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California Northstate University



Per Applicationem Collegium Autem Dentis Medicina Dentariae Medicinae Doctoris DMD

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Initial Accreditation Application Self-Study Report

Predoctoral Dental Education Program

California Northstate University
College of Dental Medicine

9700 W. Taron Drive
Elk Grove, CA 95757
(916)378-3505

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Administrator Verification Initial Accreditation Application for a Dental Education Program

Administrator Verification Initial Accreditation Application for a Dental Education Program

The Commission requires appropriate administrators of the institution* verify that the contents of the application are factually accurate.

SPONSORING INSTITUTION
Name: California Northstate University Street Address: 9700 West Taron Drive City:, Elk Grove State: California Zip: 95757
Chief Executive Officer (Univ. President, Chancellor, Provost) Name: Alvin Cheung Title: President Phone: (916) 686-7300- Signature:  Date: May 7, 2019
Chief Administrative Officer (Dean) Name: Leon Assael Title: Dean Phone: 916 686 7871 Fax: (916) 686-7310 E-Mail: leon.assael@cnsu.edu Signature:  Date: May 7, 2019
Associate Dean for Academic Affairs: Name: Rosemary Wu Title: Associate Dean Phone: (415)505-0133 Fax: (916) 686-7310 E-Mail: rosemarywu@gmail.com Signature:  Date: 5-7-2019

*If the program is co-sponsored by more than one institution, the appropriate administrators of both institutions must verify the contents of the application. This page may be expanded to include all verifications.

Summary of Factual Information on the Developing Dental Education Program

The purpose of providing the following information is to give the reader of the completed “Initial Accreditation Application for a Dental Education Program” a brief summary of critical factual information about the proposed dental education program.

Admissions

Proposed enrollment:

1 st year students	<u>80</u>
2 nd year students	<u>80</u>
3 rd year students	<u>80</u>
4 th year students	<u>80</u>

Projected month/year of enrollment of first class:	<u>August 2020 (if approved or as soon as CODA approves)</u>
Projected month/year of graduation of first class:	<u>June 2024 (dependent on start date)</u>

Facilities

Projected or established number of clinical treatment units:	<u>60 initial (2020-22) 80 projected (2022-2023)</u>
Projected or established number of preclinical/simulation units:	<u>44 (2020)</u>
Projected or established number of radiography units:	<u>30 (2020)</u>
Projected or established number of laboratory units:	<u>80 (2020)</u>

Financial Support

Total direct cost budgeted for first fiscal year: \$10,700,000

(\$7,200,000 plus
\$3,500,000 cash
purchase expense
for 2400 Maritime
Drive CNUCDM
building)

Documentation of Compliance with Commission Policies

Please provide documentation demonstrating the program's compliance with the Commission's Third Party Comments, Complaints and Distance Education policies.

Third Party Comments:

The program is responsible for soliciting third-party comments relative to the Commission's accredited programs. Third party comments may include comments submitted by interested parties such as faculty, students/residents; program directors/administrators, Commission consultants, specialty and dental-related organizations, patients, and/or consumers that pertain to the standards or policies and procedures used in the Commission's accreditation process. An announcement for soliciting third-party comments is to be published at least 90 days prior to the site visit. The notice should indicate that third-party comments are due in the Commission's office no later than 60 days prior to the site visit. Please review the entire policy on Third Party Comments in the Commission's "Evaluation and Operational Policies and Procedures" (EOPP) manual.

1. Please provide documentation and/or indicate what evidence will be available during the site visit to demonstrate compliance with the Commission's policy on Third Party Comments.

See [Appendix C-1 Notice of Request for Third Party Comments](#)

Complaints:

The program is responsible for developing and implementing a procedure demonstrating that students/residents will be notified, at least annually, of the opportunity and the procedures to file complaints with the Commission. Additionally, the program must plan to maintain a record of complaints received since the Commission's last comprehensive review of the program. Please review the entire policy on Complaints in the Commission's "Evaluation and Operational Policies and Procedures" (EOPP) manual.

1. Please provide documentation and/or indicate what evidence will be available during the site visit to demonstrate compliance with the Commission's policy on Complaints.

The CNUCDM, with its parent university, CNU, will publish and post its procedures for accepting and processing comments and complaints with regard to the formation and development of CNUCDM. The complaint policy is noted as [Appendix C-2 Complaints Policy](#).

Each complaint will be memorialized and logged and will include its status regarding referral and action taken. All complaints will be managed via the appropriate component of CNU administrative and committee structure. The complaint forms and log can be found in:

[Attachment C-3 Grievance-Complaint Form Non Accreditation Issue](#)
[Attachment C-4 Grievance-Complaint Form CODA](#)
[Attachment C-5 Complaint Log](#)

Distance Education:

Programs that offer distance education must have processes in place through which the program establishes that the student who registers in a distance education course or program is the same student who participates in and completes the course or program and receives the academic credit.

Methods may include, but are not limited to:

- a secure login and pass code;
- proctored examinations; and/or
- new or other technologies and practices that are effective in verifying student identity.

Please review the entire policy on Distance Education in the Commission's "Evaluation and Operational Policies and Procedures" (EOPP) manual.

1. If applicable, please provide documentation and/or indicate what evidence will be available during the site visit to demonstrate compliance with the Commission's policy on Distance Education.

There is no distance education currently planned for the CNUCDM program.

FOREWORD

Description of California Northstate University

California Northstate University (CNU) is an institution of higher education dedicated to developing and training professionals who are leaders in healthcare science, education, and research. As an attempt to address the continued deficits faced by California in the production of healthcare professionals, the College of Pharmacy (COP) was founded in 2006 and gained approval to operate as a degree-granting college from the Bureau for Private Postsecondary Education (BPPE) on April 15, 2007, according to the standard operations as set forth in California Education Code 94705.

The College of Pharmacy (COP) welcomed its inaugural class in the fall of 2008, and CNU was granted WSCUC accreditation in June 2012. In continuing the mission of CNU to advance the art and science of healthcare by providing innovative education and delivery systems, the College of Medicine was added through WSCUC's substantive change process in August 2013 and accepted its first class in fall of 2015. In May 2015 WSCUC approved the addition of an undergraduate program in Health Sciences. The College of Pharmacy and the College of Medicine offer a PharmD and MD respectively, and the college of Health Sciences offers a BS degree in Health Sciences. The College of Pharmacy is accredited by the Accreditation Council for Pharmacy Education (ACPE), and the College of Medicine is accredited (Preliminary Status) by the Liaison Committee on Medical Education (LCME).

The Doctorate of Psychology (PsyD) program was planned in 2016 and created in 2017 to further CNU's mission of advancing the art and science of healthcare by adding another important healthcare-related professional doctoral degree to the current offerings. The PsyD program teaches scientifically proven interventions and provide hands-on clinical experience to students who are educated to become solo practitioners or work within multidisciplinary treatment teams. Upon graduation, students will possess and demonstrate the knowledge and skills needed to treat diverse and complex mental health populations. This program was added through the Substantive Change process via a proposal in the fall of 2017 and approval in the spring of 2018, and a small class started in September 2018.

The CNU Graduate School was another natural extension of the University's mission *to advance the art and science of healthcare*. The MS in Pharmaceutical Sciences program was added to program offerings within the College of Pharmacy via a substantive change, approved in the summer of 2018.

The purpose of the new College of Dental Medicine is to strategically align oral health with CNU's Vision to provide innovative education and healthcare delivery systems for the Northern California region and beyond. The DMD program will provide a venue for integrating oral health into human health science education and practice. Oral health will be integrated into primary care as well as medical surgical specialties in sites where CNU health science education occurs across Northern California: affiliated teaching hospitals, clinics and community health centers.

The establishment of graduate and professional degree programs in health sciences provides an opportunity for CNU to expand its range of scholarly activities and continue its development of an innovative, integrated curriculum. This also provides development opportunities for existing faculty from other colleges to contribute to another program that speaks to their expertise. The program serves as an additional venue for CNU to prepare a new workforce for a modern, fast-evolving healthcare sector, specifically in the areas of access to care, public health, and technology development and implementation. Dental medicine will assist the other health professional programs in developing oral health as integral to primary care medicine, pharmacy practice and behavioural health among others. It further helps the University expand and advance research opportunities.

In making a determination that the College was both a worthy and achievable goal for the university, the planning committee and a principle consultant, Leon Assael DMD addressed the “Criteria for Granting Initial Accreditation” as noted in the CODA Initial Accreditation Materials. Each of these criteria was presented to the university leadership in late Fall 2018 and is updated for this submission.

As part of the Foreword, the following section directly addresses each of the Criteria for Granting Initial Accreditation. The purpose is to demonstrate that California Northstate University is in compliance with all criteria.

Criteria for Granting Initial Accreditation

The application for initial accreditation of a dental or dental-related program is considered complete when the following criteria, as applicable, who meets the requirements of the discipline-specific standards, have been adequately addressed in the application.

In the winter of 2018-2019, a point-by-point assessment of CNUCDM readiness for meeting the criteria for accreditation was carried out with the leadership team and was subsequently presented to and discussed by the planning group and prospective faculty, and when gaps were noted, they were addressed. A summation of the status of compliance is noted below for each of the criteria, indicating full readiness of the CNUCDM to successfully address the criteria for granting initial accreditation.

a. A dean, as applicable, who meets the requirements of the discipline-specific standards, has been employed and at least six (6) months prior to a projected accreditation site visit.

Leon A. Assael DMD was appointed Dean of the College Of Dental Medicine on September 26, 2018, and immediately began work in developing the new college. On November 1, 2018, Dean Assael became an employee of the University and commenced full-time as of December 1, 2018.

Immediately prior to his appointment, Dr. Leon Assael DMD was Clinical Professor in Public Health, and Oral Maxillofacial Surgery at University of California San Francisco. He is the immediate past Chair of the Board of the American Dental Education Association. He is Dean Emeritus of the University Of Minnesota School Of Dentistry. Dr. Assael holds a BA from Columbia University and earned a DMD from Harvard University School of Dental Medicine, as well as a Certificate in Medical Management from the University of Kentucky. He completed his residency in oral and maxillofacial surgery at Vanderbilt University.

Dr. Assael was in medical school/hospital-based practice at the Mount Sinai School of Medicine until entering dental education at the University of Connecticut in 1989. He has served as residency program director in oral and maxillofacial surgery at Medical College of Wisconsin, Mount Sinai School of Medicine, the University of Connecticut and Oregon Health & Sciences University. Dr. Assael has served as an officer on medical boards at several hospitals and as acting chief of medical staff of John Dempsey Hospital. Dr. Assael served as Dean at the University of Kentucky, College of Dentistry until 2003, when he was appointed program director then chair of Oral and Maxillofacial Surgery and Medical Director Hospital Dentistry at the Oregon Health & Science University.

He is the past editor-in-chief of the Journal of Oral and Maxillofacial Surgery (2001-2011), current co-editor in chief of Oral and Maxillofacial Surgery, past chairman of the Council on Dental Education and Licensure of the American Dental Association, and a diplomate to the American Board of Oral and Maxillofacial Surgery. Dr. Assael is the past chair of the Council of Deans of the American Dental Education Association. In 2001, President George W. Bush awarded Dr. Assael the America's Promise Award for advancements in oral health in Appalachia achieved by the University of Kentucky faculty. He is the recipient of the Donald Osborn award for outstanding educator in oral and maxillofacial surgery. In 2010, the American Association of Oral and Maxillofacial Surgeons awarded Dr. Assael the Board of Trustees special recognition award. Dr. Assael has clinical and research interests in value-based health care, systems-based oral health education, Dental therapy, bone diseases and nerve injury. Dean Assael's Curriculum Vitae is included in [Appendix 1-7 Assael CV 2019](#).

- b. [The program is sponsored by an institution that, at the time of the application, complies with the discipline-specific accreditation standards related to institutional accreditation.](#)

California Northstate University is a regionally accredited University that has achieved successful discipline-specific accreditation standards of the Western Association of Schools and Colleges – Senior College and University Commission (WSCUC). The University currently has WSCUC approval for the College of Pharmacy, College of Medicine, College of Psychology, a BS in Health Sciences and a Master's Degree program in Pharmaceutical Sciences. Application for WSCUC approval through the substantive change process for the DMD program was submitted in November 2018, and final submission of all components of the proposal for substantive changes occurred in February 2019. The substantive change review occurred on April 25, 2019. Interim approval was received with the following commendations:

Commendations:

1. The proposed program is clearly aligned with the institution's mission.
2. The institution is commended for its responsiveness to previous substantive change and commission recommendations.
3. The faculty are commended for the organization and efficiency of the proposal itself.

The WSCUC submission documents are included in [Appendix 1-8 WSCUC 2019 CNUCDM](#). The WSCUC Substantive Change action report is [Appendix 1-8 Substantive Change Action Report](#).

- c. [A strategic plan/outcomes assessment process, which will regularly evaluate the degree to](#)

which the program's stated goals and objectives are being met, is developed.

The first Strategic plan of the College of Dental Medicine was developed in the winter of 2018-2019 by the planning committee for the College with the Dean of Dental Medicine. After review by California Northstate administration, including President Cheung, it was presented for review to the curriculum committee of the Sacramento District Dental Society. On January 11, 2019, at SDDS headquarters, 64 members reviewed the strategic plan in plenary and breakout sessions and offered feedback on curriculum content. On February 4, 2019, 70 potential faculty met to review the strategic plan as the College of Dental Medicine Advisory Committee. A motion was made to accept the strategic plan as written and amended. It was unanimously approved. It was noted to the group that each of those voting in the affirmative will appear as reviewers of the strategic plan unless they preferred not to be supportive. All agreed to be listed as reviewers and supporters. At its April 2019 meeting, the CNU President's Executive Council (PEC) was presented with the College of Dental Medicine Strategic Plan which was discussed and approved with modifications in the final draft by the PEC. The strategic plan is presented in [Appendix 1-2 CDM Strategic Plan](#).

In the winter of 2018-2019 a process to regularly evaluate the degree to which the program's stated goals and objectives are being met was developed. This resulted in the development of an institutional effectiveness action plan (the cycle of continuous improvement: [Exhibit B: CODA Table 2](#)) that defines improvement issues and the mechanisms for monitoring expected outcomes. This table is attached to the strategic plan [Appendix 1-2 CDM Strategic Plan](#), and is included separately as well in [Appendix 1-2 CODA Table 2](#).

- d. [The long and short-term financial commitment of the institution to the program is documented.](#)

The Board of Directors and the Board of Trustees reviewed the pro forma created by the working group of CNU. This was presented at the June 2018 meetings and is provided in [Appendix 1-1 President Report On Planning for the Dental College 2018](#). This includes pre-enrollment startup costs of \$7,200,000 which since June have been increased due to a cast building purchase of \$3,500,000 for the College of Dental Medicine, exclusively, increasing startup costs to \$10,700,000. In addition, an updated pro forma was submitted for the WSCUC application in February 2019. This currently extant pro forma indicates net loss for the school of \$4,696,000 in the first year of pre-enrollment due to the hiring plan and other startup costs as presented in [Appendix 1-5 Detailed Working Pro forma](#). By Year 3, the pro forma indicates a net operating margin of \$1.9 million to be just under \$4 million operating margin by year 5. In February 2019, the University purchased a 16,000 square foot primary building dedicated to the College of Dental Medicine on the expanding campus of CNU in Elk Grove as presented in [Appendix 4-5 CNUCDM Facilities Schematics](#). Contracts and commitments with the architect of Pressey and Associates, CNU's facility manager James Bunsey, A-dec, and Patterson Dental are underway to complete the preclinical laboratory and the first 32-unit dental clinic. The University is committed to building a second clinic devoted to the College on the campus in Elk Grove as part of the ambulatory care services building for the California Northstate University Hospital and Clinics. This second commitment is for 60,000 square feet to include 48 additional operatories for the DMD student groups and additional clinical services.

- e. [Contractual agreements are drafted and signed providing assurance that a program dependent upon the resources of a variety of institutions and/or extramural clinics and/or](#)

other entities has adequate support.

In preparation for initiation of the College of Dental Medicine, University administration and the dean have met with entities with whom educational, research, and service programs will be developed. These have resulted to this point in the MOUs (memorandums of understanding) presented in [Appendix 1-6 MOUs Clinical](#).

These MOUs, and correspondence indicating pending MOUs or research agreements, are with:

1. HALO Health: a FQHC dental program with four clinics and over 100,000 ensured lives for oral health care
2. Wellspace Health: a health system with a pediatric dental program with 70,000 Sacramento area children in 5 clinics
3. Asian Health Services: The largest FQHC in central Oakland serving 250,000 people in the Asian community of immigrants speaking 18 distinct languages. It has the first combined behavioral health and dental health clinic.
4. Public health research grants for the virtual dental home and preventive dental health by Dr. Paul Glassman
5. Shingle Springs Wellness Center: a 24 operator, 7 dentist program serving the communities of the foothills.

In addition, developmental meetings have occurred with the following entities that will likely result in additional clinical rotations and MOUs:

1. The California Department of Public Health, Office of Oral Health
2. Yolo County Oral Health Services
3. Colusa Indian Health
4. Sacramento Native American Health Center
5. Marin Community Health Clinics
6. Fresno Hospital System
7. Irvine, California Dental Associates
8. Pacific Dental Services

f. [A defined student admission process and due process procedures are developed.](#)

The Dean of Student Affairs and Admissions, Dr. Richard Simonsen, has been appointed. The Vice President of Student Affairs and Admissions, Xiaodong Feng, has centralized many admissions and student affairs functions for the professional schools. CNU has applied for and been accepted as a member of ADEA which will allow participation in the AADSAS WebAdmit dental admissions processes. The College will be listed with AADSAS when application is complete but will NOT enroll any students in the DMD program until CODA approval. Our listing will disclose that CNUCDM is pending accreditation and that no final offers of admission will be made prior to the completion of initial accreditation by CODA.

The membership of the Admissions Committee has been named. The processes and procedures for admissions, student affairs, academic policies, due process, grading, remediation and other student affairs policies are included in the student handbook found in [Appendix 2-3 2020-2021 CNUCDM Student Handbook](#).

g. A projection of the number, qualifications, assignments and appointment dates of faculty is developed.

The hiring plan for the faculty of the CNUCDM is included in [Exhibit R](#) and [Appendix 3-1 Faculty Hiring Plan](#). The plan includes a pre-enrollment faculty of 15 with an increase of 15 FTE's per annum for a mature faculty of 60 by year 4. Among these 60 faculty, 42 will be FTE's assigned to the CDM budget. These 42 faculty are those responsible for the curriculum in dental medicine. The remainder will be basic science faculty, assigned to Common Pathway courses, paid by the College of Medicine and reimbursed through the dental medicine budget to the College of Medicine. Additionally, volunteer Community faculty will be salaried by their health systems entity while CNU students rotate on clerkships to those sites.

The plan is undergoing implementation at the current time with the completion of hiring of the Dean, Administrators, and faculty. Some faculty whose start date has not yet arrived are currently under consulting engagement for the preparation of the self-study and will have start dates subsequently. This is summarized in [Appendix 3-1 Hiring Plan for Faculty Years 1 and 2](#) as well as in the President's project management timetable in [Appendix 1-1 President Report On the Planning For Dental College 2018](#).

Of note is that currently active appointments with assignments include leadership in administration, academic affairs, curriculum, student affairs, research, institutional research and development, clinical affairs and admissions. The position Associate Dean of Academic Affairs had been filled, but has now reopened and should be appointed by the end of June, 2019. Curriculum development with faculty leaders in disciplines of comprehensive dentistry, oral surgery, periodontology, pediatric dentistry, oral facial pain, oral medicine, oral radiology, orthodontics, prosthodontics, and endodontics is ongoing including curriculum planning activities on February 4 and February 20, 2019 as demonstrated in [Appendix 1-7 Task Force and Advisory Committee](#).

The College of Dental Medicine at CNU will provide didactic, laboratory and simulation education and experiential patient care education with a team of full- and part-time faculty. CNU does not offer tenure. There will also be a dean and five associate/assistant deans of

1. Academic Affairs and Faculty Development
2. Clinical Affairs
3. Curriculum and Clinical Education
4. Student Affairs and Admissions
5. Research

	Year 1	Year 2	Year 3	Year 4
Research Faculty	1	2	2	2
Teaching Faculty	14	28	43	58
Total	15	30	45	60

CNUCDM anticipates 42 FTE salaried faculty, 30 of whom will be full-time, making the salaried faculty make-up of 71% full-time. Our target is to have at least 50% of the faculty full-time and

the other 50% part-time up to .8. 18 FTE non-salaried Volunteer Community Faculty will be utilized at health systems for which we have or are developing MOUs.

Teaching faculty will provide instruction for two classes per semester, while research faculty will teach one course per semester. Each class will be taught for 3-12 hours a week.

Faculty will also be expected to develop curriculum, with their focus on developing student learning outcomes, and faculty will be responsible for assessing student learning. Additionally, faculty will mentor students and serve on research project/dissertation committees. Faculty members are expected to be academic advisors for a maximum of ten students. Research faculty are allotted 30 hours a week for research.

The Associate/Assistant Deans of Academic Affairs, Curriculum, Student Affairs and Clinical Affairs will lead the assessment of educational effectiveness by monitoring set norms and developing programs to address ongoing issues.

Supervision of students while at practicums and internships will occur on site. It is the responsibility of the training locations to have a clinical supervisor on staff to provide supervision and mentorship to the students. Separate faculty are not hired by the University for this purpose, though the Associate Dean of Clinical Education and the Field Placement Office will monitor placements to ensure that students are being trained in the key areas of the practice of dentistry and at the expected level proficiency.

Types of Faculty

- Basic Medical Sciences educators (in addition to COM Common Pathway educators)
- Preclinical educators
- Clinical educators - general dentistry
- Clinical educators - dental specialties
- Part-time clinical educators
- Volunteer Clinical Adjunct Faculty (no cost) associated to affiliated sites

A breakdown of faculty duties into hours per week, including a list of responsibilities will be part of every faculty members assignment and time allocation as noted in **Appendix3-4 Faculty Evaluation Form**. The number and type of all CNUCDM faculty are outlined in **Exhibit R**.

The College of Dental Medicine at CNU will provide didactic, laboratory and simulation education and experiential patient care education with a team of primarily full-time faculty. Our target is to have at least 50% of the faculty full-time and the other 50% part-time up to eight FTE. While the part-time faculty will include the administrative team and content experts across the spectrum of dental medicine, its disciplines and its specialties, part-time clinical educators from the Northstate region will provide clinical preceptorship/education, mentorship, lecture and small group learning seminars at the primary campus and in community-based education sites.

A planning group of over 70 future faculty associated to the Sacramento District Dental Society has met several times to develop curriculum. The 12 original members of the planning group for the College of Dental Medicine will also serve in part-time faculty capacity. The hiring plan calls for 60 FTEs comprised of full- and part-time faculty; this plan provides a comprehensive mix to accommodate instructional, clinical, service and scholarly needs of the college.

- h. An explanation is included of how the curriculum was developed including who developed the curriculum and the philosophy underlying the curriculum. If curriculum materials are based on or are from an established education program, there must be documentation that permission was granted to use these materials.

The curriculum was developed with no engagement of any established dental education program. It does share human studies courses with the California Northstate College of Medicine. The CNUCDM curriculum was entirely developed by the teams described below. The organization of the curriculum was developed by the Dean. Thus, no permission from any entities is required.

The development process began with the work of the planning committee in 2017 and 2018 which resulted in the recommendation to the board for formation of a dental college based upon the principles of CNU to advance the art and science of medicine through exceptional education, service, scholarship and social accountability. A committee of over 70 potential faculty of the Sacramento District Dental Society met on four occasions in the winter of 2018-2019 to develop the components of curriculum needed. Minutes of these meetings and their findings are included in [Appendix 1-7 Task Force and Advisory Committee](#). This resulted in the plan presented and approved by the committee, the College of Medicine Curriculum Committee and Dean, and the University in February 2019, as presented in the minutes found in [Appendix 1-7 Task Force and Advisory Committee](#).

Curriculum Mission and Vision

The Mission of the College of Dental Medicine is to advance the art and sciences of health care through excellence in oral health education, practice, research, service, and social accountability

Education: Create skilled and knowledgeable clinicians who will constantly advance their capabilities throughout life

Practice: Produce clinical leaders in oral health who will serve in private practice, health systems practice, and in interprofessional settings

Research: Promulgate scientific inquiry throughout the curriculum and support student and faculty research that creates an environment of scientific curiosity and an evidence based foundation for clinical practice.

Service: Provide individual patient care services at all clinical sites under the auspices of CNUCDM that produces the very best oral health outcomes and clinical value.

Social Accountability: Advocate for and help build stronger communities in California and globally through improved oral health care, disease prevention, health promotion and protection from oral diseases through community-based approaches.

The Vision of the College of Dental Medicine is to provide constructive innovation in its education programs, and leadership in integrating oral health care into human health care systems.

Our Values:

- Patient-centered didactic and clinical education that always puts improved health outcomes first

- Foster a humanistic and character-developing environment for dental students
- Making better communities and a better world through improved oral health
- Understanding the professional responsibility of the dentist as the head of the oral health care team
- Practicing health promotion and disease prevention and protection
- Advancing California Northstate University through excellence in all we do

Supporting narrative: The integration of oral health into human health requires dentists who are capable of performing at the highest level in an ever more complex and demanding environment of emerging technology, social change, human disease management, and evolving health systems. The CNUCDM is developing a curriculum with four basic themes into which all didactic and clinical content will be served. These four themes are: **Human Systems, Odontology, Oral and Maxillofacial Studies, and Behavioral and Social Sciences.** All four themes will be delivered in a diagonal curriculum.

*(Definition: the **diagonal curriculum** includes concurrent didactic, small group learning, simulation and clinical experiences at all phases of the curriculum with increasing clinical experiences and decreasing didactics gradually through all four years. While basic clinical encounters begin in the fall of the first year, advanced clinical practice occurs in the fourth year. While emphasis on didactic foundations is at a high level in the first year, some didactic component with seminars and case-based didactics continues through the fourth year)*

Program Learning Outcomes (PLOs) for the DMD program

1. Patient-Centered Care: Demonstrate understanding of healthcare disparities and cultural awareness in patient counseling and patient advocacy
2. Evidence-Based Care: Apply current, evidence-based oral healthcare within the scope of general dentistry
3. Culturally competent, empathic communication: Demonstrate patient-centered, empathic, and culturally competent communication and interpersonal skills
4. Oral and Written Communication: Demonstrate sound oral and written communications in patient care
5. Critical Thinking: Utilize critical thinking, problem solving skills and systemic thinking in assessing and making reasoned, evidence-based decisions in patient care
6. Ethics and Professionalism: Demonstrate professionalism and ethical decision making
7. Biomedical Sciences Knowledge: Demonstrate an understanding of the fundamentals of biomedical sciences and apply them appropriately in oral healthcare
8. Practice Management: Apply legal, regulatory and business management concepts related to provision of oral healthcare services

The four themes will be presented utilizing interprofessional education in part utilizing a **Common Pathway** for some courses. The **Common Pathway** consists of aspects of courses especially in human systems and behavioral and social sciences that can be taught alongside students in medicine, pharmacy and clinical psychology. Courses that will utilize in part or in whole a Common Pathway, will be noted in the course list as **CP** courses.

These courses are presented in each of the four years. For year one headed by numeral “5”, year 2 numeral “6”, for year 3 numeral “7” and for year 4 numeral “8” preceded by the thematic heading **HS** for Human Systems, **Odont** for Odontology, **OMFS** for Oral and Maxillofacial Studies, and **BSS** for Behavioral and Social Sciences.

- i. The first-year curriculum with general course and specific instructional objectives, learning activities, evaluation instruments (including, as applicable, laboratory evaluation forms, sample tests, quizzes, and grading criteria) is developed.

Answered in conjunction with j. below

- j. As applicable, courses for the subsequent years of the curriculum are developed, including general and specific course objectives.

I and J are answered in common as they are linked in the diagonal curriculum. Syllabi for first year courses, including outcome assessments and grading rubrics for the first year, are attached in **Appendix 2-1 Consolidated Course Syllabi**.

CURRICULUM STRUCTURE AND COURSE LIST:

Students will be engaged in a 45-week curriculum for the first three years, beginning in September for each year, and culminating in a DMD degree granted in June of the fourth year making the fourth year curriculum 40 weeks. Total curriculum weeks are 175.

A continuous series of didactic, small group learning, laboratory, and clinical courses in:

Human Systems: Developing applied knowledge in the normal function and structure of human biology and the pathophysiology of diseases of human systems at all stages of life. Understanding and applying the implications for oral health exerted by these human systems and their associated diseases.

Odontology: In-depth knowledge of the normal structure and function of the teeth, alveolar bone, and masticatory system at all stages of life. In-depth knowledge of the diseases of teeth, including caries, periodontal disease and masticatory disorders, the methods to diagnose, prevent, and treat odontologic diseases. Obtaining primary and advanced skills in the treatment of odontologic diseases.

Oral and Maxillofacial Studies: In-depth knowledge of the normal structure and function of the oral and maxillofacial region at all stages of life. In-depth knowledge of the diseases of this region including those of growth and development, neoplasia, degenerative diseases, infectious diseases, and trauma. Emphasis on OMS systems, including oral mucosa, cutaneous diseases, the jaws, neurologic disorders, salivary gland disorders, paranasal sinuses, airway, and musculoskeletal diseases.

Behavioral and Social Sciences: Developing knowledge in human psychology and behavior impacting oral health and the interventions that positively and negatively impact oral health. Understanding the economic, regulatory and political environment for oral health practice.

Understanding the sociologic, cultural, economic determinants of health and how to positively influence the health of communities and societies.

The 4 theme diagonal curriculum:

Human Systems

Case-based biomedical sciences: For the following Common Pathways courses (labeled CP Course) with the College of Medicine (COM), the clinical case presentations will include those oral cases presented by the CDM faculty, in addition to selected common cases with the COM. The supporting basic science with each courses will be Common Pathway anatomy, histology, embryology, biochemistry, immunology, microbiology, nutrition, pathology, pharmacology and physiology.

Course #	Course Title	Credits	Year	Term
HS 511	Hematology (CP Course)	4	DS 1	Fall

As described in COM curriculum with clinical case correlation by dental faculty. Correlated clinical cases related to oral health sciences will include: dental care in the hemophilia patient, acquired bleeding disorders in the dental patient, oral effects of anemia, and dental care for the hematology oncology patient.

Course #	Course Title	Credits	Year	Term
HS 521	Integumentary and Musculoskeletal Systems (CP Course)	7	DS 1	Fall

As described in COM curriculum with clinical case correlation by dental faculty. Correlated clinical cases related to oral health sciences will include vesiculobullous disease of the oral mucosa, oral manifestations of muscular dystrophy, oral cancer, myofascial pain dysfunction syndrome, arthritis in dental practice, osteoporosis and oral health.

Course #	Course Title	Credits	Year	Term
HS 512	Neuroscience (CP Course)	9	DS 1	Spring

As described in COM curriculum with clinical case correlation by dental faculty. Correlated clinical cases related to oral health sciences will include maxillofacial nerve injury, oral manifestations of Parkinson's disease, oral and maxillofacial movement disorders, trigeminal neuralgia, migraine and facial migraine, oral care of the stroke and spinal cord injured patient.

Course #	Course Title	Credits	Year	Term
HS 522	Cardiovascular and Pulmonary Systems (CP Course)	9	DS 1	Spring

As described in COM curriculum with clinical case correlation by dental faculty. Correlated clinical cases related to oral health sciences include: prevention, diagnosis, and immediate treatment of acute myocardial ischemia in dental practice, oral health aspects of obstructive sleep apnea, managing asthma in dental practice, congestive heart failure implications in oral health care, valvular heart disease implications in dental practice, Marfan's syndrome.

Course #	Course Title	Credits	Year	Term
HS 611	Renal System (CP Course)	5	DS 2	Fall

As described in COM curriculum with clinical case correlation by dental faculty. Correlated clinical cases related to oral health sciences include oral manifestations of renal failure/renal osteodystrophy/HPTH, dehydration and oliguria in odontogenic infection, acid/base considerations in fever and dental infection.

Course #	Course Title	Credits	Year	Term
HS 621	Gastroenterology (CP Course)	5	DS 2	Fall

As described in COM curriculum with clinical case correlation by dental faculty. Correlated clinical cases related to oral health sciences include oral effects of chronic liver failure, oral surgical considerations in Vitamin K dependent factor depletion in chronic hepatitis, oral manifestations of bulimia, Salivary gland disorders, concomitant disorders of the GI and oral microbiome, effects of mastication/salivary health on GI health, oral manifestations of patients with colonic polyps.

Course #	Course Title	Credits	Year	Term
HS 631	Endocrine System (CP Course)	5	DS 2	Fall

As described in COM curriculum with clinical case correlation by dental faculty. Correlated clinical cases related to oral health sciences include , oral health considerations in obesity, oral health impact of type 1 and type 2 diabetes, oral findings in endocrine disorders, e.g. multiple endocrine neoplasia, hyperthyroidism/hypothyroidism.

Course #	Course Title	Credits	Year	Term
HS 641	Clinical Pharmacology LAL	3	DS 2	Fall

This course will review the basics of pharmacokinetics and drug development and review the important clinical characteristics of the major drug categories including cardiac, pulmonary, GI, GU, endocrine, musculoskeletal, psychotropic, neurologic, dermatologic drugs, antibiotics,

Course #	Course Title	Credits	Year	Term
HS 642	Clinical Pharmacology 2/Oral Pharmacology LAL	3	DS 2	Spring

This course will review the major drugs used in dental practice. Emphasis on analgesics, pain and anxiety control, antibiotics. Other drugs of oral diseases including oral mucosal diseases, diseases of the dental pulp and periodontium, paranasal sinuses, and those for musculoskeletal problems of the head and neck. Correlation of drugs in the general pharmacopeia with oral health impact for HS 641 will concentrate on side effects of the oral region including examples of xerostomia, superinfection with thrush, tardive dyskinesia, among others.

Course #	Course Title	Credits	Year	Term
HS 721	Junior Year Medicine Seminar SEM	2	DS 3	Fall

Weekly case-based seminars presenting existing dental and comprehensive care patients and their medical comorbidities. Cases will be selected from existing active patients as well as from standardized patients, for the D3 class with evidence based review of relevant medical findings and their impact on oral health and clinical interventions. This will be done with a purpose to mitigate risk and improve patient care outcomes.

Course #	Course Title	Credits	Year	Term
HS 722	Junior Year Medicine Seminar SEM	2	DS 3	Spring

Complex cases will be selected beyond the level of HS 721 including those commonly requiring medical surgical intervention in concurrence with oral health care. Examples such as oncology patients, obstetric patients, and transplant patients will be examined. Weekly case-based seminars presenting existing dental and comprehensive care patients and their medical comorbidities will be continued in the seminar as well.

Course #	Course Title	Credits	Year	Term
HS 821	Senior Year Medicine Seminar SEM	2	DS 4	Fall

Weekly case-based seminars presenting existing dental and comprehensive care patients and their medical comorbidities. Continued development of advanced case-based patient presentations including those on hospitalized patients.

Course #	Course Title	Credits	Year	Term
HS 822	Senior Year Medicine Seminar SEM	2	DS 4	Spring

Weekly case-based seminars presenting existing dental and comprehensive care patients and their medical comorbidities. Development of advanced knowledge of cases presenting for medical treatment for which dental consultation is needed in the preanesthetic presurgical patient and in concurrence with major systemic disease including trauma, stroke, myocardial infarction.

Odontology

Course #	Course Title	Credits	Year	Term
Odont 511	Foundations of Odontology <i>LAL, LAB and CLIN</i>	6	DS 1	Fall

This course will introduce students to infection control, the dental office and clinical care site, and provide initial skill in interaction with the patient and the patient's oral cavity. Students will enter the clinical setting with faculty and upper level students to provide limited aspects of oral care and join the oral health care team.

Course #	Course Title	Credits	Year	Term
Odont 521	Dental Anatomy <i>LAL and LAB</i>	6	DS 1	Fall

Anatomy of the teeth and associated structures is presented including the masticatory apparatus. Clinical correlations affecting function such as sleep disorders, temporomandibular disorders and growth and development anomalies are clinical correlates to explain function and structure in dental anatomy.

Course #	Course Title	Credits	Year	Term
Odont 522	Cariology <i>LAL</i>	3	DS 1	Spring

The biology, phenotype, epidemiology, anatomical changes from caries is presented. The prevention of caries through CAMBRA is developed as well as strategies for management at all stages of the disease. The course introduces the pathways of caries as a regional and systemic disease.

Course #	Course Title	Credits	Year	Term
Odont 611	Operative Dentistry <i>LAL and LAB</i>	6	DS 2	Fall

The surgical treatment of caries and degenerative and congenital diseases of the enamel and dentin is presented through the development of technical skills to remove diseased portions of the teeth and to provide anatomical functional direct restorations of teeth. Prevention and minimally invasive procedures for caries management is emphasized. Laboratory session focus on the development of procedures and psychomotor skills using surgical armamentarium in a simulated clinical setting for the treatment of caries and other diseases of the enamel and dentin.

Course #	Course Title	Credits	Year	Term
Odont 621	Periodontology <i>LAL and LAB</i>	3	DS 2	Fall

The normal structure and function of the periodontium is presented. The pathology, microbiology, immunology, and pathophysiology of diseases of the periodontium is presented. Prevention, chronic disease management, and nonsurgical/minimally invasive procedures for periodontal diseases is emphasized. Laboratory session focus on the development of procedures and psychomotor skills using surgical armamentarium in a simulated clinical setting for the treatment of diseases of the periodontium.

Course #	Course Title	Credits	Year	Term
Odont 622	Periodontology <i>LAL and LAB</i>	3	DS 2	Spring

In-depth understanding of the etiology and progression of chronic periodontal diseases is developed in this course. The influence of systemic diseases such as HIV, diabetes mellitus, and obesity on the health of the periodontium is explored. Surgical interventions for the treatment of diseases of the periodontium is presented. The laboratory is focused on advanced techniques including flap surgery, guided tissue regeneration, socket preservation among others, as well as continued development of skills in curettage.

Course #	Course Title	Credits	Year	Term
Odont 632	Prosthodontics and Implant Dentistry: Removable Prosthodontics <i>LAL and LAB</i>	6	DS 2	Spring

The anatomic and pathophysiologic aspects of partial and full edentulism is presented. Development, construction, placement and maintenance of full and partial removable prosthodontic restorations is presented. The laboratory will include impressions, jaw occlusal registrations, gnathology, cast development and mounting, development of wax rims and occlusal scheme and teeth mounting.

Course #	Course Title	Credits	Year	Term
Odont 642	Endodontology: Diseases of the Pulp and Pathways of Odontogenic Infection, Endodontic Therapy and Technique <i>LAL and LAB</i>	3	DS 2	Spring

The diagnosis and treatment of the diseases of the dental pulp throughout life is presented. The biologic basis for treatment of diseases of the pulp is developed as well as the rationale for these methods. The laboratory will introduce students to the ortho-endodontic therapy methods including the use of magnification, access the pulp canals, instrumentation of the canals and obliteration of the pulpectomy site to clinical standards.

Course #	Course Title	Credits	Year	Term
Odont 662	Comprehensive Care Family Dentistry <i>CLIN and LAB</i>	3	DS 2	Spring

Treatment of caries and periodontal disease with discipline based faculty from operative dentistry, prosthodontics, endodontology and periodontology is carried out with the DS 2 as an active participant in the care team that includes a DS 3 and DS 4. Students will participate in case presentations, medical record assessment and recording, and other aspects of the clinic activities. The laboratory will include a simulated clinic visit including OSCE record and electronic health record.

Course #	Course Title	Credits	Year	Term
Odont 741	Prosthodontics and Implant Dentistry: Fixed Prosthodontics <i>LAL and LAB</i>	6	DS 3	Fall

The indirect restoration of teeth and the indirect replacement of missing teeth with crowns and bridges is presented. Treatment planning for these restorations including occlusal, periodontal, caries assessment is presented. Other methods for indirect restoration including partial coverage indirect restoration is presented. The introduction of digital techniques for impression and CadCam restoration development is presented. The laboratory will provide practice with the surgical armamentarium for tooth preparation for fixed prosthetic restoration, for impressions with analog and digital methods and for the construction of fixed indirect restorations. The laboratory will also teach methods for provisional restoration of the fixed prosthodontic patient.

Course #	Course Title	Credits	Year	Term
Odont 761	Comprehensive Care Family Dentistry <i>CLIN</i>	8	DS 3	Fall

This daily clinic will focus on students developing their family of patients in conjunction with other members of their team headed by the faculty team leader. Emphasis on diagnosis and treatment planning and completion of initial urgent procedures will be carried out.

Course #	Course Title	Credits	Year	Term
Odont 752	Periodontology Seminar <i>SEM</i>	2	DS 3	Spring

Using a case-based format, the treatment planning, outcome assessment, management of medical and dental comorbidities among others of the patient with diseases of the periodontium is presented. Patient-centered, health systems informed, and culturally aware aspects of care are discussed through the case-based format.

Course #	Course Title	Credits	Year	Term
Odont 762	Comprehensive Care Family Dentistry <i>CLIN</i>	8	DS 3	Spring

This daily clinic will further develop the completion of Phase 1 therapy, disease control mitigation of risk and initiation of preventive care in the patient family. The student will develop this under the leadership of the team leader. The student will also begin aspects of Phase 2 therapy, reconstructive dentistry and address other comorbidities in patient care.

Course #	Course Title	Credits	Year	Term
Odont 841	Periodontology Seminar <i>SEM</i>	2	DS 4	Fall

Using case-based format, interdisciplinary problems especially with orthodontics, endodontics and prosthodontic consideration will be developed through patient presentations of patients of record or via the OSCE format. Further exploration of comorbidities in periodontal diseases will be developed.

Course #	Course Title	Credits	Year	Term
Odont 851	Prosthodontics and Implant Dentistry: Implant Surgery and Prosthodontic Reconstruction <i>LAL and LAB</i>	3	DS 4	Fall

The replacement of missing teeth utilizing dental implants is presented. This course includes the biomechanics of implants, concepts of osseointegration, restoration options for implants, implant systems and the placement of implants. The laboratory will teach the placement of implants including appropriate assessment and osteotomies, and the restoration of implants using indirect and direct techniques.

Course #	Course Title	Credits	Year	Term
Odont 861	Comprehensive Care Family Dentistry <i>CLIN</i>	8	DS 4	Fall

This clinical practicum will focus on the daily clinical activities of a practicing dentist including all intake, comprehensive care, case management issue extant under the leadership of the team leader. The DS 4 will also demonstrate leadership of the oral healthcare team including DS2 and 3 students and the dental assisting and dental hygiene staff through cooperation and assessment of outcomes of care.

Course #	Course Title	Credits	Year	Term
Odont 862	Comprehensive Care Family Dentistry <i>CLIN</i>	8	DS 4	Spring

The final semester of comprehensive care family dentistry will focus on the completion of phase 2 care for patients of record, increasing facility in providing initial evaluation and care of the dental patient, and addressing complex issues in care including those associated to overall health, stages of life, cultural awareness among others.

Oral and Maxillofacial Studies

Course #	Course Title	Credits	Year	Term
OMFS 511	Foundations of Dental Medicine <i>LAL</i>	3	DS 1	Fall

This course will focus on introduction to the patient/doctor relationship, the role of dental medicine in health care, the scientific basis of the pathophysiology, diagnostic methods, and treatment modalities of major oral diseases. Examples will include congenital diseases such as cleft lip and palate, degenerative diseases such as rheumatoid arthritis, neoplastic disease such as oral squamous cancer, traumatic diseases such as facial fracture, and infectious disease such as HPV. This course includes a review of biochemistry relevant to the medical school first and second year HS courses to match the coursework provided to the MD students in foundations of medicine.

Course #	Course Title	Credits	Year	Term
OMFS 512	Oral Microbiology/Immunology <i>LAL</i>	3	DS 1	Spring

The oral microbiome in health and disease is presented including the ecologic niches of the oral region: periodontium, teeth, mucosa, nasopharynx, and salivary glands. The virology of the upper airway mouth and pharynx is presented including HPV, HIV, and acute viral diseases. The presence of prions and their potential role in disease is presented. The host response resulting in homeostasis or the initiation of infection is reviewed

Course #	Course Title	Credits	Year	Term
OMFS 532	Surgical Anatomy of the Head and Neck <i>LAL and LAB</i>	2	DS 1	Spring

The structures of the viscerocranium are presented including osteology, myology, cranial nerve peripheral anatomy, salivary glands, lymphatics, arterial supply and venous drainage. In-depth understanding of fascial planes, infratemporal fossa, triangles of the neck, myology of the mandible and maxilla will be presented with clinical illustrations as to their utility in dental medicine practice.

Course #	Course Title	Credits	Year	Term
OMFS 621	Dental Medicine at All Stages of Life <i>LAL</i>	3	DS 2	Fall

Growth, development, function and the human experience from birth to death will be presented including the impact of oral health and oral health interventions, prevention, disease promotion and treatment at all stages. This topic is developed from the biologic, social, economic and cultural aspects of the human experience.

Course #	Course Title	Credits	Year	Term
OMFS 631	Dental Anesthesiology 1: Local Anesthesia <i>LAL and LAB</i>	3	DS 2	Fall

The pharmacology of local anesthesia, armamentarium for administration and technique for administration is presented. Local and systemic complications of administration, contraindications and comorbidities are presented. The laboratory will demonstrate and practice technique of local anesthesia administration on analogy and haptic simulators.

Course #	Course Title	Credits	Year	Term
OMFS 641	Oral Radiology 1 <i>LAL and LAB</i>	3	DS 2	Fall

The physics of ionizing radiation and the development of Roentgen's methods are presented. The components of clinical equipment to emit radiation and sensors, both analog and digital are presented. The interpretation of oral radiographs, periapical and bite wing radiographs is developed. Intraoral radiographs using a simulator are performed in the laboratory.

Course #	Course Title	Credits	Year	Term
OMFS 632	Dental Anesthesiology 2: Pain and Anxiety Control, Analgesia, Medical Management of Local Anesthesia Patients <i>LAL and LAB</i>	3	DS 2	Spring

The risks of local anesthesia detection and management are presented. Understanding pain and anxiety in dental practice through assessment methods is presented. The pharmacologic and nonpharmacological means of mitigating pain and anxiety in dental care is presented. This includes the use of nitrous oxide, oral anxiolysis, and parenteral drugs.

Course #	Course Title	Credits	Year	Term
OMFS 642	Oral Pathology/Oral Medicine 1 <i>LAL and LAB</i>	3	DS 2	Spring

The significant tumors, anomalies, oral manifestations of systemic disease and other pathologies of the oral and maxillofacial region are presented. The laboratory will focus on the gross pathology and microscopic pathology of the oral and maxillofacial region

Course #	Course Title	Credits	Year	Term
OMFS 652	Orthodontics and Craniofacial Growth and Development <i>LAL and LAB</i>	3	DS 2	Spring

Principles of craniofacial growth and development will be presented. Abnormalities leading to malocclusion and dentofacial deformities will be shown. Methods of diagnosing disorders of dental facial growth and development will be understood and utilized by students. Orthodontic interventions for these conditions including methods, and outcomes will be shown. The laboratory will concentrate on diagnosis and orthodontic treatment methods.

Course #	Course Title	Credits	Year	Term
OMFS 751	Oral Radiology 2 <i>LAL and LAB</i>	3	DS 3	Fall

The understanding of Panoramic, planar films, CT, MRI. Nuclear medicine, and non-ionizing methods of image acquisition is presented. Comparison of these methods and appropriate case selection for these studies is presented. The utility in treatment planning and integration with other digital treatment planning methods is shown. The diagnosis of pathology via these methods is developed.

Course #	Course Title	Credits	Year	Term
OMFS 761	Principles of Oral Surgery <i>LAL and LAB</i>	3	DS 3	Fall

The principles of aseptic technique, flap design, surgical access, surgical hemostasis, infection prevention, and wound healing are presented. Technique for the removal of erupted and non-erupted teeth, both surgically and via forceps and elevator is presented. Preprosthetic surgical technique and minor soft tissue surgery including biopsy is presented. The laboratory will focus on the surgical and nonsurgical removal of teeth and on soft tissue surgery and biopsy.

Course #	Course Title	Credits	Year	Term
OMFS 771	Pediatric Dentistry <i>LAL and LAB</i>	3	DS 3	Fall

Child development and child management in the clinical setting will be developed from a holistic and family based perspective. Major diseases in growth and development of the oral cavity will be elucidated. The development of the deciduous and mixed dentition along with craniofacial development is presented. Caries diagnosis, treatment and prevention in the deciduous dentition is shown. The laboratory will provide simulated clinical experiences in caries treatment, deciduous crowns, space maintenance, and care of the pediatric patient.

Course #	Course Title	Credits	Year	Term
OMFS 742	Oral Pathology/Oral Medicine 2 <i>LAL</i>	3	DS 3	Spring

Further development of the oral manifestations of systemic disease is presented with emphasis on diabetes, hematologic bleeding disorders, hematologic malignancies, lymphomas, myeloma, xerostomic diseases, autoimmune disease, maxillofacial movement disorders, other neurologic diseases such as Parkinson's, with oral manifestations.

Course #	Course Title	Credits	Year	Term
OMFS 752	Clinical Clerkship: Pediatric Dentistry <i>4 weeks, 30 hours per week plus call CLIN</i>	8	DS 3	Spring

The student will engage in clinical experiences in the pediatric dentistry clinic as a member of the care team, treating patients under the supervision of pediatric dentistry faculty. Consultation on pediatric patients referred for oral conditions via pediatric medicine will occur.

Course #	Course Title	Credits	Year	Term
OMFS 762	Advanced Topics in Oral and Maxillofacial Surgery <i>LAL</i>	2	DS 3	Spring

Understanding of major conditions of the oral and maxillofacial region requiring surgical intervention is presented. This includes diagnostic features, techniques for corrective surgery and outcome assessment. Categories include the treatment of facial trauma, ablative tumor surgery of the head and neck, cleft lip and palate surgery, craniofacial surgery, orthognathic surgery, reconstructive surgery of the jaws and face, and surgical treatment of temporomandibular disorders.

Course #	Course Title	Credits	Year	Term
OMFS 772	Clinical Clerkship: Oral and Maxillofacial Surgery <i>4 weeks, 30 hours per week plus call</i> <i>CLIN</i>	8	DS 3	Spring

The students will enter the oral and maxillofacial surgery care team for this clerkship including the care of patients for dentoalveolar surgery, major maxillofacial surgery and complex conditions of the head and neck. Clinical experience in ambulatory oral surgery and anesthesia and assisting for maxillofacial surgery in the operating room including emergency and trauma care occurs. Participation in hospital rounds and conferences occurs.

Course #	Course Title	Credits	Year	Term
OMFS 851	Oral Radiology Seminar <i>SEM</i>	2	DS 4	Fall

This case-based seminar will present findings using all methods in OMFS 641 and OMFS 751 to demonstrate through active learning the radiographic findings in key diseases of the oral and maxillofacial region.

Course #	Course Title	Credits	Year	Term
OMFS 862	Oral Pathology/Oral Medicine Seminar <i>SEM</i>	2	DS 4	Spring

Concentration on oral medicine will include the risk assessment and management of complex systemic diseases related to dental medicine care in dental practice. Case-based discussion on the dental medicine patient with HIV, ongoing chemotherapy for malignancy, osteoporosis/osteopenia among others will be presented by students in seminar format.

Course #	Course Title	Credits	Year	Term
OMFS 872	Clinical Clerkship: Orthodontics <i>4 hours per week for 8 weeks</i> <i>CLIN</i>	2	DS 4	Spring

Students will enter the orthodontic care team providing diagnostic and treatment services for patients undergoing orthodontic care under the auspices of orthodontic faculty in College of Dental Medicine clinics.

Behavioral and Social Sciences

Course #	Course Title	Credits	Year	Term
BSS 501	Managing Student Life <i>LAL and Lab</i>	1	DS 1	Fall

Resilience, sustainability as a student and future health professional will be presented. Managing student debt, stress management, effects of social media, interpersonal relationships, and ethics in student practice will be discussed. The problems of drug and alcohol abuse will be shown. Respect in the University including cultural, gender, and sexual conduct issues will be presented. Students will be made aware of resources to promote student wellbeing.

Course #	Course Title	Credits	Year	Term
BSS 522	Ethics in Dental Medicine and Health Care <i>LAL</i>	2	DS 1	Spring

The fundamentals of dental and medical ethics are presented including beneficence and non-maleficence. The Helsinki statement and other aspects of human research guidelines are presented including the role of Human Studies committees. The care of animals in biomedical research is discussed as well as the ethical use of human tissue in clinical care, transplant medicine etc. Ethical financial relationships and the underlying law behind them in clinical practice is discussed. The role of the criminal, tort system, the Board of Dentistry of California, and the ADA in dental ethics is presented.

Course #	Course Title	Credits	Year	Term
BSS 662	Behavioral Medicine (CP Course) <i>LAL, Clinical</i>	3	DS 2	Spring

In this course aspects of clinical psychology of importance in dental practice is presented. Cased base learning will include: minor and major psychiatric illnesses impacting on oral health and the provision of oral health care; elder, spousal and child abuse; dental fear; and, dental phobias.

Course #	Course Title	Credits	Year	Term
BSS 701	Dental Public Health <i>LAL</i>	2	DS 3	Fall

The fundamentals of public health are presented including health and public health measures for health protection, protection from disease and health promotion. The surgeon general's report, 2000, updated 2019, on the status of oral health in America is presented. WHO assessment of oral health globally is presented. Population based initiative to improve oral health are discussed with a focus on clean water and fluoride exposure.

Course #	Course Title	Credits	Year	Term
BSS 721	Practice Management 1 <i>LAL</i>	2	DS 3	Fall

Addressing issues of student debt, career path, and modes of practice will be presented. Operating a dental practice via solo or group practice model and in health systems based practice will be discussed. Issues including human resources management, the actions of the care team in practice and financial responsibility and accounting will be presented.

Course #	Course Title	Credits	Year	Term
BSS 861	Clinical Clerkship: Community-based Education <i>4 weeks, 30 hours per week plus call CLIN</i>	8	DS 4	Fall

Affiliated health systems based practices will accept CNU students into their care teams where senior students will provide clinical care under the supervision of Volunteer Community-Based Faculty in those sites. Suitable transportation and housing will be arranged for where needed. The purpose of the course is to provide community engagement with the constituencies served, to gain experience in community-based clinical care and to interact with the interprofessional and intraprofessional care team

Course #	Course Title	Credits	Year	Term
BSS 871	Seminar in Dental Public Health <i>SEM</i>	2	DS 4	Fall

This weekly seminar develops through cased based discussions led by student teams the public health issues in oral health in California and globally including access to care, social determinants of oral health, scope of practice issues, insurance and payment systems for oral health, access to fluoride, immunizations especially for HPV, and health protection for vulnerable populations such as children and elderly.

Course #	Course Title	Credits	Year	Term
BSS 822	Practice Management 2 <i>SEM and LAB</i>	2	DS 4	Spring

The simulation of dental practices in various models will be developed by students in groups including addressing issues of hiring, overhead, interaction with vendors, staff development, marketing, accounting and all operations in dental practice. The regulatory environment for pricing, dental insurance, health insurance will be reviewed as well as all aspects of the operation of dental practices.

Course #	Course Title	Credits	Year	Term
BSS 862	Clinical Clerkship: Community-based Education 4 weeks, 30 hours per week plus call CLIN	8	DS 4	Spring

This course will be at a second community-based rotation site to elaborate on the activities of the first rotation and engage a new community and a new clinic. In addition to comprehensive care experience, the student will compare and contrast communities and clinical care entities and provide a reflective essay on their community care experience.

Course #	Course Title	Credits	Year	Term
BSS 872	Senior Elective Clinical Clerkship CLIN	6	DS 4	Spring

D4 students will select from additional clerkships available at clinical sites either discipline based or comprehensive care in odontology, oral and maxillofacial studies or human studies. Examples include comprehensive care at a remote clinic (odontology), dental specialty clerkship in oral maxillofacial surgery (OMFS), clerkship in internal medicine (Human Studies), or population health study abroad or in the United States (BSS).

Credit Hours and Student Contact Hours

Curriculum Theme	Credit Hours	Year	Credit Hours	Contact Hours
Human Systems	58	Year 1	55	1140
Odontology	84	Year 2	66	1380
OMFS	62	Year 3	60	1590
BSS	36	Year 4	59	1470
Total	240		240	5580

- k. If the capacity of the facility does not allow all students to be in laboratory, pre-clinical laboratory and/or clinic at the same time, a plan documenting how students will spend laboratory, pre-clinical and/or clinical education sessions has been developed and is included.

The CNU campus currently encompasses more than 200,000 square feet and includes the two original Elk Grove and Rancho Cordova facilities. The DMD program will be housed in a separate building at 2400 Maritime Drive in Elk Grove, in close proximity to the original Elk Grove facility. The building for the DMD program is 16,000 square feet and will house class space for didactic aspects of the program, preclinical laboratories and the first teaching clinic of the college. At the original Elk Grove facility, DMD students will also have access to class space for Common Pathway courses, two laboratories, a library, distributed study rooms, a cafeteria, and various offices.

All dental students will begin clinical training in their first year, utilizing the preclinical laboratory and clinical simulation labs that are planned to be built in the Elk Grove building dedicated to CNUCDM. First-year students will also have clinical experiences as part of the care team in the clinic. The CNUCDM facilities will contain 40 dental simulation units and 4 Haptic units where the students will be able to practice the skills taught within the classroom. The units will contain instruments and configurations, compartments to store instruments, a torso with adumbrated arms and shoulders, and height adjustment. The unit will be on wheels and have the ability to fit comfortably under workstations.

The main clinical practicum of the CNUCDM DMD program will be in two clinics operated by the University on the Elk Grove Site. The first to be built in 2019-2020 will be 32 operatories in the CNUCDM-dedicated facility on Maritime Drive. The second clinic will include 48 operatories and will be part of the California Northstate University Hospital and Clinics in its ambulatory care building in a building adjacent to the primary site with a planned opening by the end of Year 2 of the program, Summer 2022. Additionally, within the greater Sacramento/San Joaquin Valley area California Northstate is planning on operating additional interprofessional collaborative practice facilities for medicine, dental medicine and behavioral health. These additional sites are currently being actively planned, but will not be sites as planned where DMD students will undergo competency assessment. Like other dental school-based clinics, CNU's two main clinics will feature faculty and students working side by side and providing the highest level of clinical care while completing competency assessments and gaining clinical experience for the DMD students.

The initial capacity of the College of Dental Medicine will accommodate a class of 80 students. All Common Pathway courses are in plenary classrooms accommodating 220 students which will seat all 180 medical and dental students. Small group learning facilities are adequate to accommodate all students into their "college" group of 20. Anatomy laboratory, learning center and library, general skills laboratories are all adequate to accommodate all students in a regular schedule.

Preclinical and simulation laboratory will have four types of facilities in the dedicated College of Dental Medicine building:

1. Type 1: Bench laboratory space with seating, audiovisual and instrumentation for 80 students (class example: dental anatomy)
 2. Type 2: Operative dentistry/A-dec simulator with scanning self-assessment optical scanner, work station, 40 units. Students will practice in this environment in two sections.
 3. Type 3: Operative dentistry utilizing A-Dec 40 dental chairs with simulator dental head: Students will work in this environment when rotated from type 2 simulation during the same hours. Students will either be assigned during preclinical laboratory hours to the Type 2 or 3 units. Of note is that this will be performed for the first 2 years as there will not be a 3rd and 4th year class. The second clinic and additional simulation space using emerging technology is anticipated for the 3rd -5th year of operations.
 4. Type 4: Haptic simulators: these 4 MOOG Simodont units will be assigned on a rotating basis to students in groups of 4.
1. As applicable, evaluation instruments for laboratory, pre-clinical, clinical, and clinical enrichment experiences are developed.

Rubrics for laboratory activities are noted in the syllabus for first year dental anatomy courses. Rubrics for assessment of performance in Foundations of Odontology are included for infection control, clinical assessment, patient intake, the medical record and dental sealants. These can be found in [Appendix 2-1 Consolidated Course Syllabi](#).

Evaluation instruments, including grading rubrics, for Hematology, Musculoskeletal and Integumentary, Renal, Cardiovascular and Pulmonary, Gastrointestinal, and Neurosciences block course are also enclosed in [Appendix 2-1 Consolidated Course Syllabi](#).

- m. As applicable, policies and procedures such as a patient recruitment system; patient classification system; an ionizing radiation policy; an infection control policy; and a student tracking system are developed.

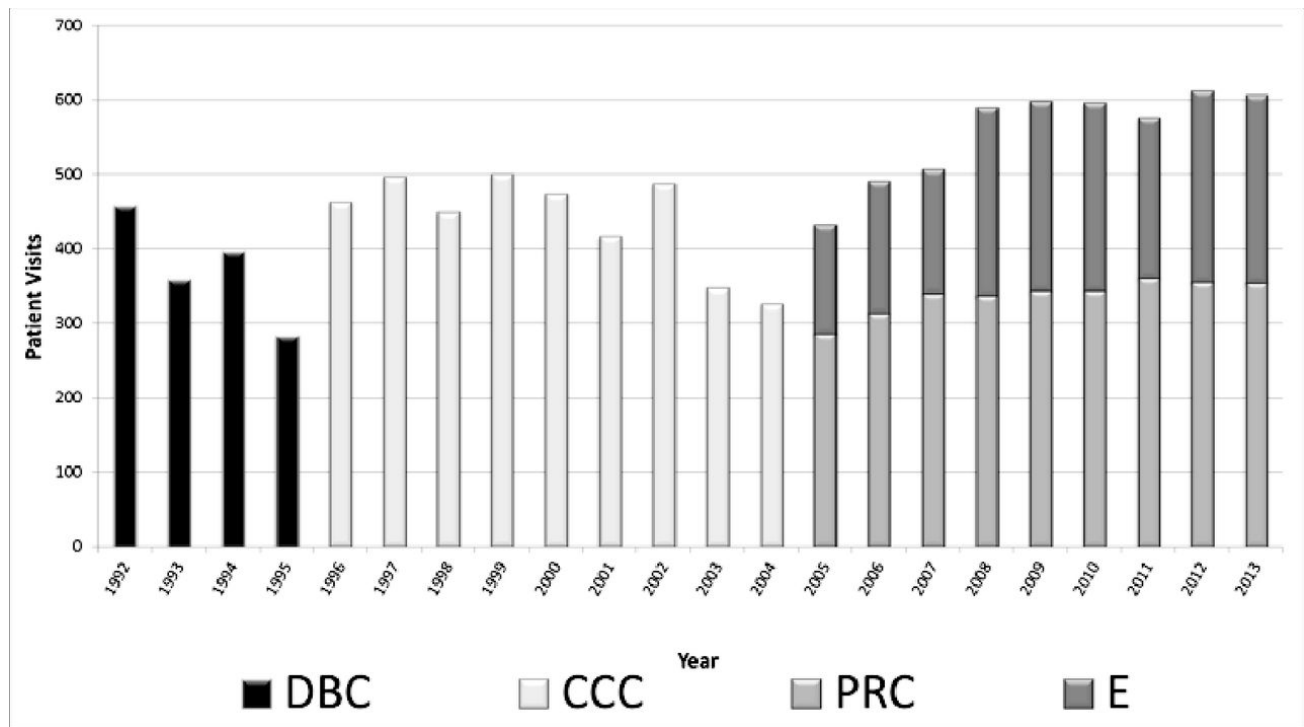
Patient intake occurs through a recruitment system of announced patient screening days. Along with faculty practice capacity, it is anticipated that all patients with oral health needs will be seen in some capacity by the CNU clinics including complex medical and dental patients. Patients will be initially seen and will receive urgent care without regard to ability to pay. The College will make its best effort to provide patient care at a reasonable cost so that patients without insurance will be able to have necessary dental care and achieve good oral health outcomes.

The ionizing radiation policy and infection control policies are attached in [Appendix 5-7 Ionizing Dental Radiation Proposed Policy](#) and [Appendix 5-8 Infection and Environmental Hazards Control Policy](#).

The registrar of CNU currently tracks students with regard to fundamental aspects of enrollment, credit hours, grades, tuition and compliance with academic policies. The College of Dental Medicine Offices of Academic Affairs and Clinical Education will develop a spreadsheet tracking system for students that will include clinical experiences, rotations, experiential data, completion of competency assessments, and entrusted clinical activity monitoring.

- n. As applicable, the adequacy of the patient caseload in terms of size, variety and scope to support required clinical experiences is available.

The size of the onsite clinical case load for students should culminate in a diverse patient experience encompassing oral health care at all stages of life and incorporating medical and dental complexity that reflects the practice of dental medicine in our region. At peer institutions, this has resulted in about 300 patient encounters per student at the time of graduation. However, dental school based practice at a typical school that *also* utilizes community-based education, produces in excess of 300 patient visits per student, as demonstrated in the following graph.



From White J, average clinical visits per US dental student from sample school

DBC = discipline-based curriculum, CCC = comprehensive care curriculum, PRC = procedural requirements curriculum, E = externship

(Dental Students' Clinical Experience Across Three Successive Curricula at One U.S. Dental School). White JM, Jenson LE, Gansky SA, Walsh CJ, Accurso BT, Vaderhobli RM, Kalendarian E, Walji MF, Cheng J. J Dent Educ. 2017 Apr;81(4):366-377. doi: 10.21815/JDE.016.010)
 DBC = discipline-based curriculum, CCC = comprehensive care curriculum, PRC = procedural requirements curriculum, E = externship

The marketing goal for the first four years of the CDM is to have 80 students in each Year 1 with a total of 320 students by the 4th year in operation. Dean Assael's experience in comprehensive care dentistry for students at Minnesota indicated an average of 6 patient visits per active enrolled patient per annum.

Thus, 160 clinically active DMD students at CNU will each require enrollment of 30 new active comprehensive care patients with sufficient health care needs per annum in addition to episodic emergency and other special services patients.

This construct requires a patient care marketing goal of 5000 new patients (5,000 patients x 6 visits = 30,000 patient visits) enrolled per year. Along with follow ups, urgent and episodic care, and the developing of other return services, overall patient services should grow in the first 5 years of operations to 50,000 per year for the DMD students.

Patient care marketing will emphasize prevention and the value of oral health screening. When operational, the CDM clinics will also be utilized for health screening integrated into other CNU health services and informational purposes. The college will liaise with the California DentiCal system for the identification of populations of children for whom dental services in Sacramento are linked with the MediCal provider. The important feature of this aspect is the extension of a DentiCal waiver program called the Dental Transformation Initiative (DTI) that provides support

and incentives for the enrollment of new patients, especially children, into dental practices for patients living in Sacramento County. This project has been extended, likely for 5 years, and will add patients living in Yolo, Sonoma, El Dorado, Napa, Merced, Santa Clara and San Joaquin adjacent counties. Achieving this project's goal will require a substantial increase in DentiCal providers which will position the College well in achieving its patient care goals. The DTI will generate further cooperation with medical/pediatric based health systems as well. The CNUCDM is working with these systems, particularly UC Davis, Sutter Health, HALO and Wellspace in this regard.

o. Class schedule(s) noting how each class will utilize the facility are developed.

The academic calendar of the College of Medicine is in [Appendix 2-3 COM-Academic-Calendar-2019-2020](#).

Of note is that students will be scheduled typically in Common Pathway courses utilizing the COM classrooms and laboratories which are adequate in size and facility to accommodate both COM and CDM students. Major classrooms seat 220 with total students from COM and CDM at 180. The anatomy lab is the only site for which hands-on experience would be limited by the number of learners. The plan is to use the facility jointly for demonstrations and then assign hours to CDM and COM students for supervised dissection and study.

Regarding classes for the CDM only, 2400 Maritime drive will have an 80 seat classroom and small class learning facilities that complement those available at the original Elk Grove facility.

p. As applicable, diagrams or blueprints of the didactic, laboratory, pre-clinical laboratory and clinical facilities, and equipment needs are developed to support the anticipated enrollment date.

The building profile of the principle building of the College of Dental Medicine at 2400 Maritime Drive is included in [Appendix 4-5 Facilities Schematics](#).

The building profile of shared facilities with the Colleges of Medicine and Pharmacy at 9700 West Taron Drive are also included in [Appendix 4-5 Facilities Schematics](#).

[Analysis of Program's Strengths and Weaknesses: Assessment of Priorities and Risk Assessment \(high, medium and low risk assessment and actions\)](#)

Assessment by the planning committee, the executive leadership of California Northstate University, and the community of interest led by the curriculum/education committee of the Sacramento District Dental Society, resulted in program initiation during the years 2017-2019. This resulted in the development of a Presidents Report on the Planning of the College of Dental Medicine presented by President Cheung to the Board of Trustees at its June 2018 meeting, ([Appendix 1-1 President Report On the Planning For Dental College](#)). This report summarizes the program initiation process including the risk assessment and actions taken to address these program initiation issues.

In the final report, the six leading principles of CNU program initiation were assessed. They include:

1. The education program(s) must be of demand by the general public,
2. The program(s) must lead to gainful employment while serving humanity or society's needs,
3. The program must be affordable and compliant with regulations and accreditation,
4. The program(s) must be deliverable by multiple learning modalities/media and able to reach learners of the future,
5. CNU must continue to address diversity and access issues in education,
6. All colleges must operate in a fiscally responsible manner to fulfill the education mission while maintaining long term sustainability and viability.

The specific areas of feasibility review included assessment of:

1. Demand of the program
2. Employment outlook
3. Earning potential to cost of degree ratio
4. Dentist per population ratio
5. Financial sustainability of the education program
6. Financial sustainability of CNU "oral health clinical operations"
7. Start-up costs

Assessment of each of these areas was answered in the affirmative. The demand for dental services in California is at an all-time high in large part due to the advancement of third party payment under the Denti-Cal Program and private payers such that 99% of California children are eligible for dental coverage. The more than 31,000 licensed dentists in California must be replaced and added to at a rate of 4% of the workforce per annum, equaling about 1200 dentists while all 6 of the current California dental schools produce less than 700 graduates per annum. California must import nearly half of its new dental workforce each year to continue to meet demand. California dentists are fully employed at the time of graduation.

However, some further analysis was generated by the *Gies in the 21st Century* report (for which Dean Assael is an author) and the work of the ADA Health Policy Institute, which demonstrate a modest excess in workforce under the current market demands. It was assessed that the Central Valley Delta, Sierra Nevada mountains, and Northern California, with its 12 million people without a dental school, do not submit to the same conditions found in the coastal cities such as Los Angeles and San Francisco. Our region has been consistently unable to attract sufficient workforce from large coastal academic health centers similar to problems identified in the upper Midwest and South in the US. This is likely to exacerbate for our region as the dentists in interior California, like the dentists of the upper Midwest and South, are nearly a decade older than those in the major coastal metropolitan areas. Those dentists arrived in the 1970's and 1980's when there were 2.4 dental school graduates per 100,000 US population while today there are just 1.8 graduates per 100,000 population. (Current Demographics and Future Trends of the Dentist Workforce, Valachovic, American Dental Education Association and found in [Appendix 1-4 Current Demographics and Future Trends](#)).

The costs of the program and the affordability of it are enhanced by not being subjected to the high costs of public education and the high costs of coastal city cost of living, construction, labor and related costs that exist in most of California. The capital district of Sacramento is not a seismic area, has a moderate climate and has housing/commercial real estate costs that are a fraction of those found in the San Francisco bay area. The pro forma examined the planned

tuition and cost of living as being substantially lower than the national average for private dental education. Our CNU planned tuition is \$76,000 per year. The tuition at other private schools in California, adjusted for an average rate over a 4 year period, range from \$77,940 to \$86,551. The return on investment for students was also presented in the Presidents report indicating an ROI of about 30%. The Bureau of Labor Statistics report also indicates a rising income for dentists in the next two decades. ([Appendix 1-1 President Report On the Planning For Dental College](#)).

Beyond the sustainability of the program, Dean Assael met with the leadership of the University in the Fall of 2018 culminating with an afternoon with the President's Executive Council on September 17, 2018 at which time a presentation was given on Vision 2030, an assessment of where dental medicine education and practice was headed in the coming decade and the opportunity to lead that change at CNU, presented in [Appendix 1-2 ADEA Vision 2030](#). In this presentation, the key elements of change for dental medicine in the coming decade and the response needed in health science education were presented.

The key elements of change in dental medicine associated to the new College plans presented were:

- Collaborative interprofessional practices
- Integrated payment system
- Value-based payment system
- Reduce the unit cost of dental care with:
 - Workforce development: team care intraprofessional education
 - Emerging practice models
 - Technology
- Oral health integrated into primary care
- Evidence-based integration into key health focus areas associated to CNU primary care mission:
 - Diabetes
 - Obesity
 - Atherosclerotic diseases
 - Oncology
 - Child development
 - Pregnancy

To accommodate those changes, a new dental education model is needed - one focused on the needs of the public and the need to integrate oral health into human health education and practice. This requires that the Colleges of Medicine, Pharmacy, Health Sciences and Psychology, integrate oral health education and practice into their developing models. This requires dental education to substantially change at every level including:

- Holistic admissions to dental school
- True commitment to diversity in dental education environment
- Advancing community-based education with interprofessional education and collaborative practice models
- Educating dentists as leaders of the oral health care team
- Clinical education of dental workforce entirely in health systems
- Collaboration with schools of health sciences and health systems

- Adoption of ACGME core competencies and developing a graduate medical education model for dental medicine
- Presence of oral health in every health science component
- Advance degrees and programs in Health Systems that promulgate integrative and value-based health care

This presentation was accepted by the President's Executive Council with a commitment to create an integrated health delivery model including oral health with existing CNU partners.

Acceptance of a Common Pathway model integrating medical and dental students in the primary biomedical sciences in a clinical case-based pedagogy was also accepted. The College of Health Sciences also agreed to collaborate as they do with medicine and pharmacy with a pipeline program to attract Sacramento area and California interior students, especially a diverse student body, to CNUCDM through baccalaureate level and post-baccalaureate programs.

Analysis of Program's Strengths and Weaknesses

Following the hiring of the Dean, the self-study for the Senior Commission of the Western Association of Schools and Colleges (WSCUC) and CODA was initiated resulting in the following document. In this analysis, a standard-by-standard qualitative analysis of the program's strengths and weaknesses as they exist now at the time of submission has been carried out with the senior leadership team of the University and the school. A process to rank order all recommendations generated during the self-study process of questions delivered via PowerPoint in two sessions with prospective faculty and with the senior leadership team. This Delphi method used questionnaires to rank the need for recommendations and their performance. The Delphi recommendations were recorded in real time in 8 groups of leaders and prospective faculty. They are reprised to follow in [Appendix 1-7 Task Force and Advisory Committee](#). In addition informal discussions occurred to further elaborate on this assessment. Leadership meetings included those with the Deans of Pharmacy, Health Sciences, Psychology, Medicine and the Vice Presidents for Operations, Academic Affairs, Institutional Effectiveness and Assessment, Chief Financial Officer, and Human Resources Director. The recommendations are categorized according to high, medium and low priority as requested for the CODA Initial Accreditation instructions.

For CNU the following definition of high, medium and low priority was used (Prioritization is based upon temporal urgency, not the importance of the standard to the success of the program):

1. **High priority:** this is an accreditation standard that must be immediately addressed to achieve Initial Accreditation
2. **Medium priority:** This is an accreditation standard that must be met prior to the enrollment of students
3. **Low priority:** This, too, is a required accreditation standard that must be achieved prior to the time of the second site visit in year two to accommodate the needs of the class of 2024 and subsequent classes

All recommendations generated during the self-study, including recommendations being implemented or implemented are presented. Short- and long-term plans for implementing the high priority recommendations are described.

Standard 1 Institutional Effectiveness assessment

- 1-1 It was felt by all that the purpose, mission, vision and values of the College of Dental Medicine was well defined, consistent with the strategic plan of the University as well as its history and ethos. While this is a **high priority** item it now is completed and is at **low risk**
- 1-2 Ongoing planning and assessment was deemed to be at an appropriate stage of development for a program that has not enrolled students, treated patients, or performed community service and biomedical research to date. Success in this area can only be measured by the following means: the infrastructure being put in place for excellent and positively evolving education, service, clinical and research programs, and the measurement and improvement activities as defined in **Appendix 1-2 CODA Table 2** and **Exhibit B and C**. Assessment of these components at this time were made and it was felt by leadership of the CDM that this is a **medium priority** due to the need to complete a quality assurance cycle prior to the second year site visit. The college is currently at **low risk** as these programs are properly implemented by the CDM team to date with timetables to preserve their effective implementation.
- 1-3 Those already affiliated with California Northstate were very supportive of the assertion that CNU was already an institution with a strong humanistic culture and that assessments of that culture by students, faculty and staff have shown the way towards further improvements. It was noted by prospective faculty that those who had experienced an exceptional humanistic culture in dental school (which has been promulgated fortunately in California) would be committed to continuing that culture at CNU, and those who had not experienced respect and humanism as students were eager not to repeat that experience at CNU. This is a **high priority** item that requires strong development prior to the enrollment of students. The leadership team of the college is being selected in part to assure the promulgation of the humanistic environment in education, service, patient care and research. This is an area of great and detailed discussion with CNU administration who aver that the CNU environment is dedicated to a humanistic culture, and appears to be a standard of **low risk**.
- 1-4 Many participants of the planning committee and the leadership team of the University are themselves from minority groups. Thanks to the diversity of our Sacramento community, where over 60 languages are spoken and Latino, African American, and American Indian communities are robust, CNU students, faculty and staff have reflected this diversity. Both pharmacy and medicine have “majority-minority” student bodies and support multiculturalism and respect at every level. The leaders and future faculty believe this is an area of **high priority**, in that the development of faculty students and staff much be in place before enrollment. It is also felt to be an area of **low risk**.
- 1-5 Financial resources of the University have been dependent on the original and new investors of the past decade, on tuition, fees, grants, and contracts. There is no state aid directly to the University though support of clinical programs, GME-related programs and government funded health care, drive the success of CNU education programs. Considerable improvements in the California Medicaid system have been of particular value in the sustainability of clinical education programs in medicine, psychology and dental medicine. CNU is a private University with investors expecting a return on investment. The financial leadership of the University has carefully produced a pro forma that has positively received investor scrutiny. This is a **high priority** item that must be continuously addressed through all phases of college development. It was felt by all, including University leadership, that

financial resources were more than adequate and that the college was at **low risk** regarding resources.

1-6 The University was noted in the self-assessment to be completely independent of other entities as it has been since its inception. This is a **high priority** requirement, but with no support from entities outside the institution, CNUCDM was felt to be at **low risk**.

1-7 All development of curriculum development and approval rests with CNU and specifically with the College of Dental Medicine. Direct inquiries to the President and the Vice Presidents of Academic Affairs and Health Sciences (Dean of Medicine) indicated no potential issues in this regard. This is a **high priority** item but CNUCDM is at **low risk**.

1-8 CNU is a WSCUC-accredited institution and is accredited in medicine by LCME and ACPE for pharmacy. The Psychology program in its first year is undergoing APA self-study. This is a **high priority** item but CNUCDM is at **low risk**.

1-9 Affiliations with various health care systems via MOUs were demonstrated to the faculty section meetings, but additionally it was noted that most of the other dental schools in California have expressed their support and desire to work with CNU. In addition, the Sacramento District Dental Society and the California Dental Association have expressed their support and positive interest in the college. Health systems in regional counties and hospital systems have interest in the progress of the college as well. Since the development of affiliations is an ongoing activity for which implementation will be for the main clinical years of 2023-2024 this is a **low priority** implementation item and CNUCDM is at **low risk** for this standard.

Standard 2: Educational Program Assessment

2-1 Several syllabi have already been developed including those for the entire human studies curriculum and curriculum components of the odontology, oral and maxillofacial studies, and behavioral and social sciences components. These include all syllabi for the first two years prior to the second CODA site visit. While some faculty to be assigned will need active development in syllabi construction, the Dean of Academic affairs and faculty development has extensive experience in this area to apply. Due to the fact this is a four year curriculum, the implementation needed makes this a **medium priority** item. The college is at **low risk** for this standard.

2-2 Due process is well established in the University and also in the CNUCDM student handbook. The Dean of Student Affairs and Admissions is further developing these processes which will be implemented by appropriate student progress committees. These activities must be immediately in place prior to enrollment making this a **high priority** item but CNUCDM is at **low risk** in this regard.

2-3 The enrollment plan is for 4 continuous academic years. This is a **high priority** as the elements of all four years must be in place prior to enrollment, CNUCDM is at **low risk**.

2-4 The goals of the education program are well stated in the strategic plan. The outcomes specific to the plan are under an appropriate stage of development as course directors for most of years 2, 3 and 4 are developing syllabi that will include learning outcomes. The

process of development will include working groups to precisely develop the defined competencies of the curriculum referred and mapped in each case to the ILOs, PLOs and individual Course Learning Outcomes. Assessments including competency assessments are to be linked to the three components noted. Although this process is under development as a **medium priority** item, it is at the appropriate stage making CNU is at **low risk** for this standard.

2-5 The working group developed the grading and student evaluation methods and systems including competency based grading and remediation policies these are linked or in the process of being linked to defined competencies. Competency assessments will occur at all stages of the program so the development of grading and student evaluation methods must be both immediate and ongoing making this a **high priority** item. CNU is at **low risk** for this standard.

2-6 Affiliation contracts and discussions with all sites will ensure the calibration of VCF (Volunteer Community Faculty) at all sites. Discipline leaders will be committed to this task including the development of calibration manuals. While initial calibration of faculty is already underway with assessment of MOU faculties through the checklist assessment and interviews regarding commitment to CAMBRA and integration with primary care, this is a **low priority** item in that implementation is needed prior to first rotations to community sites in 2023. CNU is at **low risk** for this standard.

2-7 The integrated curriculum is a **high priority** standard for CNU and is proceeding effectively. The planned curriculum in four themes (human studies, behavioral and social sciences, odontology, and oral and maxillofacial studies) delivered in a diagonal curriculum weaving didactic and clinical material in an integrated fashion throughout the four years puts CNUCDM is at **low risk** for this standard.

2-8 Curriculum management is planned through the curriculum committee as defined later in the self-study document. This is a **high priority** item in that the comprehensive curriculum management plan must be immediate and ongoing CNUCDM is at **low risk** for this standard.

2-9 Since this is a new college within the context of an existing oral healthcare community, success with the adequate number of patients will depend on CNU's ability to successfully compete and develop relationships with government agencies and health systems. While one clinic is under development in a purchased building and a second one is in the period of negotiations, these need to be completed within reasonable time to ensure the first classes have adequate clinical experiences. The planning for this must be immediate and ongoing, making this a **high priority** item. Until the second clinic is under contract/construction, CNU is at **moderate risk** for this standard. At the time of the first site visit, 4-7 months from this submission, CNUCDM will be at **low risk** for this standard.

2-10 The development of critical thinking must be incorporated fully into the initial courses in order to be promulgated throughout the curriculum. This is a **high priority** item on that basis. The entire curriculum is evidence and case-based, using small group presentation and project methods to apply knowledge critically, and will ensure critical thinking is a leading component. CNUCDM is at **low risk** for this standard.

- 2-11 Self-assessment must be incorporated fully throughout the curriculum making this a **high priority** item. The grading forms for students will include self-assessment alongside faculty assessment and in some cases peer assessment as noted in syllabi. CNUCDM is at **low risk** for this standard.
- 2-12 Biomedical sciences are both integrated through Common Pathway with the medical school as well as including dental case-based education. This is a particular strength of the curriculum. This is a **high priority** item. CNUCDM is at **low risk** for this standard.
- 2-13 Case-based learning demonstrates oral facial complex aspects of all biomedical human studies components. This is a **high priority** item. CNUCDM is at **low risk** for this standard.
- 2-14 The summary in the self-study demonstrates the high level of depth in the curriculum in regard to etiology, pathogenesis, epidemiology, differential diagnosis, prevention, treatment and prognosis for oral diseases. This is a **high priority** item. CNUCDM is at **low risk** for this standard.
- 2-15 The development of junior and senior case-based seminars in dental medicine and in medicine are to ensure the application of biomedical sciences in patient care. In addition, preceptors in clinical education will serve as faculty in case-based learning in the Human Studies Common Pathway courses. This is a **medium priority** item. CNUCDM is at **low risk** for this standard.
- 2-16 The behavioral sciences curriculum is under development within the College of Dental Medicine and with the colleges of medicine and psychology and will focus on the dental patient-centered issues in behavioral sciences. This is a **high priority** item in that the integrated curriculum in this area will occur in each of the four year program. CNUCDM is at **low risk** for this standard.
- 2-17 The program development has included strong attention to directing oral health education and services to underserved communities. Particularly the relation with Halo Health, Wellspace, and Indian Health tribal clinics will ensure this outcome. Of note is that the primary clinic of the college is located in the most ethnically diverse community of the region. This is a **low priority** item in that the management of patients from diverse backgrounds will begin to occur in earnest in 2022-2023. CNUCDM is at **low risk** for this standard.
- 2-18 Discussions with the Sacramento District Dental Society planning group have included practice management, organized dentistry and state board of dentistry leaders. The University attorney Dina Ragab will be a faculty member and Paul Wagstaffe, the University Attorney Emeritus, is a faculty member for the other colleges and will do so for dental medicine as well. The self-study reflects this. This is a process integrated into all 4 years of the curriculum and is thus a **high priority** item. CNUCDM is at **low risk** for this standard.
- 2-19 The planning group described above will interface on the issues of practice management. Students will learn with other members of the oral health team and will be taught as well by dental assistants, medical professionals, dental specialists and the whole health care team.

Since this will occur mostly in the clinical practicum, this is a **low priority** item. CNUCDM is at **low risk** for this standard.

2-20 Communication is a key ILO and PLO to be linked to most syllabi. This is throughout the curriculum and is a core principle associated to most syllabi. This is a **high priority** item. CNUCDM is at **low risk** for this standard.

2-21 Ethics and professionalism is a key ILO and PLO to be linked to most syllabi. This is a **high priority** item. CNUCDM is at **low risk** for this standard.

2-22 Assessment for evidence-based practice and communication of that evidence in clinic and small group learning sessions is a key component of the curriculum. This is a **high priority** item. CNUCDM is at **low risk** for this standard.

2-23 While excellent relationships for the care of pediatric patients, including Head Start and well-baby patients, are already in place, time has not yet permitted the development of strong geriatric relations with existing domiciled elderly patients and through senior centers. This process is underway. This is a **low priority** item. CNUCDM is at **low risk** for this standard.

2-24 The working groups of faculty have addressed clinical experiences, faculty resources and clinical facilities in all these areas including the rubric for competency assessment. This will occur in years 3 and 4, 2023-2024 thus this is a **low priority** item. CNUCDM is at **low risk** for this standard.

2-25 The University is committed to the development of a special needs clinic as part of the approved academic health center where all DMD students will participate. These will be developed with the hospital and clinics construction in 2022-2023. This is a **low priority** item. CNUCDM is at **low risk** for this standard.

2-26 As noted in the self-study, 12 weeks and two courses are in community-based learning to be implemented in 2023-2024. This is a **low priority** item. CNUCDM is at **low risk** for this standard.

Standard 3 Faculty and Staff Assessment

3-1 The faculty and staff hiring plan as noted in the self-study and exhibits, is adequate and meets industry norms for development and mature levels. This is a **high priority** item. CNUCDM is at **low risk** for this standard.

3-2 The faculty development process as noted in the self-study is adequately developed to this point and will undergo continuous development as faculty are appointed. This is a **high priority** item. CNUCDM is at **low risk** for this standard.

3-3 Negotiations with the CNU faculty senate have occurred to ensure equal representation of CNUCDM with faculty governance. The outcome ensures equal representation of dental medicine in the Senate. A CNUCDM faculty council is also planned. This is a **medium priority** item. CNUCDM is at **low risk** for this standard.

- 3-4 Faculty evaluation processes were developed during WSCUC submission and are in the self-study narrative. Faculty evaluation must be immediate and continuous. This is a **high priority** item. CNUCDM is at **low risk** for this standard.
- 3-5 As noted in faculty handbook, attached to self-study, the processes for promotion are in place. This is a **high priority** item. CNUCDM is at **low risk** for this standard.

Standard 4 Educational Support Services Assessment

- 4-1 Fully developed processes for admissions exists for the Colleges of Medicine and Pharmacy and are now completely developed for the College of Dental Medicine. These are noted in the self-study consistent with CNU policies. This is a **high priority** item. CNUCDM is at **low risk** for this standard.
- 4-2 Currently, no advanced standing is applicable at CNUCDM. This is a **low priority** item. CNUCDM is at **low risk** for this standard.
- 4-3 Due to the nature of the curriculum, admission of transfer students is not being considered at this time. This is a **low priority** item. CNUCDM is at **low risk** for this standard.
- 4-4 As stated in the self-study, both the University and the college have admissions policies designed to include recruitment and admission of a diverse student population. During the course of program development, meetings with community and regional colleges have focused on recruitment of a diverse student body with special attention towards underrepresented minorities, immigrants, and American Indians. This is a **high priority** item. CNUCDM is at **low risk** for this standard.
- 4-5 Initial assessment at the time of initiation of program development put CNU at **high risk** in this regard as no building for the college had been determined and the expectation that current facilities could accommodate the entire program needed to be addressed. A local site analysis determined that the classroom space for Common Pathway courses was adequate as well as student life, library and non-dedicated lab space. No suitable space for the clinics or preclinical simulation laboratories was initially identified. In January 2019, this circumstance changed with the purchase of a building adjacent to the main campus dedicated to the College. This will supplement University facilities with space for a fixed simulation laboratory, the first of 2 major clinics, and a classroom for 80, plus additional seminar space. While most of these facilities will be completed before enrollment of the first class, the development task is ongoing. Thus, this is a **high priority** item. With recent developments and purchases, CNUCDM is at **low risk** for this standard.
- 4-6 Written agreements are completed or in process without anticipated obstacle for all learning sites. This has been an ongoing project for the past 3 months since the Dean was hired to meet individually with leadership, community boards, and dentists from all sites to gain commitment to be sites for DMD education. This is a **low priority** item in that the implementation of these sites will be in 2023. CNUCDM is at **low risk** for this standard.
- 4-7 All of these student services are in place and noted in the student handbook. This is a **high priority** item. CNUCDM is at **low risk** for this standard.

- 4-8 All of these costs of education are noted in the pro forma and planning document for the school. They have been submitted to lenders. All will be made available to applicants at the time of admission. This is a **high priority** item. CNUCDM is at **low risk** for this standard.
- 4-9 These policies on student aid and privacy are in the University documents for existing colleges and are incorporated into CNUCDM program documents. This is a **high priority** item. CNUCDM is at **low risk** for this standard.
- 4-10 These policies on mandatory health standards are in the University documents for existing colleges and are incorporated into CNUCDM program documents. This is a **high priority** item. CNUCDM is at **low risk** for this standard.
- 4-11 Policies and programs regarding student health are in the University documents for existing colleges and are incorporated into CNUCDM program documents. This is a **high priority** item. CNUCDM is at **low risk** for this standard.
- 4-12 Immunization policies are in the University documents for existing colleges and are incorporated into CNUCDM program documents, especially with regard to specific disease immunizations. This is a **high priority** item. CNUCDM is at **low risk** for this standard.

Standard 5 Patient Care Services Assessment

- 5-1 The Assistant Dean of Clinical Affairs working with existing and prospective faculty from January through April developed these policies regarding patient's rights and patient-centered care. These are now in place but will be implemented in the coming 2 years. This is a **medium priority** item. CNUCDM is at **low risk** for this standard.
- 5-2 The clinic committee and the Dean of clinical affairs have developed the evidence-based care principles to this point with development to be specified by engaged clinicians in the coming months and years as clinics come on line. This is a **medium priority** item to be implemented in 2022. CNUCDM is at **low risk** for this standard.
- 5-3 The parameters guiding the clinic committee for the development of standards of care is in place. The cycle of continuous improvement with regard to established standards, their assessment, continuous monitoring, and evolution are noted in the establishment of the role of dean of clinical affairs and the clinic committee. This is a **medium priority** item. CNUCDM is at **low risk** for this standard.
- 5-4 The comprehensive care plan indicates that students will treat patients solely with regard to the patients' needs. The ability to take competency assessments will not interfere with comprehensive care. This is a **medium priority** item. CNUCDM is at **low risk** for this standard.
- 5-5 The plans for the clinic are to have a 24 hour emergency service associated to the adjacent hospital. Until hospital operations are in place, faculty will take this call with the support of a regional hospital service. This is a **medium priority** item. CNUCDM is at **low risk** for this standard.

- 5-6 All clinical personnel will be BLS certified. This is a **medium priority** item. CNUCDM is at **low risk** for this standard.
- 5-7 Ionizing radiation policies are developed with assistance of OMF radiology and the Dean of clinical Affairs. This is a **medium priority** item. CNUCDM is at **low risk** for this standard.
- 5-8 Policies are developed based upon CDC guidelines for asepsis and specifically supported with manufacturer recommendations vis a vis equipment. This is a **high priority** item. CNUCDM is at **low risk** for this standard.
- 5-9 University and school policies for compliance with federal (HIPAA) and local statutes with regard to patient confidentiality are under development. Those for the CNUCDM will match those of the ADA and CDA documents. This area is complemented by the planned CNU Hospital and Clinics for which additional policies for the security of protected health information will be made including a HIPAA compliant electronic health record, training and associated policies. This is a **high priority** item. CNUCDM is at **low risk** for this standard.

Standard 6- Research Program assessment

- 6-1 The commitment as an integral component of the college is in the mission, vision, goals and objectives. This is a **high priority** item. CNUCDM is at **low risk** for this standard.
- 6-2 The commitment of time, work product, facilities, equipment and other support to faculty to engage in research has been a principle item of development with the Vice President of research and the Dean of research in the CNUCDM. This is a **high priority** item. CNUCDM is at **low risk** for this standard.
- 6-3 The Dean will administer a fund to support student research as well as funds to be developed by the Dean of research. Students at CNU health professions colleges currently have an exceptional participation in biomedical research. This is a **high priority** item. CNUCDM is at **low risk** for this standard.

Description of Program Initiation

1. If a feasibility study has been conducted, briefly describe the study.

The DMD program supports the institution's mission of preparing future professionals to advance the art and science of healthcare and the vision of the University towards primary care, community service, and social consciousness and accountability. California Northstate University (CNU) currently offers an array of healthcare programs whose students would benefit from the addition of a dental education program and the interprofessional education opportunities that such a program would afford. Currently, the University provides discipline based and interprofessional education experiences for students in the medical, pharmacy, and psychology doctoral programs.

Sacramento is an ideal location due to its strong professional community, strong need for a dental school, the lower cost of living within California, and access to very prepared students and excellent faculty. CNU's DMD program would be in a position to partner with health systems and the state to improve oral health access and oral health outcomes for Sacramento, the east bay, the central valley and mountain regions of Northern California. Additionally, the dental school would be able to partner with community resources, foundations and charities for care for underserved Californians in Sacramento and beyond.

Sacramento is in need of a dental school, as one of the 30 largest metropolitan areas in the nation, Sacramento joins San Diego as the only ones without a single dental school associated with their region.

Dentistry is the health profession in the highest demand: The 66 US dental schools have about 6000+ spaces for about 13,000 US applicants and an equal number of non US dental graduates seeking a US dental degree. Graduates of dental schools have virtually 100% employment in professional related activities on day of graduation. California residents seek dental education outside of California at the highest rate of any state.

There is a great need for dental schools due to what is considered a "hidden epidemic": dental disease is the greatest untreated and undertreated of all diseases in children, the elderly, disabled, special needs patients, the poor and medically compromised. California dental schools have an inadequate record in providing dentists to rural, mountain and central California cities. There are 30,772 dentists in California for a population of 38,441,747. Academic health centers benefit from the full array of health science education with dentistry integrated into the fabric of healthcare. Policy makers in California have awakened to oral health disparities and increased attention and support for oral health.

Additionally, this program is responsive to the needs within California and beyond for qualified dentists to fill the demand for dentists. According to the Bureau of Labor Statistics, the demand for dentists will continue to grow nationwide as the US populations continue to exponentially grow and age. The aging US populations are more likely to retain their teeth due to advancements in healthcare and the increased risk of oral cancer demands have created an increase in the demand for dental professionals. The projected employment change from 2016 to 2026 for dentists is a 19% growth, which was determined to be much faster than the projected average US job growth. Due to this exciting time of growth and possibility for innovation

within dentistry, it is important that CNU stays on the cutting edge in training the best and most competent future dentists.

2. Discuss the process and procedures used for initial program development. Identify the individuals responsible for program planning.

CNU is engaged in continuous assessment of the critical elements of the institution-- from assessing how well the college achieves its mission to assessing how effectively the institution's strategic thinking and planning advance the institutional mission, vision, values, and goals. Assessment drives programmatic improvements, which are subsequently incorporated into the institution's strategic planning and the budgeting process.

Strategy 6.3 of the University's Strategic Plan is to "research viability of new programs that are consistent with the Mission for implementation." The tactics for this plan include the following: conduct appropriate research to explore plans for potential growth, create plans for new program development, develop substantive change proposals for new programs, and implement new programs that are good matches.

Initial planning for the DMD program began in 2016 when California Northstate University was exploring the possibility of other doctoral programs within the healthcare professions that not only provided a good fit with the current program offerings but which also was greatly needed in California and beyond. The DMD program emerged as the best fit with the current offerings of CNU due to the mounting dental care needs of Californians.

On September 18, 2017, the Dental School Task Force was created in order to examine the need for a regional dental school in the Sacramento area, as well as the shortage of dentists nationwide. (See [Appendix D-1 Task Force Roster](#)) Cost and affordability were discussed within the initial meeting, as well as the responsibility of CNU to provide a quality education and reasonable costs to the students. On November 13, 2017, administration was given an update on the program in the President's Executive Council and further feedback and discussion was solicited.

- 1 The process used to establish need began with a review of oral health services nationally and in California, the number of current providers, and the projected deficit in dentists. According to a compilation of 2016-2017 admissions data retained by the American Dental Education Association, it was shown that 6,100 first year enrollees were accepted from a total of 12,058 applicants of completed applications through AADSAS(50.6% acceptance rate). The Pacific coast has an outsized representation among dental applicants. The report showed that the greatest number of applicants (per million population) to US dental schools were from Washington and Oregon and the total greatest number were from California. Wanchek, T., Cook, B. J., & Valachovic, R. W. (2017) US dental school applicants and enrollees, 2016 entering class. *Journal of Dental Education*, 81(11), 1373-1382. Doi: 10.21815/JDE.017.096

California has six schools that offer programs for dentistry – two are in San Francisco and four are in the Los Angeles area. There is a need to have an established dental school within California's Central Valley for prospective students living in the region and outlying locations. Of the 30 largest metropolitan areas in the nation, Sacramento and San Diego are the only ones without a single dental school associated to their region. A total of 13,637 applications were received by dental programs in California and within the entire Western US, a total of 1,031

were enrolled. By establishing more dental programs in this region, more qualified students may be able to attend dental programs.

Appendix D-2 Monitored Dental Programs shows all six monitored dental schools in California as well as information regarding CODA accreditation status, their applicant pools, and enrollment rates. These numbers indicate that student desire for dental program placements outnumbers current availability. Additionally, the quality of applicants has improved over the years, in spite of the limited number of programs available to them. The DAT average for applicants in 2000 was 17.8 and had risen to 19.3 by 2017. Similarly, GPAs grew from 3.2 in 2000 to 3.4 by 2017. This indicates a robust pool of qualified applicants are simply unable to enroll because the number of dental programs is insufficient.

According to the Commission on Dental Accreditation (CODA), there are six dental programs in California, the closest two being in San Francisco at University of the Pacific, Arthur A. Dugoni School of Dentistry (97mi) and UCSF School of Dentistry (101mi). In 2017, University of the Pacific had 2,364 applications and 142 enrollees (6% acceptance rate), and UCSF had 2,022 applications and 86 enrollees (4% acceptance rate). Due to the lower acceptance rate, coupled with the scarcity of dental programs within 50 miles of the Sacramento region, it can be determined that there is a need for a dental school in the region.

The planning process for the College of Dental Medicine also considered that dental disease is the greatest untreated and undertreated of all diseases in children, the elderly, disabled, special needs, the poor and medically compromised. Despite that, in 2016, there were only 1.8 dental school graduates for every 100,000 people in the United States. This is a significant decrease from 1977, when there were 2.4 dental school graduates for every 100,000 people. The need in California is particularly acute, with vast amounts of the population living in the central valley, mountains and rural areas.

Therefore, the Dental School Task Force identified a need for highly qualified candidates to be provided a dental school education who cannot be served by the current number of dental programs. There is also a shortage of both applicants and enrollees who are Latino and African American. This is of particular concern in California, a state whose population is roughly 40 percent Latino and 7 percent African American. Currently, dental college enrollment nationally is 5 percent African American and 9.1 percent Latino.

In planning the development of the College of Dental Medicine, the Task Force also recognized that employment prospects for dentists are excellent. According to the U.S. Bureau of Labor Statistics, the growth in the profession is projected to increase by 19.4 percent between 2016 and 2026. This is a significant increase over other job sectors which are expected to grow by only 7 percent during that same time period. The demand for dentists is increasing so dramatically because the US population continues to exponentially grow and age. The aging US population is more likely to retain their teeth due to advancements in healthcare. Additionally, the increased risk of oral cancer increases the demand on the number of dental professionals in the country. The 2019 U.S. News and World Report also indicates that dentists enjoy a profession in the top 5 of the 100 Best Jobs in the nation and is second most favorable in Health Care Jobs. It is also a lucrative profession, with the average salary of \$158,120.

At the February 10, 2018, meeting, the task force discussed the process of accreditation, including planning the timing for the WSCUC change and CODA accreditation processes.

Further, Dr. Leon Assael was referred to the group, the person who would eventually be hired as Dean of the College of Dental Medicine after a search conducted in the Fall of 2018.

On May 26, 2018, Dr. Leon Assael met with the task force as a consultant, and the group discussed the important goals and creation of curriculum, accreditation timeline, and overall cost. On August 4, 2018, a more detailed idea of the curriculum strategy was discussed, as well as the creation of the dental clinics and student education and training. On August 6, 2018, the DMD program was introduced to the full faculty and staff in a Town Hall meeting.

In the Fall of 2018 the Task Force requested a survey to be created and disseminated to CNU College of Health Sciences (CHS) undergraduate students. The survey contained questions regarding students' interest in the field of dentistry, their desire for more information about CNU's dental program, and whether and when they might wish to submit an application to CNU's dental program. It was found that 76% of CHS students wanted further information about the program, 51% were interested in pursuing dentistry as a career choice, and 50% would apply to CNU's dental program. The majority of respondents who indicated that they would apply to the dental program also indicated that they would desire to do so as soon as they have completed their undergraduate coursework at CHS. Multiple students have indicated that the dental program at CNU fits well within the scope of the University, which reflects CNU's mission, "to advance the art and science of healthcare." The CHS student interest survey results can be found in [Appendix D-3 CHS Student Interest Survey](#).

On October 30, 2018, Dr. Leon Assael addressed the Board of Trustees and gave a brief description of his background, and his plans on the timeline for accreditation and process for the creation of the dental program. The preparation of the self-study for WSCUC and subsequently for CODA was the responsibility of the leadership team. The individuals, administrative titles, and contact information are noted in [Exhibit A](#). The application for WSCUC was submitted November 29, 2018, and the substantive change review was held with a site visit team on April 25, 2019. The Faculty Senate reviewed and discussed the proposed program during their November 6, 2018, meeting, and final Faculty Senate approval was given on November 12, 2018. After completion of the search for the dental dean, Dr. Leon Assael was hired on a part-time basis on November 1, 2018, and as a full-time employee on December 1, 2018.

Refer to [Appendix D-4 DMD Development Meeting Minutes](#), [Appendix D-5 New Program Approval Process](#), [Appendix D-6 Program Announcement](#) and [Appendix D-7 Faculty Senate Approval Letter](#).

Wanchek, T., Cook, B. J., & Valachovic, R. W. (2017) US dental school applicants and enrollees, 2016 entering class. *Journal of Dental Education*, 81(11), 1373-1382. Doi: 10.21815/JDE.017.096

Bureau of Labor Statistics, U.S. Department of Labor, *Occupational Outlook Handbook*, Dentists. Retrieved from <https://www.bls.gov/ooh/healthcare/dentists.htm>

Commission on Dental Accreditation, *Search for Dental Programs*. Retrieved from <https://www.ada.org/en/coda/find-a-program/>

This is a very strong market so filling a class would not require marketing. However, there is a desire to mold a school tied to its mission statement and its goals and objectives. In the case of CNU we are desiring students with a social consciousness, a diverse student body and one of

high academic potential. Since the CDM is based upon a community service and primary care model, the marketing strategies are strongly influenced by that paradigm.

The elements are as follows:

1. Pipeline
 - a. Develop a program beginning in secondary school to stimulate interest in dentistry as a career. The CDM will work with local 9th -12th grade schools in the greater Sacramento area and the Delta that serve students with low socioeconomic status and reside in areas of need for health care resources.
 - b. A Dentist for a Day program will introduce students to dentistry. This is shown to schools via an onsite presentation by faculty, typically in Health classes
 - c. Girl Scout and Boy Scout badges can be earned related to oral health
 - d. Student projects in high school will be available that are directed to oral health in either science or social science courses
2. College level
 - a. Visit colleges, especially those with underrepresented minorities and social need to meet with pre-health societies and preprofessional counselors among others (The dental school maintains a list of those regional baccalaureate institutions for this purpose)
 - b. Summer research opportunities for baccalaureate and post baccalaureate students
3. Public
 - a. Participation in Health fairs and free health screenings, including those in interprofessional environments with medicine and pharmacy. While doing these events, volunteers from high school and college level will be recruited to help as volunteers. Among examples of this for CNU will be Celebracion de Salud (an inter-professional health fair program for migrant workers) and California Dental Association Mission of Mercy (CDA Cares), which would include CNU students and prospective students
 - b. Web site development will emphasize the features of the CDM
 - c. Interviews with the press and other communications resources
 - d. Social media presence on Facebook, Instagram
 - e. Print media and visual media: CNU presence at the airport and via its presence on Interstate 5 will produce valuable marketing for prospective students, staff, faculty and patients.
 - f. Patient care marketing will emphasize prevention and the value of oral health screening. When operational, the CDM clinics will be utilized for health screening and informational purposes

The Admissions officer will be a full-time position whose focus will be on class development and leading in this area. In-kind cost is based upon effort of existing faculty, staff and students. Travel and marketing budget for programs, IT, branding merchandise, etc. to ensure a diverse pipeline of applicants is \$50K per year.

The marketing goal for the first four years of the CDM is to have 80 students in each Year 1, with a total of 320 students by the 4th year in operation. The patient care marketing goal is for 5,000 new patients enrolled per year.

California Northstate is committed to gaining a student body from underserved communities, including rural California communities, immigrant and migrant communities, underrepresented minorities and other chronically underserved communities. Through our pipeline program we will identify, mentor, and support community members who will seek careers in the health professions broadly and dental medicine specifically. Refer to [Appendix D-8 CDM Marketing and Recruitment Plan](#).

3. Describe the process used for employing the program's chief administrative officer/dean. State the date the dean was employed. A dean must have been employed at the time the application is submitted or at least six (6) months prior to a projected accreditation site visit.

After approval by the CNU Board of Trustees for a College of Dental Medicine in June 2018, a job description and search process for the founding Dean was initiated. The Search committee headed by President Cheung included Dean John Silva of the College of Medicine, Dean Hieu Tran of the College of Pharmacy, and Wai Chen representing the Board of Trustees.

Leon A. Assael DMD was appointed Dean of the College of Dental Medicine on September 26, 2018 and immediately began work of the new college. On November 1, 2018, Dean Assael became an employee of the University, full-time, as of December 1, 2018. A brief bio is provided below and his full CV can be found in [Appendix 1-7 Assael CV 2018](#).

November 2018 BIO: Dr. Leon Assael DMD is volunteer Clinical Professor in Public Health, and Oral Maxillofacial Surgery at University of California San Francisco. He is the immediate past Chair of the Board of the American Dental Education Association. He is Dean Emeritus of the University of Minnesota School Of Dentistry. He holds an BA from Columbia University and earned a DMD from Harvard University School of Dental Medicine, as well as a Certificate in Medical Management from the University of Kentucky. He completed his residency in oral and maxillofacial surgery at Vanderbilt University.

Dr. Assael was in medical school/hospital based practice at the Mount Sinai School of Medicine until entering dental education at the University of Connecticut in 1989. He has served as residency program director in oral and maxillofacial surgery at Medical College of Wisconsin, Mount Sinai School of Medicine, the University of Connecticut and Oregon Health & Sciences University. Dr. Assael has served as an officer on medical boards at several hospitals and as acting chief of medical staff of John Dempsey Hospital. Dr. Assael served as Dean at the University of Kentucky, College of Dentistry until 2003, when he was appointed program director then chair of Oral and Maxillofacial Surgery and Medical Director Hospital Dentistry at the Oregon Health & Science University.

He is the past editor-in-chief of the Journal of Oral and Maxillofacial Surgery (2001-2011, current co-editor in chief of Oral and Maxillofacial Surgery, past chairman of the Council on Dental Education and Licensure of the American Dental Association, and a diplomate to the American Board of Oral and Maxillofacial Surgery. Dr. Assael is the past chair of the Council of Deans of the American Dental Education Association. In 2001, President George W. Bush awarded Dr. Assael the America's Promise Award for advancements in oral health in Appalachia achieved by the University of Kentucky

faculty. He is the recipient of the Donald Osborn award for outstanding educator in oral and maxillofacial surgery. In 2010, the American Association of Oral and Maxillofacial Surgeons awarded Dr. Assael the Board of Trustees special recognition award. Dr. Assael has clinical and research interests in value based health care, systems-based oral health education, Dental therapy, bone diseases and nerve injury

4. If a facility is not currently available for use by the dental education program, briefly describe the process for approving the physical facility. Identify the proposed date for facility completion.

The process for approving a facility occurred with the construction and planning group of CNU with an architectural firm, Kevin Pressey and Associates, for the dental college. Consideration as to whether a single model of onsite clinical education was considered or a multiple site clinical setting. In both cases needs of the college were discussed and options were considered. The first options to be considered was a temporary one in Elk Grove with a local conference center and shopping center owned by the University. The psychology department had recently constructed clinical facilities at that site which is adjacent to the campus. In addition, facilities were considered at the Health Sciences Campus in Rancho Cordova.

Discussions with the University leadership centered on the need for dental medicine to be integrated through interprofessional and collaborative practice experiences with the other health sciences particularly with the College of Medicine in Common Pathway courses. In addition, the need for dedicated space for simulation and for clinics attached to other ambulatory care series being developed by the University became an important consideration. On that basis, the University purchased the building at 2400 Maritime Drive as the dental college home. The building is an exceptionally well built bank headquarters building that is undergoing renovations to include a 32 unit clinic (9000 square feet), a simulation lab (3000 square feet), and learning spaces/classrooms (4000 square feet). This purpose-built construction is currently completing its planning stage and construction will commence immediately thereafter. Occupation of the building is anticipated by the end of this year.

This 16,000 square foot facility has a small campus setting, 40 parking spaces and ample room for permanent addition to the building. The campus space is now 250 acres and the adjacent land to the dental college building is also owned by the University and is now planned for additional dental medicine and other health science learning space as well as clinical facilities and parking.

In addition to common core facilities of the University for classroom, library, learning resources, laboratories and student life facilities at 9700 Taron Drive, the College of Dental Medicine now has a building on the master campus footprint at 2400 Maritime Drive in Elk Grove, as shown in [Appendix 4-5 CNUCDM Facilities Schematics](#). The Maritime Drive Site will include the primary clinic for the College for opening in Summer 2020.

Currently the college is working with community partners and the university leadership to consider options for an additional clinical site to be developed in 2020 for opening in 2021-2022 in the greater Sacramento, San Joaquin Valley region. Real estate negotiations for this second clinical site to be built one year subsequent to the first site in Elk Grove slated for 2019-2020.

5. Discuss how the projected size of the class was determined.

	2020-2021	2021-2022	2022-2023	2023-2024
Class 1	80	80	80	80
Class 2	N/A	80	80	80
Class 3		N/A	80	80
Class 4			N/A	80
TOTAL STUDENTS NEEDING PLACEMENT	80	160	240	320 80

The planned DMD class size of 80 will engage about 160 students in clinical care at all times beginning in 2021, which may include international dental graduates to the level of 80 or greater. The economies of scale in dental education have kept the average dental school class sizes between 80 and 110. The largest dental school in the US is NYU with 400 per year and the smallest is Harvard with about 45 per year. In assessing the workforce needs of California, the 31,000 dentists of California need to replace and add to their workforce at about 4% per year meaning 1240 dentists. Matriculating dentists in the six dental schools in California include the following:

	Number of First Year Dental Students
University of the Pacific	141
USC	148
Loma Linda	103
Western University	70
UCSF	90
UCLA	87

Thus the total matriculating dentists in California schools is 638 per year A DEFICIT of 600 dentists per year. Within the capacity of the University, CNU acceptance of 80 matriculates a year from this underserved region will address this issue.

To incorporate the DMD program, CNU will build a preclinical laboratory and a clinical simulation at the Elk Grove campus. For clinical facilities, CNU will work in two phases. The first phase will be the development of the two clinics in Elk Grove with 80 clinical treatment units in 2019-21. Both clinics will share and have access to core radiology, digital clinical facilities, operational electronic health record systems, sterilization and equipment management programs.

The College will also partner with primary care clinics, dental specialties and advanced practice clinics associated to health and hospital systems, and community health centers with a FQHC model. These partnerships will be a part of the clinical experience for Year 4 students (see MOU docs).

The DMD program at CNU will partner with health systems and the State of California to improve oral health access and oral health outcomes for Sacramento, the East Bay, the Central Valley, and mountain regions of California. The program will partner with community resources, foundations, charities for care for underserved Californians, and international dental schools.

Refer to [Appendix 1-6 MOUs Clinical](#).

6. Does the institution currently offer any other dental-related educational programs? Does the institution anticipate developing any other dental-related programs in the future?

California Northstate does not offer any other dental education programs at this time. Consideration of graduate programs that interface with the health system environment for necessary care for patients with illnesses that include essential oral health issues is under consideration. Future programs linked to this need in Sacramento to be considered include pediatric dentistry, oral and maxillofacial surgery and general practice residency.

STANDARD 1 - INSTITUTIONAL EFFECTIVENESS

STANDARD 1-1

- 1-1** The dental school **must** develop a clearly stated purpose/mission statement appropriate to dental education, addressing teaching, patient care, research and service.

Intent:

A clearly defined purpose and a mission statement that is concise and communicated to faculty, staff, students, patients and other communities of interest is helpful in clarifying the purpose of the institution.

A. Description:

1. List the dental schools purpose/mission statement, that addresses teaching, patient care, research and service. If a philosophy has been developed for the school, quote the philosophy.

The Mission of the College of Dental Medicine is to advance the art and sciences of health care through excellence in oral health education, practice, research, service, and social accountability

Education: Create skilled and knowledgeable clinicians who will constantly advance their capabilities throughout life

Practice: Produce clinical leaders in oral health who will serve in private practice, health systems practice, and in interprofessional settings

Research: Promulgate scientific inquiry throughout the curriculum and support student and faculty research that creates an environment of scientific curiosity and an evidence based foundation for clinical practice.

Service: Provide individual patient care services at all clinical sites under the auspices of CNUCDM that produces the very best oral health outcomes and clinical value.

Social Accountability: Advocate for and help build stronger communities in California and globally through improved oral health care, disease prevention, health promotion and protection from oral diseases through community-based approaches.

Our Values:

- Patient-centered didactic and clinical education that always puts improved health outcomes first.
- Foster a humanistic and character-developing environment for dental students
- Making better communities and a better world through improved oral health

- Understanding the professional responsibility of the dentist as the head of the oral health care team
- Practicing health promotion and disease prevention and protection
- Advancing California Northstate University through excellence in all we do

Supporting narrative: The integration of oral health into human health requires dentists who are capable of performing at the highest level in an ever more complex and demanding environment of emerging technology, social change, human disease management, and evolving health systems. The CNUCDM is developing a curriculum with four basic themes into which all didactic and clinical content will be served. These four themes are **Human Systems, Odontology, Oral and Maxillofacial Studies, and Behavioral and Social Sciences**. All four themes will be delivered in a diagonal curriculum

2. List the parent institution's purpose/mission statement. Describe how the dental school's purpose/mission statement supports and is related to the University's purpose/mission statement.

Mission: The Mission of California Northstate University is to advance the art and science of healthcare.

Vision: To provide innovative education and healthcare delivery systems

The dental school has a mission vision and values statement in direct support of the university mission statement. As noted in standard 1:1 above the CNUCDM commitment to education practice, service, research and social accountability match those of the university by advancing the art and science of healthcare. Especially the university emphasis on social accountability and interacting with communities and health systems are missions that will be well complemented by the mission and actions of the CNUCDM.

3. What are the planned methods to communicate the dental school's purpose/mission statement to the school's communities of interest. Examples may include plans to communicate through:
 - a. Patient information materials: This will be included with the printed materials received by all new patients
 - b. Student Handbook: The student handbook begins with the Mission, Vision and Values of the CNUCDM
 - c. Faculty Handbook: The faculty handbook begins with the university mission statement
 - d. Clinic Manual: The CNUCDM mission, vision and values statement is included in the clinic manual
 - e. Program website: Due to the accreditation status, the website is under development, so as to not prematurely announce the school to prospective students. Once accredited by CODA, the website will prominently communicate the CNUCDM mission, vision and values.

B. Supportive Documentation:

1. University's purpose and/or mission statement

Mission, Vision, Values

A. Mission: To advance the art and science of healthcare.

B. Vision: To provide innovative education and healthcare delivery systems.

C. Core Values

(WE CARE)

Working as a team

Embracing diversity and workplace excellence

Caring about our students, our staff, our faculty and our profession

Advancing our University, our goals, and our discipline

Responding to challenges that may impede our Mission

Enhancing communication and partnership

Core Principles

1. Education is our business.
2. Education is about teaching and learning.
3. Education is effective when students can solve problems, pass the board exam, and have gainful careers.
4. Educational affordability is about the least time and cost to obtain the degree.
5. Education is delivered by faculty who are committed to high-yield teaching, low-stress/stress-free learning, and outcome-based SLOs (CLOs, PLOs, ILOs, and CoCuLOs) assessment.
6. Education is delivered with a relevant curriculum characterized by integration of basic and clinical sciences, supported by technology, and taught by responsible and qualified faculty and staff who are loyal to the CNU's values, interests, and priorities.
7. Education should encompass not only cognitive and intellectual growth, but also social and emotional growth, moral development and character building.
8. Educational quality is maintained through governance oversight, program review, judicious use of resources, accountability, and administrative leadership.

Please also refer to the University's strategic plan in [Appendix 1-1 CNU Strategic Plan 2015-2020](#). This is also stated in the dental college's strategic plan and reprised in the Faculty Handbook as presented in [Appendix 1-2 CDM Strategic Plan](#) and [Appendix 3-1 Faculty Handbook](#). The alignment of the creation of the CDM and the priorities of CNU are explored in [Appendix 1-1 President Report On the Planning For Dental College 2018](#).

STANDARD 1-2

- 1-2** Ongoing planning for, assessment of and improvement of educational quality and program effectiveness at the dental school **must** be broad-based, systematic, continuous, and designed to promote achievement of institutional goals related to institutional effectiveness, student achievement, patient care, research, and service.

Intent:

Assessment, planning, implementation and evaluation of the educational quality of a dental education program that is broad-based, systematic, continuous and designed to promote achievement of program goals will maximize the academic success of the enrolled students. The Commission on Dental Accreditation expects each program to define its own goals and objectives for preparing individuals for the practice of general dentistry.

A. Description:

1. List the University and dental school goals.

The University goals are noted in the CNU Strategic Plan 2015-2020 and the dental school goals are noted in the CDM strategic plan, presented in [Appendix 1-1 CNU Strategic Plan 2015-2020](#) and [Appendix 1-2 CDM Strategic Plan](#). The Strategic Plan was informed, in part, by the ADEA Vision 2030, found in [Appendix 1-2 ADEA Vision 2030](#).

UNIVERSITY STRATEGIC GOALS

Goal 1. Student Success and Educational Effectiveness. Ensure student success and student learning outcomes.

Goal 2. Research & Other Scholarly Activities. Develop, support, and sustain innovative, collaborative approaches for research and scholarly activities in health and administrative sciences and education.

Goal 3. Patient Care and Service. Provide educational opportunities to enhance community health and patient care.

Goal 4. Workplace Excellence: Create and sustain an environment conducive to productivity, collegiality, professionalism, and respect that attracts and embraces diverse top-tier talent.

Goal 5. Infrastructure: Maintain an efficient infrastructure to support and sustain learning, teaching, communication, research and scholarship while keeping education affordable.

Goal 6. Financial Sustainability and Growth. Create a financially sustainable enterprise-wide growth model.

These are on page 2 of the plan and are developed over the subsequent pages. The College of Dental Medicine goals are noted in the CDM strategic plan, presented in [Appendix 1-2 CDM Strategic Plan](#). They are on page 7 of the plan and reprised here as follows:

COLLEGE OF DENTAL MEDICINE STRATEGIC GOALS

Tactics, development plan, critical success factors, and evidence of achievement

Goal 1. Educate effective practitioners of dental medicine

Recruit, retain, educate, and train the highest quality of DMD students

Goal 2. Develop a high quality faculty and staff

Develop and distribute resources to recruit, retain and promote the effective activities of faculty and staff. Promote research and scholarship in the college.

Goal 3. Achieve effective leadership in oral health care delivery

Provide patient care that becomes recognized as some of the best oral health care available anywhere. Gain the benefits of good oral health for the patients served and in our communities beyond.

Goal 4. Promote a diverse and inclusive environment in dental medicine and in the communities we serve

Create and sustain an environment that respects all its students, staff and faculty and the patients we serve. Promote multiculturalism and American values of equality and inclusiveness in the college and for community oral health.

Goal 5. Create exceptional facilities and infrastructure

Build an efficient infrastructure to support and sustain learning, teaching, communication, research and scholarship while keeping education affordable.

Goal 6. Ensure financial sustainability and growth

Build a financially sustainable budget that will provide effective support of existing programs while being poised for expansion through strategic growth of programs

2. Describe how the University and dental school goals relate.

Comparison of the University goals and those of the college indicate that the goals of both are inclusive of the other. As a component of the University, the college contributes through its goals to the University goals of student success, excellence in research and patient care, financial stability and workplace excellence. The goals of the University similarly to provide resources and sustenance to those of the college. These are mapped as follows indicating which college goals (columns) support those of the University (rows). Those that the college supports for the University are denoted as “D” and those that the University supports for the college are noted as “U”:

Dental/University	Student success	Research scholarship	Patient care	Workplace	Infrastructure	Financial Stability
Educate profess	UD		UD			UD
Develop people		U	UD	UD		UD
Lead healthcare	D	UD	UD	UD		UD
Diversity	UD		UD	UD		U
Facilities	U	U	UD	U	U	U
Financial Stabil.	U	D	UD		U	U

3. Describe plans for the review, evaluation and revision of the dental school goals, including how when and by whom the goals will be reviewed, evaluated and revised. To what degree will the University be involved with this process?

The review, evaluation and revision of the college goals are a process that is reviewed in [Appendix 1-2 Table 2](#) with the mechanism being a continuous one assigned to committees, not individuals. These are reported to the Dean and developed at the College executive committee for approval and resources from University components. The key committees that will assess goals are:

- **The Curriculum Committee:** to evaluate Course and Program Learning Objectives, headed by Associate Dean of Academic Affairs and Faculty Development.
- **The Clinic/Quality Assurance Committee:** to evaluate goals of the clinical program, headed by Assistant Dean of Clinical Affairs.
- **The Research Committee:** to evaluate goals of the research program, headed by Assistant Dean of Research.
- **The Institutional Effectiveness Committee:** To evaluate progress on the strategic plan/Table2 and make recommendations for revision, headed by the Dean.

As part of the syllabus review procedure, the **Curriculum Committee** will examine format as well as content, considering course learning outcomes, assessment rubrics, the mapping to program learning outcomes, a content outline based on the academic calendar, a schedule of all assignments, credit hours, necessary information about library resources, and all relevant University/departmental policies. The syllabi are also reviewed to ensure that content is appropriate to the level and goals of the DMD program. If significant changes are needed, the committee will provide guidance to the faculty and require resubmission of the syllabus before final approval.

The Associate Dean of Academic Affairs and Faculty Development will work with faculty course coordinators to ensure that mapping from courses up to Program Learning Outcomes (PLOs) and Institutional Learning Outcomes (ILOs) is appropriate, such that students are able to fully develop the learning outcomes at appropriate levels of learning over the course of the program. It is the responsibility of the faculty coordinating the course to ensure that appropriate learning outcomes have been created that map to the appropriate PLOs and ILOs and that student learning outcomes are assessed. Faculty are encouraged to review CNU's Assessment

Handbook for guidance in building their learning outcomes as well as for guidance in how to conduct direct assessments of student learning. Training in writing learning outcomes and developing rubrics is available to faculty through an annual training session and by appointment from the Office of Institutional Research and Assessment.

The **Clinic/Quality Assurance Committee** will review the goals of the clinical program and assess their success through a quality review process. These will be linked to clinical education goals and goals for patient-centered care.

The **Research Committee** will assess the progress of the research program towards achieving goals and objectives and make recommendations toward applying resources and other pathways towards achieving goals in scholarship and research.

The **Institutional Effectiveness Committee** will systematically review the program goals and assess the outcomes of the strategies employed to achieve those goals. Each year a report to the University of the IEC will incorporate the performance and action of the Curriculum Committee, the Clinic/Quality Assurance Committee and the Research Committee and make strategic recommendations regarding achieving or further advancing goals.

4. Describe the assessment methods/outcomes measures that are planned to determine the degree to which the stated goals and/or objectives are being met. Planned assessments must be continuous and ongoing, include defined formative and summative measures, involve a full range of relevant internal and external stakeholders, permit anonymous input, provide for collective analysis of findings and be used to evaluate trends over time.

These are summarized in the CDM Strategic Plan, Table 2, presented in **Appendix 1-2 CDM Strategic Plan**. The assessment methods are noted in the document as the “Critical Success Factors” and the outcome measures are noted as “Evidence of Achievement” in the document. These monikers were selected to be consistent with other CNU continuous improvement documentation. Each of the above noted committees will further develop the rubrics in Table 2 for the specific purposes of evaluating components of their area of responsibility and assign responsible individuals within their area to achieve the desired goals as stated in the PLOs.

B. Supportive Documentation:

1. Assessment schedule/timetable/plan including the planned outcome measures to be utilized by the program (Example exhibit B,C)

Exhibit B and **Exhibit C** are presented to indicate assessment timetable/plan consistent with the goals of the strategic plan. Each of the planned outcome measures has an assessment timetable that is based upon the guidance provided in the startup of academic programs, clinics, clinical affiliations, faculty hiring plan and research development programs. Also, see **Appendix 1-2 CNU Assessment Handbook**.

STANDARD 1-3

- 1-3** The dental education program **must** have a stated commitment to a humanistic culture and learning environment that is regularly evaluated.

Intent:

The dental education program should ensure collaboration, mutual respect, cooperation, and harmonious relationships between and among administrators, faculty, students, staff, and alumni. The program should also support and cultivate the development of professionalism and ethical behavior by fostering diversity of faculty, students, and staff, open communication, leadership, and scholarship.

Examples of evidence to demonstrate compliance may include:

- Established policies regarding ethical behavior by faculty, staff and students that are regularly reviewed and readily available
- Student, faculty, and patient groups involved in promoting diversity, professionalism and/or leadership support for their activities
- Focus groups and/or surveys directed towards gathering information on student, faculty, patient, and alumni perceptions of the cultural environment

A. Description:

1. Describe how the dental school plans to provide an environment and culture that promotes professional, harmonious, and ethical behavior among students, faculty, administrators and staff.

The Dean of the College is responsible for assuring that the culture of CNUCDM develops effectively towards one that is professional, harmonious, and ethical in every way. This is being done through the selection of a leadership team of members who have exhibited those qualities in their own dental educator careers and exhibits a strong awareness of the consequences of a lack of humanistic environment as a burden on the development of dental medicine as a healing profession. Many on the team have lectured and written about the critical need for dentistry to evolve as a caring and inclusive profession that sees oral diseases as a proper calling for those who wish to care for the sick. The visible face of the college presents an ethical and socially conscious program to prospective students and faculty.

The Honor Code of the college will emphasize the special role that health science education has in ensuring academic integrity, respect to patients, colleagues, teachers, students, and the health care team.

The Associate Dean of Academic Affairs and Faculty Development will develop a new faculty, many of whom will not have previously been dental educators, she is committed to developing a humanistic environment that promotes diversity and professionalism

The Assistant Dean of Student Affairs and Admissions is tasked with creating and sustaining a culture among the students, faculty and staff, and of potential students that supports the values of humanism in all respects.

The College will interface with the other colleges of the university which also have a strong commitment to a humanistic culture to support students, faculty, staff, and patients. The university sponsors activities and events to support this which the college will participate in: these include celebrations of student achievement, community achievements, holiday activities and those associated to transitions of faculty, staff and students.

2. Describe plans to regularly assess the dental school environment including plans to collect and analyze data and determine changes based on the data provided.

The Office on Institutional Research and Effectiveness in the University, in concert with Dean Simonsen, will develop surveys to be given periodically that are similar to those already employed in the Colleges of Medicine and Pharmacy, but directed towards the special needs of dental students. The humanistic culture will also be measured in focus groups of students and faculty and staff to monitor the developing culture.

The Diversity, Inclusion and Climate Committee will assess the findings of these and other methods of assessment and make recommendations to further develop a positive humanistic climate at CNUCDM.

3. Describe dental school policy on expected behaviors and consequences for deviation from the policy. How will students participate in formation, implementation and assessment of the effectiveness of the policy?

This is reprised in the student handbook, [Appendix 2-3 2020-2021 Student Handbook](#), which reviews the aspects of professionalism, academic integrity and policies on social media, bullying, respect and other related items in detail. Of note in the Handbook is that the Honor Board, and Student Officers/Student Council including student membership and leadership will report to the Dean their actions regarding the formation, implementation and assessment of these policies. The Dean's executive council will consider the actions of the Honor Board, and Student Officers/Student Council regarding policy development (formation and implementation) to assure their consistency with the goals and objectives of the college, university rules and regulations, WSCUC and CODA requirements, and the requirements of local and federal law and rules.

Regarding assessment of these policies, the Honor Council will be charged with providing an annual report to the Dean regarding the effectiveness of Honor Council activities per year and include any recommendations for policies.

4. Describe how faculty will be encouraged to serve as mentors and positive role models for students.

The faculty will lead colleges of 20 students per class that will serve as advisory organizations and personal mentorship vehicles for all students. In addition, students will be assigned

individual advisors by the Dean of Student Affairs and Admissions. Such advisors may come from the full- or part-time faculty.

As part of the faculty development process, the college will review best practices and best cultures in dental education of which there are several excellent examples as well as experiences that have derailed a positive humanistic culture in the past. They will also review case studies. Peer support for promulgating humanism in education will be promoted.

5. Describe plans for all-school events that bring together faculty, staff and students.

All College events that promote a culture of humanism, diversity and inclusion will include the following:

1. White Coat Ceremony: Each D1 class will convene for a program that will welcome them to our profession as Student Dentists and as members of a healing profession. Each class will have the opportunity to develop and amend their own Honor Code and Oath and will support it at the White Coat ceremony as a class project.
2. CNU has a history of cultural awareness Days, and events. The CNUCDM will continue both as plenary with the other Colleges as well as independently. These include celebration with food, health issues, cultural norms, and games associated with the culture. Some of these are India Day, Philippine Day, Korea Day, China Day, Persia Day, and Celebracion De Salud.
3. Diversity and Humanism Training: CNUCDM is planning annual half day retreats with facilitators with a formal program to support the developing humanistic environment.
4. Outreach programs to the community of Sacramento will help support the humanism that CNUCDM will be known for. The Dean has met with migrant communities in Yolo County, the Asian community leaders in Sacramento and Oakland, and Sacramento African American community leaders in this regard. It is planned to develop outreach to promote oral health and oral health careers to these communities which will advance the humanistic environments of CNUCDM.

6. Describe plans for the type and frequency of forums that will be available for faculty, students and staff to discuss issues of mutual concern. How will the issues that are revealed during these interactions be resolved?

The Dean has an open door policy that allows any member of the College community to engage on any issue immediately or in a timely manner. In addition, the leadership team will meet monthly with each class to discuss issues of mutual concern, to communicate, to listen, and to act on concerns.

Individual units will have meetings of students, staff and faculty and issues raised will be appropriately directed. The staff will form a council to meet regularly with the Dean's executive council. Monthly faculty meetings will address any issues of mutual concern.

In all of these cases, the appropriate administrator will be charged with addressing and resolving extant issues.

B. Supportive Documentation:

1. Dental school policy on professional behavior for faculty, staff and students

This is provided in the student and faculty handbooks in **Appendix 2-3 2020-2021 CNUCDM Student Handbook, Appendix 1-3 Employee Handbook Feb 2016 and Appendix 3-1 Faculty Handbook.**

STANDARD 1-4

- 1-4** The dental school **must** have policies and practices to:
- achieve appropriate levels of diversity among its students, faculty and staff;
 - engage in ongoing systematic and focused efforts to attract and retain students, faculty and staff from diverse backgrounds; and
 - systematically evaluate comprehensive strategies to improve the institutional climate for diversity.

Intent:

The dental school should develop strategies to address the dimensions of diversity including, structure, curriculum and institutional climate. The dental school should articulate its expectations regarding diversity across its academic community in the context of local and national responsibilities, and regularly assess how well such expectations are being achieved. Schools could incorporate elements of diversity in their planning that include, but are not limited to, gender, racial, ethnic, cultural and socioeconomic. Schools should establish focused, significant, and sustained programs to recruit and retain suitably diverse students, faculty, and staff.

A. Description:

1. Describe dental school goals and how the dental school will determine the appropriate level of diversity. Describe the planned strategies, programs, policies, and procedures to address the dimensions of diversity, including structure, curriculum, and institutional climate. Include a discussion of planned programs to recruit and retain suitably diverse students, faculty, and staff.

The College goals from the Strategic Plan are to build a diverse community in order for all in our society to gain the benefits of good oral health. Many participants of the task force, advisory committee and the leadership team of the University are themselves from minorities. Thanks to the diversity of our Sacramento community, where over 60 languages are spoken and where Latino, African American, and American Indian communities are robust, CNU students, faculty and staff have reflected this diversity. Both pharmacy and medicine have “majority-minority” student bodies and support multiculturalism and respect at every level.

Articulated in the marketing plan is a desire to mold a school tied to its mission statement and its goals and objectives. In the case of CNU, we desire students with a social consciousness, from diverse backgrounds who possess high academic potential. Since the CDM is based upon a community service and primary care model, the marketing strategies would be influenced by that paradigm. The elements are as follows:

1. Pipeline
 - a. Develop a program beginning in secondary school to stimulate interest in dentistry as a career. The CDM will work with local 9th -12th grade schools in the greater Sacramento area and the Delta that serve students with low socioeconomic status and reside in areas of need for health care resources.

- b. A Dentist for a Day program will introduce students to dentistry. This is shown to schools via an onsite presentation by faculty, typically in Health classes
 - c. Girl Scout and Boy Scout badges can be earned related to oral health
 - d. Student projects in high school will be available that are directed to oral health in either science or social science courses
- 2. College level
 - a. Visit colleges, especially those with underrepresented minorities and social need to meet with pre-health societies and preprofessional counselors among others (The dental school pro forma provides a list of those regional baccalaureate institutions)
 - b. Summer research opportunities for baccalaureate and post baccalaureate students
- 3. Public
 - a. Participation in Health fairs and free health screenings, including those in inter-professional environments with medicine and pharmacy. While doing these events, volunteers from high school and college level will be recruited to help as volunteers. Among examples of this for CNU will be Celebracion de Salud (an inter-professional health fair program for migrant workers) and California Dental Association Mission of Mercy (CDA Cares), which would include CNU students and prospective students
 - b. Web site development will emphasize the features of the CDM
 - c. Interviews with the press and other communications resources
 - d. Social media presence on Facebook, Instagram
 - e. Print media and visual media: CNU presence at the airport and via its presence on Interstate 5 will produce valuable marketing for prospective students, staff, faculty and patients.
 - f. Patient care marketing will emphasize prevention and the value of oral health screening. When operational, the CDM clinics will be utilized for health screening and informational purposes

2. Discuss how the diversity goals, strategies, programs, policies, and procedures interface with the University and the local/state community.

The College will enact its plans for diversity in concert with the CNU colleges and the leadership from the local and state community. This is being done via meetings with community leaders and development of programs to serve the community. The Vice President for Admissions, Student Affairs and Diversity and the Dental school leadership and faculty have met to develop goals and strategies to promote diversity in concert with the university.

3. Will there be an individual or group designated as the program or institutional leader for diversity efforts? Describe the planned role and responsibilities of the institutional leader.

The College plans to create a Diversity and Inclusion Committee to complement the University Diversity and Inclusion Committee. The committee will be charged with developing the humanistic environment with cultural competency as outlined earlier. Membership on the Diversity and Inclusion Committee will be by faculty, students, community and staff. An annual

budget for the committee will be used to support educational, awareness and college activities to promote our diverse and inclusive environment.

4. Describe any commitment to social justice criteria and/or community service criteria that is planned for:
 - a. admission of students
 - b. recruitment and retention of faculty
 - c. recruitment and retention of staff

Social Consciousness is critical to the mission of CNU and is included in its Mission, Vision and Values statements. Social justice in California, and specifically at CNU, means that all the people of the Delta, Valley, mountains and rural areas, including immigrants, migrants, many of whom are undocumented, DACA/dreamers, LGBTQ, minorities and all Californians are given the respect, access to education, access to care, access to employment, and access to good oral health that the CNUCDM can participate in providing. The College will monitor its outcomes with regard to admissions, access to care for a diverse community and hiring of faculty and staff.

5. Describe any plans for ongoing engagement with local and/or state stakeholders, especially in communities with unmet oral health-related needs.

CNUCDM has been in active community engagement since the College was announced. The Dean has had in person meetings with all the entities listed that include work on direct projects. The Dean of Research has community engagement projects pertaining to the Virtual Dental Home and other access to care improvement activities for oral health with many of the same organizations and communities. The CNUCDM will continue an active engagement with oral health efforts in the following communities as well as additional ones to be developed in the future:

1. South Sacramento and West Sacramento with HALO and Wellspace community clinics
2. Shingle Springs, Placerville, and the Sierra Foothills with the Shingle Springs Wellness Center, El Dorado Community Health.
3. Central Sacramento and West Sacramento with Sacramento Native American Health Services and the Sacramento District Dental Society, State Government with the Department of Health, Oral Health Division, statewide with the California Hospital Association, State wide with Children Now.
4. Oakland with Asian Health Services and La Clinica de la Raza
5. Yolo County agricultural district with the oral health initiative
6. San Mateo County with the oral health coalition
7. Rural San Joaquin valley with CDA Cares and with the San Joaquin dental society
8. Colusa Indian Community Dental Clinic for rural Colusa County
9. California section of the National Dental Association
10. West Health Foundation, San Diego,

B. Supportive Documentation:

1. Dental school policy on diversity

Included is the Diversity and Inclusion Policy in **Appendix 1-4 Diversity and Inclusion Policy.**

2. List of planned dental school sponsored outreach programs/pipeline programs, e.g. HCOP, targeted to underserved minority high school and college students

The CNUCDM is working in concert with the Sacramento District Dental Society to promote oral health careers to students in the Delta. The first such meeting was held in March 2019 with over 60 students from the diverse communities of the Sacramento region. See [Appendix 4-4 List of planned outreach](#). The need for this outreach was informed by data on the dental profession presented in [Appendix 1-4 Current Demographics and Future Trends](#).

3. List of plans for faculty and administration diversity training

As we are still in the pre-enrollment phase of the college, diversity training has not been completed. This will include online coursework required for all new faculty and annual in person training as described in the annual all school half day retreat. An example of University-wide diversity training is in [Appendix 1-4 Strategies for Developing a Culturally Competent Mindset in Healthcare](#).

4. Description of the planned school committee charged with coordinating diversity efforts

The Diversity and Inclusion Committee will be headed by the Assistant Dean of Student Affairs and Admissions. It will include membership from the faculty, student body staff and community. The charge to the committee is to develop a diverse and inclusive learning, work and clinical care environment. The committee will provide a member to all faculty search committees. The committee will receive progress reports on admissions. The committee will develop programs for Pipeline student recruitment into dental medicine as well as developing access to oral health care to diverse communities. This is also presented in [Exhibit T](#)

5. Description of planned Faculty Loan Repayment Programs (FLRP), or similar programs to provide funds to recruit and assist individuals from disadvantaged backgrounds who are willing to serve as faculty for at least two years in a dental or other health professions school or training program

The College and University does not administer loan repayment programs at this time.

STANDARD 1-5

- 1-5** The financial resources **must** be sufficient to support the dental school's stated purpose/mission, goals and objectives.

Intent:

The institution should have the financial resources required to develop and sustain the program on a continuing basis. The program should have the ability to employ an adequate number of full-time faculty, purchase and maintain equipment; procure supplies, reference material and teaching aids as reflected in annual operating budget. Financial resources should ensure that the program will be in a position to recruit and retain qualified faculty. Annual appropriations should provide for innovations and changes necessary to reflect current concepts of education in the discipline. The Commission will assess the adequacy of financial support on the basis of current appropriations and the stability of sources of funding for the program.

A. Description:

1. Describe/explain the process utilized to develop the program's budget. Include the time-frame, individuals involved, and final decision making body/individual(s).

This has, in part, been described in the program initiation section. To augment this section, the University CFO and Dean of the college met on several occasions to develop the program pro forma, including the startup plan, hiring plan and budget. This include expenditures of \$7.2 million preenrollment in payroll and capital costs for clinics, classrooms, and simulation. Additionally, University purchased real estate at 2400 Maritime drive for \$3.5 million to provide dedicated facilities for the CNUCDM. This was approved by President Cheung and the Board of Trustees. The college pro forma which is an iterative working document is included as **Appendix 1-5 Detailed Working Pro forma.**

2. Describe the long-range plan developed to assist the school in achieving stable and adequate funding. Append a copy of the pro forma financial statement used to develop the program.

The long-2 emrange plan for the school is developed in the pro forma (**Appendix 1-5 Detailed Working Pro forma**) indicating mature expenses at about \$21 million per year and income exceeding that into the future. It should be noted that the University commitment to the College ensures stable and adequate funding. As compared to many larger public universities, CNU has been successful in reducing the cost of education strongly in comparison to peer universities by using the principles of cost efficient expenditures for capital needs and personnel.

3. Using the example exhibit D format, identify the projected sources of fiscal support for each developmental year until the program is fully operational.

Exhibit D indicates the year by year sources of fiscal support for the program up to the point of full operations. Note that as a private University no state or government support is noted. This has also been submitted in the WSCUC report.

4. Using the example exhibit E format, provide information on the school's budget for the previous, current and ensuing fiscal years.

Exhibit E indicates the year by year support for the program up to the present and to the point of full operations. This has also been submitted in the WSCUC report.

5. Using the example exhibit F format, provide the actual expenditures for the developmental year(s).

Exhibit F indicates the actual expenditures for the program up to the present

6. Assess the allocations for faculty salaries and professional development to ensure that the program is in a competitive position to recruit and retain qualified faculty. If the program's faculty salary schedule differs from that of the institution, explain the rationale for the difference.

The faculty salaries are based upon the ADEA salary survey according to formulae developed by the University CFO. These are identical to the methodologies utilized for the initiation of the PharmD, MD and PsyD programs. California is a challenging region for the recruitment of employees due to the high taxes and high cost of living. As a result, this has presented challenges to date in attracting faculty from beyond the region. However, the successful recruitment of the Dean and Associate/Assistant Deans of Academic Affairs and Faculty Development, Research, Curriculum and Clinical Education, and Student Affairs/Admissions occurred within this salary framework. This demonstrates that the program is in a competitive position to recruit faculty and staff, despite the cost of living challenges in California.

B. Supportive Documentation:

1. Table of financial support (Example exhibit D)

Exhibit D

2. Budget information for the developmental, current and ensuing fiscal years (Example exhibit E)

Exhibit E

3. Expenditure information for the developmental fiscal year(s) (example exhibit F)

Exhibit F

4. A copy of the pro forma financial statement used to develop the program

Items 1, 2,3, and 4 are completed and attached as Exhibit D, Exhibit E, Exhibit F and Appendix 1-5 Detailed Working Pro forma.

STANDARD 1-6

- 1-6** The sponsoring institution **must** ensure that support from entities outside of the institution does not compromise the teaching, clinical and research components of the program.

Examples of evidence to demonstrate compliance may include:

- Written agreement(s)
- Contracts between the institution/ program and sponsor(s) (For example: contract(s)/agreement(s) related to facilities, funding, faculty allocations, etc.)

A. Description:

1. Describe the dental school and University policy, procedures, and safeguards in place to prevent conflict of interest related to the teaching, clinical and research components of the program.

The COI policy of the University is attached in **Appendix 1-6 Policy on Conflict of Interest**.

B. Supportive Documentation:

1. List of contract(s)/agreements(s) that are either currently in place or planned between the institution/program and sponsor(s) related to facilities, funding, and faculty financial support

CNU is an independent University. No contracts, agreements are in place related to facilities funding or faculty support. Affiliation agreements reprised elsewhere in the self-study and under **Appendix 1-6 MOUs Clinical** do not provide for any financial agreement. All faculty are VCF (volunteer community faculty) at the site and no payments are made by either party for students.

2. Other written agreements either currently in place or planned, as available

Only agreements with clinical rotation sites are relevant for which there is no financial relationship. Those agreements are noted in #1 above.

STANDARD 1-7

- 1-7** The authority and final responsibility for curriculum development and approval, student selection, faculty selection and administrative matters **must** rest within the sponsoring institution.

A. Description:

1. Describe the academic organization, identifying the individuals or groups responsible for curriculum development and approval, student selection, faculty selection and administrative matters.

The organization of the College of Dental Medicine is as a component of California Northstate University. The organizational chart of the university is attached as **Appendix 1-7 CNU Org Chart**. The organizational chart is attached as **Appendix 1-7 Dental School Organizational Chart**. The college is headed by the Dean who reports to the President of CNU. The President reports to the CNU Board of Trustees. The Dean of CNUCDM sits on the President's Executive Council (PEC) with the Dean of the College of Medicine and Vice President of Health Affairs, the Vice President and Chief Operating Officer, the Vice President of Academic Affairs, Vice President of Research, Vice President of Institutional Research and Quality Assessment, the Dean of Health Sciences, the Dean of Psychology and the Dean of Pharmacy.

The Dean of CNUCDM convenes, as the Dean's Executive Council, The Executive Assistant to the Dean, the Associate Dean of Academic Affairs and Faculty Development, the Associate Dean of Curriculum and Clinical Education, The Assistant Dean of Research, the Assistant Dean of Clinical Affairs, the Assistant Dean of Student Affairs and Admissions, and the head of the CNUCDM faculty council.

The College will have a single academic department in the University named the Department of Dental Medicine with the Dean as department chairperson. The purpose of the single department model is to facilitate a horizontal organization whereby each of the members can have a voice and be part of the same mission based activities. As the school will be based upon a generalist model and equal voice for all clinical faculty including generalists and specialists can best be carried out in a single department model.

The college will be organized into divisions with representatives from each of the clinical disciplines *and* each of the four curriculum themes. The Associate Dean of Academic Affairs and Faculty Development will head the Council of Divisions, which will address the functioning of these components in the academic environment as well as the Curriculum Committee.

Thus, the Council of Divisions will be represented by appointed individuals from Human Studies, Oral and Maxillofacial Studies, Odontology, Behavioral and Social Sciences, Operative Dentistry, Oral and Maxillofacial Surgery, Oral Medicine, Oral Pathology, Oral Radiology, Endodontics, Prosthodontics, Periodontology, Pediatric Dentistry, and Orthodontics.

The Curriculum Committee will be represented by Human Studies, Oral and Maxillofacial Studies, Odontology, Behavioral and Social Sciences, two representatives from the divisions, and two students (D3 and D4)

Student selection is described in detail in Standard 4 documentation, including construct and functions of the admissions committee. [Appendix 1-7 CNUCDM Admissions Process 2020](#) also discusses the process as planned for the first class especially with regard to not admitting student before CODA initial accreditation of the program is obtained.

2. Describe the school's participation in the governance of the University, in accordance with its policies and procedures.

The college is a component of the University and has proportionate representation at the Faculty Senate. Faculty have equal voting rights across colleges. As noted, the Dean reports to the President and also sits with vote at the PEC. Two of the 12 members of the Board of Trustees are dentists.

3. Describe University policies and procedures which ensure that the dental school is autonomous in matters related to curriculum development and approval, student selection, faculty selection and administration.

The policies of the University ensure that the curriculum in all colleges is the responsibility of the faculty through the governance mechanisms described above. All major program changes are reviewed by the University leadership for academic, administrative, quality, human resources and financial compliance. Thus the curriculum of the College is presented to the PEC and in this self-study is signed by the President, Chief academic officer of the University.

B. Supportive Documentation:

1. Dental school organizational chart

This is attached as [Appendix 1-7 College of Dental Medicine Organizational Chart](#).

2. University organizational chart

This is attached as [Appendix 1-7 CNU Org Chart](#).

3. Curriculum Committee membership roster, as available

This is attached in [Exhibit T](#). Note that the names of some members will be added after hiring is completed. Additionally, the Sacramento District Dental Society has been involved in the development of curricular priorities as demonstrated in the meeting minutes found in [Appendix 1-7 Task Force and Advisory Committee](#).

4. Admissions flowchart and committee membership

This is attached as [Appendix 1-7 CNUCDM Admissions Process 2020](#) and [Appendix 1-7 CNUCDM Admissions Flowchart](#). The Admissions Committee is attached in [Exhibit T](#). Note that the names of some members will be added after hiring is completed.

5. Faculty search committee membership, as available

Faculty search committees are under development as faculty positions become available in specific areas.

6. Job description for the Dean of the Dental School

This is attached as [Appendix 1-7 Job Description Dean CDM](#) and [Appendix 1-7 Assael CV 2019](#).

STANDARD 1-8

1-8 The dental school **must** be a component of a higher education institution that is accredited by a regional accrediting agency.

A. Description:

1. By what regional or national accrediting agency for higher education institutions is the institution accredited? Briefly describe the institution's accreditation history, including its current status and date of last evaluation.

California Northstate University (CNU) is a private proprietary institution of higher education dedicated to developing and training professionals who are leaders in healthcare science, education, and research. As an attempt to address the continued deficits faced by California in the production of healthcare professionals, the College of Pharmacy was founded in 2006 and gained approval to operate as a degree-granting college from the Bureau for Private Postsecondary Education (BPPE) on April 15, 2007, according to the standard operations as set forth in California Education Code 94705.

CNU's College of Pharmacy welcomed its inaugural class in the fall of 2008, and CNU was granted WSCUC accreditation in June 2012. In continuing the mission of CNU to advance the art and science of healthcare by providing innovative education and delivery systems, the College of Medicine was added through WSCUC's substantive change process in August 2013 and accepted its first class in fall of 2015. In May 2015 WSCUC approved the addition of an undergraduate program in Health Sciences. The College of Pharmacy and the College of Medicine offer a PharmD and MD respectively, and the college of Health Sciences offers a BS degree in Health Sciences. The College of Pharmacy is accredited by the Accreditation Council for Pharmacy Education (ACPE), and the College of Medicine is accredited (Preliminary Status) by the Liaison Committee on Medical Education (LCME).

The doctorate of psychology (PsyD) program was planned in 2016 and created in 2017 to further CNU's mission of advancing the art and science of healthcare by adding another important healthcare-related professional doctoral degree to the current offerings. The PsyD program teaches scientifically proven interventions and provide hands-on clinical experience to students who are educated to become solo practitioners or work within multidisciplinary treatment teams. Upon graduation, students will possess and demonstrate the knowledge and skills needed to treat diverse and complex mental health populations. This program was added through the Substantive Change process via a proposal in the fall of 2017 and approval in the spring of 2018, and a small class started in September 2018.

The CNU Graduate School was another natural extension of the University's mission *to advance the art and science of healthcare*. The MS in Pharmaceutical Sciences program was added to program offerings within the College of Pharmacy via a substantive change, approved in the summer of 2018. This program is strategically aligned with CNU's Vision to provide innovative

education and healthcare delivery systems for the Northern California region and beyond. The establishment of graduate courses in health sciences provides an opportunity for CNU to expand its range of scholarly activities and continue its development of an innovative, integrated curriculum; providing development opportunities for existing faculty from other colleges to contribute to another program that speaks to their expertise. The program serves as an additional venue for CNU to prepare a new workforce for a modern, fast-evolving healthcare sector, specifically in the areas of pharmaceutical discovery and development. It further helps the University expand and advance research opportunities.

Application to WSCUC for approval of the substantive change of the College of Dental Medicine was completed in the fall of 2018. The proposal and report was submitted in February 2019. A substantive change review, with site visit occurred April 25, 2019, the full WSCUC application/proposal report having been reviewed by the 2-member site visit team (from the Substantive Change Committee) as well as WSCUC staff. The Substantive Change site team recommended the DMD program for immediate **approval** while awaiting the meeting of the full Western Association of Schools and Colleges Commission. Commendations were received for the alignment of the program with the institutional mission, the responsiveness of the CNU team regarding commission queries and the organization of the proposal. A recommendation was made to improve the marketing document. ([Appendix 1-8 Substantive Change Action Report](#))

B. Supportive Documentation:

1. Copy of institution accreditation certification

The accreditation certification is found in [Appendix 1-8 CNU Action Accreditation Letter](#). The Substantive Change proposal for the addition of the DMD program can be found in [Appendix 1-8 WSCUC 2019 CNUCDM](#) and the Substantive Change Action Report found in [Appendix 1-8 Substantive Change Action Report](#).

STANDARD 1-9

1-9 The dental school **must** show evidence of interaction with other components of the higher education, health care education and/or health care delivery systems.

A. Description:

1. Describe all planned and/or existing interactions with other components of the higher education, health care education and/or health care delivery systems, including student, faculty and administration interaction. Specifically address teaching, clinical learning and research.

The higher education system at CNU includes the following components with the following participation of the College of Dental Medicine.

In the College of Health Sciences (CHS) , Dean Assael and Keating serve as pre-professional advisors and work with admissions, student affairs and academic affairs in CHS in this regard. IN addition, interaction with CHS is with regard to the development of a pathway to dental medicine program to complement the pathway to medicine program already in existence. This will allow CHS students who meet appropriate academic standards to begin the DMD program after 3 years at CHS and complete their Bachelors after the fourth year. This is achieved through the common pathways courses with the College of Medicine.

The Dean and Associate Dean of Academic Affairs and Assistant Dean of Clinical Affairs serve on the Curriculum Committee of the College of Medicine in order to strengthen the relationship of the units for interprofessional education and to ensure the needed collaboration in the Human Systems component of the common pathway courses.

In addition The Deans of Medicine and Dental Medicine serve with the Deans of Pharmacy and Psychology on the health sciences Deans council and the Presidents Executive Committee.

The Assistant Dean of Admissions and student affairs serves as a member of the university committees for supervising these areas headed by VP Xiong Feng.

The VP for Academic Affairs, Kathy Wong, head the CNU Academic Affairs Committee which includes representation from the Dean and Associate Dean of Academic Affairs.

The College of Dental Medicine has 3 seats on the university senate as faculty representatives, as well as planned participation in committees of the senate.

The Assistant Dean of Research serves on the Research Committee headed by VP for research, Philip Mack.

IN the planning for the university hospitals and clinics, The Dean of Dental Medicine will serve on the Executive Committee of the Hospital and as a standing member of the Medical Board.

Teaching and clinical education agreements (MOUs) for community-based education courses BSS 861 and BSS 862 have been completed and are under development for implementation in 2022-2023 rotations with Asian Health Services (Oakland), HALO Health (Sacramento), Indian Health Centers of Sacramento, Colusa County, Wellspace, and Shingle Springs.

Through Public health research and reprinted in Standard 6, are research agreements with governmental entities in California with regard to oral health research and program development.

In addition, initial plans are underway to develop the senior electives as noted in BSS 872

Discussion with Jay Kumar, the dental director for the Oral Health Program at the State of California Department of Public Health, center around the development of a state oral health/population health component in the senior public health seminar BSS 862

B. Supportive Documentation:

1. Formal agreement(s) with co-sponsored or affiliated institutions that are developed to date

These are included in **Appendix 1-6 MOUs Clinical**.

2. List of planned student inter-professional didactic and clinical instruction/rotations/assignments involving components of the higher education, health care education and/or health care delivery systems

All DS 1 and DS2 Human Systems courses are taught in interprofessional learning environments. In addition to these the following courses have interprofessional learning with primary care medicine and pharmacy:

Course #	Course Title	Credits	Year	Term
BSS 861	Clinical Clerkship: Community-based Education 4 weeks, 30 hours per week plus call CLIN	8	DS 4	Fall

Affiliated health systems based practices will accept CNU students into their care teams where senior students will provide clinical care under the supervision of Volunteer Community-Based Faculty in those sites. Suitable transportation and housing will be arranged for where needed. The purpose of the course is to provide community engagement with the constituencies served, to gain experience in community-based clinical care and to interact with the interprofessional and intraprofessional care team.

Course #	Course Title	Credits	Year	Term
BSS 862	Clinical Clerkship: Community-based Education 4 weeks, 30 hours per week plus call CLIN	8	DS 4	Spring

This course will be at a second community-based rotation site to elaborate on the activities of the first rotation and engage a new community and a new clinic. In addition to comprehensive care experience, the student will compare and contrast communities and clinical care entities and provide a reflective essay on their community care experience.

Course #	Course Title	Credits	Year	Term
BSS 871	Seminar in Dental Public Health SEM	2	DS 4	Fall

This weekly seminar develops through case-based discussions led by student teams the public health issues in oral health in California and globally including access to care, social determinants of oral health, scope of practice issues, insurance and payment systems for oral health, access to fluoride, immunizations especially for HPV, and health protection for vulnerable populations such as children and elderly.

Course #	Course Title	Credits	Year	Term
BSS 872	Senior Elective Clinical Clerkship CLIN	6	DS 4	Spring

DS 4 students will select from additional clerkships available at clinical sites either discipline based or comprehensive care in odontology, oral and maxillofacial studies or human studies. Examples include comprehensive care at a remote clinic (odontology), dental specialty clerkship in oral maxillofacial surgery (OMFS), clerkship in internal medicine (Human Studies), or population health study abroad or in US (BSS).

3. List of planned cross-disciplinary faculty development programs

The College is an active participant in the CNU Institute for Teaching and Learning Excellence (ITLE) developed in 2018. The Institute has biweekly faculty development programs (Interprofessional Education Programs – IPE) across disciplines. Examples of programs include:

3/4/19 Strategies for Developing a Culturally Competent Mindset in Health Science Education
2/7/19 Autism spectrum disorders, employment and health education issues.
1/18/19 Translational Science Day

The university also publishes a monthly IPE newsletter where additional ongoing IPE activities are highlighted.

The Strategic Plan for ITLE is in [Appendix 1-9 Strategic Plan ITLE](#). An example of a prior year's faculty development offerings is available in [Appendix 1-9 Faculty Development Series](#).

4. List of planned cross-disciplinary faculty research

The Vice President for Research and the Dean of Research are planning for potential research collaboration with the College of Medicine, College of Pharmacy and College of Psychology. As faculty have yet to be recruited with research portfolios, these specifics are not developed.

STANDARD 2 - EDUCATIONAL PROGRAM

STANDARD 2-1

Instruction

- 2-1** In advance of each course or other unit of instruction, students **must** be provided written information about the goals and requirements of each course, the nature of the course content and the method(s) of evaluation to be used and how grades and competency are determined.

A. Description:

1. Describe how this information will be provided at the initiation of instruction. Address each of the areas outlined in the standard: goals and requirements, nature of course content; methods of evaluation; and determination of grades and determination of competency.

At the initiation of instruction at the time of matriculation each student is provided the following information, as it was previously provided at time of application. It is contained in the Student Handbook and is presented in person to the class, by the Dean and the Associate Dean of Academic Affairs during the first year class orientation at the time of matriculation into the DMD program:

Goals and requirements

The dental program is a four-year program and culminates in a clinical doctoral degree: the Doctor of Dental Medicine (DMD).

The Mission of the College of Dental Medicine is to advance the art and sciences of healthcare through excellence in oral health education, practice, research, service, and social accountability.

Education: Create skilled and knowledgeable clinicians who will constantly advance their capabilities throughout life

Practice: Produce clinical leaders in oral health who will serve in private practice, health systems practice, and in interprofessional settings

Research: Promulgate scientific inquiry throughout the curriculum and support student and faculty research that creates an environment of scientific curiosity and an evidence-based foundation for clinical practice

Service: Provide individual patient care services at all clinical sites under the auspices of CNUCDM that produces the very best oral health outcomes and clinical value

Social Accountability: Advocate for and help build stronger communities in California and globally through improved oral health care, disease prevention, health promotion and protection from oral diseases through community-based approaches

The Vision of the College of Dental Medicine is to provide constructive innovation in its education programs and leadership in integrating oral health care into human health care systems.

Values:

- Providing patient-centered didactic and clinical education that always puts improved health outcomes first
- Foster a humanistic and character-developing environment for dental students
- Building stronger communities and creating a better world through improved oral health
- Understanding the professional responsibility of the dentist as the head of the oral health care team
- Practicing health promotion and disease prevention and protection
- Advancing California Northstate University through excellence in all we do

Nature of course content

The integration of oral health into overall human health requires dentists who are capable of performing at the highest level in an ever more complex and demanding environment of emerging technology, social change, human disease management, and evolving health systems. In response, the California Northstate College of Dental Medicine (CNUCDM) has developed a curriculum with four basic themes: Human Systems, Odontology, Oral and Maxillofacial Studies, and Behavioral and Social Sciences. All four themes will be delivered in a diagonal curriculum to provide both horizontal and vertical integration of clinical and basic sciences in order to build students' competency in both the art and science of dentistry. Patients' assessment and management decisions need to be made through consideration of individual patient's health status and selection of the most appropriate interventions. The curriculum therefore is reflective of the necessary integration of the biomedical, behavioral, and social sciences.

The DMD curriculum will include concurrent didactic, small group learning, simulation and clinical experiences at all phases of the curriculum with increasing clinical experiences and decreasing didactic experiences gradually through all four years. While basic clinical encounters begin in the fall of the first year, advanced clinical practice occurs in the fourth year.

While emphasis on didactic foundations is at a high level in the first year, some didactic components with seminars and case-based didactic experiences continue through the fourth year. Specific types of pedagogical methods during classroom learning include the following: presentation, demonstration, simulations, team-based learning, problem-based learning, and clinical case studies.

CNU's dental program will utilize a Common Pathway with the Colleges of Health Sciences, Medicine, Pharmacy, and Psychology to build a solid foundation in the medical sciences and to provide a rich interprofessional education for students who will be working in healthcare teams for the benefit of patients. The following principles will be employed throughout the DMD curriculum:

- Interprofessional education experiences
- Collaborative practice models in clinical education
- Strong basic medical sciences with systems-based block segments
- Immediate and continuous clinical correlation
- Patient-centered care with practitioner/faculty led care teams
- Education in health systems and community clinics integrated with CNU based clinical education

- A competency-based clinical practicum
- Eclectic curriculum with “selectives” (electives that students choose) to guide students towards areas of clinical, research and societal interests. Selectives are among an array of clinical experiential, research or didactic courses available as part of the academic calendar to be selected by students in the developed block time.

These principles and designated educational experiences are designed to provide a strong foundation for building competency in the practice of dentistry.

Methods of evaluation; and determination of grades and determination of competency.

Each course provides a syllabus in CNU format that includes the following elements: the goals and requirements of each course, the nature of the course content and the method(s) of evaluation to be used and how grades and competency are determined. In general, methods of evaluation include:

1. Written examination
2. OSCE
3. Case based presentations
4. Reflective essay
5. Laboratory exercise
6. Daily clinical evaluation
7. Competency assessments

Determination of competency in the curriculum is specific to the course as is noted as requested in commission format as a text response to Standard 2-5. It is included as well for reference below as [Appendix 2-1 Methods for Determination of Competency](#)

B. Supportive Documentation:

1. Course Syllabi completed to date and/or course syllabi template

The syllabus format of the College of Dental Medicine includes for each course the goals of the course, the requirements for student projects, tests and attendance, a description of the course content including the topics for each session, and the methods of evaluation and grading, including the rubrics used for assessment. These completed syllabi for all but 2, DS1 courses, and those completed for DS2 course are provided in [Appendix 2-1 Consolidated Course Syllabi](#).

For additional DS 2, 3, and 4 courses, titles, credit hours and descriptions of each course are provided which include course content. As a capstone course, the DS4 course Comprehensive Care Dentistry Syllabus with all of the components including the goals of the course, the requirements for student projects, tests and attendance, a description of the course content including the topics for each session, and the methods of evaluation and grading, including the rubrics used for assessment, are included in [Appendix 2-1 Consolidated Course Syllabi](#).

Regarding competency measurements they are included as [Appendix 2-1 Methods for Determination of Competency](#).

STANDARD 2-2

- 2-2** If students do not meet the didactic, behavioral and/or clinical criteria as published and distributed, individual evaluations **must** be performed that lead to an appropriate decision in accordance with institutional due process policies.

A. Description:

1. Describe planned policies and procedures for remediation of students who do not meet didactic or clinical skills criteria. How frequently will the student be made aware of his/her performance? What resources are planned to be made available to the student?

Regarding academic progression the College of Dental Medicine (CDM) at California Northstate University (CNU) has a rigorous academic progression policy to ensure students' progress through the curriculum in a timely manner and to ensure they become effective and safe practitioners. The typical curriculum schedule is found in the student handbook, presented in [Appendix 2-3 2020-2021 CNUCDM Student Handbook](#).

The purpose of this policy is to ensure students reach and maintain high standards of learning throughout their time in the CDM Program and accomplish all course learning objectives. A grade below 75% in a course (70% in Human systems common pathway courses) indicates a lack of understanding of the fundamental concepts of the course material necessary for progression. These students will require a structured remediation. A grade below 60% requires a repeat of the course or further academic action. This policy is intended to allow students an opportunity to remediate or repeat when they either do not have adequate mastery of a course or fail to pass the first time taking it. A student must complete the program within five (5) years (60 calendar months) from the time they initially registered and attended their first course session in the CDM Program.

This progression policy applies to all students (didactic and clinical) in the CDM program beginning in 2019 and following thereafter.

For a student to successfully progress through the CDM Program the student must pass all courses each semester and have a minimum grade point average (GPA) of 3.0 at the time of matriculation.

Students will have the opportunity to remediate a maximum of four (4) courses that resulted in a grade below 75% throughout the didactic program; hence more than 4 courses with a grade of 60-75% (before remediation) will require that additional courses resulting in that grade be repeated. Remediation is not available for a course that resulted in a score of 60% or below.

Courses with a grade of 75% or below which are not successfully remediated or a below 60% must be repeated. A particular course can be repeated only once. Failing more than two (2) courses (before repeating), below 60%, will result in dismissal.

The consequence if a student earns a letter grade lower than 75% in any course in the curriculum is shown in Table A below:

Grades Consequence			
Number of Times	Grade	Consequence	Further Consequence
2	60-75 percent*	Remediate All Courses	Academic Probation at College optional if remediation is unsuccessful
3 or 4	60-75 percent*	Remediate All Courses	Academic Probation mandatory if remediation is unsuccessful in 3 or more courses
5 or 6	60-75 percent*	Repeat all Courses	Academic Probation mandatory
1 or 2	Below 60 percent	Repeat all Courses	Academic Probation mandatory
3	Below 60 percent	Dismissal	

- *70% for Human Systems Courses

Students will be allowed to remediate a maximum of 4 courses over the duration of the CDM Program; students will be dismissed if cumulative GPA falls below 60%; GPA will be calculated on completion of remediation; failed courses must be repeated; a failed course can be repeated only once.

Students are not permitted to begin a course if prerequisite course(s) has/have not been successfully completed and passed. Consequently, if a prerequisite course is not passed, the student's academic progression may be delayed by at least one academic year.

The characteristics of remediation are the responsibility of the course director. While general remediation policies are in each course syllabus, the exact nature of remediation will depend upon the identified deficits to create a plan most likely to achieve successful remediation. Students with learning issues are given appropriate accommodation in consultation with the Deans of Academic Affairs and Student Affairs.

2. Describe the planned policy and procedures for students with behavioral problems. Specifically address:
 - a. Professionalism and ethics,
 - b. Substance abuse, and
 - c. Legal issues or ethical misconduct outside of the dental school setting.

a. Professionalism and ethics is addressed in the Honor Code in the student handbook, **Appendix 2-3 2020-2021 CNUCDM Student Handbook**, and in the Behavioral and Social Sciences in the

curriculum. This document outlines the policy and procedures including student problem identification, student assessments, remedial and action procedures related to professionalism and ethics.

b. CNU has a university-wide Wellness Committee that meets monthly, which will now include representatives from the College of Dental Medicine. The committee is new and its organizational meetings were in the last 3 months. Minutes of the last meeting included discussions and actions on the following items from its two meetings raised in a formative fashion by the committee. They are included here to demonstrate the extent of development in this area of behavior and wellness:

- Mental health stigma
- Helping students take care of themselves via a Multi-college presence
- Wellness events and workshops for a variety of topics
- How do we support students, faculty, and staff? Questionnaire and focus groups
- Anonymous complaints
- Identifies who is at risk so they can get the resources they need. How can we make accommodations for those who are struggling?
- One like this at virtually every University o Includes sworn in police officer
- Univ. Wellness Committee should not serve as CARE, rather it should be collaborative, advisory, hold trainings Goals as oversight/advisory committee
- Focus on mental health awareness for all of CNU
- Collaboration on wellness events between colleges and communication/possible coordination of individual college activities
- Needs assessment and advisory on other task force/mental health needs that can be established (such as crisis team, wellbeing committee, etc.)
- Coordination of campus wide events/programs/seminars, etc. Goal to have solely non-faculty as the University Wellness Committee
- Importance of being inclusive,
- We all have different degrees and specialties, we can be aspirational but how do we achieve our goals?

Professionalism and ethics is additionally addressed in the honor code and in the Behavioral and Social Sciences in the curriculum. The student handbook has components on substance abuse and social media that are supported in the curriculum as well.

c. Legal and ethical issues outside the dental school setting has been an item of development for the university over the past year. Policies related to social media, representation as a health professions student have been developed. Background checks on all applicants are completed with regard to legal issues and felonies. Enrolled students are expected to inform administration of changes in their legal status with regard to residency status, arrests, etc. Ethical conduct whether on campus or off can be investigated by the Honor Council as it could affect performance and professionalism in the clinical or academic setting.

It is a consideration in such matters that the purpose of the DMD curriculum is in part to have licensees in dental medicine. As such legal and ethical issues might affect subsequent licensure, consideration and consultation with the California Board of Dentistry is needed and required. The CBD requires all sites and all individuals providing oral health care to be appropriately licensed, credentialed, and supervised by individual and by site.

B. Supportive Documentation:

1. Appropriate document outlining institutional due process for students

These policies are covered in the Student Handbook: [Appendix 2-3 2020-2021 CNUCDM Student Handbook](#) and [Appendix 2-2 CNU General Catalog](#).

STANDARD 2-3

2-3 The curriculum **must** include at least four academic years of instruction or its equivalent.

A. Description:

1. Summarize the planned educational experiences and/or curricular themes of the didactic and clinical courses offered in each semester/trimester/quarter (as applicable) of the curriculum.

The curriculum themes are divided over the four years of the curriculum as follows

Students will be engaged in 45-week curriculum for the first 3 years beginning in September for each year and culminating in a DMD degree granted in June of the 4th year making the fourth year curriculum 40 weeks. Total curriculum weeks are 175.

The four themes of the curriculum are continuous in all categories over all four years and are integrated so as to provide content and assessment across the four domains of **Human Systems, Odontology, Oral and Maxillofacial Studies and Behavioral and Social Sciences.**

As noted below:

A continuous series of didactic, small group learning, and clinical courses in

Human Systems: Developing applied knowledge in the normal function and structure of human biology and the pathophysiology of diseases of human systems at all stages of life.

Understanding and applying the implications for oral health exerted by these human systems and their associated diseases.

Odontology: In depth knowledge of the normal structure and function of the teeth, alveolar bone, and masticatory system at all stages of life. In depth knowledge of the diseases of teeth, including caries, periodontal disease and masticatory disorders, the methods to diagnose, prevent, and treat odontologic diseases. Obtaining primary and advanced skills in the treatment of odontologic diseases

Oral and Maxillofacial Studies: In depth knowledge of the normal structure and function of the oral and maxillofacial region at all stages of life. In depth knowledge of the diseases of this region including those of growth and development, neoplasia, degenerative diseases, infectious diseases, and trauma. Emphasis on OMS systems include oral mucosa, cutaneous diseases, the jaws, neurologic disorders, salivary gland disorders, paranasal sinuses, airway, and musculoskeletal diseases

Behavioral and Social Sciences: Developing knowledge in human psychology and behavior impacting on oral health and the interventions that positively and negatively impact on oral health. Understanding the economic, regulatory and political environment for oral health practice. Understanding the sociologic, cultural, economic determinants of health and how to positively influence the health of communities and societies

Each of these themes is reflective of and adapted to the Curriculum Mission and Vision and the Institutional Learning Outcomes and Program Learning outcomes of the Curriculum as noted here:

Curriculum Mission and Vision

The Mission of the College of Dental Medicine is to advance the art and sciences of health care through excellence in oral health education, practice, research, service, and social accountability

Education: Create skilled and knowledgeable clinicians who will constantly advance their capabilities throughout life

Practice: Produce clinical leaders in oral health who will serve in private practice, health systems practice, and in interprofessional settings

Research: Promulgate scientific inquiry throughout the curriculum and support student and faculty research that creates an environment of scientific curiosity and an evidence based foundation for clinical practice.

Service: Provide individual patient care services at all clinical sites under the auspices of CNUCDM that produces the very best oral health outcomes and clinical value.

Social Accountability: Advocate for and help build stronger communities in California and globally through improved oral health care, disease prevention, health promotion and protection from oral diseases through community-based approaches.

The Vision of the College of Dental Medicine is to provide constructive innovation in its education programs, and leadership in integrating oral health care into human health care systems.

Our Values:

- Patient-centered didactic and clinical education that always puts improved health outcomes first.
- Foster a humanistic and character-developing environment for dental students
- Making better communities and a better world through improved oral health
- Understanding the professional responsibility of the dentist as the head of the oral health care team
- Practicing health promotion and disease prevention and protection
- Advancing California Northstate University through excellence in all we do

Supporting narrative: The integration of oral health into human health requires dentists who are capable of performing at the highest level in an ever more complex and demanding environment of emerging technology, social change, human disease management, and evolving health systems. The CNUCDM is developing a curriculum with four basic themes into which all didactic and clinical content will be served. These four themes **are Human Systems, Odontology, Oral and Maxillofacial Studies, and Behavioral and Social Sciences**. All four themes will be delivered in a diagonal curriculum

(Definition: the diagonal curriculum includes concurrent didactic, small group learning, simulation and clinical experiences at all phases of the curriculum with increasing clinical experiences and decreasing didactics gradually through all four years. While basic clinical encounters begin in the fall of the first year, advanced clinical practice occurs in the fourth year. While emphasis on didactic foundations is at

a high level in the first year, some didactic component with seminars and case-based didactics continues through the fourth year)

Program Learning Outcomes (PLOs)

Patient-Centered Care: Demonstrate understanding of healthcare disparities and cultural awareness in patient counseling and patient advocacy

Evidence-Based Care: Apply current, evidence-based oral healthcare within the scope of general dentistry

Culturally competent, empathic communication: Demonstrate patient-centered, empathic, and culturally competent communication and interpersonal skills

Oral and Written Communication: Demonstrate sound oral and written communications in patient care

Critical Thinking: Utilize critical thinking, problem solving skills and systemic thinking in assessing and making reasoned, evidence-based decisions in patient care

Ethics and Professionalism: Demonstrate professionalism and ethical decision making

Biomedical Sciences Knowledge: Demonstrate an understanding of the fundamentals of biomedical sciences and apply them appropriately in oral healthcare

Practice Management: Apply legal, regulatory and business management concepts related to provision of oral healthcare services

The four themes will be presented utilizing interprofessional education in part utilizing a **Common Pathway** for some courses. The **Common Pathway** consists of aspects of courses especially in human systems and behavioral and social sciences that can be taught alongside students in medicine, pharmacy and clinical psychology. Course that will be utilized in part or in whole a Common Pathway will be noted in the course list as **CP courses**.

The 4 themes These are yearly courses all in each of the four years named HS 5, 6, 7, 8; Odont 5, 6, 7, 8; OMFS 5, 6, 7, 8; and, BSS 5, 6, 7, 8

CREDIT HOURS

Analysis of credit hours. Credit hours are assigned consistent with CNU credit hour policy

CNU CREDIT HOUR POLICY

1. PURPOSE

The purpose of this policy is to define the credit hour policy of the California Northstate University.

2. SCOPE/COVERAGE

This policy governs the assignment of credit hours of lecture courses, practicum work, and internship assignments.

3. POLICY STATEMENT

Credit Hour Policy

For each 15-week semester, one (1) hour of credit is assigned per hour each week of classroom or direct faculty didactic instruction (that is, per hour of lecture or student in-class time) and a minimum of two (2) hours of out-of-class student work (homework). For practicum and internship time, one (1) hour of credit is assigned per three (3) hours each week of student time spent in this activity.

4. PROCEDURE

Credit Hours in accord with this policy are assigned to courses at the time of course creation and syllabus approval by the Curriculum Committee.

Consistent with this policy, 1 credit is assigned for each 15 lecture hours in a course and its associated 30 preparation/ homework hours. 1 credit is assigned for every 25 small group learning hours and its associated 25 preparation/homework hours, and 1 credit for every 30 laboratory hours and 30 preparation/labwork hours.

Codes	Course Type
LAL	LECTURE AND/OR ACTIVE LEARNING COURSE
SIM	CLINICAL SIMULATION COURSE
LAB	LABORATORY COURSE
SEM	SEMINAR
CLIN	CLINICAL EXPERIENTIAL LEARNING
HS	HUMAN SYSTEMS COURSE
Odont	ODONTOLOGY COURSE
OMFS	ORAL AND MAXILLOFACIAL STUDIES COURSE
BSS	BEHAVIORAL AND SOCIAL SCIENCES COURSE

GRADING

Utilizing a competency based grading system, all students must reach a threshold for clinical competency in knowledge and skill set at 75%, except as 70% for HS courses. Structured remediation activities for each didactic course will ensure a higher level of knowledge for the cohort of students earning a Y, 60-75%. Students earning below 60% receive an F requiring repeat of the course or further academic action. Students earning 90%-95% will earn a grade of Honors and students earning 96-100% will earn Highest Honors.

Clinical courses will be graded Pass/Fail with the opportunity to earn EPR's (exceptional performance reviews) that can be offered to up to 1/3 of enrollees to each course director at the conclusion of each term. EPR's will be recorded numerically in each transcript according to the course in which they were earned. EPR's are based upon patient-centered care and patient outcomes as well as application of the program learning outcomes. Each clinical course will develop defined rubrics for the achievement of EPRs.

Class rank will be based upon the students' performance in LAL, SIM and LAB courses for 60% of the class rank value and by rank based upon clinics EPRs for 40% of class rank value.

LAL, SIM AND LAB GRADING

HH	PASS WITH HIGHEST HONORS (96-100%)
H	pass with honors (90-95%)
P	pass (75-90%)
Y	no pass, requires remediation (60-75%) to earn P (Y is temporary grade)
F	fail (less than 60%)
I	Incomplete, course work at satisfactory quality but assignments completion delayed by circumstance (temporary grade)
IP	In progress grade given for multiple semester courses where final grade given in subsequent semester
W	Official withdrawal

CLIN GRADING

P	Clinical care demonstrates knowledge and skills and values commensurate with achieving the defined competencies of the curriculum. Clinical course outcomes will be linked to both Program learning outcomes and CODA defined clinical competencies through Competency Assessments (CAs). Passing of CAs integrated into a clinical course is required for a P in the course.
Y	No pass, requires remediation to earn a P (Y is temporary grade)
EPRs	Exceptional Performance Reviews based upon rubrics defined by the Program Learning Outcomes as accommodated in the clinical course

B. Supportive Documentation:

1. Dental School Bulletin, Student Handbook and/or electronic communications

This is attached in **Appendix 2-3 2020-2021 CNUCDM Student Handbook.**

2. Planned schedule of courses by class year

Please refer to [Exhibit G](#) and [Appendix 2-3 CDM Course Catalog, Appendix 2-3 Schedule of Courses](#) and the College of Medicine Academic Calendar for Common Pathway Courses in [Appendix 2-3 COM Academic Calendar 2019-2020](#).

STANDARD 2-4

- 2-4 The stated goals of the dental education program **must** be focused on educational outcomes and define the competencies needed for graduation, including the preparation of graduates who possess the knowledge, skills and values to begin the practice of general dentistry.

A. Description:

1. Describe the parameters and/or scope of the general practice of dentistry on which the institution is basing its educational program.

The parameters of the general practice of dental medicine include the ability to prevent, diagnose and develop treatment plans for the control and cure of diseases of the oral cavity and associated structures within the scope of the Dental Practice Act of California. The parameters include the performance of procedures of the oral soft and hard tissues to competently restore diseased teeth, replace missing teeth, address diseases of the periodontium, and assess diseases of the oral mucosa, maxillofacial region and jaws. Parameters for prevention include population-based oral health measures, homecare, and medical management of caries and periodontal diseases. The scope of practice of dentistry as defined by CNUCDM respects the eclectic and broad nature of dental practice in California as well as the general access to dental specialists. Competency at the time of graduation is meant to demonstrate a safe initial practitioner of dental medicine for whom additional training and experience in areas of need and interest will be promulgated through formal and informal graduate and continuing education, and lifelong learning.

The scope of the practice of general dentistry at CNUCDM is for the general dentist to be the key resource for patients to gain the benefits of good oral health. The state of oral health is defined as the optimal contribution of the oral and maxillofacial complex to the wellbeing of the patient. The general dentist applies a scope of practice to achieve the goal of oral health with the necessary, knowledge, skill and values to make complete and holistic diagnoses of conditions, to administer/deliver care within appropriate skill sets as credentialed in practice, to refer to dental and medical/surgical specialists appropriately for care beyond the capacity and credentialing of the general dentist, and to effectively lead/participate in interprofessional/intraprofessional teams to achieve the best oral health outcomes, at the lowest cost and with the best patient/clinical team experience.

2. Describe how the goals of the planned dental education program prepare graduates with the knowledge, skills and values to begin to practice general dentistry, as defined by the institution.

The curriculum outline provided is organized into the four areas of Human Studies, Odontology, Oral and Maxillofacial Studies, and Behavioral/Social Sciences and is designed to be integrated not just in the curriculum, but in the practice of dental medicine. This means that the graduate will apply the knowledge, skill and values to care for the patient with oral diseases within the scope of general dentistry as described above. By integrating the approach to the patient to include general health issues, behavioral and social sciences, a broad view of the oral and maxillofacial region as well as the odontologic needs of the patient, it is hoped that the professional identity of the graduate will be as a healer demonstrating the highest level of knowledge and skill in the care of the sick while supporting the values of good works and humanism.

The goals of the program as developed in the mission, vision and values represent this construct for the clinical education of CNUCDM students. The interprofessional environment for clinical care and education, including that of community service support this as well. The patient-centered care environment is also essential to achieving these goals.

The knowledge skills and values to practice dentistry as defined by CNUCDM are also stated in the college competency statement also included in [Appendix 2-4 Graduation Competencies](#) and the measures therein to achieve these competencies in [Appendix 2-1 Methods for Determination of Competency](#)

Competencies of the DMD curriculum:

The CNUCDM DMD graduate will:

1. Demonstrate patient interaction that provides able and personable communication with the patient that addresses all clinical issues and addresses concerns in an empathetic and culturally aware fashion
2. Provide verbal and written patient presentation that demonstrates the ability to present key findings and organize them in a fashion to make appropriate care decisions.
3. Utilizes all pertinent biomedical knowledge to influence and optimize the care of the patient
4. Able to apply knowledge with critical thinking developed in the care of patients across all pertinent multiple domains.
5. Demonstrates the ability to comfortably apply clinical skills for dental procedures in a fashion that promotes the continued development of skills, patient confidence, and consideration for applying more advanced skills when needed.
6. Applies the tenets of ethical behavior and professionalism with exemplary leadership empathy, clinical behavioral understanding customized to the patient's needs.

7. Integrates all aspects of the practice management, systems-based practice, legal and regulatory requirements of practice and consistently applies this knowledge as a skill in clinical practice.

B. Supportive Documentation:

1. Mission and Goals Document

This is included as **Appendix 1-2 CDM Strategic Plan**.

2. List of competencies needed for graduation

T

The specific competencies needed for graduation are noted in **Appendix 2-4 Graduation Competencies**, and **Appendix 2-1 Methods for Determination of Competency**.

The Curriculum Committee meeting during the course of 2019 and 2020 and prior to the D2, D3 and D4 years is likely to further evolve these assessments. However, the narrative to Standard 2-5, to follow, outlines the Summative and essential formative assessments agreed to at this time. Noted in standard 2-5 narrative are 19 competency assessments in Human Studies, 29 in odontology, 21 for oral and maxillofacial studies and 7 in behavioral and social sciences.

In addition, it can be noted that each clinical competency will cover the standards in 2-24 and be reflective of the additional requirements of other Standard 2 components. Thus, each competency and their evaluation will include the knowledge, skills and values needed for the competency. This will include a rubric not only on procedural performance but on patient interaction, professionalism, application of biomedical knowledge and evidence-based decision making

3. Plans for the process used to evaluate, revise and /or update the defined competencies, including relevant data to be collected

The development of the Program Learning Outcomes (PLOs) was informed by the Commission on Dental Accreditation (CODA) standards and are aligned with those expected learning outcomes for similar programs across the nation. The following PLOs represent the intellectual, practical, and professional knowledge and skills that students are expected to demonstrate by the time that they graduate:

1. Patient-Centered Care: Demonstrate understanding of healthcare disparities and cultural awareness in patient counseling and patient advocacy
2. Evidence-Based Care: Apply current, evidence-based oral healthcare within the scope of general dentistry
3. Culturally competent, empathic communication: Demonstrate patient-centered, empathic, and culturally competent communication and interpersonal skills
4. Oral and Written Communication: Demonstrate sound oral and written communications in patient care
5. Critical Thinking: Utilize critical thinking, problem solving skills and systemic thinking in assessing and making reasoned, evidence-based decisions in patient care

6. Ethics and Professionalism: Demonstrate professionalism and ethical decision making
7. Biomedical Sciences Knowledge: Demonstrate an understanding of the fundamentals of biomedical sciences and apply them appropriately in oral healthcare
8. Practice Management: Apply legal, regulatory and business management concepts related to provision of oral healthcare services

Attached are detailed descriptions of institution learning outcomes, the program learning outcomes, and the co-curricular learning outcomes, presented in [Appendix 2-4 DMD ILO Rubric](#), [Appendix 2-4 DMD PLO Rubric](#), and [Appendix 2-4 DMD CoCuLO](#). The timeline and process for how these competencies and outcomes are reviewed are included in the comprehensive assessment of the DMD program found in [Appendix 2-4 DMD Assessment Plan](#).

STANDARD 2-5

- 2-5** The dental school **must** employ student evaluation methods that measure the defined competencies.

Intent:

Assessment of student performance should measure not only retention of factual knowledge, but also the development of skills, behaviors, and attitudes needed for subsequent education and practice. The education program should assess problem solving, clinical reasoning, professionalism, ethical decision-making and communication skills. The evaluation of competence is an ongoing process that requires a variety of assessments that can measure not only the acquisition of knowledge and skills but also assess the process and procedures which will be necessary for entry level practice.

Examples of evidence to demonstrate compliance may include:

- Narrative descriptions of student performance and professionalism in courses where teacher-student interactions permit this type of assessment
- Objective structured clinical examination (OSCE)
- Clinical skills testing

A. Description:

1. Provide a listing of the formative and summative competency assessments for:
 - a. clinical procedures
 - b. problem solving
 - c. clinical reasoning
 - d. professionalism
 - e. ethical decision-making
 - f. communication skills

Competency assessments with specific components are only able to be implemented by faculty assigned to future students. However, those processes and developing those competencies within the parameters of the curriculum are under very active development. To follow is **a listing** of formative and summative competency assessments for the domains noted.

Competencies will be implemented and continuously evaluated in the third and fourth year of the curriculum in that they are all clinical and they are summative and imply a readiness to apply the competency in dental practice. Under that estimation, they will undergo contemporaneous development along with the details of clinical courses in disciplines and comprehensive care in the third and fourth year. The Curriculum Committee is charged with monitoring the progress of developed competencies during this period

At this point in development, prior to enrollment, CNUCDM is able to provide the following list of summative competencies within the scope of general dentistry as defined by the institution.

Note that while each competency assessment is organized under the four curriculum themes, the assessment rubrics for each incorporate the ability to perform clinical procedures, to problem solve, to apply clinical reasoning, to exhibit professionalism, to apply ethical decision making principles, and to demonstrate good communication skills.

Also note that formative assessments will be embedded in every course in small group learning, daily encounter assessments, quizzes etc. Because of that circumstance, summative evaluations for competency assessment are presented here as the completion of the process of competency assessment. **ONLY LABORATORY-BASED FORMATIVE ASSESSMENTS**, (not the formative assessments from other courses), **ARE NOTED HERE** as they are prerequisites for subsequent patient- based summative assessments.

All competency assessments whether formative or summative are individual, high stakes (in that progression in the curriculum is dependent on achievement) and performed with academic integrity and with objective rubrics.

Human Studies Summative Competency Assessment (HSSCA)

Each of these competencies in HS will include the assessment of the medical condition noted, apply oral health treatment planning in and evidence based way applying clinical reasoning, and demonstrating ethics, professionalism and good communication skills. The following key is used to reflect on the utilization of the requested domains for Standard 2-5 response in the table below

- 1. Clinical Procedures (CP)**
- 2. Problem Solving (PS)**
- 3. Clinical Reasoning (CR)**
- 4. Professionalism (P)**
- 5. Ethical Decision Making (EDM)**
- 6. Communication Skills (CS)**

HS SCA	Course number	Assessment Method Domains	Prerequisites	Comments And Competency Statement Numerical links
Bleeding disorder	HS 526	OSCE PS,CR,CS	Didactic material HS 526	2 ,3, 4, 6, 7
Leukemia	HS 526	OSCE PS,CR,CS	Didactic material HS 526	2, 3, 4, 6, 7
Anemia	HS 526	OSCE PS,CR,CS	Didactic material HS 526	2, 3, 4, 6, 7

Arthritis	HS 511	OSCE PS,CR,CS	Didactic material HS 526	2, 3, 4, 6, 7
Osteoporosis	HS 511	OSCE PS,CR,CS	Didactic material HS 526	2, 3, 4, 6, 7
Stroke	HS 551	OSCE PS,CR,CS,ED M	Didactic material HS 551	2, 3, 4, 6, 7
Parkinson's Disease	HS 551	OSCE PS,CR,CS,ED M	Didactic material HS 551	2, 3, 4, 6, 7
Renal failure	HS 611	OSCE PS,CR,CS	Didactic material HS 641	2, 3, 4, 6, 7
Acid/base acute infection	HS 611	OSCE PS,CR,CS	Didactic material HS 641	2, 3, 4, 6, 7
Chronic hepatitis	HS 621	OSCE PS,CR,CS	Didactic material HS 621	2,3,4,6,7
Type 2 diabetes	HS 671	OSCE PS,CR,CS	Didactic material HS 671	2, 3, 4, 6, 7
Hyperthyroidism	HS 671	OSCE PS,CR,CS	Didactic material HS 671	2, 3, 4, 6, 7
Poly pharmacy	HS 642	OSCE PS,CR,CS, EDM	HS 642 and other HS courses	2, 3 ,4, 6, 7
Complex medical case assessment: Cardiovascular/pulmo nary	HS 721	Patient based PS,CR,CS, P, EDM	Concurrent medicine seminar	2, 3, 4, 6, 7 Patient selected from student's existing patients
Complex medical case assessment: Endocrine/oncology/O B/ GI or transplant	HS 722	Patient based PS,CR,CS, P, EDM	Concurrent medicine seminar	2, 3, 4, 6, 7 Patient selected from student's existing patients
Complex medical case assessment: Interdisciplinary/ hospital based	HS 821	Patient based PS,CR,CS, P, EDM	Concurrent medicine seminar	2, 3, 4, 6, 7 Patient selected from hospital

				consults while on rotation
Complex medical case assessment: preanesthetic/presurgical consult	HS 822	Patient based PS,CR,CS, P, EDM	Concurrent medicine seminar	2, 3, 4, 6, 7 Patient selected from preop pool evaluated by student
Complex medical case assessment: Special Needs Patient	HS 821 HS 822	Patient based PS,CR,CS, P, EDM	Concurrent medicine seminar	2, 3, 4, 6, 7 Patient selected from preop pool evaluated by student

Odontology Summative and Formative Competency Assessment (OSFCA)

OSFCA	Course number	Assessment method	Prerequisites	Comments
Infection Control	Odont 501	Operatory based CP, PS, CR, CS, P, EDM	Didactics and Lab on infection control	1, 2, 3, 4, 5, 6, 7 While comp assessment is in first year each clinical comp continues to assess
Caries risk assessment, app. CAMBRA	Odont 522	Case-based didactic exam PS, CR, P, EDM	didactics Odont 522	1, 2, 3, 4, 5, 6, 7
Operative Dentistry lab FORMATIVE assessment	Odont 621	Laboratory exercise X 4 (class 1,2,3,4) CP, PS, CR	Didactics and lab ODONT 621	2, 3, 4, 5 FORMATIVE
Periodont. Lab SRP formative assessment	Odont 621	Laboratory exercise x 1 CP, PS, CR	Didactics and lab Odon 631	2, 3, 4, 5 FORMATIVE
Periodont. Lab Surgery formative assessment	Odont 632	Laboratory exercise x 1 CP, PS, CR	Didactics and lab Odon 632	2, 3, 4, 5 FORMATIVE

Outcomes of periodontal therapy	Odont 752	Patient based CP, PS, CR, CS, P, EDM	Seminar participation	1, 2, 3, 4, 5, 6, 7 Patient selected from students existing patients
Integrated perio care (at least 3) perio/pros/endo/ortho/ oral medicine/ oral surgery assessment	Odont 841	Patient Based CP, PS, CR, CS, P, EDM	Seminar participation	1, 2, 3, 4, 5, 6, 7 Patient selected from students existing patients
Full denture laboratory	Odont 632	Laboratory exercise CP, PS, CR	Lecture and lab Odont 632	2, 3, 4, 5 FORMATIVE
Partial denture laboratory	Odont 632	Laboratory exercise CP, PS, CR	Lecture and lab Odont 632	2, 3, 4, 5 FORMATIVE
Indirect fixed restoration and replacement of teeth)	Odont 741	Laboratory exercise X3 (crown, FPD, CAD/CAM CP, PS, CR	Lecture and lab Odont 741	2, 3, 4, 5 FORMATIVE
Dental implant placement and restoration	Odont 841	Laboratory exercise CP, PS, CR	Lecture and lab Odont 841	2, 3, 4, 5 FORMATIVE
Endodontic therapy	Odont 532	Laboratory exercise X3 (incisor, premolar, molar) CP, PS, CR	Lecture and lab Odont 532	2, 3, 4, 5 FORMATIVE
Intake odontologic diagnosis and treatment planning	Odont 761	Patient based CP, PS, CR, CS, P, EDM	Daily participation	1, 2, 3, 4, 5, 6, 7
Comprehensive caries treatment	Odont 761	Patient based including comp evaluation of all restorations, application of CAMBRA and disease control	Daily participation in clinic and case completion	1, 2, 3, 4, 5, 6, 7

		CP, PS, CR, CS, P, EDM		
Demonstration of phase 1 therapy	Odont 762	Patient based CP, PS, CR, CS, P, EDM	Phase 1 therapy completed in at least 3 cases	1, 2, 3, 4, 5, 6, 7
Leading the dental team	Odont 861	Team based CP, PS, CR, CS, P, EDM	Odont 861 for at least 8 weeks	1, 2, 3, 4, 5, 6, 7
Completion of phase 1 and 2 therapy	Odont 861 Or Odont 862	Patient Based CP, PS, CR, CS, P, EDM	Odont 862 for at least 8 weeks	1, 2, 3, 4, 5, 6, 7
Operative dentistry: class 2	Odont 861 Or Odont 862	Patient Based CP, PS, CR, CS, P, EDM	When ready per group leader assessment	1, 2, 3, 4, 5, 6, 7
Operative dentistry: crown	Odont 861 or Odont 862	Patient Based CP, PS, CR, CS, P, EDM	When ready per group leader assessment	1, 2, 3, 4, 5, 6, 7
Endodontic therapy	Odont 861 or Odont 862	Patient Based CP, PS, CR, CS, P, EDM	When ready per group leader assessment	1, 2, 3, 4, 5, 6, 7
Scaling and root planing	Odont 861 or Odont 862	Patient Based CP, PS, CR, CS, P, EDM	When ready per group leader assessment	1, 2, 3, 4, 5, 6, 7
Full denture	Odont 861 or Odont 862	Patient Based CP, PS, CR, CS, P, EDM	When ready per group leader assessment	1, 2, 3, 4, 5, 6, 7
Partial Denture	Odont 861 or Odont 862	Patient Based CP, PS, CR, CS, P, EDM	When ready per group leader assessment	1, 2, 3, 4, 5, 6, 7
Fixed partial denture (either implant or tooth supported)	Odont 861 or Odont 862	Patient Based CP, PS, CR, CS, P, EDM	When ready per group leader assessment	1, 2, 3, 4, 5, 6, 7
Dental implant restoration	Odont 861 or Odont 862	Patient Based CP, PS, CR, CS, P, EDM	When ready per group leader assessment	1, 2, 3, 4, 5, 6, 7

Dental emergencies	Odont 861 or Odont 862	Patient Based CP, PS, CR, CS, P, EDM	When ready per group leader assessment	1, 2, 3, 4, 5, 6, 7
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**Oral and Maxillofacial Studies Summative and Formative Competency Assessment
(OMFSFSCA)**

OMFSFSCA	Course number	Assessment method	Prerequisites	Comments
Patient doctor communication	OMFS 511	OSCE CP, PS, CR, CS, P, EDM	Small group OMFS 511	1, 2, 3, 4, 5, 6, 7 FORMATIVE
Anatomy case presentation with clinical correlation	OMFS 532	Laboratory presentation PS, CR, CS	Anatomy lab	2, 3, 4, 5 FORMATIVE
Local anesthesia technique	OMFS 631	Clinical demonstration on subject X 4	OMFS 631 lab	1, 2, 3, 4, 5, 6, 7 FORMATIVE
Nitrous oxide administration	OMFS 632	Patient based CP, PS, CR, CS, P, EDM	OMFS 632 lab	1, 2, 3, 4, 5, 6, 7
Radiologic examination, exposure and interpretation	OMFS 651	Patient based periapical CP, PS, CR, CS, P, EDM	OMFS 651 lab and lecture	1, 2, 3, 4, 5, 6, 7
Radiographic examination exposure and interpretation	OMFS 751	Patient based Panoramic and Cone Beam CT CP, PS, CR, CS, P, EDM	OMFS 751 lab and lecture	1, 2, 3, 4, 5, 6, 7
Oral medicine/oral pathology case presentation	OMFS 862	Patient based CP, PS, CR, CS, P, EDM	OMFS 662,762 and in OMFS 862 seminar	1, 2, 3, 4, 5, 6, 7 Case selected preferably from student patient of record
Exodontia	OMFS 771	Laboratory CP, PS, CR	OMFS 771 lecture and lab	1, 2, 3, 4, 5, 6, 7 FORMATIVE
Pediatric operative dentistry	OMFS 771	Laboratory CP, PS, CR	OMFS 771 lecture and lab	2, 3, 4, 5 FORMATIVE

Space maintenance	OMFS 581	Laboratory CP, PS, CR	OMFS 581 AND OMFS 771 concurrent	2, 3, 4, 5 FORMATIVE
Exodontia simple extraction	OMFS 761	Patient based CP, PS, CR, CS, P, EDM	In OMS clerkship or Comp care clinic	1, 2, 3, 4, 5, 6, 7
Exodontia surgical extraction	OMFS 761	Patient based CP, PS, CR, CS, P, EDM	In OMS clerkship or Comp care clinic	1, 2, 3, 4, 5, 6, 7
Preprosthetic surgery	OMFS 761	Patient based CP, PS, CR, CS, P, EDM	In OMS clerkship or Comp care clinic	1, 2, 3, 4, 5, 6, 7
Implant placement	OMFS 761 or Odont 862	Patient based CP, PS, CR, CS, P, EDM	In OMS clerkship or Comp care clinic	1, 2, 3, 4, 5, 6, 7
Medical assessment for surgery	OMFS 761	Patient based CP, PS, CR, CS, P, EDM	In OMS clerkship or Comp care clinic	1, 2, 3, 4, 5, 6, 7
Pain and anxiety control	OMFS 761	Patient based CP, PS, CR, CS, P, EDM	In OMS clerkship or Comp care clinic	1, 2, 3, 4, 5, 6, 7
Head and neck exam, screening and risk assessment for head and neck cancer	OMFS 772	Patient based CP, PS, CR, CS, P, EDM	In OMS clerkship or comp care clinic	
Dental care of the child preschool	OMFS 752	Patient based CP, PS, CR, CS, P, EDM	In peds clerkship or in comp care clinic	1, 2, 3, 4, 5, 6, 7
Dental care of the child K-12	OMFS 752	Patient based CP, PS, CR, CS, P, EDM	In peds clerkship or in comp care clinic	1, 2, 3, 4, 5, 6, 7
Orthodontic Growth and development assessment	OMFS 872	Patient Based CP, PS, CR, CS, P, EDM	In orthodontic clerkship or comp care clinic	1, 2, 3, 4, 5, 6, 7

**Behavioral and Social Sciences Summative and Formative Competency Assessments
(BSSSFCA)**

BSSSFCA	Course number	Assessment method	Prerequisites	Comments
Student wellbeing	BSS 501	Case-based PS, CR, CS, P, EDM	none	2, 3, 4, 5, 6, 7 FORMATIVE
Ethics in dental practice	BSS 521	OSCE PS, CR, CS, P, EDM	BSS 521 small group	1, 2, 3, 4, 5, 6, 7 FORMATIVE
Psychiatric illnesses	BSS 662	Patient based CS, PS, CR, CS, P, EDM	none	1, 2, 3, 4, 5, 6, 7 Patients of record from D3, D4 teams
Practice management	BSS 821	Practice simulation PS, CR, CS, P, EDM	BSS 721 and enrolled in BSS 821	2, 3, 4, 5, 6, 7
Community assessment	BSS 862	Reflective essay PS, CR, CS, P, EDM	Enrolled in BSS 862 and in senior seminar in public health	2, 3, 4, 6, 7

2. Include the types of assessments planned for each of the above areas (i.e., Objective Structured Clinical Examination (OSCE) etc.

These are attached to the list above in side-by-side presentation. Note that these competency assessments (both formative and summative) include laboratory, desktop, clinical simulation, practice simulation, OSCE, patient based, oral case presentation, and reflective essays. The method of evaluation is based upon the following criteria:

- What is being measured
- What needs to be developed to assure objective and repeatable and consistent measurement across encounters
- What is a practical and cost effective means of assessment

Thus with those criteria extant, the plan to use the multiple array of assessments described in the above table was developed. For example, while laboratory evaluations provide a highest degree of consistency for evaluating Clinical Procedures, it has limited capacity in the other domains. OSCE's offer the ability to provide objective and repeatable, structured assessment in all domains, but is limited for procedural skills. Clinical patient based encounters serve to assess all 6 of the above domains, but can only provide limited objective and repeatable, consistent

assessments. Thus, the CNUCDM competency assessment construct, utilizes an appropriate array of assessments to optimize the evaluation of all domains.

3. Describe how students will be deemed ready to challenge (sit for, take) the competency assessments, including any specific prerequisites.

The ability to take a competency assessment is reprised in each of the course syllabi. Every competency assessment is attached to a course in the curriculum also noted in the list above by course number. While the criteria for taking the assessment will be noted in the syllabi, not all syllabi are complete at this point.

The ability to challenge a competency assessment will always depend upon a determination that the student demonstrates the requisite didactic knowledge, clinical skill and values to perform unaided in the clinical setting for the procedure being examined. In addition, the circumstances of the assessment must permit consistency and appropriate level of complexity when as part of a clinical procedure. This threshold will depend also upon patient needs and upon the complexity of the procedure being examined, and the needs and complexity of the patient.

4. Describe how faculty members will be calibrated to evaluate student performance. Will all faculty members (full-time and part-time) assess student performance, or will there be specific faculty who assess student performance? How will this determined?

Division heads, course directors and the Curriculum Committee are charged with providing effective calibration of new and existing faculty. The hallmarks of calibration will be the creation of rubrics to assess each of the defined competencies, the development of training materials for faculty to define the rubric criteria and assessment tools, and ongoing training of faculty.

Only trained faculty who are continuously assessed for their ability to provide competency assessment will perform these summative evaluations. Faculty performance review is the direct responsibility of the course director for which the competency assessment occurs. The academic affairs/curriculum and clinical education administrative components through the Curriculum Committee and the Student Performance Committee will monitor compliance and further develop the program. The Associate Dean of Academic Affairs and Faculty Development will provide leadership in the advancing of every faculty member's role in assessment at every level including summative assessments.

5. Describe any procedures that will be utilized to ensure that students receive an objective assessment of their skills.

The specificity of the rubrics will help ensure the objective assessment of students. Direct observation of these assessments, the analysis of faculty-specific data relative to assessments and 360 degree feedback on faculty and student performance are tools that will promote the objective assessment of student skills. Through the use of electronic grading, a data base of faculty performance in assessment will be made. The course director, clinical care and discipline leaders are also charged with assuring that competency assessment is consistent with the highest qualities associated with excellent patient care, objectively applied to all students.

B. Supportive Documentation:

1. All forms and criteria developed to date that will be used to determine if students have successfully achieved competency

Most forms for this purpose are under development as nearly all such assessments are in the D3 and D4 year for which syllabi remain under development. Some examples are included. The assessment forms and rubrics for dental anatomy, for infection control, for medical and dental history/intake, and for DS 4 capstone comprehensive care is attached as **Appendix 2-1 Consolidated Course Syllabi**.

STANDARD 2-6

- 2-6** Students must receive comparable instruction and assessment at all sites where required educational activity occurs through calibration of all appropriate faculty.

Examples of Evidence to demonstrate compliance may include:

- On-going faculty training
- Calibration Training Manuals
- Periodic monitoring for compliance
- Documentation of faculty participation in calibration-related activities

A. Description:

1. Describe the program's policies, procedures, and/or mechanisms that will assure students receive instruction and assessment at all sites where required educational activity occurs through calibration of all appropriate faculty.

A plan for ongoing faculty training, the development of calibration training manuals, a compliance monitoring plan and compliance documentation is the direct responsibility of the course directors attached to the competency assessments noted in Standard 2-5. In addition, the course director for BSS 861 and BSS 862, community based education and well as the clinical rotation course directors will liaise with the course directors in discipline specific areas to calibrate as to the instruction content, methods and assessments utilized in those settings, and communicate those to the site specific faculty. As part of the site assessment activity, the assessments provided by individual community based and clinic based faculty will be collated to determine consistency, value, and objectivity of assessments

As the program is under development this assigned responsibility is in process and will be completed as part of every course before its inauguration. It is the responsibility of the Division leaders and Associate Deans to monitor this development and compliance via the Curriculum Committee.

2. Describe how the program will monitor instruction and assessment at all sites where educational activity occurs to ensure comparability.

The course directors associated to activities at the affiliated sites will perform calibration exercises for community-based faculty. The Course Director for BSS 861 and 862 will continuously monitor activities to assure compliance for instruction and assessments at all sites where educational activity occurs. A record of those visits and findings will provide a continuous assessment and improvement mechanism. The course director will apply the site visit checklist ([Appendix 2-6 Site evaluation checklist](#)) at each scheduled site visit to assure that the calibration of faculty is up to date regarding instructional methods and assessment of DMD students.

3. Give examples of how students will receive comparable instruction and assessment at all sites where educational activity occurs.

To date, the Dean, who is the former Director of Community-Based Education and Practice at UCSF, has met with all confirmed and potential sites to review the relationship regarding meeting CNUCDM standards of instruction and assessment. Each faculty member based at a community site will be expected to attend calibration education, providing daily assessment and summative assessment of students. Specifically, required site specific calibration exercises are in place for the following topics and will be presented including an outcome assessment as CE for each site:

- Operative dentistry
- CAMBRA-
- Pediatric dentistry
- Oral surgery
- Endodontics

B. Supportive Documentation:

1. Formal/Informal faculty calibration activities, including planned meeting agendas and calibration materials. Provide information by program site.

Once these affiliations are ready to be activated in 2022-2023, planning calibration activities, updated meeting agendas and calibration materials will be available by site. Attached is a sample calibration exercise ([Appendix 2-6 Pediatric Pulp Therapy Calibration - R.Stewart](#)) previously performed for affiliated sites with UCSF to be performed under pending collaborative agreement at these sites and additional ones for CNU.

2. Training materials for faculty calibration training

These are discipline based and will be under development by content leaders/course directors specifically in operative dentistry, pediatric dentistry, endodontics, periodontics, oral surgery and prosthodontics. Included is an example of calibration training for oral surgery, presented in [Appendix 2-6 oral surgery exodontia calibration](#)

3. Planned outcomes of faculty calibration training; interval of assessment

Full integration of VCF faculty with concurrent and annual assessments through student evaluations, faculty evaluations, and BSS 861 and 862 course director assessment. In the first two years of operation of BSS 861 and BSS 862 (academic year 2023-2024) and (academic year 2024-2025) quarterly site visits and outcome assessment of faculty calibration at community sites will be carried out and will be performed at minimum per annum thereafter.

The planned outcome of this training is optimal compliance with CNU protocols and standards of care and adherence to assessment methods. Such assessments should be found to be consistent with those obtained from onsite evaluation of DMD students.

STANDARD 2-7

- 2-7** Biomedical, behavioral and clinical science instruction **must** be integrated and of sufficient depth, scope, timeliness, quality and emphasis to ensure the achievement of the curriculum's defined competencies.

A. Description:

1. Describe how biomedical, behavioral and clinical sciences will be integrated in the curriculum. Give examples of "team-taught" courses with biomedical, behavioral and/or clinical faculty.

The integration of biomedical, behavioral and clinical sciences is amply demonstrated in the curriculum and is a hallmark of the CNUCDM curriculum that integrates the curriculum throughout all four years and with the continuous involvement of the 4 themes of human studies, odontology, behavioral and social sciences and oral and maxillofacial disorders. A 4 year curriculum mapping, found in [Appendix 2-8 CDM Curricular Map Landscape](#), demonstrates this integration through the introduction of material and its mastery in an integrated fashion over the four years.

Also as noted in Standard 2-5 competency assessments, the biomedical behavioral and clinical aspects of competency assessments are included along with ethics and professionalism into assessment. Each competency assessment must include application of knowledge, skills and values and thus must integrate behavioral/social sciences, human studies and clinical sciences into the assessment.

Each Common Pathway course is led and taught by faculty in the College of Medicine. Pharmacology courses are led and taught by faculty in the College of Pharmacy, as well as faculty of the College of Dental Medicine. Behavioral science faculty will teach course components on major psychiatric disorders, trauma informed care, anxiety, pain control, and phobias. Each Common Pathway course engages clinical dental faculty into the small group, case-based learning sessions for dental students based upon the human systems studies occurring in Human Studies. Junior and senior medical seminars will engage College of Medicine and College of Pharmacy faculty into the case-based seminar format.

2. Describe the depth, scope, timeliness, quality, and emphasis of the planned biomedical, behavioral and clinical science courses. What criteria will be used to determine the depth, scope, timeliness, quality, and emphasis?

The CNUCDM curriculum is based upon the contention that dental medicine is the anatomically based practice of medicine and surgery and that the depth of biomedical knowledge and application needed by a dentist is equal to, or greater in some cases, to that which is needed by a physician. Dentists are expected to diagnose, prescribe, assess outcomes and have ongoing treatment planning that takes into account biomedical findings. Thus the Common Pathway courses were selected to be in the College of Medicine taught in an integrated format with

medical student colleagues in the major areas of hematology, musculoskeletal and integumentary, cardiovascular and pulmonary, renal, neurologic, endocrine.

The depth and scope of behavioral and social science is reflected by its prominent role as one of the four themes of the curriculum. That is based upon the understanding that health behaviors, the social determinants of health, the influence of culture and psychology on health outcomes, and the exigencies of population health, drive the need for greater engagement of DMD students in behavioral health. These aspects are well integrated through all four years of the curriculum.

The applied knowledge of dental practice in the care of diseases of the teeth, supporting structures, and oral and maxillofacial region are dependent on building blocks of knowledge and skill that cannot wait until years 3 and 4. CNUCDM has the philosophy that early clinical engagement, through a diagonal curriculum, and as noted in Foundations of Odontology and Foundations of Dental Medicine is key to developing knowledgeable and skilled clinicians who are also able to integrate biomedical science into practice.

The depth, scope, timeliness, quality and emphasis of our curriculum is a primary task of the Curriculum Committee. This committee will continuously determine these characteristics of the curriculum through outcomes assessments, surveys, direct observation, evidence-based pedagogic and clinical information, and the views of the committee.

B. Supportive Documentation:

1. Course syllabi, including content and instructional methods that support compliance with this standard

Course syllabi and the syllabi template for CNUCDM are attached in **Appendix 2-1 Consolidated Course Syllabi**.

2. Course list by year (Example exhibit G)

Exhibit G is attached.

3. Departmental course offerings (Example exhibit H)

Exhibit H is attached.

STANDARD 2-8

- 2-8** The dental school **must** have a curriculum management plan that ensures: (address separately)
- an ongoing curriculum review and evaluation process which includes input from faculty, students, administration and other appropriate sources;
 - evaluation of all courses with respect to the defined competencies of the school to include student evaluation of instruction; and
 - elimination of unwarranted repetition and outdated and unnecessary material;
 - incorporation of emerging information and achievement of appropriate sequencing.

A. Description:

1. Describe the planned curriculum review process. Describe how students, faculty, administration and other sources will have input into the process.

The planned curriculum review process is the responsibility of the Curriculum Committee. Formal student curriculum feedback is generated with each course evaluation. Scheduled meetings with student officers and whole class meetings will formally address curriculum review and assessment as an agenda item. Faculty divisional, course faculty and plenary meetings of faculty will address course review. In addition EACH course in the curriculum will undergo formal review by a three person Course Assessment Committee (CAC) reported to the Curriculum Committee every 2 years after first delivery of the course through the first cycle of students, and every 4 years thereafter. The Curriculum Committee will develop assessment forms to indicate the components of course review and rubrics to objectively assess course criteria. The schedule, flowchart, forms, and processes associated to course review are reprinted in the Appendices of Standard 2-8.

2. Will the school's course review process require an assessment to determine if the course is contributing to the schools competencies? How will the school's review process assess the learning outcomes of the course?

Each course review performed in the format described above will be referred to the competency assessments associated to each course in the tables provided under Standard 2-5. The course evaluation form will require an assessment of how the course contributes to the specific competencies of the course, its learning outcomes, the PLOs (Program Learning Outcomes) and the ILOs (Institution Learning Outcomes). Each of these are in the course syllabi template and will be assessed as part of formal course review. The learning outcome assessments for course, program and University will begin with the annual assessment of the course director, provided to the CAC for their appraisal.

3. Describe the process that the school will use to eliminate unwarranted repetition and outdated unnecessary material from the curriculum.

Curriculum mapping performed via CANVAS, key word search of didactic materials, as well as Curriculum Committee review, will develop the process whereby unnecessary repetition can be considered by the committee. Course directors and the CACs will be tasked with assessing courses for outdated material. The course review process will include queries as to the appropriate depth, contemporaneous nature of material and the need for any repetition associated to the course content.

4. Describe how the school will ensure that innovative methods and emerging information will be regularly added to the curriculum. Describe how the school will achieve the proper sequencing of courses.

As part of the syllabus review procedure, the Curriculum Committee will examine format as well as content considering course learning outcomes, assessment rubrics, the mapping to program learning outcomes, a content outline based on the academic calendar, a schedule of all assignments, credit hours, necessary information about library resources, and all relevant University/departmental policies. The syllabi are also reviewed to ensure that content is appropriate to the level and goals of the DMD program. If significant changes are needed, the committee will provide guidance to the faculty and require resubmission of the syllabus before final approval.

The Associate Dean of Academic Affairs will work with faculty course coordinators to ensure that mapping from courses up to Program Learning Outcomes (PLOs) and Institutional Learning Outcomes (ILOs) is appropriate, such that students are able to fully develop the learning outcomes at appropriate levels of learning over the course of the program. It is the responsibility of the faculty coordinating the course to ensure that appropriate learning outcomes have been created that map to the appropriate PLOs and ILOs. Faculty are provided CNU's Assessment Handbook ([Appendix 2-8 CNU Assessment Handbook](#)) for guidance in building their learning outcomes. Training in writing learning outcomes and developing rubrics is available to faculty through an annual training session and by appointment from the Office of IR and Assessment.

Participation in CNU Institute for Teaching and Learning and American Dental Association faculty section program "We Teach" will promote the use of advanced pedagogic methods. Innovative programs available through the National Library of Medicine, OVID, Science Direct, and UpToDate through the CNU Medical Library will be sources for faculty and students to access emerging information to bring to existing courses and add to the curriculum. Discipline-based expertise of board certified and AGD masters clinical faculty through continuing education will help build a contemporary forward thinking curriculum.

B. Supportive Documentation:

1. Planned curriculum/course review schedule

This is included as [Appendix 2-8 Course Review Schedule](#).

2. Detailed course review flowchart outlining the planned process of curriculum review

See below combined response. Also, see [Appendix 2-8 Course Review Flowchart](#).

3. Planned course evaluation form

See below combined response. Also, see [Appendix 2-8 Course Evaluation Form](#).

4. Intended curriculum management plan

The curriculum management plan beyond course review schedules, flowchart and review forms will be developed by the Curriculum Committee to closely meet the needs of the college when it is under active operations. Curriculum management will include a holistic assessment of emerging technology, evaluation of practice patterns, community need based upon socioeconomics and epidemiology of diseases, changes in payment systems, such as value-based care models and primary care models emerging in California, among others. Curriculum management for CNUCDM will be an active and organic process that will only be developed fully when the academic and clinical programs are fully active. The fully formed Curriculum Committee will commence work in in June 2019. It is anticipated that an inclusive approach to the creation of these [Appendices 2-8 Course Review Schedule, Flowchart and Evaluation Form](#) will be done by the Curriculum Committee in time for review prior to the first site visit. This is appropriate considering that these course reviews will commence after two years of operations and consideration of details of review that best meets the needs of effective review are best determined concurrently.

5. A summary table outlining planned courses and how each will contribute to each of the school's defined competencies

A linking of all courses to the Program Learning Outcomes and Institutional Learning Outcomes is provided in: [Appendix 2-4 DMD ILO Rubric](#), [Appendix 2-4 DMD PLO Rubric](#), [Appendix 2-4 DMD CoCuLO](#).

STANDARD 2-9

- 2-9** The dental school **must** ensure the availability of adequate patient experiences that afford all students the opportunity to achieve its stated competencies within a reasonable time.

A. Description:

1. Provide a description of the patient pool and the school's system for categorizing and assigning or managing patient care.

The patient pool was described in section “m” in the Foreword, and includes a plan for a marketing goal for the first four years of the CDM is to have 80 students in each Year 1 with a total of 320 students by the 4th year in operation. Dean Assael's experience in comprehensive care dentistry for students at Minnesota indicated an average of 6 patient visits per active enrolled patient per annum.

Thus, 160 clinically active DMD students at CNU will each require enrollment of 30 new active patients per annum in addition to episodic emergency and other special services patients.

This construct requires a patient care marketing goal of 5,000 new patients (5,000 patients X 6 visits = 30,000 patient visits) enrolled per year. Along with follow ups and the developing of other return services overall patient services should grow in the first 5 years of operations to 50,000 per year for the DMD students.

Patient care marketing will emphasize prevention and the value of oral health screening. When operational, the CDM clinics will also be utilized for health screening integrated into other CNU health services and informational purposes. The college will liaise with the California Denti-Cal system for the identification of populations of children for whom dental services in Sacramento are linked with the Medi-Cal provider. This will generate further cooperation with adult health systems as well.

For clinical facilities, CNU will work in two phases. The first phase will be the development of a clinic in Elk Grove with 32 clinical treatment units in 2019-20. A second clinic, also with 48 clinical treatment units, will be built at another adjacent location in Elk Grove and completed in 2022. Both clinics will share core radiology, digital clinical facilities, operational electronic health record systems, sterilization and equipment management programs. These two clinics will comprise a capacity in excess of 50,000 patient visits per year and will permit the achievement of the defined competencies for every student.

The College will also partner with primary care clinics, dental specialties and advanced practice clinics associated to health and hospital systems, and community health centers with a FQHC model. These partnerships will be a part of the clinical experience for Year 4 students (see MOU docs). The DMD program at CNU will partner with health systems and the state to improve oral health access and oral health outcomes for Sacramento, the East Bay, the Central Valley, and mountain regions of Northern California.

Regarding the assignment and management of care, the college will assign EVERY patient to an existing care team headed by a Team leader. CNU defines a Team Leader as a practicing dentist faculty member with responsibility for a cohort of dental patients to be treated under the Team Leaders leadership including dental students in the care team. The Team Leader is the responsible licensee for all care provided by the team. All general dental care in CNU clinics will be delivered under the Team Leader model. Only patients of complexity beyond the capability of the faculty of CNUCDM will be referred to appropriate tertiary and quaternary care facilities. Other patients often seen as “too complex” for dental students will be given the option for care in an integrated format with the Team leader and students.

2. Describe the marketing plan to recruit patients, including a marketing timeline and a description of the target market.

Marketing will be done via the CNU communications programs, consistent with the ethos of the University. All people able to be seen in the College will be the target market. In addition to print press, social media, and broadcast media, informational sessions with community resources will be employed. The marketing timeline will be developed as clinical facilities come on line in 2020. Concurrent with the availability of clinical operations, the communications and advertising plan will be implemented. Monitoring for the successful marketing of the program will be ongoing and the marketing plan will be adjusted to that environmental scan.

The target market is as described in Standard 2-9 and in section “m” of the Foreword.

3. Summarize the planned students' patient care experiences. What procedures and policies will be in place to assure that all students have sufficient experiences to successfully challenge the school's clinical competency assessments?

The Competency map including all competency assessments will be mapped to each student in a real time spreadsheet. The appropriate administration, team leaders, and the students themselves will be able to continuously map their performance in achieving the defined competencies of the curriculum. It is the responsibility of the team leaders, course directors, and students to assess progress and develop action plans. Each team leader who is a faculty dentist will have a team coordinator, (a staff individual assigned to the team), who will monitor the progress of every student in the team. Such progress will include experiential activities, completion of Competency assessments and the continuous fulfillment of patient centered care, in a case manager role. All patient appointments will be made by the team coordinator who will ensure patient-centered care while ensuring the completion of the defined competencies for every student team member.

B. Supportive Documentation:

1. Planned patient admissions process flow chart

As clinical staff are hired and the clinics are under active construction, patient admission processes and forms will be developed in conjunction with the development of clinical operations.

2. Goal for the number of patient visits per year

This is contained in the narrative above: 50,000 when both primary clinics are operational and students are in 3rd and 4th year. This is also included in the College's strategic plan, found in [Appendix 1-2 CDM Strategic Plan](#).

3. Goal for the number and demographic profile of patients that will seek and receive comprehensive care

This is contained in part in the narrative above. The demographic profile of patients will depend upon the strategic alliances for patient acquisition to be performed with health entities in the region. The Sacramento district has a carve-out for pediatric dental care under Medicaid. Discussions with HALO healthcare and the Department of Health should assure access to these patients. The college will work with geriatric facilities for ambulatory geriatric patients as in the Senior Center of Elk Grove, region with large retirement communities, as well as with facilities among the 91 regional sites for domiciled elderly patients such as Brookdale Elk Grove, the Meadows and Carlton Senior Living.

4. Goal for the number of patient procedures to be delivered per year

This is contained in the narrative above: 30,000 procedures among 50,000 visits, as described in the College's strategic plan in [Appendix 1-2 CDM Strategic Plan](#).

Critical Thinking

STANDARD 2-10

2-10 Graduates **must** be competent in the use of critical thinking and problem-solving, including their use in the comprehensive care of patients, scientific inquiry and research methodology.

Intent:

Throughout the curriculum, the educational program should use teaching and learning methods that support the development of critical thinking and problem solving skills.

Examples of evidence to demonstrate compliance may include:

- Explicit discussion of the meaning, importance, and application of critical thinking
- Use of questions by instructors that require students to analyze problem etiology, compare and evaluate alternative approaches, provide rationale for plans of action, and predict outcomes
- Prospective simulations in which students perform decision-making
- Retrospective critiques of cases in which decisions are reviewed to identify errors, reasons for errors, and exemplary performance
- Writing assignments that require students to analyze problems and discuss alternative theories about etiology and solutions, as well as to defend decisions made
- Asking students to analyze and discuss work products to compare how outcomes correspond to best evidence or other professional standards
- Demonstration of the use of active learning methods, such as case analysis and discussion, critical appraisal of scientific evidence in combination with clinical application and patient factors, and structured sessions in which faculty and students reason aloud about patient care

A. Description:

1. Describe plans to use any educational models, formats and/or pedagogy that are intended to promote critical thinking/problem solving.

The structure of nearly every course is to combine lecture, small group learning, laboratory and clinically applicable components into courses. This integrated curriculum is the hallmark of the College of Medicine as well. The College of Dental Medicine will continue that model in the Colloquium components of the Common Pathway biomedical courses. Case-based small group learning, active learning, group projects, student presentations, seminars in medicine, dental medicine, and comprehensive care will promote critical thinking and active learning. Students will all be adept at clinical problem solving utilizing peer reviewed literature and data based such as OVID and UpToDate in many courses.

The extension of the human studies program into seminar series in the 3rd and 4th year is designed to apply biomedical knowledge into the care of existing patients of record and to utilize critical thinking skills to coordinate the dental, medical social and behavioral aspects of patient care. Case based seminars as well in oral and maxillofacial studies and behavioral and social sciences will utilize adult active learning methods in the seminar rooms. These rooms are set up with library access to seamlessly inquire National Library of Medicine and proprietary Data bases such as OVID to compare patient care under the aegis of CNU with best practices.

2. Describe how students will be deemed competent in the use of critical thinking and problem-solving in the areas of:
 - a. comprehensive care of patients
 - b. scientific inquiry and research methodology

Students will begin comprehensive care clinics and clinical rotations each morning with group meetings many of which are devoted to case-based presentation of comprehensive care patients. The competency assessments of clinical knowledge and skills that are summative evaluations will include critical thinking, use of evidence based dentistry in care decisions and understanding of the biomedical basis of decisions.

Students will have instruction into the characteristics of valid bench and clinical research, with a focus on clinical research in basic sciences and the clinical curriculum. Specifically, beginning as part of Foundations of Dental Medicine OMFS 511, they will understand the CONSORT, PRISMA and STROBE documents and be expected to apply these criteria in seminars. For example, CONSORT check list applied to clinical research determines that comparative or control groups were randomized, that inclusion and exclusion criteria were specific, and that a patient flow chart determined whether there is structural bias in the study. Each clinical faculty member, as part of their faculty development, will also be educated in these areas and be expected to apply them in seminars and assigned group projects. Both the faculty and students will in an integrated care delivery environment apply the principles of critical thinking and clinical problem solving in the care of patients directly and in the supporting seminars.

B. Supportive Documentation:

1. List of planned courses that will utilize and evaluate:
 - a. application of critical thinking
 - b. questions by instructors that require students to analyze problem etiology, compare and evaluate alternative approaches, provide rationale for plans of action, and predict outcomes
 - c. prospective simulations in which students perform decision-making
 - d. retrospective critiques of cases in which decisions are reviewed to identify errors, reasons for errors, and exemplary performance
 - e. writing assignments that require students to analyze problems and discuss alternative theories about etiology and solutions, as well as to defend decisions made
 - f. asking students to analyze and discuss work products to compare how outcomes correspond to best evidence or other professional standards
 - g. demonstration of the use of active learning methods, such as case analysis and discussion, critical appraisal of scientific evidence in combination with clinical

application and patient factors, and structured sessions in which faculty and students reason aloud about patient care

Planned courses that will utilize application of items A, B, C, D, E, F and G are enclosed in **Appendix 2-10 Critical Thinking Rubric**. As they appear in this single Appendix, all courses that utilize and evaluate these criteria are listed.

These were selected by the following criteria:

A: Courses that employ case-based clinical decision making utilizing evidence-based approaches to learning.

B: Higher levels of Bloom's Taxonomy to analyze and evaluate

C: Simulations such as OSCE's are utilized

D: Look backs at completed or in-process care in the clinical setting is applied in seminars and during quality assurance by the clinical team

E: Courses with critical thinking writing assignments

F: Self-assessment, Compare preclinical and clinical work outcomes to evidence-based care and standards of care

G: Utilization of active learning methods

This review demonstrates that critical thinking is replete in the curriculum, but with regard to competency assessment, critical thinking is a Program Learning Outcome that is contained within the assessment domains of Competency Assessments (sample attached in **Appendix 2-15 Competency Assessment sample for biomedical science application**) as well as the evaluation of students in courses, most particularly seminars.

STANDARD 2-11

- 2-11** Graduates **must** demonstrate the ability to self-assess, including the development of professional competencies and the demonstration of professional values and capacities associated with self-directed, lifelong learning.

Intent:

Educational program should prepare students to assume responsibility for their own learning. The education program should teach students how to learn and apply evolving and new knowledge over a complete career as a health care professional. Lifelong learning skills include student assessment of learning needs.

Examples of evidence to demonstrate compliance may include:

- Students routinely assess their own progress toward overall competency and individual competencies as they progress through the curriculum
- Students identify learning needs and create personal learning plans
- Students participate in the education of others, including fellow students, patients, and other health care professionals, that involves critique and feedback

A. Description:

1. Describe plans for the self-assessment processes that students use in the preclinical laboratory and in the clinical portion of the curriculum.

Self-assessment will be part of the daily assessment form in the preclinical laboratory and it continues in the clinical setting. This will be set up in the grading form. The student will complete their self-assessment prior to the faculty assessment and, as part of the faculty assessment, the faculty member will review the self-assessment to compare their findings to that of the student so as to contribute to the student's ability to self-assess according to standardized and calibrated criteria.

The categories of self-assessment will be

Diagnosis/assessment

Patient communication

Professionalism

Application of biomedical knowledge

Critical thinking/evidence-based care

Psychomotor performance (with procedure-specific assessments)

Reflection/outcome assessment

4. Describe how students will demonstrate the ability to access and utilize resources independent of direct faculty input and direction.

Technology, peers, staff, patients, and data bases will provide feedback. The students will demonstrate this capacity/ability in their evaluations.

Technology such as scanning, haptic assessment, prep check and imaging programs, will be used to provide objective feedback on procedure performance. Patients, peers and staff will be given the opportunity to give feedback on individual student performance.

5. Describe how the dental school will encourage students to attend and critically evaluate continuing education programs.

All students will be attending portions of the meetings of the Sacramento District Dental Society as student members as well as those of the CDA and ADA. An active student chapter of the AADR, NDA, HDA and ADEA will permit students to take CE courses at those events. As a continuing education provider, CNU will sponsor events that, as available, will be attended by students. When students attend a scientific meeting as a participant or presenter, they will provide a report to their peers. Annually, before the Dentsply competition, AADR or ADEA, students who are presenting sessions or posters along with faculty presentations will also present at the Dean's research seminar/day.

B: Supportive Documentation:

1. Planned student self-assessment forms that illustrate how students
 - a. will routinely assess their own progress toward overall competency and individual competencies as they progress through the curriculum,
 - b. will identify their own learning needs,
 - c. will create personal learning plans, and
 - d. will participate in the evaluation of others, including fellow students, patients and other health care professionals that involves providing critique and feedback

A sample planned student self-assessment form is attached in **Appendix 2-11 Self Assessment Form**.

Further modifications in course specific student self-assessment forms will be discipline-based, the responsibility of the course director, and according to the criteria noted above. Each of these items reflect areas a, b, c, and d, noted above:

1. Diagnosis/assessment
2. Patient communication
3. Professionalism
4. Application of biomedical knowledge
5. Critical thinking/evidence based care
6. Psychomotor performance (with procedure specific assessments)
7. Reflection/outcome assessment
8. Student development assessment

These must be developed for each individual course and while they can be seen globally here, individual forms will be the responsibility of the course director. Each form will be submitted to

the Curriculum Committee for its approval and conformity with CNU's template before it is accepted.

STANDARD 2-12

2-12 Biomedical science instruction in dental education **must** ensure an in-depth understanding of basic biological principles, consisting of a core of information on the fundamental structures, functions and interrelationships of the body systems.

A. Description:

1. Summarize plans for providing students with core information presented on fundamental biologic structures, functions and interrelationships of the body systems.

Each of the Common Pathway courses in Human Systems is an integrated course that includes the normal development, anatomy, physiology, biochemistry, immunology, microbiology of the system as well as the congenital, degenerative, neoplastic, and traumatic pathologies of that organ system. These are thoroughly summarized in the course syllabi for the Human Systems courses with details in [Appendix 2-1 Consolidated Course Syllabi](#). While each of these disciplines is studied with medical students in lecture, laboratory and small group learning, the dental colloquium will apply these in a case-based fashion to oral diseases with assigned clinical dental faculty.

2. How will the school ensure that students have an in-depth understanding of basic biological principles?

The students in the College of Dental Medicine will take the same standardized examinations in basic medical sciences as the medical students including shelf examinations and released NBME Part 1 exams as well as quizzes and final exams. In depth knowledge is continuously ensured through the junior and senior seminar series and in clinical encounters where the continued application of basic medical science knowledge is required. In depth understanding is ensured through the competency assessments. Competency assessments are all linked to the competencies of the college and the PLOs of the College of Dental Medicine which is in [Appendix 2-4 Graduation Competencies](#) specifically stating that CA's will include the following competency statements:

Utilize all pertinent biomedical knowledge to influence and optimize the care of the patient
Apply knowledge with critical thinking developed in the care of patients across all pertinent multiple domains

B. Supportive Documentation:

1. Course syllabi for biomedical science courses

These are included in [Appendix 2-1 Consolidated Course Syllabi](#).

STANDARD 2-13

- 2-13** The biomedical knowledge base **must** emphasize that the oro-facial complex is an important anatomical area existing in a complex biological interrelationship with the entire body.

A. Description:

1. Describe how the oro-facial complex will be integrated and emphasized in the instruction of biomedical sciences.

Regarding Standards 2-13, 2-14 the following curriculum structure is reprised: The biomedical sciences are taught primarily in the Common Pathway in an interprofessional environment with students in the College of Medicine. These courses, noted in the curriculum outline and respective syllabi include blocks in the first and second year of hematology, connective tissue, cardiovascular, pulmonary, gastrointestinal, renal, neuroscience, and endocrinology. Each of these course in organized around plenary learning which integrate medical and dental students and small group case based learning (about half the course hours) which includes group projects, individual presentations and OSCE's currently organized around the "colleges" in the medical school. Each "college" is a group of 20 students organized in the small group teaching rooms daily after the plenary sessions.

The dental school will also divide its class of 80 into 4 "colleges" of 20 students. These will be each headed by a dental school faculty member who will serve as preceptor of the "college". These will employ dental medicine relevant case based studies, literature reviews, OSCE's, presentations and other small group exercises to ensure the proper understanding of the oral facial complex in the context of basic medical science education. This will continuously ensure that the oral facial complex is noted to be an essential component of complex human biologic systems.

The titles of OSCE's and case-based learning in the biomedical sciences related to oral health issues is presented in the course descriptions. These case based studies are devoted to oral health conditions and their relation to the specific biomedical science courses. For example, the Hematology block includes cases of bleeding in dental practice and the bleeding dyscrasias associated, the musculoskeletal block has cases on rheumatoid arthritis, osteoporosis, and muscular dystrophy related to oral health. The cardiovascular block has case-based learning on assessment of the dental patient with CV diseases like atherosclerotic heart disease, hypertension, and congestive heart failure. In addition, the Curriculum Committee of the College of Medicine is working with the College of Dental Medicine to create integrated small group exercises that contain BOTH medical and dental components as exercises. One of these cases is "the Wisdom of Phillip Head" regarding a patient with pericoronal infection of a third molar who sustained septic shock, cardiovascular compromise and renal failure.

B. Supportive Documentation:

1. Course syllabi for biomedical science courses

Course syllabi are in **Appendix 2-1 Consolidated Course Syllabi.**

STANDARD 2-14

- 2-14** In-depth information on abnormal biological conditions **must** be provided to support a high level of understanding of the etiology, epidemiology, differential diagnosis, pathogenesis, prevention, treatment and prognosis for oral and oral-related diseases.

A. Description:

1. Summarize the in-depth information that will be presented to students on abnormal biologic conditions, including etiology, epidemiology, differential diagnosis, pathogenesis, prevention, treatment and prognosis for oral and oral-related diseases.’

The curriculum ensures in depth understanding of abnormal biologic conditions of oral and oral related diseases. The chart below summarizes information on the in depth presentation in each course of the curriculum of:

1. Abnormal biologic conditions
2. Etiology of oral related disease
3. Epidemiology of oral related disease
4. Differential diagnosis of oral related disease
5. Pathogenesis of oral related disease
6. Prevention of oral related disease
7. Treatment of oral related disease
8. Prognosis of oral related disease

The chart demonstrates that oral and oral related pathologic conditions are replete in all areas of the curriculum that address abnormal biologic conditions. These are most directly related to oral diseases in the clinical dental medicine sciences and are directed in small group learning environments in the basic medical sciences towards oral health related issues.

Of note is that in a new curriculum, this list is not all inclusive and will be malleable. The chart is meant to demonstrate the in-depth information that permits a high level understanding of oral related diseases in each course in the curriculum.

STANDARD 2-14

**COURSE BY COURSE ASSESSMENT
OF IN-DEPTH UNDERSTANDING OF ABNORMAL BIOLOGIC CONDITIONS**

Year 1

Course	Abn	etiol	epi	Diff diagnosis	Pathogen.	prevent	treat	prognosis
Hematology	x	x		x	x	x	x	x
Integumentary and Musculoskeletal Systems	x	x		x	x	x	x	x
Foundations of Odontology	x	x			x	x	x	x
Dental Anatomy								
Foundations of Dental Medicine	x	x	x	x	x	x	x	x
Managing Student Life								
Neuroscience	x	x	x	x	x	x	x	x
Cardiovascular and Pulmonary Systems	x	x	x	x	x	x	x	x
Cariology	x	x	x		x	x	x	x
Oral Microbiology/Im munology	x	x			x	x	x	x
Surgical Anatomy of the Head and Neck								
Ethics in Dental Medicine and Health Care								

Year 2

Course	abn	etiol	epi	Diff dx	patho	prev	treat	prog
Renal System	x	x	x	x	x	x	x	x
Gastroenterology	x	x	x	x	x	x	x	x
Endocrine System	x	x	x	x	x	x	x	x
Clinical Pharmacology 1	x	x		x	x	x	x	x
Operative Dentistry	x	x			x	x	x	x
Periodontology (Fall and Spring)	x	x	x	x	x	x	x	x
Dental Anesthesiology 1, Local Anesthesia								
Oral Radiology 1	x	x		x	x			
Clinical Pharmacology 2/Oral Pharmacology	x	x		x	x	x	x	x
Prosthodontics and Implant Dentistry: Removable Prosthodontics	x	x			x		x	x
Comprehensive Care Family Dentistry	x	x	x	x	x	x	x	x
Endodontology, Diseases of the Pulp and Pathways of Odontogenic Infection	x	x		x	x		x	x
Dental Anesthesiology 2: Pain and Anxiety Control,								
Oral Pathology/Oral Medicine 1	x	x	x	x	x	x	x	x
Orthodontics and Craniofacial Growth and Development	x	x	x	x	x	x	x	x
Behavioral Medicine	x	x	x	x	x	x	x	x
Dental Medicine at all Stages of Life	x	x	x	x	x	x	x	x

Year 3

Course	abn	etiol	epi	Diff dx	patho	prev	treat	prog
Junior Year Medicine Seminar (fall, spring)	x	x		x	x	x	x	x
Prosthodontics and Implant Dentistry: Fixed Prosthodontics	x	x					x	x
Comprehensive Care Family Dentistry	x	x	x	x	x	x	x	x
Oral Radiology 2	x	x		x	x			
Principles of Oral Surgery	x	x		x	x		x	x
Pediatric Dentistry	x	x	x	x	x	x	x	x
Dental Public Health	x	x	x	x	x	x	x	x
Practice Management 1								
Periodontology Seminar	x	x	x	x	x	x	x	x
Oral Pathology/Oral Medicine 2	x	x	x	x	x	x	x	x
Clinical Clerkship: Oral and Maxillofacial Surgery	x	x		x	x		x	x
Clinical Clerkship: Pediatric Dentistry	x	x	x	x	x	x	x	x

Year 4

Course	Abn	Etiol	Epi	Diff dx	patho	preven	treat	prog
Senior Year Medicine Seminar	x	x		x	x	x	x	x
Periodontology Seminar	x	x		x	x	x	x	x
Prosthodontics and Implant Dentistry: Implant Surgery and Prosthodontic Reconstruction	x	x			x		x	x
Comprehensive Care Family Dentistry	x	x	x	x	x	x	x	x
Oral Radiology Seminar	x	x		x	x			
Clinical Clerkship: Community-Based Education	x	x	x	x	x	x	x	x
Seminar in Dental Public Health	x	x	x	x	x	x	x	x
Oral Pathology/Oral Medicine Seminar	x	x		x	x	x		
Clinical Clerkship: Orthodontics	x	x		x	x		x	x
Advanced Topics in Oral and Maxillofacial Surgery	x	x	x	x	x	x	x	x
Practice Management 2								
Clinical Electives	x	x	x	x	x	x	x	x

B. Supportive Documentation:

1. Course syllabi for biomedical science courses

Course syllabi are in [Appendix 2-1 Consolidated Course Syllabi](#).

STANDARD 2-15

2-15 Graduates **must** be competent in the application of biomedical science knowledge in the delivery of patient care.

Intent:

Biological science knowledge should be of sufficient depth and scope for graduates to apply advances in modern biology to clinical practice and to integrate new medical knowledge and therapies relevant to oral health care.

A. Description:

1. Describe how new medical and biologic knowledge will be incorporated and integrated into the delivery of dental care.

The delivery of dental care occurs in the clinical practicum in courses including those in the sections of Odontology and Oral and Maxillofacial Studies. These clinical courses are where the delivery of dental care will occur as part of the curriculum. The correlation of medical and dental knowledge in a case based fashion will be accomplished and integrated into the care of active patients through the seminar series for DMD 3 and DMD 4 students that continues to carry Human Studies and Behavioral and Social Sciences into clinical practice through the majority clinical oral health care curriculum.

First, it is expected that new medical and biologic knowledge will be incorporated into the care delivery in a direct fashion such as in patient assessment, write ups, consideration of biologic and medical findings influencing care, among others. Group leaders will normally begin each clinic in comprehensive care dentistry with a review of the patients of the day and consideration of medical and biologic issues of importance in their care. This will include presentations by students and faculty in important issues in patient care among the team. Such presentations can focus on disease states (such as diabetes, osteoporosis, cardiovascular diseases) in patients of record and brief updates utilizing search tools such as Up To Date for briefs on critical issues.

Second, the formative and summative competency assessments in the clinic will include assessment of the application of biomedical knowledge in patient care. The competency assessments of clinical activities all link to the application of biomedical knowledge into clinical decision making.

Herein are the courses where dental care is delivered by DMD students, followed by the courses where medical and biologic knowledge is systematically, in an active case based fashion incorporated into the ongoing care of dental patients via patient care seminars.

A. Courses where oral health care is delivered and medical knowledge is incorporated

a. Comprehensive Care Dentistry: year 2, 3, and 4

Course #	Course Title	Credits	Year	Term
Odont 662	Comprehensive Care Family Dentistry <i>CLIN and LAB</i>	3	DS 2	Spring

Treatment of caries and periodontal disease with discipline based faculty from operative dentistry, prosthodontics, endodontology and periodontology is carried out with the DS 2 as an active participant in the care team that includes a DS3 and DS 4. Students will participate in case presentations, medical record assessment and recording, and other aspects of the clinic activities. The laboratory will include a simulated clinic visit including OSCE record and electronic health record.

Course #	Course Title	Credits	Year	Term
Odont 762	Comprehensive Care Family Dentistry <i>CLIN</i>	8	DS 3	Spring

This daily clinic will further develop the completion of Phase 1 therapy, disease control mitigation of risk and initiation of preventive care in the patient family. The student will develop this under the leadership of the team leader. The student will also begin aspects of Phase 2 therapy, reconstructive dentistry and address other comorbidities in patient care.

Course #	Course Title	Credits	Year	Term
Odont 861	Comprehensive Care Family Dentistry <i>CLIN</i>	8	DS 4	Fall

This clinical practicum will focus on the daily clinical activities of a practicing dentist including all intake, comprehensive care, case management issue extant under the leadership of the team leader. The DS 4 will also demonstrate leadership of the oral healthcare team including DS2 and 3 students and the dental assisting and dental hygiene staff through cooperation and assessment of outcomes of care.

b. Clinical Clerkship in Oral Surgery

Course #	Course Title	Credits	Year	Term
OMFS 772	Clinical Clerkship: Oral and Maxillofacial Surgery <i>4 weeks, 30 hours per week plus call CLIN</i>	8	DS 3	Spring

The students will enter the oral and maxillofacial surgery care team for this clerkship including the care of patients for dentoalveolar surgery, major maxillofacial surgery and complex conditions of the head and neck. Clinical experience in ambulatory oral surgery and anesthesia and assisting for maxillofacial surgery in the operating room including emergency and trauma care occurs. Participation in hospital rounds and conferences occurs.

c. Clinical Clerkship in Pediatric Dentistry

Course #	Course Title	Credits	Year	Term
OMFS 771	Pediatric Dentistry <i>LAL and LAB</i>	3	DS 3	Fall

Child development and child management in the clinical setting will be developed from a holistic and family based perspective. Major diseases in growth and development of the oral cavity will be elucidated. The development of the deciduous and mixed dentition along with craniofacial development is presented. Caries diagnosis, treatment and prevention in the deciduous dentition is shown. The laboratory will provide simulated clinical experiences in caries treatment, deciduous crowns, space maintenance, and care of the pediatric patient.

d. Clinical clerkship orthodontics

Course #	Course Title	Credits	Year	Term
OMFS 872	Clinical Clerkship: Orthodontics <i>4 hours per week for 8 weeks</i> CLIN	2	DS 4	Spring

Students will enter the orthodontic care team providing diagnostic and treatment services for patients undergoing orthodontic care under the auspices of orthodontic faculty in College of Dental Medicine clinics.

e. Clinical Clerkship: Community-Based Education

Course #	Course Title	Credits	Year	Term
BSS 861	Clinical Clerkship: Community-based Education <i>4 weeks, 30 hours per week plus call</i> CLIN	8	DS 4	Fall

Affiliated health systems based practices will accept CNU students into their care teams where senior students will provide clinical care under the supervision of Volunteer Community-Based Faculty in those sites. Suitable transportation and housing will be arranged for where needed. The purpose of the course is to provide community engagement with the constituencies served, to gain experience in community-based clinical care and to interact with the interprofessional and intraprofessional care team

Course #	Course Title	Credits	Year	Term
BSS 862	Clinical Clerkship: Community-based Education <i>4 weeks, 30 hours per week plus call</i> CLIN	8	DS 4	Spring

This course will be at a second community-based rotation site to elaborate on the activities of the first rotation and engage a new community and a new clinic. In addition to comprehensive care experience, the student will compare and contrast communities and clinical care entities and provide a reflective essay on their community care experience.

- B. Furthermore, here are seminar courses concurrent with these clinical activities where biologic and medical issues to integrated knowledge application in patient care occurs.**

Course #	Course Title	Credits	Year	Term
OMFS 862	Oral Pathology/Oral Medicine Seminar SEM	2	DS 4	Spring

Concentration on oral medicine will include the risk assessment and management of complex systemic diseases related to dental medicine care in dental practice. Case-based discussion on the dental medicine patient with HIV, ongoing chemotherapy for malignancy, osteoporosis/osteopenia among others will be presented by students in seminar format.

Course #	Course Title	Credits	Year	Term
Odont 752	Periodontology Seminar SEM	2	DS 3	Spring

Using a case-based format, the treatment planning, outcome assessment, management of medical and dental comorbidities among others of the patient with diseases of the periodontium is presented. Patient-centered, health systems informed, and culturally aware aspects of care are discussed through the case-based format.

Course #	Course Title	Credits	Year	Term
Odont 841	Periodontology Seminar SEM	2	DS 4	Fall

Using case-based format, interdisciplinary problems especially with orthodontics, endodontics and prosthodontic consideration will be developed through patient presentations of patients of record or via the OSCE format. Further exploration of comorbidities in periodontal diseases will be developed.

Course #	Course Title	Credits	Year	Term
HS 721	Junior Year Medicine Seminar SEM	2	DS 3	Fall

Weekly case-based seminars presenting existing dental and comprehensive care patients and their medical comorbidities. Cases will be selected from existing active patients as well as from standardized patients, for the D3 class with evidence based review of relevant medical findings and their impact on oral health and clinical interventions. This will be done with a purpose to mitigate risk and improve patient care outcomes.

Course #	Course Title	Credits	Year	Term
HS 722	Junior Year Medicine Seminar SEM	2	DS 3	Spring

Complex cases will be selected beyond the level of HS 721 including those commonly requiring medical surgical intervention in concurrence with oral health care. Examples such as oncology patients, obstetric patients, and transplant patients will be examined. Weekly case-based seminars presenting existing dental and comprehensive care patients and their medical comorbidities will be continued in the seminar as well.

Course #	Course Title	Credits	Year	Term
HS 821	Senior Year Medicine Seminar <i>SEM</i>	2	DS 4	Fall

Weekly case-based seminars presenting existing dental and comprehensive care patients and their medical comorbidities. Continued development of advanced based cases including those on hospitalized patients.

Course #	Course Title	Credits	Year	Term
HS 822	Senior Year Medicine Seminar <i>SEM</i>	2	DS 4	Spring

Weekly case-based seminars presenting existing dental and comprehensive care patients and their medical comorbidities. Development of advanced knowledge of cases presenting for medical treatment for which dental consultation is needed in the preanesthetic presurgical patient and in concurrence with major systemic disease including trauma, stroke, myocardial infarction.

2. Describe how students will be assessed in the application of biomedical knowledge in the treatment of patients.

Daily formative assessment of students in the clinical courses will include evaluation of knowledge values and skills in the provision of patient care. Competency assessments will similarly include the application of biomedical knowledge in the treatment of patients. The use of MedHub and E*Value for grading is currently planned for the clinical setting as the electronic health record (which will be integrated with the medical record) will not include a grading component. While this will eventually be in electronic format, [Appendix 2-24 OMFS 772 Summative Competency Assessment](#) includes a sample assessment form for a competency assessment for oral surgery that includes the application of biomedical knowledge in the assessment.

Also of note is that the monitoring of application of biomedical knowledge in the care of patients in preparation for ongoing and accreditation program review by CODA for the four year site visit and is collated in the PLO and ILO assessment plan presented in [Appendix 2-21 PLO and ILO assessment plan CNUCDM](#).

3. Describe plans for basic science and clinical faculty interactions to plan and evaluate the curriculum so that biomedical science knowledge will be applied in patient care.

The Curriculum Committee will serve as the primary venue for interactions to plan and evaluate the curriculum as that is the primary charge of that committee. The organization of the curriculum according to the four themes of Human Studies, Odontology, Oral and Maxillofacial Studies, and Behavioral and Social Sciences across the four years and with continuous interaction is designed in greatest part to accomplish this task.

Also of note is that the monitoring of application of biomedical knowledge in the care of patients in preparation for ongoing and accreditation program review is collated in the PLO and ILO assessment plan presented in [Appendix 2-21 PLO and ILO assessment plan CNUCDM](#). This serves as the template for this monitoring by the Curriculum Committee especially with regard to

program learning outcomes for critical thinking, evidence based care, and biomedical sciences knowledge

B. Supportive Documentation:

1. Student clinical assessment forms, as available

Attached in Appendix 2-24 OMFS 772 Summative Competency Assessment,
Appendix 2-24 Competency Assessment - General Rubric for Clinical Dentistry
Appendix 2-21 PLO and ILO assessment plan CNUCDM, and
Appendix 2-15 sample Clinical Competency assessment

STANDARD 2-16

2-16 Graduates **must** be competent in the application of the fundamental principles of behavioral sciences as they pertain to patient-centered approaches for promoting, improving and maintaining oral health.

A. Description:

1. Summarize the planned curriculum in behavioral sciences, especially the area of patient-centered approaches for promoting, improving and maintaining oral health. Describe the intended patient-centered approaches that will be presented to students.

The CNUCDM curriculum is exceptional in dental education in that one of the four themes of the curriculum is Behavioral and Social Sciences which encompasses courses in all four years of the DMD program comprising 36 of 240 DMD program credits. This theme of behavioral and social sciences emphasizes the role of behavioral health, community health, diversity, and cultural humility in the emerging practice of dental medicine in health systems. Highlights of behavioral science education with patient centered approaches include:

- In BSS 522, the fundamentals of dental and medical ethics will demonstrate to the student the intentional actions of beneficence and non-maleficence in dental practice. The protection of patient rights and research subject rights will introduce the student to essential concepts that can effect dental practice decisions such as when a novel procedure approaches the characteristics of human research. The role of the IRB and of the Helsinki statement will be reviewed.
- BSS 662 behavioral medicine will be under the course leadership of the College of Psychology, introduce the student to the minor and major psychiatric illnesses impacting on oral health and the provision of oral health care. This will include substance abuse, dental fear, phobias, and elder and child abuse. Patient centered care for individuals with identifiable psychiatric illnesses can be more effective and more intentional in approach in the practice of dental medicine. BSS 662 will provide the foundation for that consideration.
- BSS 701 dental public health will focus on the behavioral and social determinants of oral health and initiatives to positively influence behavior. Those initiatives can be at the population level including the use of PSA's, social media, entertainment, and even product placement among others.
- BSS 861, BSS 862 are community clerkships where engagement with communities in which developing cultural competency and effective provision of promotion of oral health in a new environment will permit the development of behavioral medicine skills in the student

The courses and descriptions are reprised here:

Behavioral and Social Sciences

Course #	Course Title	Credits	Year	Term
BSS 501	Managing Student Life <i>LAL and Lab</i>	1	DS 1	Fall

Resilience, sustainability as a student and future health professional will be presented. Managing student debt, stress management, effects of social media, interpersonal relationships, and ethics in student practice will be discussed. The problems of drug and alcohol abuse will be shown. Respect in the University including cultural, gender, and sexual conduct issues will be presented. Students will be made aware of resources to promote student wellbeing.

Course #	Course Title	Credits	Year	Term
BSS 522	Ethics in Dental Medicine and Health Care <i>LAL</i>	2	DS 1	Spring

The fundamentals of dental and medical ethics are presented including beneficence and non-maleficence. The Helsinki statement and other aspects of human research guidelines are presented including the role of Human Studies committees. The care of animals in biomedical research is discussed as well as the ethical use of human tissue in clinical care, transplant medicine etc. Ethical financial relationships and the underlying law behind them in clinical practice is discussed. The role of the criminal, tort system, the Board of Dentistry of California, and the ADA in dental ethics is presented.

Course #	Course Title	Credits	Year	Term
BSS 662	Behavioral Medicine (CP Course) <i>LAL, Clinical</i>	3	DS 2	Spring

In this course aspects of clinical psychology of importance in dental practice is presented. Cased base learning will include: minor and major psychiatric illnesses impacting on oral health and the provision of oral health care; elder, spousal and child abuse; dental fear; and, dental phobias.

Course #	Course Title	Credits	Year	Term
BSS 701	Dental Public Health <i>LAL</i>	2	DS 3	Fall

The fundamentals of public health are presented including health and public health measures for health protection, protection from disease and health promotion. The surgeon general's report, 2000, updated 2019, on the status of oral health in America is presented. WHO assessment of oral health globally is presented. Population based initiative to improve oral health are discussed with a focus on clean water and fluoride exposure.

Course #	Course Title	Credits	Year	Term
BSS 721	Practice Management 1 LAL	2	DS 3	Fall

Addressing issues of student debt, career path, and modes of practice will be presented. Operating a dental practice via solo or group practice model and in health systems based practice will be discussed. Issues including human resources management, the actions of the care team in practice and financial responsibility and accounting will be presented.

Course #	Course Title	Credits	Year	Term
BSS 861	Clinical Clerkship: Community-based Education 4 weeks, 30 hours per week plus call CLIN	8	DS 4	Fall

Affiliated health systems based practices will accept CNU students into their care teams where senior students will provide clinical care under the supervision of Volunteer Community-Based Faculty in those sites. Suitable transportation and housing will be arranged for where needed. The purpose of the course is to provide community engagement with the constituencies served, to gain experience in community-based clinical care and to interact with the interprofessional and intraprofessional care team

Course #	Course Title	Credits	Year	Term
BSS 871	Seminar in Dental Public Health SEM	2	DS 4	Fall

This weekly seminar develops through cased based discussions led by student teams the public health issues in oral health in California and globally including access to care, social determinants of oral health, scope of practice issues, insurance and payment systems for oral health, access to fluoride, immunizations especially for HPV, and health protection for vulnerable populations such as children and elderly.

Course #	Course Title	Credits	Year	Term
BSS 822	Practice Management 2 SEM and LAB	2	DS 4	Spring

The simulation of dental practices in various models will be developed by students in groups including addressing issues of hiring, overhead, interaction with vendors, staff development, marketing, accounting and all operations in dental practice. The regulatory environment for pricing, dental insurance, health insurance will be reviewed as well as all aspects of the operation of dental practices.

Course #	Course Title	Credits	Year	Term
BSS 862	Clinical Clerkship: Community-based Education <i>4 weeks, 30 hours per week plus call CLIN</i>	8	DS 4	Spring

This course will be at a second community-based rotation site to elaborate on the activities of the first rotation and engage a new community and a new clinic. In addition to comprehensive care experience, the student will compare and contrast communities and clinical care entities and provide a reflective essay on their community care experience.

Course #	Course Title	Credits	Year	Term
BSS 872	Senior Elective Clinical Clerkship CLIN	6	DS 4	Spring

D4 students will select from additional clerkships available at clinical sites either discipline based or comprehensive care in odontology, oral and maxillofacial studies or human studies. Examples include comprehensive care at a remote clinic (odontology), dental specialty clerkship in oral maxillofacial surgery (OMFS), clerkship in internal medicine (Human Studies), or population health study abroad or in US (BSS).

In addition to the BSS courses, clerkships in comprehensive care dentistry, oral and maxillofacial surgery and pediatric dentistry are especially focused on changing patient behavior to promote, improve and maintain oral health. Some components of this are behavioral modification in pediatrics, pain and anxiety control in oral surgery, and motivational interviewing in periodontology and comprehensive care dentistry

2. Describe how students will be assessed in the application of the fundamental principles of behavioral sciences as they pertain to patient-centered approaches for promoting, improving and maintaining oral health, including the ways by which students demonstrate effective interpersonal communication skills during patient interactions.

The daily formative assessments in clinics as well as the summative competency assessments will all include behavioral, ethical, professional, cultural, communication skills as applicable in the clinical setting. This is ensured as these components are part of the clinical competency assessment rubric. A sample rubric for competency assessment in oral surgery is included to demonstrate this is in [Appendix 2-15 Competency Assessment sample for biomedical science application](#).

Students will as well be evaluated for communication skills and patient interaction in OSCE's where patient communication and ability to elicit information and provide health information is assessed.

All clinical faculty will be educated and calibrated, and assessed for inter-rater reliability with regard to the assessment rubric including behavioral assessment.

B. Supportive Documentation:

1. Student clinical assessment forms, as available

Appendix 2-21 PLO and ILO assessment plan CNUCDM

Appendix 2-24 Competency Assessment - General Rubric for Clinical Dentistry

Appendix 2-15 sample Clinical Competency Assessment

Appendix 2-15 Competency Assessment sample for biomedical science application

2. List of planned student experiences:

a. at public health facilities

The College has developed many MOUs (Memorandums of Understanding) with the Dental Directors of Federally Qualified Health Centers, Native American Health Centers, and other Community Health Service providers in Sacramento County and surrounding counties. These MOUs were established for the purpose of developing multiple off campus clinical rotations through the various public health facilities to provide an enriching educational opportunity for students as well as providing quality care to the patients of these health centers. The College curriculum was designed to ensure students are prepared to practice at a level of skill that generates confidence in the patients, the Health Center's Attending faculty and the Health Center's administrators. The current model for student involvement at public health facilities is designed on an 8 week rotation at the assigned facility. This longer rotation period ensures the students, the health centers patients, and the health center staff serving as faculty have sufficient time to develop a clear understanding of the procedural requirements for providing care specific to the facility that care will be delivered in and that the rotation length provides ample time for the faculty to make outcome based decisions regarding the level of Professionally Entrusted procedures a student is able to undertake.

b. interacting with grade school students

Among the public health facilities we have formed MOUs for Community Based Care facilities are several that have a high level of utilization by families with grade school age children. The practicum training will include patient experiences at both the main campus clinical facilities as well as the Community Based Care facilities ensuring patient encounters with grade school aged children. We are currently developing relationships with Community Based Clinics that are participants in California's Department of Health Care Services Dental Transformation Initiative by developing a Virtual Dental Home for children in the counties that are in close proximity to the CNU College of Dental Medicine. We look forward to being a participant in establishing Dental Homes and/or Virtual Dental Homes through our main clinical services or through community based clinics our students rotate through.

Sacramento District Dental Society originated the Smiles for Kids program which was later adopted by the American Dental Association as Give Kids a Smile. This program relies on volunteers who currently screen 40,000 children in areas of need, provide the children and parents education on the oral health care needs, and provide information for those who qualify

for state or county assistance on options for obtaining care. For those in need who do not qualify for assistance but are unable to obtain care needed are then as part of the Smiles for Kids program taken care of by volunteer dentists. Students from the various hygiene and assisting programs aid the volunteer dentists do the screening and also help in patient care at the multiple clinics each year where up to 1000 children are treated under the Smiles for Kids program in the Sacramento region.

c. interacting with nursing home residents

For residents of nursing homes we are in the process of identifying and developing potential for MOUs for providing care to patients in nursing homes either through on site or referral based care. Currently, we are still in the earliest stages of both identifying possible participants and developing the MOU with the site under consideration. Of note is that Elk Grove is a regional center for senior living including all levels of functionality such as private senior communities, independent living, assisted living, stroke and memory care.

d. participation in health fairs

Regarding having our students participate in Health Fairs, there is clearly the opportunity to have our students participate in many health fairs on many levels. The California Dental Association Foundation provides oral health care to those in need through its CDA Cares free clinics. This event is a twice a year event providing oral health care to 4000 patients a year. Of the roughly 1500 volunteers for each of these two events, a significant number of those volunteers are dental students. It is clearly part of the strategic plan for CNU to develop a relationship with CDA Cares to provide an opportunity to participate in these events. The learning objective for students is understanding the level of need that is unmet in the state and to begin to appreciate the challenges associated with providing care to those in need. In addition there are many local health fairs targeting communities of need where we anticipate developing an opportunity for students to provide oral health education, screening, and explaining options for obtaining services that patients are often not aware they may be qualified to obtain.

3. Course syllabi for behavioral sciences courses

The course syllabi for DMD 1 and DMD 2 students in Behavioral and social Sciences are in the following appendices:

Appendix 2-16 BSS 501 Managing Student Life Syllabus

Appendix 2-16 BSS 522 Ethics Syllabus

Appendix 2-16 BSS 662 Behavioral Medicine Syllabus

STANDARD 2-17

- 2-17** Graduates **must** be competent in managing a diverse patient population and have the interpersonal and communications skills to function successfully in a multicultural work environment.

Intent:

Students should learn about factors and practices associated with disparities in health status among subpopulations, including but not limited to, racial, ethnic, geographic, or socioeconomic groups. In this manner, students will be best prepared for dental practice in a diverse society when they learn in an environment characterized by, and supportive of, diversity and inclusion. Such an environment should facilitate dental education in:

- *basic principles of culturally competent health care;*
- *recognition of health care disparities and the development of solutions;*
- *the importance of meeting the health care needs of dentally underserved populations, and;*
- *the development of core professional attributes, such as altruism, empathy, and social accountability, needed to provide effective care in a multi-dimensionally diverse society.*

A. Description:

1. Describe the planned patient population students will encounter in dental school clinics and extramural sites. How will the dental school ensure that students have experiences functioning in a multicultural work environment?

The greater Sacramento and Elk Grove community is amply described elsewhere in the document. To reprise its essence, the Delta is one of the most economically, socially, racially, religiously, lifestyle, national origin and culturally diverse communities in California and the world. Local schools have need for translation in over 60 major language groups. The current staff and student body at CNU is multicultural in its entirety. All staff faculty and students are immersed in a multicultural environment.

To develop students' knowledge skills and values intentionally in a multicultural way some of the following features of the program should be noted:

- On site student activities include weekly multicultural events and some major ones particularly highlighting the large Asian, Hispanic, and multiethnic communities of the region.
- Current members of the faculty are members of Asian Dental Society, Hispanic Dental Association, National Dental Association, Gay Straight Dental Alliance, Indian Dental Association, among other organizations that will be extended to student groups once enrollment begins.

- Patients will, by reason of clinic locations, be very diverse, but additionally welcoming activities by the above groups and the plenary college community will assure a working diverse environment for patients.
- Multilingual staff and clinical materials especially in Spanish, Mandarin, Vietnamese, and Korean will be offered.
- Clinical rotations include those to diverse clinics such as Asian Health, Shingle Springs Tribal Clinic and HALO health which serves Sacramento's Little Saigon community.
- Social accountability is a core value of CNU and is included in program and course learning objectives.

2. Describe how student interpersonal skills and communication skills will be assessed in a multicultural work environment.

The evaluation of every student in clinical competency assessments includes cultural competency, professionalism and ethics. The ethics course BSS 522 as well provides assessment of professionalism to include empathy and social accountability. The rubrics that assess interpersonal and communication skills noted in Standards 2-15.

Note that each of the competency assessments is linked to the Program Learning Outcomes which are noted as well in every syllabus. Of note in this context is that Program Learning outcome 3: culturally Competent, Empathetic Communication. Here is its rubric to be applied in the areas of professionalism and ethics for each competency assessment

PLO 3: Culturally Competent, Empathic Communication.

Demonstrate patient centered, empathic and culturally competent communication and interpersonal skills

Indicators	Initial	Developing	Developed	Proficient
3.1. Empathy. Demonstrates the ability to communicate with the patient empathically.	• Does not demonstrate the ability to communicate with the patient empathically.	• Demonstrates some ability, but experiences lapses in the ability to communicate empathically	• Demonstrates the ability to communicate empathically, with few lapses.	• Demonstrates an advanced ability, and never experiences lapses in communicating empathically.
3.2. Cultural competence. Demonstrates the ability to engage in communication with the patient that is culturally aware and accepting.	• Does not demonstrate communication and interactions that convey respect or concern for patients and the community.	• Demonstrates communication and interactions characteristic of a minimal level of respect, and little concern for patients and the community is apparent through use of some	• Demonstrates appropriate communication and interactions that are characteristic of a basic level of respect, and concern for patients and the community is apparent through use of appropriate communication,	• Demonstrates professional communication and interactions by showing empathy, respect, and concern for patients and the community through use of appropriate

	<ul style="list-style-type: none"> • Does not demonstrate an awareness of customs, beliefs, or perspectives in diverse patients • Does not demonstrate awareness of cultural and linguistic needs of patients in order to communicate health information 	<p>appropriate communication, but student does not employ follow-up questions for clarification, when necessary, and student provides inappropriate detail in responses</p> <ul style="list-style-type: none"> • Demonstrates a minimal level of awareness of customs, beliefs, or perspectives in diverse patients • Demonstrates minimal awareness of cultural and linguistic needs of patients; either does not or only attempt to adapt behaviors, but does so ineffectively, to communicate health information 	<p>where student uses some clear, but not necessarily relevant or detailed, follow-up questions and responses</p> <ul style="list-style-type: none"> • Demonstrates awareness of customs and beliefs, but may not clarify with patients about personal perspectives • Demonstrates awareness of the cultural and linguistic needs of diverse patients, and adapt behaviors to communicate health information, but communication may not be effective 	<p>communication where follow-up questions (as needed) and responses are clear, relevant, and detailed</p> <ul style="list-style-type: none"> • Demonstrates awareness of customs, beliefs, or perspectives in diverse patients; ask appropriate questions to clarify perspectives and perceptions in diverse patients • Demonstrates full awareness of and responsiveness to cultural and linguistic needs of diverse patients by adapting behaviors appropriately in order to effectively communicate health information
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B. Supportive Documentation:

1. Student clinical assessment forms, as available

Appendix 2-24 Competency Assessment - General Rubric for Clinical dentistry
Appendix 2-21 PLO and ILO assessment plan CNUCDM.

2. Patient feedback surveys and questionnaires, as available

These are in the process of being developed with a plan to engage Press Ganey which will serve as a consistent administrator across CNU clinical programs from patient surveys of satisfaction and feedback including cultural issues. Press Ganey has been useful in the past in that it can provide comparative reports with blinded comparable clinical organizations and provide

longitudinal information to develop continuous improvement. In addition the university is embarking on a climate survey for the fall of 2020.

3. Relevant course syllabi in behavioral sciences, dental public health, and/or epidemiology, as available

Appendix 2-16 BSS 501 Managing Student Life Syllabus

Appendix 2-16 BSS 522 Ethics Syllabus

Appendix 2-16 BSS 662 Behavioral Medicine Syllabus

Practice Management

STANDARD 2-18

2-18. Graduates **must** be competent in applying legal and regulatory concepts related to the provision and/or support of oral health care services.

A. Description:

1. Describe planned student experiences in applying legal and regulatory concepts related to the provision and/or support of oral health care services.

Students will, in every clinical care setting where oral health services are carried out, apply legal and regulatory concepts related to the provision of oral health care services to which they are attached. Additionally in the group meeting and seminar setting, these legal and regulatory issues will be addressed as appropriate to case based presentation and in a didactic fashion.

PROGRAM LEARNING OUTCOMES

The PLOs of the CNUCDM ensure that legal and regulatory concepts are included and mapped to each course in its syllabus. All clinical courses and clinical rotation courses will map to this PLO. This is explicitly noted in program learning outcome #8

Program Learning Outcomes (PLOs): Outcome #8

Practice Management: Apply legal, regulatory and business management concepts related to provision of oral healthcare services

DIDACTIC

The didactic components of this educational experience to be applied in the clinic are delivered in a topic based fashion in the following courses, herein listed with their associated descriptions

Course #	Course Title	Credits	Year	Term
BSS 721	Practice Management 1 LAL	2	DS 3	Fall

Addressing issues of student debt, career path, and modes of practice will be presented. Operating a dental practice via solo or group practice model and in health systems based practice will be discussed. Issues including human resources management, the actions of the care team in practice and financial responsibility and accounting will be presented.

Course #	Course Title	Credits	Year	Term
BSS 822	Practice Management 2 SEM and LAB	2	DS 4	Spring

The simulation of dental practices in various models will be developed by students in groups including addressing issues of hiring, overhead, interaction with vendors, staff development, marketing, accounting and all operations in dental practice. The regulatory environment for pricing, dental insurance, health insurance will be reviewed as well as all aspects of the operation of dental practices.

In these courses, didactic information related to legal and regulatory issues will explicitly include the following subjects:

1. HIPAA and PHI (protected health information) rules
2. FERPA
3. Human resources including EEO rules
4. Business and taxation rules of dental practices in various forms
5. Dental services organizations (DSOs)
6. Dental insurance
7. Health insurance
8. Medicare and Medicaid, Tricare, federal/uniform services/VA rules
9. CDCP (centers for Disease Control and Prevention) recommendations and rules
10. OSHA
11. Licensure requirements

IN CLINICAL CARE

During the patient encounter the faculty will review each of these concepts with students to be sure they are being applied where appropriate in the care of individual patients. As noted below, these concepts must be reviewed in daily clinical activities, not just to assure proper patient care, but also in the evaluation of students. Specifically the grading rubric on all Standard 2-24 grading rubrics contains a section on legal and regulatory competency assessments

2. Describe how students will be assessed in applying legal and regulatory concepts related to the provision and/or support of oral health care services (e.g., HIPAA, immunization, Basic Life Support, MSDS, licensure requirements).

The assessment of competency in the area of legal and regulatory aspects of care is linked to CNU PLOs and competencies for all of clinical dental education evaluations in clinics where DMD students are engaged in clinical care.

The rubric used assures at the achievement of competency that the DMD student will:

1. Consistently apply appropriate compliance with HIPAA, documentation billing, informed consent and risk management aspects of practice
2. Integrate all aspects of the regulatory environment and consistently applies this knowledge as a skill in clinical practice

3. Reflect on regulatory issues, teach them, apply them proactively and develop supporting policies to assure compliance and improve quality.

B. Supportive Documentation:

1. Student clinical assessment forms, as available

Appendix 2-24 Competency Assessment - General Rubric for Clinical Dentistry

2. Course syllabi related to legal and regulatory concepts, as available

As the BSS courses 721 and BSS 821 in practice management are to be given in year 3 and year 4, these course syllabi have not yet been developed.

STANDARD 2-19

2-19 Graduates **must** be competent in applying the basic principles and philosophies of practice management, models of oral health care delivery, and how to function successfully as the leader of the oral health care team.

A. Description:

1. Describe how dental students will interact and collaborate with other dental care providers, including:
 - a. dental specialists
 - b. dental hygienists
 - c. dental assistants
 - d. dental laboratory technologists

The CNUCDM will include full and part time faculty in all dental specialties. Student will thus interact and collaborate in patient care with every CODA recognized dental specialty in all clinical care settings whether directly or indirectly as will occur in some community based education sites. DMD students will as well be members of the clinical care team with dental specialists while on rotation on clinical clerkships in OMFS 872 orthodontics clerkship, OMFS 752 pediatric dentistry clerkship, OMFS 761, oral and maxillofacial surgery clerkship.

CNUCDM is developing a relationship with regional dental hygiene, dental assisting programs for BSS 861 and 862 clerkships at community sites and additionally in concert with these programs. Implementation of this will not be before 2023,

Two local dental laboratories, one within 100 yards of the main CNUCDM clinical building, are in discussion with the college regarding the performance of clinical laboratory procedures for patients of the college, concurrent with the direct activity of DMD students in communicating and following their laboratory procedures directly with the laboratory. No comprehensive prosthetics laboratory fabrication by indirect analog means is planned within the college clinics, though digital prosthodontics within the college is planned. In the hiring plan is a staff dental laboratory technician to directly interface with DMD students. Every student will, as part of education and competency assessment, provide prescription and instructions to the laboratory technician.

2. Summarize the planned practice management curriculum.

Two courses comprise the subject specific aspects of didactic practice management BSS 721 and BSS 821. These will first be presented in Fall 2022 and Fall 2023 to third and fourth year DMD students.

In addition this knowledge is applied in every clinical setting and is measure in the competency assessments under the CNUCDM competency criteria #7:

Competency #7: Integrates all aspects of the practice management, systems-based practice, legal and regulatory requirements of practice and consistently applies this knowledge as a skill in clinical practice.

BSS 721 addresses issues of student debt, career path, and modes of practice. Operating a dental practice via solo or group practice model and in health systems based practice is discussed. Issues including human resources management, the actions of the care team in practice and financial responsibility and accounting are presented in BSS 721

BSS 822 provides a simulation of dental practices in various models developed by students in groups including addressing issues of hiring, overhead, interaction with vendors, staff development, marketing, accounting and all operations in dental practice. The regulatory environment for pricing, dental insurance, health insurance is reviewed as well as all aspects of the operation of dental practices.

3. Describe any planned student interactions with local or state government officials in relation to oral health care issues.

Fortunately, CNUCDM is located in the capital city of California, our largest state. Meetings have occurred with the state dental director Dr. Jay Kumar who is looking forward to being a resource to our students and speaking to our students. Paul Glassman continues to lead the state-wide initiative for the virtual dental home among other state initiatives which will bring our students and faculty towards activities with county leaders.

4. Describe how students will be assessed in applying the basic principles and philosophies of practice management, models of oral health care delivery, and how to function successfully as the leader of the oral health care team.

As noted in **Appendix 2-24 Mapping of all Competency Assessments**, all clinical competency assessments include evaluation of criteria #7 “Integrates all aspects of the practice management, systems-based practice, legal and regulatory requirement of practice and consistently applies this knowledge as a skill in clinical practice.”

Among the assessments that apply the basic principles and philosophies of practice management, models of oral health care delivery are assessments in the following domains noted in **Appendix 2-24 Mapping of all Competency Assessments** in clinical practice education

1. Infection control
2. CAMBRA
3. Periodontal therapy
4. Caries treatment
5. Comprehensive care
6. Leading the dental team
7. Operative dentistry
8. Endodontic therapy
9. Removable prosthodontics

10. Fixed prosthodontics,
11. Oral surgery
12. Pediatric dentistry
13. Public health

In each of these domains, didactic information, clinical and experiential activities, as well as competency assessments are included in the broad curriculum beyond practice management specific coursework.

B. Supportive Documentation:

1. Student clinical assessment forms, as available

Appendix 2-24 Competency Assessment - General Rubric for Clinical Dentistry

2. Course syllabi related to practice management, as available

Both practice management courses are in years 3 and 4 and are under development at this time.

STANDARDS 2-20

- 2-20** Graduates **must** be competent in communicating and collaborating with other members of the health care team to facilitate the provision of health care.

Intent:

Students should understand the roles of members of the health care team and have educational experiences, particularly clinical experiences that involve working with other healthcare professional students and practitioners. Students should have educational experiences in which they coordinate patient care within the health care system relevant to dentistry.

A. Description:

1. Describe how students will interact and collaborate with other health care providers, including but not limited to:
 - a. primary care physicians, nurses, and medical students
 - b. public health care providers
 - c. nursing home care providers
 - d. pharmacists and other allied health personnel
 - e. social workers

CNU currently has a well-established doctoral culture on campus with students enrolled in both the PharmD and MD programs and, more recently, in the PsyD program. The doctoral culture is pervasive across the University—with research opportunities and support for faculty and students. Research groups at the University have produced over 54 publications, 23 grants, 73 presentations, 37 scholarships and fellowships, four book chapters, and two patents. For the DMD program, establishment of a graduate culture will begin before students enter the program through appropriately rigorous admission requirements. These include a baccalaureate degree, demonstrated academic excellence and high GPA, evidence of scholastic engagement through letters of recommendation, and a driven desire to succeed in the profession as evidenced by their statement of purpose. Doctoral level course requirements are sequential and increase in difficulty and complexity as the student moves through the program gaining the skills and experience necessary to become a dentist. To ensure that students develop the skills and cultivate the attitudes and values needed for the profession, students will be mentored throughout the entire program.

Students in the DMD program will be integrated into the intellectual community of CNU in three fundamental ways. First, they will share the same semester schedule as the College of Pharmacy and the College of Medicine so that students are encouraged to interact through the same break times, vacations, and active class periods. Within this semester schedule, students in the DMD program will take Common Pathways courses with their fellow students in the College of Medicine. These courses in Human Systems will provide opportunities for collaboration in coursework and projects.

Students will also be sharing learning spaces in the library and study halls. Additionally, each college has dedicated laboratory spaces, serving various functions inside the spectrum of research and clinical training. For instance, the College of Medicine has approximately 2,100 square feet of dedicated research space for benchtop research applications for faculty and their student mentees. In addition, the COM possesses a 619 square feet simulation lab composed of two digital manikins, PC read outs and emergency response equipment (crash carts, blood pressure cuffs, pseudo-meds, etc.). This space is allocated for simulated emergency room, trauma applications and ultrasound equipment. The manikins are highly interactive and give the students the opportunity to practice their clinical skills without the guilt or stress of potentially injuring a live patient. . CNUCOP has 3 classrooms of 5,000 square feet each, one sterile compounding lab, an IV sterile compounding lab. It shares the manikin lab with COM as well as an interprofessional education program. The COP has an Advanced Pharmacy Practice Simulation Lab and a new lab with 700 square feet finished in 2018 for drug discovery, pharmacology and virology.

CNU recognizes and promotes appropriate linkages among scholarship, teaching, assessment, student learning, and service. Each college of the University allots a percentage of faculty's time for pursuit of research and/or scholarly activities, including mentoring students in these. The institution clearly defines expectations for research, scholarship, and creative activity for its students. In the COM, students participate in a self-directed scholarly project. In the College of Pharmacy, students participate in scholarly activities, create scientific posters, participate in research with faculty mentors, participate in the CNUCOP Summer Research Fellowship Program, and receive travel assistance to represent the college at professional organization conferences. Additionally, students and faculty participate in a multitude of healthcare-related community service events each year. In fact, the COP students participated in 58 health fairs, health education and related health events from July of 2015 to July of 2016.

Students from the dental program also share certain courses and study groups with the students from the other graduate programs. These include sessions covering Statistics, pharmacology, and the yearlong Leadership in Health Professions course in the senior medicine seminar. Each of the Common Pathway courses in hematology, musculoskeletal/cutaneous, cardiovascular, pulmonary, neurology, gastroenterology and nephrology will have common small group learning sessions. While on clinical rotations in clinics and hospitals, dental students will have interprofessional learning experiences with students in medicine, pharmacy, psychology and allied health programs from affiliated schools.

The College of Dental Medicine is integrated into the fabric of the academic health center most principally with the College of Medicine. Fully 58 of 2140 credits are taught by MD faculty from the COM in Human Systems Studies. Pharmacology is taught in part by COM and College of Pharmacy Faculty and Behavioral Sciences is taught in part by Psychology faculty. In each of these courses a clinical case based learning method is used that will acculturate DMD students into the essential role that the interprofessional team plays in the practice of dental medicine.

Health systems based clinical rotations include sites where primary care medicine, pediatrics, social work, pharmacy, public health leaders, nurses, medical students and others in the clinical care team interact with DMD students on a daily basis. As examples, Asian Health in Oakland has MSW counselors in the dental clinic with appointed patients to manage issues related to mental health and the social determinants of health. In this innovative program under the leadership of Huong Le DDS, these are patients of record in the dental clinic so that the dental

team including CNUCDM students will engage in that care. As another best practice, Colusa Tribal Health has in common patients in the dialysis clinic and transplant clinic who integrate their oral health care at the same site as their medical care. DMD students will interface with the health team in the holistic management of these patients' needs.

Collaboration with three Sacramento regional geriatric domiciliaries and nursing homes is underway to develop a point of service activity at those sites as well as interaction with the care team with regard to improving oral health at those sites. This would be planned for implementation during the clinical years of the first class in 2022-2023.

2. Describe any planned clinical experiences students will have outside of dental school clinics, where medical care or long-term care is the primary focus.

BSS 861 and BSS 862 are the community based education courses which are all in sites where primary medical care occurs. As examples, Halo Health and Shingle Springs share electronic health records, clinical staff, registration etc. Under the State of California authority, pediatric patients of record at those sites and at Wellspace clinics have their dental home at those sites as well and are engaged in a value based payment system. El Dorado Community Health only treats dental patients who also have primary care at the site. Sites such as these have staff case conferences where dental, medical, behavioral and social work teams optimize the care plans for individual patients. It is expected that DMD student will participate in those conferences as do other health professions learners at those sites.

3. Describe how the student will be assessed, including any assessment mechanism made by non-dental school faculty, for:

- communication
- collaboration

Non-dental faculty in the College of Medicine will be providing formative and summative assessments of students in the following courses:

1. Hematology HS 526
2. Musculoskeletal HS 511
3. Neuroscience HS 551
4. Renal HS 611
5. Gastrointestinal HS 621
6. Endocrine HS 631

And in the following case-based seminars:

1. HS 722
2. HS 821
3. HS 822

The CNUCDM competency statements include four of the seven that focus most directly on Communication and Collaboration. These are:

Statement 1: Demonstrate patient interaction that provides able and personable communication with the patient that addresses all clinical issues and addresses concerns in an empathetic and culturally aware fashion.

Statement 2: Provide verbal and written patient presentation that demonstrates the ability to present key findings and organize them in a fashion to make appropriate care decisions.

Statement 6: Applies the tenets of ethical behavior and professionalism with exemplary leadership empathy, clinical behavioral understanding customized to the patient's needs.

Statement 7: Integrates all aspects of the practice management, systems-based practice, legal and regulatory requirements of practice and consistently applies this knowledge as a skill in clinical practice.

Each of these competency statements are addressed in the assessment mechanisms (ASSESSMENT METHODS) associated to the Human Systems Summative Competency Assessments (HS SCA) as reprised below in the right column for each assessment.

HS SCA	Course number	Assessment Method Domains	Prerequisites	Comments And Competency Statement Numerical links
Bleeding disorder	HS 526	OSCE PS, CR, CS	Didactic material HS 526	2, 3, 4, 6, 7
Leukemia	HS 526	OSCE PS, CR, CS	Didactic material HS 526	2, 3, 4, 6, 7
Anemia	HS 526	OSCE PS, CR, CS	Didactic material HS 526	2, 3, 4, 6, 7
Arthritis	HS 511	OSCE PS, CR, CS	Didactic material HS 526	2, 3, 4, 6, 7
Osteoporosis	HS 511	OSCE PS, CR, CS	Didactic material HS 526	2, 3, 4, 6, 7
Stroke	HS 551	OSCE PS, CR, CS, EDM	Didactic material HS 551	2, 3, 4, 6, 7
Parkinson's Disease	HS 551	OSCE PS, CR, CS, EDM	Didactic material HS 551	2, 3, 4, 6, 7
Renal failure	HS 611	OSCE	Didactic material HS 641	2, 3, 4, 6, 7

		PS, CR, CS		
Acid/base acute infection	HS 611	OSCE PS, CR, CS	Didactic material HS 641	2, 3, 4, 6, 7
Chronic hepatitis	HS 621	OSCE PS, CR, CS	Didactic material HS 621	2, 3, 4, 6, 7
Type 2 diabetes	HS 671	OSCE PS, CR, CS	Didactic material HS 671	2, 3, 4, 6, 7
Hyperthyroidism	HS 671	OSCE PS, CR, CS	Didactic material HS 671	2, 3, 4, 6, 7
Poly pharmacy	HS 642	OSCE PS, CR, CS, EDM	HS 642 and other HS courses	2, 3, 4, 6, 7
Complex medical case assessment: Cardiovascular/pulmonary	HS 721	Patient based PS, CR, CS, P, EDM	Concurrent medicine seminar	2, 3, 4, 6, 7 Patient selected from student's existing patients
Complex medical case assessment: Endocrine/oncology/OB/ GI or transplant	HS 722	Patient based PS, CR, CS, P, EDM	Concurrent medicine seminar	2, 3, 4, 6, 7 Patient selected from student's existing patients
Complex medical case assessment: Interdisciplinary/hospital based	HS 821	Patient based PS, CR, CS, P, EDM	Concurrent medicine seminar	2, 3, 4, 6, 7 Patient selected from hospital consults while on rotation
Complex medical case assessment: preanesthetic/pre surgical consult	HS 822	Patient based PS, CR, CS, P, EDM	Concurrent medicine seminar	2, 3, 4, 6, 7 Patient selected from preop pool evaluated by student

B. Supportive Documentation:

1. Student assessment forms, as available, which will assess, at a minimum:
 - a. ability to identify that consultation is required
 - b. ability to articulate reason for interaction which is correct and accurate
 - c. ability to integrate recommended medical treatment into dental treatment plan

Please refer to [Appendix 2-8 CNU Assessment Handbook](#) and [Appendix 2-24 Competency Assessment - General Rubric for Clinical Dentistry](#) which includes identification of need for consultation, critical thinking reasoning and biomedical integration with dental treatment plan.

2. List of extramural clinics and sites planned to date that are intended to provide interaction and collaboration with other members of the health care team

Teaching and clinical education agreements (MOUs) for community-based education courses BSS 861 and BSS 862 have been completed and are under development for implementation in 2022-2023 rotations with Asian Health Services (Oakland), HALO Health (Sacramento), Indian Health Centers of Sacramento, Colusa County, Wellspace, El Dorado Community Health , and Shingle Springs Indian Health.

3. Course syllabi for behavioral sciences courses

[Appendix 2-16 BSS 501 Managing Student Life Syllabus](#)

[Appendix 2-16 BSS 522 Ethics Syllabus](#)

[Appendix 2-16 BSS 662 Behavioral Medicine Syllabus](#)

STANDARD 2-21

Ethics and Professionalism

2-21 Graduates **must** be competent in the application of the principles of ethical decision making and professional responsibility.

Intent:

Graduates should know how to draw on a range of resources, among which are professional codes, regulatory law, and ethical theories. These resources should pertain to the academic environment, patient care, practice management and research. They should guide judgment and action for issues that are complex, novel, ethically arguable, divisive, or of public concern.

A. Description:

1. Summarize the planned curriculum in ethics and professionalism. Address the areas of academic environment, patient care, practice management and research.

Ethics and professionalism is a discipline based course BSS 522 and is also included in every aspect of the curriculum, academic environment, patient care and scholarly environment.

BSS 522 given in the first year, addresses the didactic aspects of professionalism and ethics to delineate the components and even the nomenclature of ethics. It includes sections on patient autonomy, justice, veracity, beneficence, and non-maleficence. Application of these principles in the patient interview, treatment planning informed consent, and the administration of dental care is addressed in this course. A case based approach to address the ethical dilemmas of solo and group practice, and systems-based practice and in licensure are reviewed in the course. The students are broken into small groups with faculty for salons where free and unstructured discussion is used tied to specific ethical considerations in practice to elucidate the parameters of ethics as applied in practice.

The principles developed in BSS 522 are augmented throughout the curriculum in the clinical practicum. The linked program learning outcomes to ethics include PLO #6 Ethics and Professionalism and PLO #3 culturally competent, empathic communication.

The assessment of the PLOs regarding ethics and professionalism as the program is developed in 2022 and 2023 is shown in [Appendix 2-21 PLO and ILO assessment Plan CUNCDM](#). It demonstrates that for the clinical clerkships in comprehensive care dentistry and oral maxillofacial surgery a reflection paper, presentations of clinical case demonstrating ethical issue as well as formative and summative evaluation that address the PLOs and competencies associated to ethics are utilized.

The guidelines for applications of the principles of ethics in these endeavors is contained within the Honor Code of CNU CDM [Appendix 2-20 Honor Code](#). This Honor code is based upon the

principles of Respect, Honesty and Integrity, Legal Standards and Ethical Behavior, Professionalism.

Each student is presented the Honor Code at the time of acceptance to the program for signature. It is again reviewed and signed concurrently by the entire class at the White Coat Ceremony at the summer of the first year at which time the Hippocratic Oath (as revised by the Class of 2024 prior to the White Coat Ceremony) is also made by the Class.

2. Describe the intended role of students in the school's disciplinary board.

The honor code of the CNUCDM describes the student involvement in the Honor Board, the Office of Academic Affairs, and Office of Student Affairs. Please refer to [Appendix 2-20 Honor Code](#) and [Appendix 2-3 2020-2021 CNUCDM Student Handbook](#).

In this document it is noted that 3 student members, two faculty members and members of student affairs committee will serve on the Honor Council to review potential violations of the Code and make recommendations for rectification.

It is intended that a high level of student engagement in this task will further promote student understanding of their professional responsibility and of the essential role of ensuring ethics in all clinical care teams and academic clinical environments.

3. Describe how students will be assessed in the application of the principles of ethical decision making and professional responsibility.

Competency assessments and formative assessments as linked to the program learning outcomes and the competencies for the CNUCDM.

CNUCDM graduation Competency #6 is: Apply the tenets of ethical behavior and professionalism with exemplary leadership empathy, clinical behavioral understanding customized to the patient's needs.

CNUCDM PLOs are also linked to the assessment rubrics for measurement of specific and global competencies. Those pertaining to ethics and professionalism are in [Appendix 2-4 DMD PLO Rubric](#) specific to PLO 1, 3 and 6 and noted here;

PLO 1: Patient-Centered Care

Demonstrate understanding of healthcare disparities and cultural awareness and capability in patient counseling and providing appropriate patient advocacy

Indicators	Initial	Developing	Developed	Proficient
1.1. Education. Demonstrates ability to educate all audiences through effectively communicating	<ul style="list-style-type: none">• Does not appropriately counsel patients• Does not check for	<ul style="list-style-type: none">• Counsels patients but leaves out pertinent information needed by patient	<ul style="list-style-type: none">• Generally demonstrates empathy, communicates accurate information clearly, checks	<ul style="list-style-type: none">• Consistently demonstrates empathy, communicates accurate information clearly, checks

information and assessing learning	<p>understanding, ask questions, and/or asks inappropriate questions.</p> <ul style="list-style-type: none"> • Does not demonstrate the ability to find and utilize appropriate resources and references necessary for providing accurate counseling, consultation and education 	<ul style="list-style-type: none"> • Communicates with basic level of clarity but does not always check for understanding or rephrase when confusion occurs. • Demonstrates the ability to find a one or two resources, yet the resources are not the best or most appropriate for providing accurate counseling, consultation and education 	<p>for understanding</p> <ul style="list-style-type: none"> • Seeks to ensure understanding and generally asks questions. • Frequently demonstrates the ability to find and utilize appropriate resources and references necessary for providing accurate counseling, consultation and education 	<p>for understanding</p> <ul style="list-style-type: none"> • Ensures understanding and asks appropriate questions. • Consistently demonstrates the ability to find and utilize appropriate resources and references for providing accurate patient counseling, consultation and education
<p>1.2. Patient advocacy. Represents the patient's best interests</p>	<ul style="list-style-type: none"> • Does not demonstrate the ability represent a patient's best interest 	<ul style="list-style-type: none"> • Demonstrates awareness of issues that impact a patient • Demonstrates minimal ability to articulate these issues but does not demonstrate ability to sufficiently advocate on a patient's behalf 	<ul style="list-style-type: none"> • Demonstrates sufficient awareness of issues that impact a patient • Demonstrates ability to articulate these issues • Demonstrates ability to sufficiently advocate on a patient's behalf 	<ul style="list-style-type: none"> • Demonstrates full awareness of the most important issues that impact a patient • Demonstrates ability to clearly and effectively articulate these issues • Demonstrates ability to effectively advocate on a patient's behalf

PLO 3: Culturally Competent, Empathic Communication.

Demonstrate patient centered, empathic and culturally competent communication and interpersonal skills

Indicators	Initial	Developing	Developed	Proficient
3.1. Empathy. Demonstrates the ability to communicate with the patient empathically.	<ul style="list-style-type: none">• Does not demonstrate the ability to communicate with the patient empathically.	<ul style="list-style-type: none">• Demonstrates some ability, but experiences lapses in the ability to communicate empathically	<ul style="list-style-type: none">• Demonstrates the ability to communicate empathically, with few lapses.	<ul style="list-style-type: none">• Demonstrates an advanced ability, and never experiences lapses in communicating empathically.
3.2. Cultural competence. Demonstrates the ability to engage in communication with the patient that is culturally aware and accepting.	<ul style="list-style-type: none">• Does not demonstrate communication and interactions that convey respect or concern for patients and the community.• Does not demonstrate an awareness of customs, beliefs, or perspectives in diverse patients• Does not demonstrate awareness of cultural and linguistic needs of patients in order to communicate health information	<ul style="list-style-type: none">• Demonstrates communication and interactions characteristic of a minimal level of respect, and little concern for patients and the community is apparent through use of some appropriate communication, but student does not employ follow-up questions for clarification, when necessary, and student provides inappropriate detail in responses• Demonstrates a minimal level of awareness of customs, beliefs, or perspectives in diverse patients• Demonstrates minimal awareness of cultural and linguistic needs of patients; either does not or only attempt to adapt	<ul style="list-style-type: none">• Demonstrates appropriate communication and interactions that are characteristic of a basic level of respect, and concern for patients and the community is apparent through use of appropriate communication, where student uses some clear, but not necessarily relevant or detailed, follow-up questions and responses• Demonstrates awareness of customs and beliefs, but may not clarify with patients about personal perspectives• Demonstrates awareness of the cultural and linguistic needs of diverse patients, and adapt behaviors to communicate health	<ul style="list-style-type: none">• Demonstrates professional communication and interactions by showing empathy, respect, and concern for patients and the community through use of appropriate communication where follow-up questions (as needed) and responses are clear, relevant, and detailed• Demonstrates awareness of customs, beliefs, or perspectives in diverse patients; ask appropriate questions to clarify perspectives and perceptions in diverse patients• Demonstrates full awareness of and responsiveness to cultural and linguistic needs of diverse patients by adapting behaviors

		behaviors, but does so ineffectively, to communicate health information	information, but communication may not be effective	appropriately in order to effectively communicate health information
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PLO 6: Ethics and Professionalism.

Demonstrating professionalism and ethical decision making

Indicators	Initial	Developing	Developed	Proficient
6.1. Professionalism. Demonstrates behaviors and values that are consistent with the trust given to the profession by patients, other healthcare providers, and society	<ul style="list-style-type: none"> Does not consistently demonstrate professional attitudes and behaviors (altruism, excellence, duty, accountability, honesty, and integrity) Demonstrates frequent lapses in accountability or quality of work 	<ul style="list-style-type: none"> Demonstrates some professional attitudes and behaviors yet there is inconsistency that may impede on the quality of work or treatment of patients and other healthcare team members (altruism, excellence, duty, accountability, honesty, and integrity) 	<ul style="list-style-type: none"> Generally demonstrates most of the professional attitudes and behaviors (altruism, excellence, duty, accountability, honesty, and integrity) that are required in the profession Demonstrates ability to use these behaviors and values to improve healthcare 	<ul style="list-style-type: none"> Consistently demonstrates the professional attitudes and behaviors that uphold the integrity and competence of the work and the treatment of patients and other healthcare team professionals (altruism, excellence, duty, accountability, honesty, and integrity) Consistently uses these behaviors and values to improve healthcare
6.2. Ethics. Demonstrates the ability to make decisions consistent with the values of practitioners and scholars of oral healthcare.	<ul style="list-style-type: none"> Does not make ethical decisions consistent with the values of practitioners and scholars of oral healthcare. 	<ul style="list-style-type: none"> Demonstrates the ability to exercise ethical decision making, and a rudimentary knowledge of ethics within oral healthcare. 	<ul style="list-style-type: none"> Demonstrates the ability to exercise clear and ethical decision making, and a sufficient knowledge of ethics within oral healthcare. 	Demonstrates the ability to exercise clear and ethical decision making, and an advanced knowledge of ethics within oral healthcare.

These evaluations are included in the rubrics that match the evaluations to the PLOs and the Competencies. In these evaluations and in self-evaluations by the students performed in E*Value, those domains are addressed.

In addition, a PCR report is completed for any professional concern that is raised in the academic or clinical setting. This report includes the description of the incident and the evaluation of the student with regard to the application of principles of ethical decision making and professional responsibility: [Appendix 2-21 Professionalism Concern Report Fillable CDM](#).

4. Describe the resources students will be exposed/referred to in considering ethical decision-making.

B. Supportive Documentation:

1. Student assessment forms, as available

[Appendix 2-20 Honor Code](#)

[Appendix 2-4 DMD PLO Rubric](#)

[Appendix 2-3 2020-2021 CNUCDM Student Handbook](#)

[Appendix 2-21 Professionalism Concern Report Fillable CDM](#)

2. Course syllabi related to ethics and professionalism, as available

[Appendix 2-16 BSS 522 Ethics Syllabus](#)

[Appendix 2-16 BSS 662 Behavioral Medicine Syllabus](#)

STANDARD 2-22

- 2-22** Graduates **must** be competent to access, critically appraise, apply, and communicate scientific and lay literature as it relates to providing evidence-based patient care.

Intent:

The education program should introduce students to the basic principles of clinical and translational research, including how such research is conducted, evaluated, applied, and explained to patients.

A. Description:

1. Summarize the planned curriculum concerning the basic principles of clinical and translational research.

Students are gaining didactic knowledge into the investigative process, scientific method and clinical research design throughout the curriculum. The tools for **Accessing** scientific literature are developed first in orientation to the medical library in which medical librarians present the resources available. These include Ovid, Science Direct, the full resources of the National Library of Medicine including Medline, OMIM, oncology, and other specific data bases such as for HIV. In addition, the in print and electronic reserve are presented and demonstrated.

The following databases are available through the Library webpage for all the University community:

- **AccessMedicine** - from McGraw-Hill is an online resource containing electronic copies of major medical and health related textbooks.
- **AccessPharmacy** – from McGraw-Hill is an online curricular resource designed to meet the changing demands of pharmacy education. Containing electronic copies of major pharmacy textbooks. AccessPharmacy allows students to select a core curriculum topic, browse by organ system, review textbooks, or search across leading pharmacy online references.
- **APhA PharmacyLibrary** – features content from a selection of APhA’s authoritative textbooks, an interactive NAPLEX® review, case studies, and a variety of news sources.
- **Bates Visual Guide** – A collection of physical examination videos for different systems.
- **Clinical Pharmacology** – a complete drug and toxicology information solution for improved decisions and prevention of clinical quality shortfalls at any point of care.

- **EBSCO Academic Search Premiere** – A bibliographic multi-disciplinary full-text database, with more than 8,500 full-text periodicals, including more than 7,300 peer-reviewed journals.
- **Micromedex** – a suite of databases including Drugdex which provides evidence-based, unbiased, fully referenced information and independently reviewed data from major drug centers and pharmacology services worldwide; Identidex which identifies pharmaceuticals by the imprint code and secondary characteristics such as color, size and shape; and Poisindex which identifies ingredients for hundreds of thousands of commercial, biological, and pharmaceutical products.
- **Natural Standards** – is a database founded by clinicians and researchers to provide high quality, evidence-based information about complementary and alternative therapies.
- **OVID** – A collection of approximately 50 full-text journals from the American Journal of Cardiovascular Drugs to Therapeutic Drug Monitoring. An additional 3000+ journals have indices and abstracts available here.
- **Resources A-Z** – A searchable electronic listing of all our current electronic journals over all our platforms.
- Online public access card catalog for books and other physical items.
- Interlibrary Loan Request form

The course **Foundations of Dental Medicine OMFS 511** specifically presents a systematic approach to the **assessment, critical appraisal and communication** of all clinical peer reviewed scientific studies which are the foundation of all clinical scientific knowledge. OMFS 511 presents:

CONSORT: Consolidated standards of reporting Trials: the international standards for reporting clinical comparative and placebo controlled studies, along with its 25 item checklist that assesses items such as the use of a valid control group, case flow charts, and inclusion and exclusion criteria and how to check for their validity.

PRISMA: Preferred reporting items for systematic reviews and Meta-Analyses: the international standards for reporting reviews of multiple studies for assessment of conclusions that can be validly asserted across multiple investigations.

STROBE: Strengthening the reporting of observational studies in epidemiology: the international standards for reporting case controlled studies, case series and population based clinical studies.

Most courses offer the opportunity and many have the requirement for **Critical Appraisal, Application and Communication** of the scientific literature.

In the first and second year biomedical sciences Human Studies course, all courses rely on peer reviewed literature, searching biomedical data bases and applying them to group and individual projects that utilized biomedical research to inform and illustrate solutions to biomedical questions. This is particularly utilized method in the small group learning components CCMP.

All seminars in the third and fourth year in periodontology, medicine, oral medicine and those associated to comprehensive care dentistry and rotations include case based presentations in

which accessing and utilizing scientific literature appropriately vetted for validity using the above standards will be carried out.

Lay literature is reviewed in the Behavioral and Social Sciences section of the curriculum where issues related to lay understanding of oral and human diseases are associated to life choice decisions made by patients, the social determinants of health and others. All courses refer to lay literature including social media, the press, television, internet and public forums are noted in the chart below.

All courses with such group presentations are noted in the following chart and highlighted for active presentations utilizing the above criteria.

CNUCDM Courses that apply the basic principles of Clinical Translational Research in Active Learning for **Access, Appraisal, Application** and **Communication** follow:

Year 1

Course	Access	Appraise	Apply	Communication	Lay literature
Hematology	x	x	x	x	
Integumentary and Musculoskeletal Systems	x	x		x	
Foundations of Odontology	x	x	x	x	x
Dental Anatomy					
Foundations of Dental Medicine	x	x	x	x	x
Managing Student Life					
Neuroscience	x	x	x	x	
Cardiovascular and Pulmonary Systems	x	x	x	x	
Cariology	x	x	x		
Oral Microbiology/Immunology	x	x			
Surgical Anatomy of the Head and Neck					
Ethics in Dental Medicine and Health Care	x	x	x	x	

Year 2

Course	Access	Appraise	Apply	Communicate	Lay literature
Renal System	x	x	x	x	
Gastroenterology	x	x	x	x	
Endocrine System	x	x	x	x	
Clinical Pharmacology 1	x	x			
Operative Dentistry					
Periodontology (Fall and Spring)	x	x			
Dental Anesthesiology 1, Local Anesthesia					
Oral Radiology 1					
Clinical Pharmacology 2/Oral Pharmacology					
Prosthodontics and Implant Dentistry: Removable Prosthodontics					
Comprehensive Care Family Dentistry	x	x	x	x	
Endodontology, Diseases of the Pulp and Pathways of Odontogenic Infection					
Dental Anesthesiology 2: Pain and Anxiety Control,					
Oral Pathology/Oral Medicine 1					
Orthodontics and Craniofacial Growth and Development					
Behavioral Medicine	x	x	x	x	x
Dental Medicine at all Stages of Life	x	x	x	x	x

Year 3

Course	Access	Appraise	Apply	Communicate	Lay literature
Junior Year Medicine Seminar (fall, spring)	x	x	x	x	
Prosthodontics and Implant Dentistry: Fixed Prosthodontics	x	x	x	x	
Comprehensive Care Family Dentistry	x	x	x	x	
Oral Radiology 2	x	x	x	x	
Principles of Oral Surgery	x	x	x	x	
Pediatric Dentistry	x	x	x	x	
Dental Public Health	x	x	x	x	x
Practice Management 1					
Periodontology Seminar	x	x	x	x	
Oral Pathology/Oral Medicine 2	x	x	x	x	
Clinical Clerkship: Oral and Maxillofacial Surgery	x	x	x	x	
Clinical Clerkship: Pediatric Dentistry	x	x	x	x	

Year 4

Course	Access	Appraise	Apply	Communicate	Lay literature
Senior Year Medicine Seminar	x	x	x	x	
Periodontology Seminar	x	x	x	x	
Prosthodontics and Implant Dentistry: Implant Surgery and Prosthodontic Reconstruction	x	x	x	x	
Comprehensive Care Family Dentistry	x	x	x	x	
Oral Radiology Seminar	x	x	x	x	
Clinical Clerkship: Community-Based Education					
Seminar in Dental Public Health	x	x	x	x	x
Oral Pathology/Oral Medicine Seminar	x	x	x	x	
Clinical Clerkship: Orthodontics	x	x	x	x	
Advanced Topics in Oral and Maxillofacial Surgery	x	x	x	x	
Practice Management 2					x
Clinical Electives	x	x	x	x	

- Describe how students will be assessed in their ability to access critically appraise, apply, and communicate scientific and lay literature as it relates to providing evidence-based patient care.

Each of the course syllabi completed to date include the assessment of student performance in individual and group based presentations of relevant scientific and lay literature as it pertains to its communication in seminars and in group plenary presentations. Application of these principles in evidence-based care is a component of the rubrics utilized for Competency Assessments in the clinical setting.

B. Supportive Documentation:

- Student assessment forms, as available

Appendix 2-24 Competency Assessment - General Rubric for Clinical Dentistry

2. Course syllabi related to clinical and translational research, as available

Appendix 2-22 ODONT 511 Foundations of Odontology Syllabus

Appendix 2-24 OMFS 511 Foundations of Dental Medicine Syllabus

Appendix 2-1 Consolidated Course Syllabi

STANDARD 2-23

2-23 Graduates **must** be competent in providing oral health care within the scope of general dentistry to patients in all stages of life.

A. Description:

1. Describe the dental school's definition/parameters of the scope of general dentistry.

The parameters of the practice of dental medicine

The parameters of the general practice of dental medicine include the ability to prevent, diagnose and develop treatment plans for the control and cure of diseases of the oral cavity and associated structures within the scope of the Dental Practice Act of California. The parameters include the performance of procedures of the oral soft and hard tissues to competently restore diseased teeth, replace missing teeth, address diseases of the periodontium, and assess diseases of the oral mucosa, maxillofacial region and jaws. Parameters for prevention include population-based oral health measures, homecare, and medical management of caries and periodontal diseases. The scope of practice of dentistry as defined by CNUCDM respects the eclectic and broad nature of dental practice in California as well as the general access to dental specialists. Competency at the time of graduation is meant to demonstrate a safe initial practitioner of dental medicine for whom additional training and experience in areas of need and interest will be promulgated through formal and informal graduate and continuing education, and lifelong learning.

Definition of the scope of general dentistry

The scope of the practice of general dentistry at CNUCDM is for the general dentist to be the key resource for patients to gain the benefits of good oral health. The state of oral health is defined as the optimal contribution of the oral and maxillofacial complex to the wellbeing of the patient. The general dentist applies a scope of practice to achieve the goal of oral health with the necessary, knowledge, skill and values to make complete and holistic diagnoses of conditions, to administer/deliver care within appropriate skill sets as credentialed in practice, to refer to dental and medical/surgical specialists appropriately for care beyond the capacity and credentialing of the general dentist, and to effectively lead/participate in interprofessional/intraprofessional teams to achieve the best oral health outcomes, at the highest efficiency of resource utilization, and with the best patient/clinical team experience.

2. Discuss the school's definition/categorization of the stages of life and how treatment will be modified to reflect the stages of life.

The stages of life are described in the interprofessional colloquium entitled "Stages of Life" given now as a course in the College of Medicine headed by Dr. Louise Glaser MD. It is planned that this will be an interprofessional colloquium beginning in 2021 with participation of the DMD, D Pharm, and D Psych students. It is listed in the Dental course listing now as OMFS 621. The description follows (though the syllabus for administration in 2021/2022 will be developed as an IPE course)

Course #	Course Title	Credits	Year	Term
OMFS 621	Dental Medicine at All Stages of Life	3	DS 2	Fall

Growth, development, function and the human experience from birth to death will be presented including the impact of oral health and oral health interventions, prevention, disease promotion and treatment at all stages. This topic is developed from the biologic, social, economic and cultural aspects of the human experience.

The CDM has begun work on this IPE component at the time of this submission which is based on the College of Medicine course included as: [Appendix 2-23 COM 591 Stages of Life Course Syllabus 2018-19](#). In its description:

- This course spans the human life cycle beginning with birth and infancy and concluding with the dying patient and elders. We will discuss normal growth and development at each stage as well as common challenges.
- Course Content is intended to be high yield both for important basic science and medicine of the first two years of medical school as well for entering clerkships and caring for patients. Material will be presented via a variety of formats including but not limited to: Clinical presentations, Clinical cases, CCBLs, faculty – student interactive sessions, and small and large group activities.

The categories are as following:

1. Birth
2. Infancy
3. Childhood
4. Adolescence
5. Adulthood
6. Old age
7. Moribund

Course content will be directed to each of these ages affected by the human biology education provided, by the odontologic needs of each of these stages of life, by oral and maxillofacial considerations at all stages of life, and by the behavioral and social sciences issues arising during these stages. The considerations for each of these as provided didactically and applied clinically in the care of patients is mapped for each of the courses to follow:

If the component is in the didactic phase of the curriculum (THOUGH CLINICAL CASES ARE PRESENTED IN THE DIDACTIC CURRICULUM AS WELL) it is marked with a D and if in the clinical part of the curriculum it is marked with a C

Year 1

Course	BIRTH	INFANT	CHILD	ADOLESCENCE	ADULT	Old age	MORIBUND
Hematology	D	D	D	D	D	D	D
Integumentary and Musculoskeletal Systems	D	D	D	D	D	D	D
Foundations of Odontology	C	C	C	C	C	C	C
Dental Anatomy	D	D	D	D			
Foundations of Dental Medicine	C	C	C	C	C	C	C
Managing Student Life					D		
Neuroscience	D	D	D	D	D	D	D
Cardiovascular and Pulmonary Systems	D	D	D	D	D	D	D
Cariology		D	D	D	D	D	
Oral Microbiology/Immunology	D	D	D	D	D	D	D
Surgical Anatomy of the Head and Neck					D		
Ethics in Dental Medicine and Health Care	D	D	D	D	D	D	D

Year 2

Course	BIRTH	INFANT	CHILD	ADOLESCENT	ADULT	OLD AGE	MORIBUND
Renal System	D	D	D	D	D	D	D
Gastroenterology	D	D	D	D	D	D	D
Endocrine System	D	D	D	D	D	D	D
Clinical Pharmacology 1		D	D	D	D	D	D
Operative Dentistry			C	C	C	C	
Periodontology (Fall and Spring)			C	C	C	C	
Dental Anesthesiology 1, Local Anesthesia		C	C	C	C	C	C
Oral Radiology 1	C	C	C	C	C	C	C
Clinical Pharmacology 2/Oral Pharmacology		C	C	C	C	C	C
Prosthodontics and Implant Dentistry: Removable Prosthodontics					C	C	
Comprehensive Care Family Dentistry	C	C	C	C	C	C	C
Endodontology, Diseases of the Pulp and Pathways of Odontogenic Infection			C	C	C	C	
Dental Anesthesiology 2: Pain and Anxiety Control,		C	C	C	C	C	C
Oral Pathology/Oral Medicine 1	C	C	C	C	C	C	C
Orthodontics and Craniofacial Growth and Development	C	C	C	C			
Behavioral Medicine	C	C	C	C	C	C	C
Dental Medicine at all Stages of Life	C	C	C	C	C	C	C

Year 3

Course	birth	infancy	childhood	adolescence	adult	Old age	moribund
Junior Year Medicine Seminar (fall, spring)					C	C	C
Prosthodontics and Implant Dentistry: Fixed Prosthodontics					C	C	
Comprehensive Care Family Dentistry	C	C	C	C	C	C	C
Oral Radiology 2			C	C	C	C	
Principles of Oral Surgery	D	D	D	D	D	D	
Pediatric Dentistry	D	D	D				
Dental Public Health	C	C	C	C	C	C	C
Practice Management 1							
Periodontology Seminar			C	C	C	C	
Oral Pathology/Oral Medicine 2	C	C	C	C	C	C	C
Clinical Clerkship: Oral and Maxillofacial Surgery	C	C	C	C	C	C	C
Clinical Clerkship: Pediatric Dentistry	C	C	C	C			

Year 4

Course	BIRTH	INFANT	CHILD	ADOLESCENT	ADULT	OLD AGE	MORIBUND
Senior Year Medicine Seminar				C	C	C	C
Periodontology Seminar			C	C	C	C	
Prosthodontics and Implant Dentistry: Implant Surgery and Prosthodontic Reconstruction					C	C	
Comprehensive Care Family Dentistry	C	C	C	C	C	C	C
Oral Radiology Seminar			C	C	C	C	
Clinical Clerkship: Community-Based Education	C	C	C	C	C	C	
Seminar in Dental Public Health	C	C	C	C	C	C	C
Oral Pathology/Oral Medicine Seminar	C	C	C	C	C	C	C
Clinical Clerkship: Orthodontics	C	C	C	C	C		
Advanced Topics in Oral and Maxillofacial Surgery	C	C	C	C	C	C	C
Practice Management 2							
Clinical Electives	C	C	C	C	C	C	C

3. Describe how students will be assessed in providing oral health care based on the school's definition of scope of general dentistry and the school's definition/categorization of the stages of life.

Student assessment in providing oral health care will be by the following means depending upon the course.

Competency assessments (both formative and summative) include laboratory, desktop, clinical simulation, practice simulation, OSCE, patient based, oral case presentation, and reflective essays. All of these are clinical assessments regarding oral health care. The method of evaluation is based upon the following criteria:

- What is being measured
- What needs to be developed to assure objective and repeatable and consistent measurement across encounters
- What is a practical and cost effective means of assessment

Attached to each assessment is the demographics of the patient being treated which can be matched with regard to stage of life. It is labeled on the evaluation form as follows in [Appendix 2-24 Competency Assessment – General Rubric for Clinical dentistry](#)

Competency Assessment: Grading Rubric
Including application of biomedical sciences, behavioral sciences, ethics and professionalism

Stage of life of patient (circle one)

1. Birth
2. Infant
3. Childhood
4. Adolescence
5. Adulthood
6. Old age
7. Moribund

It is not intended that every student would do every procedure on patients in all stages of life since that is not needed in clinical care. It is intended that for the clinical care being provided for that stage of life that is appropriate to the patient's needs, the students will gain experience and be assessed.

As a practical matter, the treatment needed for patients at stages 1 "birth" and 7 "moribund" will occur with great inconsistency in the curriculum of CNUCDM as it would with every dental and medical school. Thus all students will not have that experience. However, some students will still have clinical experiences related to these stages of life and they can serve as guideposts in seminar to other students. These include perinatal oral health care, and palliative oral health care in hospice and other end of life settings.

All students will have clinical experience and be assessed in stages 2, 3, 4, 5, 6 which includes infancy, childhood, adolescence, adulthood and old age. Assessment rubrics for these areas will include the student's biomedical, behavioral and social accommodations to the stage of life in the competency assessment.

B. Supportive Documentation:

2. Student assessment forms, as available

Appendix 2-24 Competency Assessment - General Rubric for Clinical Dentistry

Appendix 2-24 parameters and scope of general dentistry at CNUCDM

STANDARD 2-24

Standard 2-24 Clinical Sciences Education

2-24 At a minimum, graduates must be competent in providing oral health care within the scope of general dentistry, as defined by the school, including:

- a. patient assessment, diagnosis, comprehensive treatment planning, prognosis, and informed consent;
- b. screening and risk assessment for head and neck cancer;
- c. recognizing the complexity of patient treatment and identifying when referral is indicated;
- d. health promotion and disease prevention;
- e. local anesthesia, and pain and anxiety control, including consideration of the impact of prescribing practices and substance use disorder;
- f. restoration of teeth;
- g. communicating and managing dental laboratory procedures in support of patient care;
- h. replacement of teeth including fixed, removable and dental implant prosthodontic therapies;
- i. periodontal therapy;
- j. pulpal therapy;
- k. oral mucosal and osseous disorders;
- l. hard and soft tissue surgery;
 - m. dental emergencies;
- n. malocclusion and space management; and
- o. evaluation of the outcomes of treatment, recall strategies, and prognosis

Intent:

Graduates should be able to evaluate, assess, and apply current and emerging science and technology. Graduates should possess the basic knowledge, skills, and values to practice dentistry, independently, at the time of graduation. The school identifies the competencies that will be included in the curriculum based on the school's goals, resources, accepted general practitioner responsibilities and other influencing factors. The comprehensive care experiences provided for patients by students should be adequate to ensure competency in all components of general dentistry practice. Programs should assess overall competency, not simply individual competencies in order to measure the graduate's readiness to enter the practice of general dentistry.

A. Description:

1. For each of the areas (a. through o.) provide a description of planned student experiences. Relate these experiences to the school's defined scope of general practice.
2. Describe how the school will ensure that comprehensive care experiences provided for patients by students are adequate to ensure competency in all components of general dentistry practice.

3. Describe how students will be assessed in each of the areas (a. through o.)
4. Describe how students overall competency will be assessed to determine the graduate's readiness to enter the practice of general dentistry.
5. Describe how competency for each of the areas (a. through o.) will be met and ensured for all graduates.

FORMATTING NOTE TO CODA:

CNUCDM is addressing the 1, 2, 3, 4 and 5 components (above) of Standard 2-24 in the following format. Items 2 and 4 are addressed in this introductory section as they do not request formatting a. through o., while items 1, 3, and 5 do require an assessment a. through o. and are placed within each section to follow in each section (a. through o.) titled NARRATIVE SUPPORTING STANDARD.

INTRODUCTION

CNUCDM defined the general dentist as the key resource for patients to gain the benefits of good oral health. The state of oral health is defined as the optimal contribution of the oral and maxillofacial complex to the wellbeing of the patient. The general dentist applies a scope of practice to achieve the goal of oral health with the necessary, knowledge, skill and values to make complete and holistic diagnoses of conditions, to administer/deliver care within appropriate skill sets as credentialed in practice, to refer to dental and medical/surgical specialists appropriately for care beyond the capacity and credentialing of the general dentist, and to effectively lead/participate in interprofessional/intraprofessional teams to achieve the best oral health outcomes, at the lowest cost and with the best patient/clinical team experience.

CNUCDM sees its future graduating dentists as having achieved the level of global competency in all facets of clinical dentistry that can be applied in conjunction and holistically for the benefit of the patient.

Regarding the individual competencies for Standard 2-24 it is believed that substantial clinical experience in all facets of care must be the cornerstone to the development of competency.

However the pedagogic aspects of competency assessment require a variety of tools including simulation, machine/computer assessments, OSCE's, or laboratory based assessment. The assessment of competency is not a one-time activity but is based importantly on formative assessments, daily observations, evaluation of experiential volume, as well as the competency assessment itself.

Ensuring comprehensive care experiences are adequate to ensure competency

Description #2: Describe how the school will ensure that comprehensive care experiences provided for patients by students are adequate to ensure competency in all components of general dentistry practice.

All dental students will begin clinical training in their first year, utilizing the preclinical laboratory and clinical simulation labs, as well as with initial clinical experiences as part of the care team in the clinic. The clinical training will be linked to the Program Learning Outcomes and Institutional Learning Outcomes of the university, including such outcomes as professionalism and ethics, patient care, practice management, and biomedical sciences knowledge. The clinical labs will be located near the main campus at an acquired facility.

Second-year dental students will undergo supervision in the clinical labs while learning how to practice clinical dentistry, including periodontics, restorative dentistry, orthodontics, and endodontics. Second year students will practice within the labs for 12 hours, under 12 hours of supervision per week. Third year students will also undergo supervision as well and will gain competency in key areas of practice such as oral diagnosis and treatment planning, operative dentistry, and emergencies. Third year students will practice within the labs for six hours, under six hours of supervision per week (see Sample CDM MOU doc).

Another required element of the CNUCDM is the community based clinical practicum, in which each of 80 students per cohort will have 10 encounters per week in general dentistry at CNUCDM operated sites for 12 months. Each clinical site will accommodate 1-3 students for the entire year based on a rotation schedule of 8-week rotations, meaning CNUCDM will partner with as many as 12 clinical sites. Each student will have four months of selectives in other health care settings or in a dental specialty setting, including but not limited to radiology, primary care medicine, community health, oral pathology, orthodontics, and mobile units.

Clinical faculty will monitor student performance to ensure competency at expected performance levels, articulated in the learning outcomes' rubrics and published in course syllabi. Additionally, students must maintain satisfactory academic progress, as stated below and articulated in the SAP Policy (doc).

The consequence if a student earns a letter grade lower than 75% in any course in the curriculum is as follows:

Grades	Consequence
2 60-75%*	Remediate all courses; Academic Probation at College's option if remediation is unsuccessful
3 or 4 60-75%*	Remediate all courses; mandatory Academic Probation if remediation is unsuccessful in three or more courses
5 or 6 60-75%*, 1 or 2 below 60%	Repeat both course(s); mandatory Academic Probation
3 below 60%	Dismissal

*70% for College of Medicine HS courses

Students will be allowed to remediate a maximum of 4 courses over the duration of the CDM Program; students will be dismissed if cumulative GPA falls below 60%; GPA will be calculated on completion of remediation; failed courses must be repeated; a failed course can be repeated only once.

Structure of Clinical Education at CNUCDM

CNUCDM will have two clinical education sites where full and part time calibrated faculty will educate DMD students in clinical dental medicine, one in the primary dental medicine building on Maritime Drive in Elk Grove where 4 teams of 8 students per class will operate and one in the ambulatory care building of the California Northstate University Hospital and Clinics where 6 teams of 8 students per class will operate.

In addition clinical dental education will occur during rotations in oral and maxillofacial surgery, pediatric dentistry, orthodontics as well with calibrated full and part time faculty. These will also occur onsite at the CNUCDM Elk Grove location at the CNU hospital and clinics under development or construction in 2020-2022.

Also, community-based education in BSS 861 and BSS 862 as well as in electives are carried out with faculty who are as well calibrated by CNUCDM. However, while experiential thresholds, and overall competency are developed at those sites, no competency assessments are performed in community based sites.

Generalist Model

CNUCDM is to be a dental medicine program under the generalist model. While separate clinics will exist for oral surgery, orthodontics, and pediatric dentistry, comprehensive care dentistry will include all oral diagnosis for comprehensive care, restorative, prosthodontic, periodontic, endodontic, care. There are no graduate programs such that all comprehensive care dentistry under the aegis of CNUCDM clinics will be performed within clinical care teams. Students will be organized into 8 students per class Teams, headed by a team leader.

Team leader

The team leader is a fulltime general dentist who will be the licensee responsible for all care delivered to patients associated to the team. Patients will identify with the Team leader as their

dentist and with the Team itself as their dental home. The team leader is responsible for patient centered care provided according to the highest quality standards while also ensuring the clinical progress of every student to achieve competency in the curriculum within the parameters of the academic schedule. To further ensure the achievement of these purposes, a team coordinator, who is a full time non-dentist staff member, will make all patient appointments to ensure progress of patient centered care and the achievement of excellent clinical experiences, progress towards competencies, and competency assessments for each student.

The entire care team including the team leader, team coordinator, and student will be aware of the experiential thresholds required for the ability to challenge the competency assessment for a discipline and will be developing in concert the achievement of comprehensive care experiences that are adequate to ensure competency in all components of general dentistry practice and those required to achieve the CNUCDM competencies and program learning outcomes. This process will be managed through timely and continuous monitoring as well as biannual audit of team and individual student experience and performance.

The team leader will interface with the Assistant Dean of Clinics, and the Associate Dean of Academic Affairs to ensure the application of the curriculum in the clinical practicum as well as adherence to clinical standards. The team leader will as well be a mentor and a role model for students.

With organization of the student body into teams of 8 by class, students will be introduced to their teams vertically beginning with first year students learning infection control and throughout the curriculum from initial clinical experiences as DMD2 students on to comprehensive care dentistry in years 3 and 4. It is expected that students will have achieved competencies and can be entrusted to continue patient care with EPA's entrusted Professional Activities, after the completion of a Competency Assessment. In this role, the team leader remains the responsible licensee for all care but can provide direct supervision while giving greater autonomy to the student while preparing them for being an independent responsible licensee on the day of graduation.

Competency Assessments

The event termed a "competency assessment" or CA by CNUCDM is a culmination event that provides a summative assessment. It is performed individually, without assistance, is high stakes in that it is required for progression and graduation from the professional program. While the assessment of competency includes the CA it must also include a holistic evaluation over time of the students' knowledge, skill and values applied to the clinical area under evaluation. The stage of life of the evaluation (birth, infant, child, adolescent, adult, old age, moribund) is noted in each CA.

The formative and summative rubrics associated to this assessment all include the following categories:

1. Patient interaction
2. Patient presentation
3. Application of biomedical Knowledge
4. Critical thinking

5. Clinical Skills
6. Ethical behavior/professionalism
7. Practice management/systems based practice/
Legal regulatory

While each CA develops specific criteria related to the clinical performance of the procedure, appropriate critical thinking aspects of the procedure and appropriate application of biomedical knowledge for the procedure, areas such as patient interaction, patient presentation, ethics and professionalism have common application across disciplines.

The formative assessment of students at CNU includes self-assessment and peer assessment. CNUCDM is currently working with an assessment model in E*value/MedHub, customized to our college that will incorporate the rubric in **Appendix 2-24 Competency Assessment – General Rubric for Clinical Dentistry**. The features of this under development is that it is structured to permit 360 degree evaluation of the student with blinding. It will permit measurements of any reviewer and students to assess performance characteristics. It will provide continuous current information on students and their pathways towards competency assessments as well as their outcomes.

Global Competency Assessment

Description #4: Describe how students overall competency will be assessed to determine the graduate's readiness to enter the practice of general dentistry.

Global competency will be evaluated in concert with the competency assessments as delineated in Standard 2-24 a-o as well as in concert with comprehensive care dentistry. To accomplish this each of the competency assessments will use the common rubric utilizing the 6 common components listed above of patient interaction, patient presentation, application of biomedical knowledge, critical thinking, clinical skills, and ethical behavior/professionalism. In addition to that aspect of measuring global competency, the courses in comprehensive care family dentistry, Odont 86, Odont 862 will include a senior comprehensive case presentation, competency assessment presented by each student, each semester of the senior year. This will be presented by the student in seminar format as a formal case presentation with discipline based faculty, biomedical science faculty and the group leader to hear the presentation, ask questions regarding the care decisions and underlying knowledge, skill and values applied to the care, and to provide a grade on this global competency assessment.

The following address all of Standard 2-24 including descriptions 1, 3 and 5.

STANDARD 2-24 (a)

- 2-24** At a minimum, graduates must be competent in providing oral health care within the scope of general dentistry, as defined by the school, including:
- a. patient assessment, diagnosis, comprehensive treatment planning, prognosis, and informed consent;

COMPETENCY STATEMENTS SUPPORTING STANDARD 2-24a

1. Demonstrate patient interaction that provides able and personable communication with the patient that addresses all clinical issues and addresses concerns in an empathetic and culturally aware fashion
2. Provide verbal and written patient presentation that demonstrates the ability to present key findings and organize them in a fashion to make appropriate care decisions.
3. Utilize all pertinent biomedical knowledge to influence and optimize the care of the patient
4. Apply knowledge with critical thinking developed in the care of patients across all pertinent multiple domains.
6. Apply the tenets of ethical behavior and professionalism with exemplary leadership empathy, clinical behavioral understanding customized to the patient's needs.
7. Integrate all aspects of the practice management, systems-based practice, legal and regulatory requirements of practice and consistently applies this knowledge as a skill in clinical practice.

PROGRAM LEARNING OUTCOMES SUPPORTING STANDARD 2-24A

Program Learning Outcomes (PLOs) DMD Program

1. Patient-Centered Care: Demonstrate understanding of healthcare disparities and cultural awareness in patient counseling and patient advocacy
2. Evidence-Based Care: Apply current, evidence-based oral healthcare within the scope of general dentistry
3. Culturally competent, empathic communication: Demonstrate patient centered, empathic, and culturally competent communication and interpersonal skills
4. Oral and Written Communication: Demonstrate sound oral and written communications in patient care
5. Critical Thinking: Utilize critical thinking, problem solving skills and systemic thinking in assessing and making reasoned, evidence-based decisions in patient care
6. Ethics and Professionalism: Demonstrate professionalism and ethical decision making

7. **Biomedical Sciences Knowledge:** Demonstrate an understanding of the fundamentals of biomedical sciences and apply them appropriately in oral healthcare
8. **Practice Management:** Apply legal, regulatory and business management concepts related to provision of oral healthcare services

COURSES SUPPORTING STANDARD 2-24a

The following courses support the development of competency in patient assessment, diagnosis, comprehensive treatment planning, prognosis, and informed consent. While all of the curriculum forms a general background for this standard, each of these courses form a key portion of the underpinnings required for patient assessment and treatment planning.

Course #	Course Title	Credits	Year	Term
HS 511	Hematology (CP Course)	4	DS 1	Fall

As described in COM curriculum with clinical case correlation by dental faculty. Correlated clinical cases related to oral health sciences will include: dental care in the hemophilia patient, acquired bleeding disorders in the dental patient, oral effects of anemia, and dental care for the hematology oncology patient.

Course #	Course Title	Credits	Year	Term
HS 521	Integumentary and Musculoskeletal Systems (CP Course)	7	DS 1	Fall

As described in COM curriculum with clinical case correlation by dental faculty. Correlated clinical cases related to oral health sciences will include vesiculobullous disease of the oral mucosa, oral manifestations of muscular dystrophy, oral cancer, myofascial pain dysfunction syndrome, arthritis in dental practice, osteoporosis and oral health.

Course #	Course Title	Credits	Year	Term
HS 512	Neuroscience (CP Course)	9	DS 1	Spring

As described in COM curriculum with clinical case correlation by dental faculty. Correlated clinical cases related to oral health sciences will include maxillofacial nerve injury, oral manifestations of Parkinson's disease, oral and maxillofacial movement disorders, trigeminal neuralgia, migraine and facial migraine, oral care of the stroke and spinal cord injured patient.

Course #	Course Title	Credits	Year	Term
HS 522	Cardiovascular and Pulmonary Systems (CP Course)	9	DS 1	Spring

As described in COM curriculum with clinical case correlation by dental faculty. Correlated clinical cases related to oral health sciences include: prevention, diagnosis, and immediate treatment of acute myocardial ischemia in dental practice, oral health aspects of obstructive sleep apnea, managing asthma in dental practice, congestive heart failure implications in oral health care, valvular heart disease implications in dental practice, Marfan's syndrome.

Course #	Course Title	Credits	Year	Term
HS 611	Renal System (CP Course)	5	DS 2	Fall

As described in COM curriculum with clinical case correlation by dental faculty. Correlated clinical cases related to oral health sciences include oral manifestations of renal failure/renal osteodystrophy/HPTH, dehydration and oliguria in odontogenic infection, acid/base considerations in fever and dental infection.

Course #	Course Title	Credits	Year	Term
HS 621	Gastroenterology (CP Course)	5	DS 2	Fall

As described in COM curriculum with clinical case correlation by dental faculty. Correlated clinical cases related to oral health sciences include oral effects of chronic liver failure, oral surgical considerations in Vitamin K dependent factor depletion in chronic hepatitis, oral manifestations of bulimia, Salivary gland disorders, concomitant disorders of the GI and oral microbiome, effects of mastication/salivary health on GI health, oral manifestations of patients with colonic polyps.

Course #	Course Title	Credits	Year	Term
HS 631	Endocrine System (CP Course)	5	DS 2	Fall

As described in COM curriculum with clinical case correlation by dental faculty. Correlated clinical cases related to oral health sciences include , oral health considerations in obesity, oral health impact of type 1 and type 2 diabetes, oral findings in endocrine disorders, e.g. multiple endocrine neoplasia, hyperthyroidism/hypothyroidism.

Course #	Course Title	Credits	Year	Term
HS 641	Clinical Pharmacology LAL	3	DS 2	Fall

This course will review the basics of pharmacokinetics and drug development and review the important clinical characteristics of the major drug categories including cardiac, pulmonary, GI, GU, endocrine, musculoskeletal, psychotropic, neurologic, dermatologic drugs, antibiotics,

Course #	Course Title	Credits	Year	Term
HS 642	Clinical Pharmacology 2/Oral Pharmacology LAL	3	DS 2	Spring

This course will review the major drugs used in dental practice. Emphasis on analgesics, pain and anxiety control, antibiotics. Other drugs of oral diseases including oral mucosal diseases, diseases of the dental pulp and periodontium, paranasal sinuses, and those for musculoskeletal problems of the head and neck. Correlation of drugs in the general pharmacopeia with oral health impact for HS 641 will concentrate on side effects of the oral region including examples of xerostomia, superinfection with thrush, tardive dyskinesia, among others.

Course #	Course Title	Credits	Year	Term
HS 721	Junior Year Medicine Seminar SEM	2	DS 3	Fall

Weekly case-based seminars presenting existing dental and comprehensive care patients and their medical comorbidities. Cases will be selected from existing active patients as well as from standardized patients, for the D3 class with evidence based review of relevant medical findings and their impact on oral health and clinical interventions. This will be done with a purpose to mitigate risk and improve patient care outcomes.

Course #	Course Title	Credits	Year	Term
HS 722	Junior Year Medicine Seminar SEM	2	DS 3	Spring

Complex cases will be selected beyond the level of HS 721 including those commonly requiring medical surgical intervention in concurrence with oral health care. Examples such as oncology patients, obstetric patients, and transplant patients will be examined. Weekly case-based seminars presenting existing dental and comprehensive care patients and their medical comorbidities will be continued in the seminar as well.

Course #	Course Title	Credits	Year	Term
HS 821	Senior Year Medicine Seminar SEM	2	DS 4	Fall

Weekly case-based seminars presenting existing dental and comprehensive care patients and their medical comorbidities. Continued development of advanced case-based patient presentations including those on hospitalized patients.

Course #	Course Title	Credits	Year	Term
HS 822	Senior Year Medicine Seminar SEM	2	DS 4	Spring

Weekly case-based seminars presenting existing dental and comprehensive care patients and their medical comorbidities. Development of advanced knowledge of cases presenting for medical treatment for which dental consultation is needed in the preanesthetic presurgical patient and in concurrence with major systemic disease including trauma, stroke, myocardial infarction.

Course #	Course Title	Credits	Year	Term
Odont 522	Cariology LAL	3	DS 1	Spring

The biology, phenotype, epidemiology, anatomical changes from caries is presented. The prevention of caries through CAMBRA is developed as well as strategies for management at all stages of the disease. The course introduces the pathways of caries as a regional and systemic disease.

Course #	Course Title	Credits	Year	Term
Odont 621	Periodontology LAL and LAB	3	DS 2	Fall

The normal structure and function of the periodontium is presented. The pathology, microbiology, immunology, and pathophysiology of diseases of the periodontium is presented. Prevention, chronic disease management, and nonsurgical/minimally invasive procedures for periodontal diseases is emphasized. Laboratory session focus on the development of procedures and psychomotor skills using surgical armamentarium in a simulated clinical setting for the treatment of diseases of the periodontium.

Course #	Course Title	Credits	Year	Term
Odont 622	Periodontology LAL and LAB	3	DS 2	Spring

In-depth understanding of the etiology and progression of chronic periodontal diseases is developed in this course. The influence of systemic diseases such as HIV, diabetes mellitus, and obesity on the health of the periodontium is explored. Surgical interventions for the treatment of diseases of the periodontium is presented. The laboratory is focused on advanced techniques including flap surgery, guided tissue regeneration, socket preservation among others, as well as continued development of skills in curettage.

Course #	Course Title	Credits	Year	Term
Odont 752	Periodontology Seminar SEM	2	DS 3	Spring

Using a case-based format, the treatment planning, outcome assessment, management of medical and dental comorbidities among others of the patient with diseases of the periodontium is presented. Patient-centered, health systems informed, and culturally aware aspects of care are discussed through the case-based format.

Course #	Course Title	Credits	Year	Term
Odont 841	Periodontology Seminar SEM	2	DS 4	Fall

Using case-based format, interdisciplinary problems especially with orthodontics, endodontics and prosthodontic consideration will be developed through patient presentations of patients of record or via the OSCE format. Further exploration of comorbidities in periodontal diseases will be developed.

Course #	Course Title	Credits	Year	Term
Odont 662	Comprehensive Care Family Dentistry CLIN and LAB	3	DS 2	Spring

Treatment of caries and periodontal disease with discipline based faculty from operative dentistry, prosthodontics, endodontology and periodontology is carried out with the DS 2 as an active participant in the care team that includes a DS 3 and DS 4. Students will participate in case presentations, medical record assessment and recording, and other aspects of the clinic activities. The laboratory will include a simulated clinic visit including OSCE record and electronic health record.

Course #	Course Title	Credits	Year	Term
Odont 761	Comprehensive Care Family Dentistry CLIN	8	DS 3	Fall

This daily clinic will focus on students developing their family of patients in conjunction with other members of their team headed by the faculty team leader. Emphasis on diagnosis and treatment planning and completion of initial urgent procedures will be carried out.

Course #	Course Title	Credits	Year	Term
Odont 762	Comprehensive Care Family Dentistry CLIN	8	DS 3	Spring

This daily clinic will further develop the completion of Phase 1 therapy, disease control mitigation of risk and initiation of preventive care in the patient family. The student will develop this under the leadership of the team leader. The student will also begin aspects of Phase 2 therapy, reconstructive dentistry and address other comorbidities in patient care.

Course #	Course Title	Credits	Year	Term
Odont 861	Comprehensive Care Family Dentistry CLIN	8	DS 4	Fall

This clinical practicum will focus on the daily clinical activities of a practicing dentist including all intake, comprehensive care, case management issue extant under the leadership of the team leader. The DS 4 will also demonstrate leadership of the oral healthcare team including DS2 and 3 students and the dental assisting and dental hygiene staff through cooperation and assessment of outcomes of care.

Course #	Course Title	Credits	Year	Term
Odont 862	Comprehensive Care Family Dentistry CLIN	8	DS 4	Spring

The final semester of comprehensive care family dentistry will focus on the completion of phase 2 care for patients of record, increasing facility in providing initial evaluation and care of the dental patient, and addressing complex issues in care including those associated to overall health, stages of life, cultural awareness among others.

COMPETENCY ASSESSMENTS (CA's) SUPPORTING STANDARD 2-24a

Each of these is mapped to

- 1. Clinical Procedures (CP)**
- 2. Problem Solving (PS)**
- 3. Clinical Reasoning (CR)**
- 4. Professionalism (P)**
- 5. Ethical Decision Making (EDM)**
- 6. Communication Skills (CS)**

ii.

OMFSFSCA	Course number	Assessment method	Prerequisites	Comments
Patient doctor communication	OMFS 511	OSCE CP, PS,CR,CS, P, EDM	Small group OMFS 511	FORMATIVE
Caries risk assessment, app. CAMBRA	Odont 522	Case-based didactic exam PS, CR, P, EDM	didactics Odont 522	
Ethics in dental practice	BSS 521	OSCE PS, CR, CS, P, EDM	BSS 521 small group	FORMATIVE
Outcomes of periodontal therapy	Odont 752	Patient based CP, PS,CR,CS, P, EDM	Seminar participation	Patient selected from students existing patients

Integrated perio care (at least 3) perio/pros/endo/ ortho/ oral medicine/ oral surgery assessment	Odont 841	Patient Based CP, PS,CR,CS, P, EDM	Seminar participation	Patient selected from students existing patients
Intake odontologic diagnosis and treatment planning	Odont 761	Patient based CP, PS, CR, CS, P, EDM	Daily participation	
Medical assessment for surgery	OMFS 761	Patient based CP, PS, CR, CS, P, EDM	In OMS clerkship or Comp care clinic	

NARRATIVE SUPPORTING STANDARD 2-24a

[Provide a description of planned student experiences. Relate these experiences to the school's defined scope of general practice.](#)

CNUCDM will operate its clinical practicum in a group practice, comprehensive care model. Without a separate oral diagnosis department or clinic, students will with their care teams and team leaders perform all patient intake including patient assessment, diagnosis, comprehensive treatment planning prognosis and informed consent. This has the advantage of having the consequences of those actions visible to the whole care team throughout the course of treatment. It will as well afford the opportunity for reassessment and continuous improvement of care and education based upon the actions of the team during the course of intake and subsequent treatment. This comprehensive care model is critical to the CDNUCDM parameters and scope of general dentistry in which the general dentist takes responsibility over the decisions and action of care throughout the course of treatment.

The volume of student experiences will not require experiential thresholds to challenge the competency assessment, since patient assessment, diagnosis, treatment planning, assessment of prognosis and informed consent and related areas is ubiquitous in the clinical curriculum. These domains will be at the heart of daily activity in the comprehensive care model clinic in the team format. These experiences are integral to the scope of general practice at CNU CDM which includes that CNU graduates will be THE key resource for patients to gain the benefits of good oral health. As the lead diagnostician and treatment planned of the oral health team, the CNU general dentist graduate will be applying the scope of general dentistry as defined by the institution.

Describe how students will be assessed in each of the areas

Assessments noted above in the section titled, Competency Assessments Supporting standard 2-24a are divided among the following categories:

- 1. Clinical Procedures (CP)**
- 2. Problem Solving (PS)**
- 3. Clinical Reasoning (CR)**
- 4. Professionalism (P)**
- 5. Ethical Decision Making (EDM)**
- 6. Communication Skills (CS)**

Of note is that that patient assessment, diagnosis and treatment planning component is included in all clinical competency assessments as demonstrated in the rubric for clinical dentistry which includes patient presentation, application of biomedical knowledge and critical thinking which are all linked to patient assessment.

Prognosis and informed consent is further linked into the rubric with regard to ethical behavior and professionalism as well as the domains noted above.

Describe how competency will be met and ensured for all graduates.

Competency in patient assessment, diagnosing comprehensive treatment planning prognosis and informed consent is ensured in that every dental graduate must complete the competency assessments noted in **Appendix 2-24 Mapping of all Competency Assessments** which are summarized as related to 2-24a in the listing above showing those CA's.

Completion of all CA's are linked to the courses where they occur and are required for passing the course and thus required for all graduates

STANDARD 2-24 (b)

2-24 At a minimum, graduates must be competent in providing oral health care within the scope of general dentistry, as defined by the school, including:

- b. screening and risk assessment for head and neck cancer;

COMPETENCY STATEMENTS SUPPORTING STANDARD 2-24b

1. Demonstrate patient interaction that provides able and personable communication with the patient that addresses all clinical issues and addresses concerns in an empathetic and culturally aware fashion
2. Provide verbal and written patient presentation that demonstrates the ability to present key findings and organize them in a fashion to make appropriate care decisions.
3. Utilize all pertinent biomedical knowledge to influence and optimize the care of the patient
4. Apply knowledge with critical thinking developed in the care of patients across all pertinent multiple domains.

PROGRAM LEARNING OUTCOMES SUPPORTING STANDARD 2-24b

Program Learning Outcomes (PLOs) DMD Program

Patient-Centered Care: Demonstrate understanding of healthcare disparities and cultural awareness in patient counseling and patient advocacy

Evidence-Based Care: Apply current, evidence-based oral healthcare within the scope of general dentistry

Culturally competent, empathic communication: Demonstrate patient centered, empathic, and culturally competent communication and interpersonal skills

Biomedical Sciences Knowledge: Demonstrate an understanding of the fundamentals of biomedical sciences and apply them appropriately in oral healthcare

COURSES SUPPORTING STANDARD 2-24b

Course #	Course Title	Credits	Year	Term
OMFS 642	Oral Pathology/Oral Medicine 1 LAL and LAB	3	DS 2	Spring

The significant tumors, anomalies, oral manifestations of systemic disease and other pathologies of the oral and maxillofacial region are presented. The laboratory will focus on the gross pathology and microscopic pathology of the oral and maxillofacial region

Course #	Course Title	Credits	Year	Term
OMFS 742	Oral Pathology/Oral Medicine 2 LAL	3	DS 3	Spring

Further development of the oral manifestations of systemic disease is presented with emphasis on diabetes, hematologic bleeding disorders, hematologic malignancies, lymphomas, myeloma, xerostomic diseases, autoimmune disease, maxillofacial movement disorders, other neurologic diseases such as Parkinson's, with oral manifestations.

Course #	Course Title	Credits	Year	Term
OMFS 862	Oral Pathology/Oral Medicine Seminar SEM	2	DS 4	Spring

Concentration on oral medicine will include the risk assessment and management of complex systemic diseases related to dental medicine care in dental practice. Case-based discussion on the dental medicine patient with HIV, ongoing chemotherapy for malignancy, osteoporosis/osteopenia among others will be presented by students in seminar format.

Course #	Course Title	Credits	Year	Term
OMFS 762	Advanced Topics in Oral and Maxillofacial Surgery LAL	2	DS 3	Spring

Understanding of major conditions of the oral and maxillofacial region requiring surgical intervention is presented. This includes diagnostic features, techniques for corrective surgery and outcome assessment. Categories include the treatment of facial trauma, ablative tumor surgery of the head and neck, cleft lip and palate surgery, craniofacial surgery, orthognathic surgery, reconstructive surgery of the jaws and face, and surgical treatment of temporomandibular disorders.

Course #	Course Title	Credits	Year	Term
OMFS 772	Clinical Clerkship: Oral and Maxillofacial Surgery 4 weeks, 30 hours per week plus call CLIN	8	DS 3	Spring

The students will enter the oral and maxillofacial surgery care team for this clerkship including the care of patients for dentoalveolar surgery, major maxillofacial surgery and complex conditions of the head and neck. Clinical experience in ambulatory oral surgery and anesthesia and assisting for maxillofacial surgery in the operating room including emergency and trauma care occurs. Participation in hospital rounds and conferences occurs.

COMPETENCY ASSESSMENTS SUPPORTING STANDARD 2-24b

1. Clinical Procedures, (CP)
2. Problem Solving (PS)
3. Clinical Reasoning (CR)
4. Professionalism (P)
5. Ethical Decision Making (EDM)
6. Communication Skills (CS)

OMFSFSCA	Course number	Assessment method	Prerequisites	Comments
Oral medicine/oral pathology case presentation	OMFS 862	Patient based CP, PS,CR,CS, P, EDM	OMFS 662,762 and in OMFS 862 seminar	Case selected preferably from student patient of record
Head and neck exam, screening and risk assessment for head and neck cancer	OMFS 772	Patient based CP,PS, CR, CS, P, EDM	In OMS clerkship or comp care clinic	

NARRATIVE SUPPORTING STANDARD 2-24b

Provide a description of planned student experiences. Relate these experiences to the school's defined scope of general practice.

Students will develop foundational knowledge related to head and neck cancer in the Human Studies portion of the curriculum under pathobiology, oncogenesis, general epithelial tumors, sarcomas, including those of the head and neck and cutaneous malignancies such as squamous cell carcinoma and melanoma. In Foundations of dental medicine, student will learn the head and neck exam and understand the key areas for assessment of malignancy such as floor of mouth pharyngeal fauces, and posterior third of the tongue. Subsequently in oral and maxillofacial surgery and in oral medicine/ oral pathology student will develop understanding of the risk assessment for oral cancer particularly HPV, alcohol, drug abuse and tobacco. In the clinical rotations and in comprehensive care dentistry every patient will receive a head and neck exam initially and as indicated based upon risk during the course of treatment.

Describe how students will be assessed

Formative and summative assessments will both require that cancer as well as all diseases of the head and neck are taken into account in the patient assessment. IN OMFS 772, a competency for head and neck exam, screening and risk assessment for head and neck cancer is a patient based CA in which the student performs anamnestic ally a risk assessment for those factors increasing risk for oral cancer, performs a head and neck exam, and accurately reports their findings verbally and in writing. Competency is additionally assessed by examination of students in oral

pathology and oral medicine in which the characteristics of visual inspection of oral lesions including cancer are assessed.

Describe how competency will be met and ensured for all graduates.

Competency in screening and risk assessment for head and neck cancer is ensured in that every dental graduate must complete the competency assessments noted in **Appendix 2-24 Mapping of all Competency Assessments** which are summarized as related to 2-24b in the listing above showing those CA's. Completion of all CA's are linked to the courses where they occur and are required for passing the course and thus required for all graduates

STANDARD 2-24 (c)

2-24 At a minimum, graduates must be competent in providing oral health care within the scope of general dentistry, as defined by the school, including:

- c. recognizing the complexity of patient treatment and identifying when referral is indicated;

COMPETENCY STATEMENTS SUPPORTING STANDARD 2-24c

1. Provide verbal and written patient presentation that demonstrates the ability to present key findings and organize them in a fashion to make appropriate care decisions.
2. Utilize all pertinent biomedical knowledge to influence and optimize the care of the patient
3. Apply knowledge with critical thinking developed in the care of patients across all pertinent multiple domains.
4. Apply the tenets of ethical behavior and professionalism with exemplary leadership empathy, clinical behavioral understanding customized to the patient's needs.
5. Integrate all aspects of the practice management, systems-based practice, legal and regulatory requirements of practice and consistently applies this knowledge as a skill in clinical practice.

PROGRAM LEARNING OUTCOMES SUPPORTING STANDARD 2-24c

1. Patient-Centered Care: Demonstrate understanding of healthcare disparities and cultural awareness in patient counseling and patient advocacy
2. Evidence-Based Care: Apply current, evidence-based oral healthcare within the scope of general dentistry
3. Culturally competent, empathic communication: Demonstrate patient centered, empathic, and culturally competent communication and interpersonal skills
4. Oral and Written Communication: Demonstrate sound oral and written communications in patient care
5. Critical Thinking: Utilize critical thinking, problem solving skills and systemic thinking in assessing and making reasoned, evidence-based decisions in patient care
6. Ethics and Professionalism: Demonstrate professionalism and ethical decision making
7. Biomedical Sciences Knowledge: Demonstrate an understanding of the fundamentals of biomedical sciences and apply them appropriately in oral healthcare
8. Practice Management: Apply legal, regulatory and business management concepts related to provision of oral healthcare services

COURSES SUPPORTING STANDARD 2-24c

Referral may be needed to physicians in various capacities, dental specialists or other health professionals. Each of these courses provide the underpinnings for development of this competency.

Course #	Course Title	Credits	Year	Term
HS 721	Junior Year Medicine Seminar <i>SEM</i>	2	DS 3	Fall

Weekly case-based seminars presenting existing dental and comprehensive care patients and their medical comorbidities. Cases will be selected from existing active patients as well as from standardized patients, for the D3 class with evidence based review of relevant medical findings and their impact on oral health and clinical interventions. This will be done with a purpose to mitigate risk and improve patient care outcomes.

Course #	Course Title	Credits	Year	Term
HS 722	Junior Year Medicine Seminar <i>SEM</i>	2	DS 3	Spring

Complex cases will be selected beyond the level of HS 721 including those commonly requiring medical surgical intervention in concurrence with oral health care. Examples such as oncology patients, obstetric patients, and transplant patients will be examined. Weekly case-based seminars presenting existing dental and comprehensive care patients and their medical comorbidities will be continued in the seminar as well.

Course #	Course Title	Credits	Year	Term
HS 821	Senior Year Medicine Seminar <i>SEM</i>	2	DS 4	Fall

Weekly case-based seminars presenting existing dental and comprehensive care patients and their medical comorbidities. Continued development of advanced case-based patient presentations including those on hospitalized patients.

Course #	Course Title	Credits	Year	Term
Odont 761	Comprehensive Care Family Dentistry <i>CLIN</i>	8	DS 3	Fall

This daily clinic will focus on students developing their family of patients in conjunction with other members of their team headed by the faculty team leader. Emphasis on diagnosis and treatment planning and completion of initial urgent procedures will be carried out.

Course #	Course Title	Credits	Year	Term
Odont 752	Periodontology Seminar SEM	2	DS 3	Spring

Using a case-based format, the treatment planning, outcome assessment, management of medical and dental comorbidities among others of the patient with diseases of the periodontium is presented. Patient-centered, health systems informed, and culturally aware aspects of care are discussed through the case-based format.

Course #	Course Title	Credits	Year	Term
Odont 762	Comprehensive Care Family Dentistry CLIN	8	DS 3	Spring

This daily clinic will further develop the completion of Phase 1 therapy, disease control mitigation of risk and initiation of preventive care in the patient family. The student will develop this under the leadership of the team leader. The student will also begin aspects of Phase 2 therapy, reconstructive dentistry and address other comorbidities in patient care.

Course #	Course Title	Credits	Year	Term
Odont 841	Periodontology Seminar SEM	2	DS 4	Fall

Using case-based format, interdisciplinary problems especially with orthodontics, endodontics and prosthodontic consideration will be developed through patient presentations of patients of record or via the OSCE format. Further exploration of comorbidities in periodontal diseases will be developed.

Course #	Course Title	Credits	Year	Term
Odont 851	Prosthodontics and Implant Dentistry: Implant Surgery and Prosthodontic Reconstruction LAL and LAB	3	DS 4	Fall

The replacement of missing teeth utilizing dental implants is presented. This course includes the biomechanics of implants, concepts of osseointegration, restoration options for implants, implant systems and the placement of implants. The laboratory will teach the placement of implants including appropriate assessment and osteotomies, and the restoration of implants using indirect and direct techniques.

Course #	Course Title	Credits	Year	Term
Odont 861	Comprehensive Care Family Dentistry CLIN	8	DS 4	Fall

This clinical practicum will focus on the daily clinical activities of a practicing dentist including all intake, comprehensive care, case management issue extant under the leadership of the team leader. The DS 4 will also demonstrate leadership of the oral healthcare team including DS2 and 3 students and the dental assisting and dental hygiene staff through cooperation and assessment of outcomes of care.

Course #	Course Title	Credits	Year	Term
Odont 862	Comprehensive Care Family Dentistry CLIN	8	DS 4	Spring

The final semester of comprehensive care family dentistry will focus on the completion of phase 2 care for patients of record, increasing facility in providing initial evaluation and care of the dental patient, and addressing complex issues in care including those associated to overall health, stages of life, cultural awareness among others.

COMPETENCY ASSESSMENTS SUPPORTING STANDARD 2-24c

- 1. Clinical Procedures, (CP)**
- 2. Problem Solving (PS)**
- 3. Clinical Reasoning (CR)**
- 4. Professionalism (P)**
- 5. Ethical Decision Making (EDM)**
- 6. Communication Skills (CS)**

Competency assessment	Course number	Assessment method	Prerequisites	Comments
Complex medical case assessment: Cardiovascular/pulmonary	HS 721	Patient based PS, CR, CS, P, EDM	Concurrent medicine seminar	Patient selected from student's existing patients
Complex medical case assessment: Endocrine/oncology/OB/ GI or transplant	HS 722	Patient based PS, CR, CS, P, EDM	Concurrent medicine seminar	Patient selected from student's existing patients
Complex medical case assessment: Interdisciplinary/hospital based	HS 821	Patient based PS, CR, CS, P, EDM	Concurrent medicine seminar	Patient selected from hospital consults while on rotation
Complex medical case assessment: preanesthetic/presurgical consult	HS 822	Patient based PS, CR, CS, P, EDM	Concurrent medicine seminar	Patient selected from preop pool evaluated by student
Integrated perio care (at least 3) perio/pros/endo/ortho/ oral medicine/ oral surgery assessment	Odont 841	Patient Based CP, PS, CR, CS, P, EDM	Seminar participation	Patient selected from students existing patients
Exodontia surgical extraction	OMFS 761	Patient based	In OMS clerkship or Comp care clinic	

		CP, PS, CR, CS, P, EDM		
Implant placement	OMFS 761 or Odont 862	Patient based CP, PS, CR, CS, P, EDM	In OMS clerkship or Comp care clinic	
Medical assessment for surgery	OMFS 761	Patient based CP, PS, CR, CS, P, EDM	In OMS clerkship or Comp care clinic	
Orthodontic Growth and development assessment	OMFS 872	Patient Based CP, PS, CR, CS, P, EDM	In orthodontic clerkship or comp care clinic	
Psychiatric illnesses	BSS 662	Patient based CS, PS, CR, CS, P, EDM	INBSS 662	Patients of record from D3, D4 teams

NARRATIVE SUPPORTING STANDARD 2-24c

[Provide a description of planned student experiences. Relate these experiences to the school's defined scope of general practice.](#)

In the human studies component of the curriculum in D1 and D2 systems based education will provide foundational knowledge regarding the capacity of referring medical surgical specialties for which the student will refer or receive patients. The clinical medical faculty in these settings include internists, pediatricians, radiologist, pathologists, surgeons, endocrine, cardiac, pulmonary, renal, and oncology medical specialists among others. The Behavioral and social sciences program interaction with psychologists will provide foundational knowledge about the capabilities of those health professional. Pharmacology is taught in part by pharmacists who will provide foundational knowledge of the capacity of pharmacists regarding referral for reasons such as compounding, prescription and over the counter drugs.

The odontology and oral and maxillofacial studies components of the curriculum will include foundational education from all CODA recognized dental specialties. The dental clinical curriculum includes advanced understanding of the scope of the dental specialties beyond the capacity of every general dentist and thus the ability and need to refer. Each of these student didactic experiences will form the foundation for their understanding of the expertise of these health professionals and the role that they can play in referral.

This knowledge is then applied in the clinical courses. Junior and senior medical seminars, HS 721, HS 722, and HS 821 use and case based approach, utilizing patients of record which recognizes the complexity of patient treatment and identifies the need for and subsequently

employs medical referral. This includes referral for psychiatry psychology, as well as medical surgical specialties.

Describe how students will be assessed

The competency assessments related to recognizing the complexity of patient treatment and identifying when referral is indicated are noted above in the Competency assessments for Standard 2-24c. Each of the medical assessment competency assessments will include the role and opinions of both the patients dentist and physician who in the complex case management have worked in a referral relationship to develop treatment plans and planned outcomes consistent with the patients overall medical needs.

Interaction with the dental specialties including for periodontal surgery, dental implants, surgical extractions, pain and anxiety control, and for dental growth and development among others will include assessment as to the role of the general dentist vis a vis the specialist in the complex care of the patient and understanding the role of referral.

Describe how competency will be met and ensured for all graduates.

Competency in recognizing the complexity of patient treatment and identifying when referral is indicated t is ensured in that every dental graduate must complete the competency assessments noted in **Appendix 2-24 Mapping of all Competency Assessments** which are summarized as related to 2-24c in the listing above showing those CA's. Completion of all CA's are linked to the courses where they occur and are required for passing the course and thus required for all graduates.

STANDARD 2-24 (d)

2-24 At a minimum, graduates must be competent in providing oral health care within the scope of general dentistry, as defined by the school, including:

- d. health promotion and disease prevention;

COMPETENCY STATEMENTS SUPPORTING STANDARD 2-24d

1. Demonstrate patient interaction that provides able and personable communication with the patient that addresses all clinical issues and addresses concerns in an empathetic and culturally aware fashion
2. Provide verbal and written patient presentation that demonstrates the ability to present key findings and organize them in a fashion to make appropriate care decisions.
3. Utilize all pertinent biomedical knowledge to influence and optimize the care of the patient

PROGRAM LEARNING OUTCOMES SUPPORTING STANDARD 2-24d

1. Patient-Centered Care: Demonstrate understanding of healthcare disparities and cultural awareness in patient counseling and patient advocacy
2. Evidence-Based Care: Apply current, evidence-based oral healthcare within the scope of general dentistry
3. Culturally competent, empathic communication: Demonstrate patient centered, empathic, and culturally competent communication and interpersonal skills
4. Oral and Written Communication: Demonstrate sound oral and written communications in patient care
5. Critical Thinking: Utilize critical thinking, problem solving skills and systemic thinking in assessing and making reasoned, evidence-based decisions in patient care
6. Ethics and Professionalism: Demonstrate professionalism and ethical decision making
7. Biomedical Sciences Knowledge: Demonstrate an understanding of the fundamentals of biomedical sciences and apply them appropriately in oral healthcare

COURSES SUPPORTING STANDARD 2-24d

All HS courses demonstrating human diseases and all clinical dentistry didactic courses offer foundational knowledge to understand the prole of health promotion and disease prevention.

Course #	Course Title	Credits	Year	Term
BSS 662	Behavioral Medicine (CP Course) <i>LAL, Clinical</i>	3	DS 2	Spring

In this course aspects of clinical psychology of importance in dental practice is presented. Cased base learning will include: minor and major psychiatric illnesses impacting on oral health and the provision of oral health care; elder, spousal and child abuse; dental fear; and, dental phobias.

Course #	Course Title	Credits	Year	Term
BSS 701	Dental Public Health <i>LAL</i>	2	DS 3	Fall

The fundamentals of public health are presented including health and public health measures for health protection, protection from disease and health promotion. The surgeon general's report, 2000, updated 2019, on the status of oral health in America is presented. WHO assessment of oral health globally is presented. Population based initiative to improve oral health are discussed with a focus on clean water and fluoride exposure.

COMPETENCY ASSESSMENTS SUPPORTING STANDARD 2-24d

- 1. Clinical Procedures, (CP)**
- 1. Problem Solving (PS)**
- 2. Clinical Reasoning (CR)**
- 3. Professionalism (P)**
- 4. Ethical Decision Making (EDM)**
- 5. Communication Skills (CS)**

Competency assessment	Course number	Assessment method	Prerequisites	Comments
Caries risk assessment, app. CAMBRA	Odont 522	Case-based didactic exam PS, CR, P, EDM	didactics Odont 522	1, 2 ,3, 4, 5, 6, 7
Outcomes of periodontal therapy	Odont 752	Patient based CP, PS, CR, CS, P, EDM	Seminar participation	1, 2, 3, 4, 5, 6, 7 Patient selected from students existing patients
Intake odontologic diagnosis and treatment planning	Odont 761	Patient based CP, PS, CR, CS, P, EDM	Daily participation	1, 2, 3, 4, 5, 6, 7

Head and neck exam, screening and risk assessment for head and neck cancer	OMFS 772	Patient based CP, PS, CR, CS, P, EDM	In OMS clerkship or comp care clinic	
Community assessment	BSS 862	Reflective essay PS, CR, CS, P, EDM	Enrolled in BSS 862 and in senior seminar in public health	2, 3, 4, 6, 7

NARRATIVE SUPPORTING STANDARD 2-24d

Provide a description of planned student experiences. Relate these experiences to the school's defined scope of general practice.

Foundational knowledge regarding health promotion and disease prevention is included in human studies course in which prevention issues such as smoking, alcohol, diet, lifestyle, drug abuse, social determinants of health and their impact are discussed. The results of interventions to mitigate those risks are presented. In the caries, periodontal diseases, oral and maxillofacial surgery, pediatric dentistry, oral pathology/oral medicine, and orthodontics courses among others offer the foundational knowledge to support preventive dentistry measures and health promotion. BSS 701 dental public health provides understanding to apply disease protection, promotion and prevention to the dental clinical environment

These elements are applied during the clinical practicum courses as part of the intake, which includes CAMBRA assessment, during the course of treatment which includes counseling on lifestyle choices such as smoking, and in assessing the outcomes of treatment and recall strategies.

The scope of practice at CNUCDM for the new dental practice is to provide health promotion, protection and prevention for patients under the purview of the practicing dentist.

Describe how students will be assessed

Specific competency assessments are required to achieve Standard 2-24d.

The CA for CAMBRA will assess the students' ability to provide individualized risk assessment and a prevention plan that includes the medical management of caries prevention strategies.

Outcomes of periodontal therapy will assess the student's capacity to recognize the outcome of periodontal care prevention, promotion and protection strategies.

Intake diagnosis and treatment planning CA will assess the student's ability to ascertain home care utilization and make intake preventive dentistry recommendations in the CA.

The CA in head and neck cancer screening includes how the patient communicates with the patient regarding cancer prevention strategies, specifically the roles of tobacco, and alcohol, HPV.

On a population basis, prevention and health promotion is addressed in the public health competency assessment where the students write a reflective essay on the community to which they are assigned to assess and make recommendations regarding the community's oral health prevention and promotion activities.

Describe how competency will be met and ensured for all graduates.

Competency in health promotion and disease prevention is ensured in that every dental graduate must complete the competency assessments noted in **Appendix 2-24 Mapping of all Competency Assessments** which are summarized as related to 2-24d in the listing above showing those CA's. Completion of all CA's are linked to the courses where they occur and are required for passing the course and thus required for all graduates

STANDARD 2-24 (e)

2-24 At a minimum, graduates must be competent in providing oral health care within the scope of general dentistry, as defined by the school, including:

- e. local anesthesia, and pain and anxiety control, including consideration of the impact of prescribing practices and substance use disorder;

COMPETENCY STATEMENTS SUPPORTING STANDARD 2-24e

1. Demonstrate patient interaction that provides able and personable communication with the patient that addresses all clinical issues and addresses concerns in an empathetic and culturally aware fashion
2. Provide verbal and written patient presentation that demonstrates the ability to present key findings and organize them in a fashion to make appropriate care decisions.
3. Utilize all pertinent biomedical knowledge to influence and optimize the care of the patient
4. Apply knowledge with critical thinking developed in the care of patients across all pertinent multiple domains.
5. Demonstrate the ability to comfortably apply clinical skills for dental procedures in a fashion that promotes the continued development of skills, patient confidence, and consideration for applying more advanced skills when needed.
6. Apply the tenets of ethical behavior and professionalism with exemplary leadership empathy, clinical behavioral understanding customized to the patient's needs.

PROGRAM LEARNING OUTCOMES SUPPORTING STANDARD 2-24e

1. Patient-Centered Care: Demonstrate understanding of healthcare disparities and cultural awareness in patient counseling and patient advocacy
2. Evidence-Based Care: Apply current, evidence-based oral healthcare within the scope of general dentistry
3. Culturally competent, empathic communication: Demonstrate patient centered, empathic, and culturally competent communication and interpersonal skills
4. Oral and Written Communication: Demonstrate sound oral and written communications in patient care
5. Critical Thinking: Utilize critical thinking, problem solving skills and systemic thinking in assessing and making reasoned, evidence-based decisions in patient care
6. Ethics and Professionalism: Demonstrate professionalism and ethical decision making
7. Biomedical Sciences Knowledge: Demonstrate an understanding of the fundamentals of biomedical sciences and apply them appropriately in oral healthcare

COURSES SUPPORTING STANDARD 2-24e

Local anesthesia, pain and anxiety control is taught in the following course included here with their course descriptions

Course #	Course Title	Credits	Year	Term
OMFS 631	Dental Anesthesiology 1: Local Anesthesia <i>LAL and LAB</i>	3	DS 2	Fall

The pharmacology of local anesthesia, armamentarium for administration and technique for administration is presented. Local and systemic complications of administration, contraindications and comorbidities are presented. The laboratory will demonstrate and practice technique of local anesthesia administration on analogy and haptic simulators.

Course #	Course Title	Credits	Year	Term
OMFS 632	Dental Anesthesiology 2: Pain and Anxiety Control, Analgesia, Medical Management of Local Anesthesia Patients <i>LAL and LAB</i>	3	DS 2	Spring

The risks of local anesthesia detection and management are presented. Understanding pain and anxiety in dental practice through assessment methods is presented. The pharmacologic and nonpharmacological means of mitigating pain and anxiety in dental care is presented. This includes the use of nitrous oxide, oral anxiolysis, and parenteral drugs.

Course #	Course Title	Credits	Year	Term
HS 641	Clinical Pharmacology <i>LAL</i>	3	DS 2	Fall

This course will review the basics of pharmacokinetics and drug development and review the important clinical characteristics of the major drug categories including cardiac, pulmonary, GI, GU, endocrine, musculoskeletal, psychotropic, neurologic, dermatologic drugs, antibiotics,

Course #	Course Title	Credits	Year	Term
HS 642	Clinical Pharmacology 2/Oral Pharmacology <i>LAL</i>	3	DS 2	Spring

This course will review the major drugs used in dental practice. Emphasis on analgesics, pain and anxiety control, antibiotics. Other drugs of oral diseases including oral mucosal diseases, diseases of the dental pulp and periodontium, paranasal sinuses, and those for musculoskeletal problems of the head and neck. Correlation of drugs in the general pharmacopeia with oral health impact for HS 641 will concentrate on side effects of the oral region including examples of xerostomia, superinfection with thrush, tardive dyskinesia, among others.

Course #	Course Title	Credits	Year	Term
BSS 662	Behavioral Medicine (CP Course) <i>LAL, Clinical</i>	3	DS 2	Spring

In this course aspects of clinical psychology of importance in dental practice is presented. Cased base learning will include: minor and major psychiatric illnesses impacting on oral health and the provision of oral health care; elder, spousal and child abuse; dental fear; and, dental phobias.

COMPETENCY ASSESSMENTS SUPPORTING STANDARD 2-24e

1. Clinical Procedures, (CP)
2. Problem Solving (PS)
3. Clinical Reasoning (CR)
4. Professionalism (P)
5. Ethical Decision Making (EDM)
6. Communication Skills (CS)

Competency assessment	Course number	Assessment method	Prerequisites	Comments
Local anesthesia technique	OMFS 631	Clinical demonstration on subject X 4	OMFS 631 lab	1, 2 ,3, 4, 5, 6, 7 FORMATIVE
Nitrous oxide administration	OMFS 632	Patient based CP, PS, CR, CS, P, EDM	OMFS 632 lab	1, 2, 3, 4, 5, 6, 7
Pain and anxiety control	OMFS 761	Patient based CP, PS, CR, CS, P, EDM	In OMS clerkship or Comp care clinic	1, 2, 3, 4, 5, 6, 7
Medical assessment for surgery	OMFS 761	Patient based CP, PS, CR, CS, P, EDM	In OMS clerkship or Comp care clinic	1, 2, 3, 4, 5, 6, 7

NARRATIVE SUPPORTING STANDARD 2-24e

[Provide a description of planned student experiences. Relate these experiences to the school's defined scope of general practice.](#)

The primary courses supporting Standard 2-24e are listed above and include OMFS 631 and OMFS 632, which reviews the pharmacology, clinical procedures risks and benefits of local anesthesia, nitrous oxide, oral and parenteral sedation. These are also inclusive clinical laboratory experience to develop skills associated to these tasks. HS 641 and HS 642 provide foundational knowledge on the uptake and distribution of drugs and the specific pharmacology of drugs used in local anesthesia, pain and anxiety control. BSS 662 provides foundational

knowledge on the underlying issues, of pain, anxiety, drug abuse and behavioral/nonpharmacologic interventions to mitigate these behaviors. Each clinical practicum course utilizes these techniques on a daily basis and this is part of the clinical education provided in the clinical setting.

The scope of general practice at CNUCDM is inclusive of the requirement to provide excellent pain and anxiety control for every patient.

Describe how students will be assessed

Daily formative assessments of students assess their ability to provide a comfortable experience for the patient and to demonstrate good listening skills empathy and professionalism which are essential to achieving good pain and anxiety control. The competency assessments for clinical skills for all clinical procedures include the administration and quality of local anesthesia, and patient comfort through pain and anxiety control. In addition to these area, the CA's listed above provide specific assessment of Standard 2-24e. These include CA's on:

Local anesthesia technique, a formative assessment in the preclinical laboratory for ability to translate this skill into the clinical care setting. Though formative it is listed here as the first competency assessment of the student in this area.

The Nitrous oxide CA includes the knowledge, skills and behaviors needed for effective use of this analgesic method

Pain and anxiety control CA is a patient based one in which the assessment of the need for PAC methods, risk assessment regarding substance use/abuse of psychotropic drugs, and the application of sedation by pharmacologic and nonpharmacological means is assessed for competency.

Medical assessment for surgery CA includes the selection of anesthesia techniques and means to mitigate risk through pain and anxiety control.

Describe how competency will be met and ensured for all graduates.

Competency in local anesthesia pain and anxiety control including consideration of the impact of prescribing practices and substance use disorder is ensured in that every dental graduate must complete the competency assessments noted in **Appendix 2-24 Mapping of all Competency Assessments** which are summarized as related to 2-24e in the listing above showing those CA's. Completion of all CA's are linked to the courses where they occur and are required for passing the course and thus required for all graduates.

STANDARD 2-24 (f)

2-24 At a minimum, graduates must be competent in providing oral health care within the scope of general dentistry, as defined by the school, including:

f. restoration of teeth;

COMPETENCY STATEMENTS SUPPORTING STANDARD 2-24f

1. Demonstrate patient interaction that provides able and personable communication with the patient that addresses all clinical issues and addresses concerns in an empathetic and culturally aware fashion
2. Provide verbal and written patient presentation that demonstrates the ability to present key findings and organize them in a fashion to make appropriate care decisions.
3. Utilize all pertinent biomedical knowledge to influence and optimize the care of the patient
4. Apply knowledge with critical thinking developed in the care of patients across all pertinent multiple domains.
5. Demonstrate the ability to comfortably apply clinical skills for dental procedures in a fashion that promotes the continued development of skills, patient confidence, and consideration for applying more advanced skills when needed.
6. Apply the tenets of ethical behavior and professionalism with exemplary leadership empathy, clinical behavioral understanding customized to the patient's needs.

PROGRAM LEARNING OUTCOMES SUPPORTING STANDARD 2-24f

1. Patient-Centered Care: Demonstrate understanding of healthcare disparities and cultural awareness in patient counseling and patient advocacy
2. Evidence-Based Care: Apply current, evidence-based oral healthcare within the scope of general dentistry
3. Culturally competent, empathic communication: Demonstrate patient centered, empathic, and culturally competent communication and interpersonal skills
4. Oral and Written Communication: Demonstrate sound oral and written communications in patient care
5. Critical Thinking: Utilize critical thinking, problem solving skills and systemic thinking in assessing and making reasoned, evidence-based decisions in patient care
6. Ethics and Professionalism: Demonstrate professionalism and ethical decision making
7. Biomedical Sciences Knowledge: Demonstrate an understanding of the fundamentals of biomedical sciences and apply them appropriately in oral healthcare
8. Practice Management: Apply legal, regulatory and business management concepts related to provision of oral healthcare services

COURSES SUPPORTING STANDARD 2-24f

Course #	Course Title	Credits	Year	Term
Odont 611	Operative Dentistry <i>LAL and LAB</i>	6	DS 2	Fall

The surgical treatment of caries and degenerative and congenital diseases of the enamel and dentin is presented through the development of technical skills to remove diseased portions of the teeth and to provide anatomical functional direct restorations of teeth. Prevention and minimally invasive procedures for caries management is emphasized. Laboratory session focus on the development of procedures and psychomotor skills using surgical armamentarium in a simulated clinical setting for the treatment of caries and other diseases of the enamel and dentin.

Course #	Course Title	Credits	Year	Term
Odont 662	Comprehensive Care Family Dentistry <i>CLIN and LAB</i>	3	DS 2	Spring

Treatment of caries and periodontal disease with discipline based faculty from operative dentistry, prosthodontics, endodontology and periodontology is carried out with the DS 2 as an active participant in the care team that includes a DS 3 and DS 4. Students will participate in case presentations, medical record assessment and recording, and other aspects of the clinic activities. The laboratory will include a simulated clinic visit including OSCE record and electronic health record.

Course #	Course Title	Credits	Year	Term
Odont 761	Comprehensive Care Family Dentistry <i>CLIN</i>	8	DS 3	Fall

This daily clinic will focus on students developing their family of patients in conjunction with other members of their team headed by the faculty team leader. Emphasis on diagnosis and treatment planning and completion of initial urgent procedures will be carried out.

Course #	Course Title	Credits	Year	Term
Odont 762	Comprehensive Care Family Dentistry <i>CLIN</i>	8	DS 3	Spring

This daily clinic will further develop the completion of Phase 1 therapy, disease control mitigation of risk and initiation of preventive care in the patient family. The student will develop this under the leadership of the team leader. The student will also begin aspects of Phase 2 therapy, reconstructive dentistry and address other comorbidities in patient care.

Course #	Course Title	Credits	Year	Term
Odont 861	Comprehensive Care Family Dentistry <i>CLIN</i>	8	DS 4	Fall

This clinical practicum will focus on the daily clinical activities of a practicing dentist including all intake, comprehensive care, case management issue extant under the leadership of the team leader. The DS 4 will also demonstrate leadership of the oral healthcare team including DS2 and 3 students and the dental assisting and dental hygiene staff through cooperation and assessment of outcomes of care.

Course #	Course Title	Credits	Year	Term
Odont 862	Comprehensive Care Family Dentistry <i>CLIN</i>	8	DS 4	Spring

The final semester of comprehensive care family dentistry will focus on the completion of phase 2 care for patients of record, increasing facility in providing initial evaluation and care of the dental patient, and addressing complex issues in care including those associated to overall health, stages of life, cultural awareness among others.

Course #	Course Title	Credits	Year	Term
BSS 861	Clinical Clerkship: Community-based Education <i>4 weeks, 30 hours per week plus call</i>	8	DS 4	Fall

Affiliated health systems based practices will accept CNU students into their care teams where senior students will provide clinical care under the supervision of Volunteer Community-Based Faculty in those sites. Suitable transportation and housing will be arranged for where needed. The purpose of the course is to provide community engagement with the constituencies served, to gain experience in community-based clinical care and to interact with the interprofessional and intraprofessional care team

Course #	Course Title	Credits	Year	Term
BSS 862	Clinical Clerkship: Community-based Education <i>4 weeks, 30 hours per week plus call</i>	8	DS 4	Spring

This course will be at a second community-based rotation site to elaborate on the activities of the first rotation and engage a new community and a new clinic. In addition to comprehensive care experience, the student will compare and contrast communities and clinical care entities and provide a reflective essay on their community care experience.

COMPETENCY ASSESSMENTS SUPPORTING STANDARD 2-24f

1. Clinical Procedures, (CP)
2. Problem Solving (PS)
3. Clinical Reasoning (CR)
4. Professionalism (P)
5. Ethical Decision Making (EDM)
6. Communication Skills (CS)

Competency assessment	Course number	Assessment method	Prerequisites	Comments
<i>Intake odontologic diagnosis and treatment planning</i>	Odont 761	Patient based CP, PS, CR, CS, P, EDM	Daily participation	1, 2, 3, 4, 5 ,6, 7
<i>Comprehensive caries treatment</i>	Odont 761	Patient based including comp evaluation of all restorations, application of CAMBRA and disease control CP, PS, CR, CS, P, EDM	Daily participation in clinic and case completion	1, 2, 3, 4, 5, 6,7
<i>Demonstration of phase 1 therapy</i>	Odont 762	Patient based CP, PS, CR, CS, P, EDM	Phase 1 therapy completed in at least 3 cases	1, 2, 3, 4, 5, 6, 7
Operative dentistry: class 2	Odont 861 Or Odont 862	Patient Based CP, PS, CR, CS, P, EDM	When ready per group leader assessment	1, 2, 3, 4, 5, 6, 7
Operative dentistry: crown	Odont 861 or Odont 862	Patient Based CP, PS, CR, CS, P, EDM	When ready per group leader assessment	1, 2, 3, 4, 5, 6, 7

NARRATIVE SUPPORTING STANDARD 2-24f

Provide a description of planned student experiences. Relate these experiences to the school's defined scope of general practice.

Cariology and dental anatomy provide foundational knowledge for student embarking on clinical education in operative dentistry. The preclinical operative dentistry course Odont 621 will provide knowledge and skills in the preparation of teeth and restoring teeth by both direct and indirect restorations. Each of the 5 semesters in comprehensive care dentistry will have continuous and progressive development of higher levels of understanding, improving skills and greater self-assessment in operative dentistry. BSS 861 and BSS 862 community based education also includes daily experience in operative dentistry. During all these clinical practicum experiences, student will get daily feedback from faculty and grading.

Describe how students will be assessed

During the CA for intake diagnosis and treatment planning, the competency assessment will include the student's assessment of the operative dentistry needs of the patient via accurate diagnosis as well as the direct and indirect restoration methods and materials selected by the student during the CA in the treatment plan.

As part of the CA for comprehensive caries treatment, this patient based CA assesses the outcomes of operative dentistry interventions performed and how they are presented by the student in the CA.

The CA on the completion of phase 1 therapy includes the caries status of the patient and how the selected restorative methods in operative dentistry impacted on the outcome of phase 1 care.

The Class 2 restoration of a carious tooth is a patient based CA in which the student demonstrates the knowledge skills and behaviors expected in direct restoration of a diseased tooth.

The crown CA restoration of a carious tooth is a patient based CA in which the student demonstrates the knowledge skills and behaviors expected in indirect restoration of a diseased tooth.

Describe how competency will be met and ensured for all graduates.

Competency in restoration of teeth is ensured in that every dental graduate must complete the competency assessments noted in [Appendix 2-24 Mapping of all Competency Assessments](#) which are summarized as related to 2-24f in the listing above showing those CA's. Completion of all CA's are linked to the courses where they occur and are required for passing the course and thus required for all graduates.

STANDARD 2-24 (g)

2-24 At a minimum, graduates must be competent in providing oral health care within the scope of general dentistry, as defined by the school, including:

- g. communicating and managing dental laboratory procedures in support of patient care;

COMPETENCY STATEMENTS SUPPORTING STANDARD 2-24g

1. Provide verbal and written patient presentation that demonstrates the ability to present key findings and organize them in a fashion to make appropriate care decisions.
2. Utilize all pertinent biomedical knowledge to influence and optimize the care of the patient
3. Apply knowledge with critical thinking developed in the care of patients across all pertinent multiple domains.
4. Demonstrate the ability to comfortably apply clinical skills for dental procedures in a fashion that promotes the continued development of skills, patient confidence, and consideration for applying more advanced skills when needed.
7. Integrate all aspects of the practice management, systems-based practice, legal and regulatory requirements of practice and consistently applies this knowledge as a skill in clinical practice.

PROGRAM LEARNING OUTCOMES SUPPORTING STANDARD 2-24g

Patient-Centered Care: Demonstrate understanding of healthcare disparities and cultural awareness in patient counseling and patient advocacy

Evidence-Based Care: Apply current, evidence-based oral healthcare within the scope of general dentistry

Oral and Written Communication: Demonstrate sound oral and written communications in patient care

Critical Thinking: Utilize critical thinking, problem solving skills and systemic thinking in assessing and making reasoned, evidence-based decisions in patient care

Biomedical Sciences Knowledge: Demonstrate an understanding of the fundamentals of biomedical sciences and apply them appropriately in oral healthcare

Practice Management: Apply legal, regulatory and business management concepts related to provision of oral healthcare services

COURSES SUPPORTING STANDARD 2-24g

The following courses support the communication and managing of dental laboratory procedures in support of patient care.

Course #	Course Title	Credits	Year	Term
Odont 632	Prosthodontics and Implant Dentistry: Removable Prosthodontics <i>LAL and LAB</i>	6	DS 2	Spring

The anatomic and pathophysiologic aspects of partial and full edentulism is presented. Development, construction, placement and maintenance of full and partial removable prosthodontic restorations is presented. The laboratory will include impressions, jaw occlusal registrations, gnathology, cast development and mounting, development of wax rims and occlusal scheme and teeth mounting.

Course #	Course Title	Credits	Year	Term
Odont 741	Prosthodontics and Implant Dentistry: Fixed Prosthodontics <i>LAL and LAB</i>	6	DS 3	Fall

The indirect restoration of teeth and the indirect replacement of missing teeth with crowns and bridges is presented. Treatment planning for these restorations including occlusal, periodontal, caries assessment is presented. Other methods for indirect restoration including partial coverage indirect restoration is presented. The introduction of digital techniques for impression and CadCam restoration development is presented. The laboratory will provide practice with the surgical armamentarium for tooth preparation for fixed prosthetic restoration, for impressions with analog and digital methods and for the construction of fixed indirect restorations. The laboratory will also teach methods for provisional restoration of the fixed prosthodontic patient.

Course #	Course Title	Credits	Year	Term
Odont 851	Prosthodontics and Implant Dentistry: Implant Surgery and Prosthodontic Reconstruction <i>LAL and LAB</i>	3	DS 4	Fall

The replacement of missing teeth utilizing dental implants is presented. This course includes the biomechanics of implants, concepts of osseointegration, restoration options for implants, implant systems and the placement of implants. The laboratory will teach the placement of implants including appropriate assessment and osteotomies, and the restoration of implants using indirect and direct techniques.

Course #	Course Title	Credits	Year	Term
Odont 662	Comprehensive Care Family Dentistry CLIN and LAB	3	DS 2	Spring

Treatment of caries and periodontal disease with discipline based faculty from operative dentistry, prosthodontics, endodontology and periodontology is carried out with the DS 2 as an active participant in the care team that includes a DS 3 and DS 4. Students will participate in case presentations, medical record assessment and recording, and other aspects of the clinic activities. The laboratory will include a simulated clinic visit including OSCE record and electronic health record.

Course #	Course Title	Credits	Year	Term
Odont 761	Comprehensive Care Family Dentistry CLIN	8	DS 3	Fall

This daily clinic will focus on students developing their family of patients in conjunction with other members of their team headed by the faculty team leader. Emphasis on diagnosis and treatment planning and completion of initial urgent procedures will be carried out.

Course #	Course Title	Credits	Year	Term
Odont 762	Comprehensive Care Family Dentistry CLIN	8	DS 3	Spring

This daily clinic will further develop the completion of Phase 1 therapy, disease control mitigation of risk and initiation of preventive care in the patient family. The student will develop this under the leadership of the team leader. The student will also begin aspects of Phase 2 therapy, reconstructive dentistry and address other comorbidities in patient care.

Course #	Course Title	Credits	Year	Term
Odont 861	Comprehensive Care Family Dentistry CLIN	8	DS 4	Fall

This clinical practicum will focus on the daily clinical activities of a practicing dentist including all intake, comprehensive care, case management issue extant under the leadership of the team leader. The DS 4 will also demonstrate leadership of the oral healthcare team including DS2 and 3 students and the dental assisting and dental hygiene staff through cooperation and assessment of outcomes of care.

Course #	Course Title	Credits	Year	Term
Odont 862	Comprehensive Care Family Dentistry CLIN	8	DS 4	Spring

The final semester of comprehensive care family dentistry will focus on the completion of phase 2 care for patients of record, increasing facility in providing initial evaluation and care of the dental patient, and addressing complex issues in care including those associated to overall health, stages of life, cultural awareness among others.

COMPETENCY ASSESSMENTS SUPPORTING STANDARD 2-24g

1. Clinical Procedures, (CP)
2. Problem Solving (PS)
3. Clinical Reasoning (CR)
4. Professionalism (P)
5. Ethical Decision Making (EDM)
6. Communication Skills (CS)

Competency assessment	Course number	Assessment method	Prerequisites	Comments
Full denture	Odont 861 or Odont 862	Patient Based CP, PS, CR, CS, P, EDM	When ready per group leader assessment	1, 2, 3, 4, 5, 6, 7
Partial Denture	Odont 861 or Odont 862	Patient Based CP, PS, CR, CS, P, EDM	When ready per group leader assessment	1, 2, 3, 4, 5, 6, 7
Dental implant restoration	Odont 861 or Odont 862	Patient Based CP, PS, CR, CS, P, EDM	When ready per group leader assessment	1, 2, 3, 4, 5, 6, 7

NARRATIVE SUPPORTING STANDARD 2-24g

Provide a description of planned student experiences. Relate these experiences to the school's defined scope of general practice.

No dental laboratory for the final construction of fixed, removable or implant born prosthesis will be available onsite. The preparation of treatment records, impressions and casts on site as well as the writing of the laboratory prescription will be done by the student with clinical faculty as well as with the communication with onsite staff. This will also be done in the digital environment and with cases associated to nonprosthetic needs in space maintenance, orthodontics and for surgical stents. Students will design restorations and prostheses with faculty and write instructions and prescription to the dental laboratory. It is the goal of the college to have a local dental laboratory as its resource that would permit student direct on site communication with the laboratory technologists as well. This is consistent with the schools defined scope of the practice of general dentistry in that the dentist is the leader of the oral health care team that includes laboratory technologists.

Describe how students will be assessed

Competency assessments in full denture, partial denture and implant restoration noted above are all patient based and in all cases the plan developed by the student in the CA must be communicated to the laboratory.

Describe how competency will be met and ensured for all graduates. “

Competency in communicating and managing dental laboratory procedures in support of patient care is ensured in that every dental graduate must complete the competency assessments noted in **Appendix 2-24 Mapping of all Competency Assessments** which are summarized as related to 2-24g in the listing above showing those CA's. Completion of all CA's are linked to the courses where they occur and are required for passing the course and thus required for all graduates.

STANDARD 2-24 (h)

2-24 At a minimum, graduates must be competent in providing oral health care within the scope of general dentistry, as defined by the school, including:

- h. replacement of teeth including fixed, removable and dental implant prosthodontic therapies;

COMPETENCY STATEMENTS SUPPORTING STANDARD 2-24h

1. Demonstrate patient interaction that provides able and personable communication with the patient that addresses all clinical issues and addresses concerns in an empathetic and culturally aware fashion
2. Provide verbal and written patient presentation that demonstrates the ability to present key findings and organize them in a fashion to make appropriate care decisions.
3. Utilize all pertinent biomedical knowledge to influence and optimize the care of the patient
4. Apply knowledge with critical thinking developed in the care of patients across all pertinent multiple domains.
5. Demonstrate the ability to comfortably apply clinical skills for dental procedures in a fashion that promotes the continued development of skills, patient confidence, and consideration for applying more advanced skills when needed.
6. Apply the tenets of ethical behavior and professionalism with exemplary leadership empathy, clinical behavioral understanding customized to the patient's needs.
7. Integrate all aspects of the practice management, systems-based practice, legal and regulatory requirements of practice and consistently applies this knowledge as a skill in clinical practice.

PROGRAM LEARNING OUTCOMES SUPPORTING STANDARD 2-24h

1. Patient-Centered Care: Demonstrate understanding of healthcare disparities and cultural awareness in patient counseling and patient advocacy
2. Evidence-Based Care: Apply current, evidence-based oral healthcare within the scope of general dentistry
3. Culturally competent, empathic communication: Demonstrate patient centered, empathic, and culturally competent communication and interpersonal skills
4. Oral and Written Communication: Demonstrate sound oral and written communications in patient care
5. Critical Thinking: Utilize critical thinking, problem solving skills and systemic thinking in assessing and making reasoned, evidence-based decisions in patient care
6. Ethics and Professionalism: Demonstrate professionalism and ethical decision making

7. Biomedical Sciences Knowledge: Demonstrate an understanding of the fundamentals of biomedical sciences and apply them appropriately in oral healthcare
8. Practice Management: Apply legal, regulatory and business management concepts related to provision of oral healthcare services

COURSES SUPPORTING STANDARD 2-24h

Course #	Course Title	Credits	Year	Term
Odont 632	Prosthodontics and Implant Dentistry: Removable Prosthodontics <i>LAL and LAB</i>	6	DS 2	Spring

The anatomic and pathophysiologic aspects of partial and full edentulism is presented. Development, construction, placement and maintenance of full and partial removable prosthodontic restorations is presented. The laboratory will include impressions, jaw occlusal registrations, gnathology, cast development and mounting, development of wax rims and occlusal scheme and teeth mounting.

Course #	Course Title	Credits	Year	Term
Odont 741	Prosthodontics and Implant Dentistry: Fixed Prosthodontics <i>LAL and LAB</i>	6	DS 3	Fall

The indirect restoration of teeth and the indirect replacement of missing teeth with crowns and bridges is presented. Treatment planning for these restorations including occlusal, periodontal, caries assessment is presented. Other methods for indirect restoration including partial coverage indirect restoration is presented. The introduction of digital techniques for impression and CadCam restoration development is presented. The laboratory will provide practice with the surgical armamentarium for tooth preparation for fixed prosthetic restoration, for impressions with analog and digital methods and for the construction of fixed indirect restorations. The laboratory will also teach methods for provisional restoration of the fixed prosthodontic patient.

Course #	Course Title	Credits	Year	Term
Odont 851	Prosthodontics and Implant Dentistry: Implant Surgery and Prosthodontic Reconstruction <i>LAL and LAB</i>	3	DS 4	Fall

The replacement of missing teeth utilizing dental implants is presented. This course includes the biomechanics of implants, concepts of osseointegration, restoration options for implants, implant systems and the placement of implants. The laboratory will teach the placement of implants including appropriate assessment and osteotomies, and the restoration of implants using indirect and direct techniques.

Course #	Course Title	Credits	Year	Term
Odont 662	Comprehensive Care Family Dentistry <i>CLIN and LAB</i>	3	DS 2	Spring

Treatment of caries and periodontal disease with discipline based faculty from operative dentistry, prosthodontics, endodontology and periodontology is carried out with the DS 2 as an active participant in the care team that includes a DS 3 and DS 4. Students will participate in case presentations, medical record assessment and recording, and other aspects of the clinic activities. The laboratory will include a simulated clinic visit including OSCE record and electronic health record.

Course #	Course Title	Credits	Year	Term
Odont 761	Comprehensive Care Family Dentistry <i>CLIN</i>	8	DS 3	Fall

This daily clinic will focus on students developing their family of patients in conjunction with other members of their team headed by the faculty team leader. Emphasis on diagnosis and treatment planning and completion of initial urgent procedures will be carried out.

Course #	Course Title	Credits	Year	Term
Odont 762	Comprehensive Care Family Dentistry <i>CLIN</i>	8	DS 3	Spring

This daily clinic will further develop the completion of Phase 1 therapy, disease control mitigation of risk and initiation of preventive care in the patient family. The student will develop this under the leadership of the team leader. The student will also begin aspects of Phase 2 therapy, reconstructive dentistry and address other comorbidities in patient care.

Course #	Course Title	Credits	Year	Term
Odont 861	Comprehensive Care Family Dentistry <i>CLIN</i>	8	DS 4	Fall

This clinical practicum will focus on the daily clinical activities of a practicing dentist including all intake, comprehensive care, case management issue extant under the leadership of the team leader. The DS 4 will also demonstrate leadership of the oral healthcare team including DS2 and 3 students and the dental assisting and dental hygiene staff through cooperation and assessment of outcomes of care.

Course #	Course Title	Credits	Year	Term
Odont 862	Comprehensive Care Family Dentistry <i>CLIN</i>	8	DS 4	Spring

The final semester of comprehensive care family dentistry will focus on the completion of phase 2 care for patients of record, increasing facility in providing initial evaluation and care of the dental patient, and addressing complex issues in care including those associated to overall health, stages of life, cultural awareness among others.

COMPETENCY ASSESSMENTS SUPPORTING STANDARD 2-24h

1. Clinical Procedures, (CP)
2. Problem Solving (PS)
3. Clinical Reasoning (CR)
4. Professionalism (P)
5. Ethical Decision Making (EDM)
6. Communication Skills (CS)

Competency assessment	Course number	Assessment method	Prerequisites	Comments
Full denture	Odont 861 or Odont 862	Patient Based CP, PS, CR, CS, P, EDM	When ready per group leader assessment	1, 2, 3, 4, 5, 6, 7
Partial Denture	Odont 861 or Odont 862	Patient Based CP, PS, CR, CS, P, EDM	When ready per group leader assessment	1, 2, 3, 4, 5, 6, 7
Dental implant restoration	Odont 861 or Odont 862	Patient Based CP, PS, CR, CS, P, EDM	When ready per group leader assessment	1, 2, 3, 4, 5, 6, 7
Fixed partial denture (either implant or tooth supported)	Odont 861 or Odont 862	Patient Based CP, PS, CR, CS, P, EDM	When ready per group leader assessment	1, 2, 3, 4, 5, 6, 7

NARRATIVE SUPPORTING STANDARD 2-24h

Provide a description of planned student experiences. Relate these experiences to the school's defined scope of general practice.

The comprehensive clinical care model and community based education are sites where students will have extensive experiences in fixed and removable replacement of missing teeth. California is fortunate in that the adult dental benefit under Medi-Cal now includes both fixed and removable replacement of missing teeth. The waiting lists for such services in regional health centers with which the CNUCDM has MOUs is several hundred patients per site. Indeed, one site El Dorado community health would like to both have our students on site for the purpose of managing this prosthetic backlog, and to also refer to our CNU operated site as it is within reasonable distance from that clinic. The scope of general dentistry as defined at CNUCDM clearly included the rehabilitation of function and esthetics for patients with missing teeth.

Describe how students will be assessed

Full denture, partial denture, fixed partial denture (either implant or tooth supported) and dental implant restoration competency assessments are all patient based and all administered in Odont 861 or 862 in the fourth year. Of note is that the utilization of dental implants in addressing edentulous spaces has superseded the tooth born restoration of bounded edentulous spaces and thus is a more likely option for the CA for fixed partial denture. Though tooth born restoration is acceptable for this standard, the student also will take a CA specific to implant born restoration.

Describe how competency will be met and ensured for all graduates.

Competency in replacement of teeth including fixed removable and dental implant prosthodontic therapies is ensured in that every dental graduate must complete the competency assessments noted in [Appendix 2-24 Mapping of all Competency Assessments](#) which are summarized as related to 2-24h in the listing above showing those CA's. Completion of all CA's are linked to the courses where they occur and are required for passing the course and thus required for all graduates.

STANDARD 2-24 (i)

2-24 At a minimum, graduates must be competent in providing oral health care within the scope of general dentistry, as defined by the school, including:

- i. periodontal therapy;

COMPETENCY STATEMENTS SUPPORTING STANDARD 2-24i

1. Demonstrate patient interaction that provides able and personable communication with the patient that addresses all clinical issues and addresses concerns in an empathetic and culturally aware fashion
2. Provide verbal and written patient presentation that demonstrates the ability to present key findings and organize them in a fashion to make appropriate care decisions.
3. Utilize all pertinent biomedical knowledge to influence and optimize the care of the patient
4. Apply knowledge with critical thinking developed in the care of patients across all pertinent multiple domains.
5. Demonstrate the ability to comfortably apply clinical skills for dental procedures in a fashion that promotes the continued development of skills, patient confidence, and consideration for applying more advanced skills when needed.
6. Apply the tenets of ethical behavior and professionalism with exemplary leadership empathy, clinical behavioral understanding customized to the patient's needs.

PROGRAM LEARNING OUTCOMES SUPPORTING STANDARD 2-24i

1. Patient-Centered Care: Demonstrate understanding of healthcare disparities and cultural awareness in patient counseling and patient advocacy
2. Evidence-Based Care: Apply current, evidence-based oral healthcare within the scope of general dentistry
3. Culturally competent, empathic communication: Demonstrate patient centered, empathic, and culturally competent communication and interpersonal skills
4. Oral and Written Communication: Demonstrate sound oral and written communications in patient care
5. Critical Thinking: Utilize critical thinking, problem solving skills and systemic thinking in assessing and making reasoned, evidence-based decisions in patient care
6. Ethics and Professionalism: Demonstrate professionalism and ethical decision making
7. Biomedical Sciences Knowledge: Demonstrate an understanding of the fundamentals of biomedical sciences and apply them appropriately in oral healthcare
8. Practice Management: Apply legal, regulatory and business management concepts related to provision of oral healthcare services

COURSES SUPPORTING STANDARD 2-24i

Course #	Course Title	Credits	Year	Term
Odont 621	Periodontology <i>LAL and LAB</i>	3	DS 2	Fall

The normal structure and function of the periodontium is presented. The pathology, microbiology, immunology, and pathophysiology of diseases of the periodontium is presented. Prevention, chronic disease management, and nonsurgical/minimally invasive procedures for periodontal diseases is emphasized. Laboratory session focus on the development of procedures and psychomotor skills using surgical armamentarium in a simulated clinical setting for the treatment of diseases of the periodontium.

Course #	Course Title	Credits	Year	Term
Odont 622	Periodontology <i>LAL and LAB</i>	3	DS 2	Spring

In-depth understanding of the etiology and progression of chronic periodontal diseases is developed in this course. The influence of systemic diseases such as HIV, diabetes mellitus, and obesity on the health of the periodontium is explored. Surgical interventions for the treatment of diseases of the periodontium is presented. The laboratory is focused on advanced techniques including flap surgery, guided tissue regeneration, socket preservation among others, as well as continued development of skills in curettage.

Course #	Course Title	Credits	Year	Term
Odont 752	Periodontology Seminar <i>SEM</i>	2	DS 3	Spring

Using a case-based format, the treatment planning, outcome assessment, management of medical and dental comorbidities among others of the patient with diseases of the periodontium is presented. Patient-centered, health systems informed, and culturally aware aspects of care are discussed through the case-based format.

Course #	Course Title	Credits	Year	Term
Odont 841	Periodontology Seminar <i>SEM</i>	2	DS 4	Fall

Using case-based format, interdisciplinary problems especially with orthodontics, endodontics and prosthodontic consideration will be developed through patient presentations of patients of record or via the OSCE format. Further exploration of comorbidities in periodontal diseases will be developed.

Course #	Course Title	Credits	Year	Term
Odont 662	Comprehensive Care Family Dentistry <i>CLIN and LAB</i>	3	DS 2	Spring

Treatment of caries and periodontal disease with discipline based faculty from operative dentistry, prosthodontics, endodontology and periodontology is carried out with the DS 2 as an active participant in the care team that includes a DS 3 and DS 4. Students will participate in case presentations, medical record assessment and recording, and other aspects of the clinic activities. The laboratory will include a simulated clinic visit including OSCE record and electronic health record.

Course #	Course Title	Credits	Year	Term
Odont 761	Comprehensive Care Family Dentistry <i>CLIN</i>	8	DS 3	Fall

This daily clinic will focus on students developing their family of patients in conjunction with other members of their team headed by the faculty team leader. Emphasis on diagnosis and treatment planning and completion of initial urgent procedures will be carried out.

Course #	Course Title	Credits	Year	Term
Odont 762	Comprehensive Care Family Dentistry <i>CLIN</i>	8	DS 3	Spring

This daily clinic will further develop the completion of Phase 1 therapy, disease control mitigation of risk and initiation of preventive care in the patient family. The student will develop this under the leadership of the team leader. The student will also begin aspects of Phase 2 therapy, reconstructive dentistry and address other comorbidities in patient care.

Course #	Course Title	Credits	Year	Term
Odont 861	Comprehensive Care Family Dentistry <i>CLIN</i>	8	DS 4	Fall

This clinical practicum will focus on the daily clinical activities of a practicing dentist including all intake, comprehensive care, case management issue extant under the leadership of the team leader. The DS 4 will also demonstrate leadership of the oral healthcare team including DS2 and 3 students and the dental assisting and dental hygiene staff through cooperation and assessment of outcomes of care.

Course #	Course Title	Credits	Year	Term
Odont 862	Comprehensive Care Family Dentistry <i>CLIN</i>	8	DS 4	Spring

The final semester of comprehensive care family dentistry will focus on the completion of phase 2 care for patients of record, increasing facility in providing initial evaluation and care of the dental patient, and addressing complex issues in care including those associated to overall health, stages of life, cultural awareness among others.

Course #	Course Title	Credits	Year	Term
BSS 861	Clinical Clerkship: Community-based Education <i>4 weeks, 30 hours per week plus call</i>	8	DS 4	Fall

Affiliated health systems based practices will accept CNU students into their care teams where senior students will provide clinical care under the supervision of Volunteer Community-Based Faculty in those sites. Suitable transportation and housing will be arranged for where needed. The purpose of the course is to provide community engagement with the constituencies served, to gain experience in community-based clinical care and to interact with the interprofessional and intraprofessional care team

Course #	Course Title	Credits	Year	Term
BSS 862	Clinical Clerkship: Community-based Education <i>4 weeks, 30 hours per week plus call</i>	8	DS 4	Spring

This course will be at a second community-based rotation site to elaborate on the activities of the first rotation and engage a new community and a new clinic. In addition to comprehensive care experience, the student will compare and contrast communities and clinical care entities and provide a reflective essay on their community care experience.

COMPETENCY ASSESSMENTS SUPPORTING STANDARD 2-24i

- 1. Clinical Procedures, (CP)**
- 2. Problem Solving (PS)**
- 3. Clinical Reasoning (CR)**
- 4. Professionalism (P)**
- 5. Ethical Decision Making (EDM)**
- 6. Communication Skills (CS)**

Competency assessment	Course number	Assessment method	Prerequisites	Comments
Periodont. Lab SRP formative assessment	Odont 621	Laboratory exercise x 1 CP, PS, CR	Didactics and lab Odon 631	2, 3, 4,5 FORMATIVE
Periodont. Lab Surgery formative assessment	Odont 632	Laboratory exercise x 1 CP, PS, CR	Didactics and lab Odon 632	2, 3, 4, 5 FORMATIVE
Outcomes of periodontal therapy	Odont 752	Patient based CP, PS,CR, CS, P, EDM	Seminar participation	1, 2, 3, 4, 5, 6, 7 Patient selected from students existing patients

Integrated perio care (at least 3) perio/pros/endo/ortho/ oral medicine/ oral surgery assessment	Odont 841	Patient Based CP, PS, CR, CS, P, EDM	Seminar participation	1, 2, 3, 4, 5, 6, 7 Patient selected from students existing patients
Scaling and root planing	Odont 861 or Odont 862	Patient Based CP, PS ,CR, CS, P, EDM	When ready per group leader assessment	1, 2, 3, 4, 5, 6, 7

NARRATIVE SUPPORTING STANDARD 2-24i

Provide a description of planned student experiences. Relate these experiences to the school's defined scope of general practice.

Student experiences in periodontal therapy are presaged by foundational knowledge first obtained in foundations of odontology and foundations of dental medicine course in the first year where essential foundational issues such as infection control, intake evaluation of patients, the construct of the health care team and introduction to the dental clinic occur.

The students' first exposure to periodontology as a discipline occurs in Odont 621 and Odont 622 in the second year where the supporting knowledge and laboratory based clinical skills are developed for translation of that knowledge and skill into the clinical setting. The D2 student also enter the clinical care team in Comprehensive care Dentistry at the same time so that seamless advancement of didactic knowledge and laboratory based skill in clinical periodontology can be progressively translated to the clinical setting where the group leader, also with D3 and D4 students can appropriately assign, develop and assess clinical periodontal therapy capacity in the student.

While comprehensive care dentistry advances in the D3 and D4 level, so will the level of clinical case involvement and interventions by the student, to included comprehensive care of the patient with periodontal disease utilizing medical, surgical, behavioral means to improve periodontal health. Periodontology seminar 752 and periodontology seminar 852 are case based seminars where students present discuss and using evidence based dentistry and critical thinking develop further understanding of the efficacy of periodontal care and its outcomes. Also in the fourth year students will perform periodontal therapy in Clinical clerkships community based education BSS 861 and BSS 862.

With regard to scope of practice, it is intended that students at the D4 level will carry out periodontal therapy including leadership by the team leader in a generalist model but with the assignment of faculty from periodontology who are periodontists as well as dental hygienists. Periodontists will include students in the performance of periodontal surgery of hard and soft tissues and the placement of implants. Dental hygienists will further develop student skills in the

clinic with regard to preventive and prophylactic procedures, motivational interviewing and oral hygiene instruction.

Describe how students will be assessed

Examinations including quizzes and final exams are associated to the foundational knowledge courses for periodontal therapy. Competency assessments in the application of periodontal therapy in the clinic includes both formative and summative assessments. Formative assessments include laboratory CA for scaling and root planning and for periodontal surgery (hard and soft tissue) that must be completed before clinical experiences in those areas.

Summative assessments in periodontology are planned to be in clinical settings. As noted in the above section they include:

- Outcomes of periodontal therapy: This is a patient-based CA where the student presents one of their cases to defend diagnostic, treatment and outcomes of care in a patient with periodontal disease.
- Integrated periodontology care: a patient-based CA in which the student presents and defends the outcomes of care in a periodontology patient with additional restorative, prosthodontic, surgical orthodontic or oral medicine co-factors.
- Scaling and root planning: The knowledge, clinical skills and values associated to the scaling and root planning of a patient with periodontal disease is assessed in this patient based CA.

Describe how competency will be met and ensured for all graduates.

Competency in periodontal therapy is ensured in that every dental graduate must complete the competency assessments noted in [Appendix 2-24 Mapping of all Competency Assessments](#) which are summarized as related to 2-24i in the listing above showing those CA's. Completion of all CA's are linked to the courses where they occur and are required for passing the course and thus required for all graduates.

STANDARD 2-24 (j)

2-24 At a minimum, graduates must be competent in providing oral health care within the scope of general dentistry, as defined by the school, including:

- j. pulpal therapy;

COMPETENCY STATEMENTS SUPPORTING STANDARD 2-24j

1. Demonstrate patient interaction that provides able and personable communication with the patient that addresses all clinical issues and addresses concerns in an empathetic and culturally aware fashion
2. Provide verbal and written patient presentation that demonstrates the ability to present key findings and organize them in a fashion to make appropriate care decisions.
3. Utilize all pertinent biomedical knowledge to influence and optimize the care of the patient
4. Apply knowledge with critical thinking developed in the care of patients across all pertinent multiple domains.
5. Demonstrate the ability to comfortably apply clinical skills for dental procedures in a fashion that promotes the continued development of skills, patient confidence, and consideration for applying more advanced skills when needed.
6. Apply the tenets of ethical behavior and professionalism with exemplary leadership empathy, clinical behavioral understanding customized to the patient's needs.
7. Integrate all aspects of the practice management, systems-based practice, legal and regulatory requirements of practice and consistently applies this knowledge as a skill in clinical practice.

PROGRAM LEARNING OUTCOMES SUPPORTING STANDARD 2-24j

1. Patient-Centered Care: Demonstrate understanding of healthcare disparities and cultural awareness in patient counseling and patient advocacy
2. Evidence-Based Care: Apply current, evidence-based oral healthcare within the scope of general dentistry
3. Culturally competent, empathic communication: Demonstrate patient centered, empathic, and culturally competent communication and interpersonal skills
4. Oral and Written Communication: Demonstrate sound oral and written communications in patient care
5. Critical Thinking: Utilize critical thinking, problem solving skills and systemic thinking in assessing and making reasoned, evidence-based decisions in patient care
6. Ethics and Professionalism: Demonstrate professionalism and ethical decision making
7. Biomedical Sciences Knowledge: Demonstrate an understanding of the fundamentals of biomedical sciences and apply them appropriately in oral healthcare

8. Practice Management: Apply legal, regulatory and business management concepts related to provision of oral healthcare services

COURSES SUPPORTING STANDARD 2-24j

Course #	Course Title	Credits	Year	Term
Odont 522	Cariology <i>LAL</i>	3	DS 1	Spring

The biology, phenotype, epidemiology, anatomical changes from caries is presented. The prevention of caries through CAMBRA is developed as well as strategies for management at all stages of the disease. The course introduces the pathways of caries as a regional and systemic disease.

Course #	Course Title	Credits	Year	Term
Odont 642	Endodontology: Diseases of the Pulp and Pathways of Odontogenic Infection, Endodontic Therapy and Technique <i>LAL and LAB</i>	3	DS 2	Spring

The diagnosis and treatment of the diseases of the dental pulp throughout life is presented. The biologic basis for treatment of diseases of the pulp is developed as well as the rationale for these methods. The laboratory will introduce students to the ortho-endodontic therapy methods including the use of magnification, access the pulp canals, instrumentation of the canals and obliteration of the pulpectomy site to clinical standards.

Course #	Course Title	Credits	Year	Term
Odont 662	Comprehensive Care Family Dentistry <i>CLIN and LAB</i>	3	DS 2	Spring

Treatment of caries and periodontal disease with discipline based faculty from operative dentistry, prosthodontics, endodontology and periodontology is carried out with the DS 2 as an active participant in the care team that includes a DS 3 and DS 4. Students will participate in case presentations, medical record assessment and recording, and other aspects of the clinic activities. The laboratory will include a simulated clinic visit including OSCE record and electronic health record.

Course #	Course Title	Credits	Year	Term
Odont 761	Comprehensive Care Family Dentistry <i>CLIN</i>	8	DS 3	Fall

This daily clinic will focus on students developing their family of patients in conjunction with other members of their team headed by the faculty team leader. Emphasis on diagnosis and treatment planning and completion of initial urgent procedures will be carried out.

Course #	Course Title	Credits	Year	Term
Odont 762	Comprehensive Care Family Dentistry <i>CLIN</i>	8	DS 3	Spring

This daily clinic will further develop the completion of Phase 1 therapy, disease control mitigation of risk and initiation of preventive care in the patient family. The student will develop this under the leadership of the team leader. The student will also begin aspects of Phase 2 therapy, reconstructive dentistry and address other comorbidities in patient care.

Course #	Course Title	Credits	Year	Term
Odont 861	Comprehensive Care Family Dentistry <i>CLIN</i>	8	DS 4	Fall

This clinical practicum will focus on the daily clinical activities of a practicing dentist including all intake, comprehensive care, case management issue extant under the leadership of the team leader. The DS 4 will also demonstrate leadership of the oral healthcare team including DS2 and 3 students and the dental assisting and dental hygiene staff through cooperation and assessment of outcomes of care.

Course #	Course Title	Credits	Year	Term
Odont 862	Comprehensive Care Family Dentistry <i>CLIN</i>	8	DS 4	Spring

The final semester of comprehensive care family dentistry will focus on the completion of phase 2 care for patients of record, increasing facility in providing initial evaluation and care of the dental patient, and addressing complex issues in care including those associated to overall health, stages of life, cultural awareness among others.

Course #	Course Title	Credits	Year	Term
BSS 861	Clinical Clerkship: Community-based Education <i>4 weeks, 30 hours per week plus call</i> <i>CLIN</i>	8	DS 4	Fall

Affiliated health systems based practices will accept CNU students into their care teams where senior students will provide clinical care under the supervision of Volunteer Community-Based Faculty in those sites. Suitable transportation and housing will be arranged for where needed. The purpose of the course is to provide community engagement with the constituencies served, to gain experience in community-based clinical care and to interact with the interprofessional and intraprofessional care team

Course #	Course Title	Credits	Year	Term
BSS 862	Clinical Clerkship: Community-based Education <i>4 weeks, 30 hours per week plus call CLIN</i>	8	DS 4	Spring

This course will be at a second community-based rotation site to elaborate on the activities of the first rotation and engage a new community and a new clinic. In addition to comprehensive care experience, the student will compare and contrast communities and clinical care entities and provide a reflective essay on their community care experience.

COMPETENCY ASSESSMENTS SUPPORTING STANDARD 2-24j

- 1. Clinical Procedures, (CP)**
- 2. Problem Solving (PS)**
- 3. Clinical Reasoning (CR)**
- 4. Professionalism (P)**
- 5. Ethical Decision Making (EDM)**
- 6. Communication Skills (CS)**

Competency assessment	Course number	Assessment method	Prerequisites	Comments
Endodontic therapy	Odont 532	Laboratory exercise X3 (incisor, premolar, molar) CP, PS, CR	Lecture and lab Odont 532	2, 3, 4, 5 FORMATIVE
Endodontic therapy	Odont 861 or Odont 862	Patient Based CP, PS, CR, CS, P, EDM	When ready per group leader assessment	1, 2, 3, 4, 5, 6, 7

NARRATIVE SUPPORTING STANDARD 2-24j

Provide a description of planned student experiences. Relate these experiences to the school's defined scope of general practice.

Foundational knowledge in endodontology will occur in basic medical sciences that support knowledge of immunology, microbiology, inflammation and related basic sciences. The cariology course, Odont 522 described how caries affects the pulp and the pathways of infection.

Odont 642 in the D2 year is the didactic and laboratory course in which applied knowledge and skill in endodontology in preparation for clinical activity occurs. All student experiences in endodontology subsequently occur in the clinical practicum in Comprehensive care dentistry D2, D3, and D4 and in community based education.

Of note in the planned clinical experiences is that California now includes endodontic therapy in its MediCal benefit package, and that CNUCDM will not have a graduate program in endodontology. Supervision for endodontic therapy in the comprehensive care clinic will be performed by both the team leader and by endodontist faculty members. Use of microscopes, rotary instrumentation where appropriate is planned. Students will as well perform pulpal therapy in pediatric dentistry and in community based education.

The comprehensive experience in pulpal therapy at CNUCDM that is planned is consistent with developing the desired scope of practice for the general dentist as defined by the institution.

Describe how students will be assessed

In addition to didactic examination in the endodontology course, Odont 642, the students will complete a formative competency assessment in Odont 642 in preparation for patient based care. This consists of three laboratory exercises.

Assessment of the student for pulpal therapy as a summative assessment is performed on a patient. A case is selected from a patient of record in which the diagnosis, treatment and outcome assessment of care for a patient with pulpal disease is presented by the student and is observed by the calibrated reviewer. This must include the extirpation and obturation of the pulpal tissue in a succedaneous tooth either single or multirrooted and the subsequent assessment of the outcome of treatment.

Describe how competency will be met and ensured for all graduates.

Competency in pulpal therapy is ensured in that every dental graduate must complete the competency assessments noted in [Appendix 2-24 Mapping of all Competency Assessments](#) which are summarized as related to 2-24j in the listing above showing those CA's. Completion of all CA's are linked to the courses where they occur and are required for passing the course and thus required for all graduates.

STANDARD 2-24 (k)

2-24 At a minimum, graduates must be competent in providing oral health care within the scope of general dentistry, as defined by the school, including:

k. oral mucosal and osseous disorders;

COMPETENCY STATEMENTS SUPPORTING STANDARD 2-24k

1. Demonstrate patient interaction that provides able and personable communication with the patient that addresses all clinical issues and addresses concerns in an empathetic and culturally aware fashion
2. Provide verbal and written patient presentation that demonstrates the ability to present key findings and organize them in a fashion to make appropriate care decisions.
3. Utilize all pertinent biomedical knowledge to influence and optimize the care of the patient
4. Apply knowledge with critical thinking developed in the care of patients across all pertinent multiple domains.
5. Demonstrate the ability to comfortably apply clinical skills for dental procedures in a fashion that promotes the continued development of skills, patient confidence, and consideration for applying more advanced skills when needed.

PROGRAM LEARNING OUTCOMES SUPPORTING STANDARD 2-24k

1. Patient-Centered Care: Demonstrate understanding of healthcare disparities and cultural awareness in patient counseling and patient advocacy
2. Evidence-Based Care: Apply current, evidence-based oral healthcare within the scope of general dentistry
3. Culturally competent, empathic communication: Demonstrate patient centered, empathic, and culturally competent communication and interpersonal skills
4. Oral and Written Communication: Demonstrate sound oral and written communications in patient care
5. Critical Thinking: Utilize critical thinking, problem solving skills and systemic thinking in assessing and making reasoned, evidence-based decisions in patient care
6. Ethics and Professionalism: Demonstrate professionalism and ethical decision making
7. Biomedical Sciences Knowledge: Demonstrate an understanding of the fundamentals of biomedical sciences and apply them appropriately in oral healthcare
8. Practice Management: Apply legal, regulatory and business management concepts related to provision of oral healthcare services

COURSES SUPPORTING STANDARD 2-24k

Course #	Course Title	Credits	Year	Term
HS 521	Integumentary and Musculoskeletal Systems (CP Course)	7	DS 1	Fall

As described in COM curriculum with clinical case correlation by dental faculty. Correlated clinical cases related to oral health sciences will include vesiculobullous disease of the oral mucosa, oral manifestations of muscular dystrophy, oral cancer, myofascial pain dysfunction syndrome, arthritis in dental practice, osteoporosis and oral health.

Course #	Course Title	Credits	Year	Term
OMFS 751	Oral Radiology 2 LAL and LAB	3	DS 3	Fall

The understanding of Panoramic, planar films, CT, MRI. Nuclear medicine, and non-ionizing methods of image acquisition is presented. Comparison of these methods and appropriate case selection for these studies is presented. The utility in treatment planning and integration with other digital treatment planning methods is shown. The diagnosis of pathology via these methods is developed.

Course #	Course Title	Credits	Year	Term
OMFS 851	Oral Radiology Seminar SEM	2	DS 4	Fall

This case-based seminar will present findings using all methods in OMFS 641 and OMFS 751 to demonstrate through active learning the radiographic findings in key diseases of the oral and maxillofacial region.

Course #	Course Title	Credits	Year	Term
OMFS 642	Oral Pathology/Oral Medicine 1 LAL and LAB	3	DS 2	Spring

The significant tumors, anomalies, oral manifestations of systemic disease and other pathologies of the oral and maxillofacial region are presented. The laboratory will focus on the gross pathology and microscopic pathology of the oral and maxillofacial region

Course #	Course Title	Credits	Year	Term
OMFS 742	Oral Pathology/Oral Medicine 2 LAL	3	DS 3	Spring

Further development of the oral manifestations of systemic disease is presented with emphasis on diabetes, hematologic bleeding disorders, hematologic malignancies, lymphomas, myeloma, xerostomic diseases, autoimmune disease, maxillofacial movement disorders, other neurologic diseases such as Parkinson's, with oral manifestations.

Course #	Course Title	Credits	Year	Term
OMFS 862	Oral Pathology/Oral Medicine Seminar SEM	2	DS 4	Spring

Concentration on oral medicine will include the risk assessment and management of complex systemic diseases related to dental medicine care in dental practice. Case-based discussion on the dental medicine patient with HIV, ongoing chemotherapy for malignancy, osteoporosis/osteopenia among others will be presented by students in seminar format.

Course #	Course Title	Credits	Year	Term
Odont 662	Comprehensive Care Family Dentistry CLIN and LAB	3	DS 2	Spring

Treatment of caries and periodontal disease with discipline based faculty from operative dentistry, prosthodontics, endodontology and periodontology is carried out with the DS 2 as an active participant in the care team that includes a DS 3 and DS 4. Students will participate in case presentations, medical record assessment and recording, and other aspects of the clinic activities. The laboratory will include a simulated clinic visit including OSCE record and electronic health record.

Course #	Course Title	Credits	Year	Term
Odont 761	Comprehensive Care Family Dentistry CLIN	8	DS 3	Fall

This daily clinic will focus on students developing their family of patients in conjunction with other members of their team headed by the faculty team leader. Emphasis on diagnosis and treatment planning and completion of initial urgent procedures will be carried out.

Course #	Course Title	Credits	Year	Term
Odont 762	Comprehensive Care Family Dentistry CLIN	8	DS 3	Spring

This daily clinic will further develop the completion of Phase 1 therapy, disease control mitigation of risk and initiation of preventive care in the patient family. The student will develop this under the leadership of the team leader. The student will also begin aspects of Phase 2 therapy, reconstructive dentistry and address other comorbidities in patient care.

Course #	Course Title	Credits	Year	Term
Odont 861	Comprehensive Care Family Dentistry CLIN	8	DS 4	Fall

This clinical practicum will focus on the daily clinical activities of a practicing dentist including all intake, comprehensive care, case management issue extant under the leadership of the team leader. The DS 4 will also demonstrate leadership of the oral healthcare team including DS2 and 3 students and the dental assisting and dental hygiene staff through cooperation and assessment of outcomes of care.

Course #	Course Title	Credits	Year	Term
Odont 862	Comprehensive Care Family Dentistry CLIN	8	DS 4	Spring

The final semester of comprehensive care family dentistry will focus on the completion of phase 2 care for patients of record, increasing facility in providing initial evaluation and care of the dental patient, and addressing complex issues in care including those associated to overall health, stages of life, cultural awareness among others.

Course #	Course Title	Credits	Year	Term
OMFS 772	Clinical Clerkship: Oral and Maxillofacial Surgery 4 weeks, 30 hours per week plus call CLIN	8	DS 3	Spring

The students will enter the oral and maxillofacial surgery care team for this clerkship including the care of patients for dentoalveolar surgery, major maxillofacial surgery and complex conditions of the head and neck. Clinical experience in ambulatory oral surgery and anesthesia and assisting for maxillofacial surgery in the operating room including emergency and trauma care occurs. Participation in hospital rounds and conferences occurs.

COMPETENCY ASSESSMENTS SUPPORTING STANDARD 2-24k

1. Clinical Procedures, (CP)
2. Problem Solving (PS)
3. Clinical Reasoning (CR)
4. Professionalism (P)
5. Ethical Decision Making (EDM)
6. Communication Skills (CS)

Competency assessment	Course number	Assessment method	Prerequisites	Comments
Osteoporosis	HS 511	OSCE PS, CR, CS	Didactic material HS 526	2, 3, 4, 6, 7
Oral medicine/oral pathology case presentation	OMFS 862	Patient based CP, PS, CR, CS, P, EDM	OMFS 662, 762 and in OMFS 862 seminar	1, 2, 3, 4, 5, 6, 7 Case selected preferably from student patient of record
Head and neck exam, screening and risk assessment for head and neck cancer	OMFS 772	Patient based CP, PS, CR, CS, P, EDM	In OMS clerkship or comp care clinic	

Radiographic examination exposure and interpretation	OMFS 751	Patient based Panoramic and Cone Beam CT CP, PS, CR, CS, P, EDM	OMFS 751 lab and lecture	1, 2, 3, 4, 5, 6, 7
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NARRATIVE SUPPORTING STANDARD 2-24k

Provide a description of planned student experiences. Relate these experiences to the school's defined scope of general practice.

Foundational knowledge in oral mucosal and osseous disorders occurs as noted in the courses in the previous section to include the human studies course in Integumentary and Musculoskeletal Systems, HS 521, which will include case based studies of patients with osseous and mucosal diseases. Oral radiology OMFS 751 and oral radiology seminar OMFS 851 will present osseous pathology correlated to clinical findings as seen on planar films, CT, Cone beam CT and Panoramic radiographs. Oral medicine, oral pathology OMFS 662 and OMFS 772 will present knowledge and active/laboratory learning on oral mucosal and osseous diseases. These are further augmented in a case based fashion using where possible patients of record in Oral pathology/oral medicine seminar OMFS 862. Student experiences in Comprehensive care dentistry and in rotations in oral and maxillofacial surgery and community based education will on a daily basis demonstrate the presence of osseous and mucosal pathology. This will allow the student to gain extensive experience and is consistent with the definition of general dentistry as defined by the institution.

Describe how students will be assessed

Competency assessments in support of Standard 2-24 k are summarized above. They include:

- Osteoporosis: a case-based CA in which the student diagnoses, develops treatment strategy and assesses the potential outcomes of care for a patient with osteoporosis including the oral health considerations.
- Oral medicine/oral pathology case-based CA: A patient of record is selected with oral mucosal or osseous disease for observed assessment, diagnosis and treatment planning. Outcomes of therapy or anticipated outcomes are also assessed in the patient base exam.

Describe how competency will be met and ensured for all graduates.

Competency in oral mucosal and osseous disorders is ensured in that every dental graduate must complete the competency assessments noted in **Appendix 2-24 Mapping of all Competency Assessments** which are summarized as related to 2-24k in the listing above showing those CA's. Completion of all CA's are linked to the courses where they occur and are required for passing the course and thus required for all graduates

STANDARD 2-24 (I)

2-24 At a minimum, graduates must be competent in providing oral health care within the scope of general dentistry, as defined by the school, including:

1. hard and soft tissue surgery;

COMPETENCY STATEMENTS SUPPORTING STANDARD 2-24I

1. Demonstrate patient interaction that provides able and personable communication with the patient that addresses all clinical issues and addresses concerns in an empathetic and culturally aware fashion
2. Provide verbal and written patient presentation that demonstrates the ability to present key findings and organize them in a fashion to make appropriate care decisions.
3. Utilize all pertinent biomedical knowledge to influence and optimize the care of the patient
4. Apply knowledge with critical thinking developed in the care of patients across all pertinent multiple domains.
5. Demonstrate the ability to comfortably apply clinical skills for dental procedures in a fashion that promotes the continued development of skills, patient confidence, and consideration for applying more advanced skills when needed.

PROGRAM LEARNING OUTCOMES SUPPORTING STANDARD 2-24I

1. Patient-Centered Care: Demonstrate understanding of healthcare disparities and cultural awareness in patient counseling and patient advocacy
2. Evidence-Based Care: Apply current, evidence-based oral healthcare within the scope of general dentistry
3. Culturally competent, empathic communication: Demonstrate patient centered, empathic, and culturally competent communication and interpersonal skills
4. Oral and Written Communication: Demonstrate sound oral and written communications in patient care
5. Critical Thinking: Utilize critical thinking, problem solving skills and systemic thinking in assessing and making reasoned, evidence-based decisions in patient care
6. Ethics and Professionalism: Demonstrate professionalism and ethical decision making
7. Biomedical Sciences Knowledge: Demonstrate an understanding of the fundamentals of biomedical sciences and apply them appropriately in oral healthcare
8. Practice Management: Apply legal, regulatory and business management concepts related to provision of oral healthcare services

COURSES SUPPORTING STANDARD 2-24I

Course #	Course Title	Credits	Year	Term
OMFS 761	Principles of Oral Surgery <i>LAL and LAB</i>	3	DS 3	Fall

The principles of aseptic technique, flap design, surgical access, surgical hemostasis, infection prevention, and wound healing are presented. Technique for the removal of erupted and non-erupted teeth, both surgically and via forceps and elevator is presented. Preprosthetic surgical technique and minor soft tissue surgery including biopsy is presented. The laboratory will focus on the surgical and nonsurgical removal of teeth and on soft tissue surgery and biopsy.

Course #	Course Title	Credits	Year	Term
OMFS 762	Advanced Topics in Oral and Maxillofacial Surgery <i>LAL</i>	2	DS 3	Spring

Understanding of major conditions of the oral and maxillofacial region requiring surgical intervention is presented. This includes diagnostic features, techniques for corrective surgery and outcome assessment. Categories include the treatment of facial trauma, ablative tumor surgery of the head and neck, cleft lip and palate surgery, craniofacial surgery, orthognathic surgery, reconstructive surgery of the jaws and face, and surgical treatment of temporomandibular disorders.

Course #	Course Title	Credits	Year	Term
OMFS 772	Clinical Clerkship: Oral and Maxillofacial Surgery <i>4 weeks, 30 hours per week plus call</i> <i>CLIN</i>	8	DS 3	Spring

The students will enter the oral and maxillofacial surgery care team for this clerkship including the care of patients for dentoalveolar surgery, major maxillofacial surgery and complex conditions of the head and neck. Clinical experience in ambulatory oral surgery and anesthesia and assisting for maxillofacial surgery in the operating room including emergency and trauma care occurs. Participation in hospital rounds and conferences occurs.

Course #	Course Title	Credits	Year	Term
Odont 621	Periodontology <i>LAL and LAB</i>	3	DS 2	Fall

The normal structure and function of the periodontium is presented. The pathology, microbiology, immunology, and pathophysiology of diseases of the periodontium is presented. Prevention, chronic disease management, and nonsurgical/minimally invasive procedures for periodontal diseases is emphasized. Laboratory session focus on the development of procedures and psychomotor skills using surgical armamentarium in a simulated clinical setting for the treatment of diseases of the periodontium.

Course #	Course Title	Credits	Year	Term
Odont 622	Periodontology <i>LAL and LAB</i>	3	DS 2	Spring

In-depth understanding of the etiology and progression of chronic periodontal diseases is developed in this course. The influence of systemic diseases such as HIV, diabetes mellitus, and obesity on the health of the periodontium is explored. Surgical interventions for the treatment of diseases of the periodontium is presented. The laboratory is focused on advanced techniques including flap surgery, guided tissue regeneration, socket preservation among others, as well as continued development of skills in curettage.

Course #	Course Title	Credits	Year	Term
Odont 662	Comprehensive Care Family Dentistry <i>CLIN and LAB</i>	3	DS 2	Spring

Treatment of caries and periodontal disease with discipline based faculty from operative dentistry, prosthodontics, endodontology and periodontology is carried out with the DS 2 as an active participant in the care team that includes a DS 3 and DS 4. Students will participate in case presentations, medical record assessment and recording, and other aspects of the clinic activities. The laboratory will include a simulated clinic visit including OSCE record and electronic health record.

Course #	Course Title	Credits	Year	Term
Odont 761	Comprehensive Care Family Dentistry <i>CLIN</i>	8	DS 3	Fall

This daily clinic will focus on students developing their family of patients in conjunction with other members of their team headed by the faculty team leader. Emphasis on diagnosis and treatment planning and completion of initial urgent procedures will be carried out.

Course #	Course Title	Credits	Year	Term
Odont 762	Comprehensive Care Family Dentistry <i>CLIN</i>	8	DS 3	Spring

This daily clinic will further develop the completion of Phase 1 therapy, disease control mitigation of risk and initiation of preventive care in the patient family. The student will develop this under the leadership of the team leader. The student will also begin aspects of Phase 2 therapy, reconstructive dentistry and address other comorbidities in patient care.

Course #	Course Title	Credits	Year	Term
Odont 861	Comprehensive Care Family Dentistry <i>CLIN</i>	8	DS 4	Fall

This clinical practicum will focus on the daily clinical activities of a practicing dentist including all intake, comprehensive care, case management issue extant under the leadership of the team leader. The DS 4 will also demonstrate leadership of the oral healthcare team including DS2 and 3 students and the dental assisting and dental hygiene staff through cooperation and assessment of outcomes of care.

Course #	Course Title	Credits	Year	Term
Odont 862	Comprehensive Care Family Dentistry CLIN	8	DS 4	Spring

The final semester of comprehensive care family dentistry will focus on the completion of phase 2 care for patients of record, increasing facility in providing initial evaluation and care of the dental patient, and addressing complex issues in care including those associated to overall health, stages of life, cultural awareness among others.

COMPETENCY ASSESSMENTS SUPPORTING STANDARD 2-24I

1. Clinical Procedures, (CP)
2. Problem Solving (PS)
3. Clinical Reasoning (CR)
4. Professionalism (P)
5. Ethical Decision Making (EDM)
6. Communication Skills (CS)

Competency assessment	Course number	Assessment method	Prerequisites	Comments
Exodontia simple extraction	OMFS 761	Patient based CP, PS, CR, CS, P, EDM	In OMS clerkship or Comp care clinic	1, 2, 3 ,4, 5, 6, 7
Exodontia surgical extraction	OMFS 761	Patient based CP, PS ,CR,CS, P, EDM	In OMS clerkship or Comp care clinic	1, 2, 3, 4, 5, 6, 7
Preprosthetic surgery	OMFS 761	Patient based CP, PS, CR, CS, P, EDM	In OMS clerkship or Comp care clinic	1, 2, 3, 4, 5, 6, 7
Implant placement	OMFS 761 or Odont 862	Patient based CP, PS, CR, CS, P, EDM	In OMS clerkship or Comp care clinic	1, 2, 3, 4, 5, 6, 7
Periodont. Lab Surgery formative assessment	Odont 632	Laboratory exercise x 1 CP, PS, CR	Didactics and lab Odon 632	2, 3, 4, 5 FORMATIVE
Outcomes of periodontal therapy	Odont 752	Patient based CP, PS, CR, CS, P, EDM	Seminar participation	1, 2, 3, 4, 5, 6, 7 Patient selected from students existing patients

NARRATIVE SUPPORTING STANDARD 2-24I

Provide a description of planned student experiences. Relate these experiences to the school's defined scope of general practice.

The courses supporting the development of knowledge and skills to support the performance of osseous and soft tissue surgery include Principles of oral surgery in which aseptic technique, flap design, surgical access, hemostasis, infection prevention and wound healing are presented. In this course surgical technique is reviewed and applied in a laboratory setting in Advanced Topic further presentation of complex osseous and soft tissue surgery is developed. The foundational knowledge of osseous and soft tissue surgery applied to periodontology is also presented in those course related to Standard 2-24i.

Clinical experience in comprehensive care dentistry clinical practicum and community based education as well as in the clinical clerkship in oral and maxillofacial surgery will include clinical experience in exodontia, biopsy, alveoplasty, osseous recontouring, bone grafting among other hard and soft tissue procedures. The rotation in oral and maxillofacial surgery will be at hospital based practices in the new CNU Hospital and Clinics beginning in 2023 as well as in regional hospitals and clinics, and regional health centers such as El Dorado Health and Shingle Springs Indian Health which are all ambulatory settings with OMS faculty based at those sites.

Describe how students will be assessed

All competency assessments for osseous and soft tissue surgery are patient based assessments. These include, as listed in the section above:

- Simple exodontia: in which the handling of soft and hard tissue is a component of the evaluation.
- Surgical extraction: Includes the removal and recontouring of bone associated to the removal of a tooth
- Preprosthetic surgery: The CA evaluates the recontouring of bone and soft tissue for the purpose of constructing a prosthesis
- Implant placement: Flap development and osteotomy are essential elements of the CA
- Outcomes of periodontal therapy: The results of osseous and soft tissue surgery are examined in this patient based CA

Describe how competency will be met and ensured for all graduates.

Competency in hard and soft tissue surgery is ensured in that every dental graduate must complete the competency assessments noted in **Appendix 2-24 Mapping of all Competency Assessments** which are summarized as related to 2-24I in the listing above showing those CA's. Completion of all CA's are linked to the courses where they occur and are required for passing the course and thus required for all graduates.

STANDARD 2-24 (m)

2-24 At a minimum, graduates must be competent in providing oral health care within the scope of general dentistry, as defined by the school, including:

m. dental emergencies;

COMPETENCY STATEMENTS SUPPORTING STANDARD 2-24m

1. Demonstrate patient interaction that provides able and personable communication with the patient that addresses all clinical issues and addresses concerns in an empathetic and culturally aware fashion
2. Provide verbal and written patient presentation that demonstrates the ability to present key findings and organize them in a fashion to make appropriate care decisions.
3. Utilize all pertinent biomedical knowledge to influence and optimize the care of the patient
4. Apply knowledge with critical thinking developed in the care of patients across all pertinent multiple domains.
5. Demonstrate the ability to comfortably apply clinical skills for dental procedures in a fashion that promotes the continued development of skills, patient confidence, and consideration for applying more advanced skills when needed.
6. Apply the tenets of ethical behavior and professionalism with exemplary leadership empathy, clinical behavioral understanding customized to the patient's needs.
7. Integrate all aspects of the practice management, systems-based practice, legal and regulatory requirements of practice and consistently applies this knowledge as a skill in clinical practice.

PROGRAM LEARNING OUTCOMES SUPPORTING STANDARD 2-24m

1. Patient-Centered Care: Demonstrate understanding of healthcare disparities and cultural awareness in patient counseling and patient advocacy
2. Evidence-Based Care: Apply current, evidence-based oral healthcare within the scope of general dentistry
3. Culturally competent, empathic communication: Demonstrate patient centered, empathic, and culturally competent communication and interpersonal skills
4. Oral and Written Communication: Demonstrate sound oral and written communications in patient care
5. Critical Thinking: Utilize critical thinking, problem solving skills and systemic thinking in assessing and making reasoned, evidence-based decisions in patient care
6. Ethics and Professionalism: Demonstrate professionalism and ethical decision making
7. Biomedical Sciences Knowledge: Demonstrate an understanding of the fundamentals of biomedical sciences and apply them appropriately in oral healthcare

8. Practice Management: Apply legal, regulatory and business management concepts related to provision of oral healthcare services

COURSES SUPPORTING STANDARD 2-24m

Course #	Course Title	Credits	Year	Term
OMFS 772	Clinical Clerkship: Oral and Maxillofacial Surgery <i>4 weeks, 30 hours per week plus call CLIN</i>	8	DS 3	Spring

The students will enter the oral and maxillofacial surgery care team for this clerkship including the care of patients for dentoalveolar surgery, major maxillofacial surgery and complex conditions of the head and neck. Clinical experience in ambulatory oral surgery and anesthesia and assisting for maxillofacial surgery in the operating room including emergency and trauma care occurs. Participation in hospital rounds and conferences occurs.

Course #	Course Title	Credits	Year	Term
OMFS 752	Clinical Clerkship: Pediatric Dentistry <i>4 weeks, 30 hours per week plus call CLIN</i>	8	DS 3	Spring

The student will engage in clinical experiences in the pediatric dentistry clinic as a member of the care team, treating patients under the supervision of pediatric dentistry faculty. Consultation on pediatric patients referred for oral conditions via pediatric medicine will occur.

Course #	Course Title	Credits	Year	Term
Odont 662	Comprehensive Care Family Dentistry <i>CLIN and LAB</i>	3	DS 2	Spring

Treatment of caries and periodontal disease with discipline based faculty from operative dentistry, prosthodontics, endodontology and periodontology is carried out with the DS 2 as an active participant in the care team that includes a DS 3 and DS 4. Students will participate in case presentations, medical record assessment and recording, and other aspects of the clinic activities. The laboratory will include a simulated clinic visit including OSCE record and electronic health record.

Course #	Course Title	Credits	Year	Term
Odont 761	Comprehensive Care Family Dentistry <i>CLIN</i>	8	DS 3	Fall

This daily clinic will focus on students developing their family of patients in conjunction with other members of their team headed by the faculty team leader. Emphasis on diagnosis and treatment planning and completion of initial urgent procedures will be carried out.

Course #	Course Title	Credits	Year	Term
Odont 762	Comprehensive Care Family Dentistry CLIN	8	DS 3	Spring

This daily clinic will further develop the completion of Phase 1 therapy, disease control mitigation of risk and initiation of preventive care in the patient family. The student will develop this under the leadership of the team leader. The student will also begin aspects of Phase 2 therapy, reconstructive dentistry and address other comorbidities in patient care.

Course #	Course Title	Credits	Year	Term
Odont 861	Comprehensive Care Family Dentistry CLIN	8	DS 4	Fall

This clinical practicum will focus on the daily clinical activities of a practicing dentist including all intake, comprehensive care, case management issue extant under the leadership of the team leader. The DS 4 will also demonstrate leadership of the oral healthcare team including DS2 and 3 students and the dental assisting and dental hygiene staff through cooperation and assessment of outcomes of care.

Course #	Course Title	Credits	Year	Term
Odont 862	Comprehensive Care Family Dentistry CLIN	8	DS 4	Spring

The final semester of comprehensive care family dentistry will focus on the completion of phase 2 care for patients of record, increasing facility in providing initial evaluation and care of the dental patient, and addressing complex issues in care including those associated to overall health, stages of life, cultural awareness among others.

COMPETENCY ASSESSMENTS SUPPORTING STANDARD 2-24m

1. Clinical Procedures, (CP)
2. Problem Solving (PS)
3. Clinical Reasoning (CR)
4. Professionalism (P)
5. Ethical Decision Making (EDM)
6. Communication Skills (CS)

Competency assessment	Course number	Assessment method	Prerequisites	Comments
Dental emergencies	Odont 861 or Odont 862	Patient Based CP, PS, CR, CS, P, EDM	When ready per group leader assessment	Competencies 1, 2, 3, 4, 5, 6, 7

NARRATIVE SUPPORTING STANDARD 2-24m

Provide a description of planned student experiences. Relate these experiences to the school's defined scope of general practice.

Dental emergencies, including mostly those caused by infection and trauma, will be seen by students as an integrated aspect of patient care within their teams in comprehensive care dentistry, in community clinics and whole on rotation especially in pediatric dentistry and in oral and maxillofacial surgery. While it is anticipated that all students will have a strong experience in dental emergencies, it is by its nature that each dental emergency has with it some unique characteristics. Thus the comprehensive care group will have scheduled time daily for the team to see dental emergencies and assign students as needed to the care of patients. These cases as well will be part of case conference and part of the competency assessment of students in dental emergencies as part of a competency assessment case presentation.

Describe how students will be assessed

The competency assessment for dental emergencies is noted in the above section. It is planned to be a case based presentation of a patient treated with the dental student either individually under direct supervision, or if more complex with consultant(s) from medicine, surgery, and/or dental specialists. The case defense will be with regard to the successful assessment, appropriate treatment and/or referral, assessment of outcome and consistent with the rubric measuring all aspects of the patient interaction including assessment, communication, knowledge, clinical skills, reflection and professionalism.

Describe how competency will be met and ensured for all graduates.

Competency in dental emergencies is ensured in that every dental graduate must complete the competency assessments noted in [Appendix 2-24 Mapping of all Competency Assessments](#) which are summarized as related to 2-24m in the listing above showing those CA's. Completion of all CA's are linked to the courses where they occur and are required for passing the course and thus required for all graduates.

STANDARD 2-24 (n)

2-24 At a minimum, graduates must be competent in providing oral health care within the scope of general dentistry, as defined by the school, including:

n. malocclusion and space management; and

COMPETENCY STATEMENTS SUPPORTING STANDARD 2-24n

1. Demonstrate patient interaction that provides able and personable communication with the patient that addresses all clinical issues and addresses concerns in an empathetic and culturally aware fashion
2. Provide verbal and written patient presentation that demonstrates the ability to present key findings and organize them in a fashion to make appropriate care decisions.
3. Utilize all pertinent biomedical knowledge to influence and optimize the care of the patient
4. Apply knowledge with critical thinking developed in the care of patients across all pertinent multiple domains.
5. Demonstrate the ability to comfortably apply clinical skills for dental procedures in a fashion that promotes the continued development of skills, patient confidence, and consideration for applying more advanced skills when needed.

PROGRAM LEARNING OUTCOMES SUPPORTING STANDARD 2-24n

1. Patient-Centered Care: Demonstrate understanding of healthcare disparities and cultural awareness in patient counseling and patient advocacy
2. Evidence-Based Care: Apply current, evidence-based oral healthcare within the scope of general dentistry
3. Culturally competent, empathic communication: Demonstrate patient centered, empathic, and culturally competent communication and interpersonal skills
4. Oral and Written Communication: Demonstrate sound oral and written communications in patient care
5. Critical Thinking: Utilize critical thinking, problem solving skills and systemic thinking in assessing and making reasoned, evidence-based decisions in patient care
6. Ethics and Professionalism: Demonstrate professionalism and ethical decision making
7. Biomedical Sciences Knowledge: Demonstrate an understanding of the fundamentals of biomedical sciences and apply them appropriately in oral healthcare
8. Practice Management: Apply legal, regulatory and business management concepts related to provision of oral healthcare services

COURSES SUPPORTING STANDARD 2-24n

Course #	Course Title	Credits	Year	Term
OMFS 652	Orthodontics and Craniofacial Growth and Development <i>LAL and LAB</i>	3	DS 2	Spring

Principles of craniofacial growth and development will be presented. Abnormalities leading to malocclusion and dentofacial deformities will be shown. Methods of diagnosing disorders of dental facial growth and development will be understood and utilized by students. Orthodontic interventions for these conditions including methods, and outcomes will be shown. The laboratory will concentrate on diagnosis and orthodontic treatment methods.

Course #	Course Title	Credits	Year	Term
OMFS 771	Pediatric Dentistry <i>LAL and LAB</i>	3	DS 3	Fall

Child development and child management in the clinical setting will be developed from a holistic and family based perspective. Major diseases in growth and development of the oral cavity will be elucidated. The development of the deciduous and mixed dentition along with craniofacial development is presented. Caries diagnosis, treatment and prevention in the deciduous dentition is shown. The laboratory will provide simulated clinical experiences in caries treatment, deciduous crowns, space maintenance, and care of the pediatric patient.

Course #	Course Title	Credits	Year	Term
OMFS 752	Clinical Clerkship: Pediatric Dentistry <i>4 weeks, 30 hours per week plus call</i> CLIN	8	DS 3	Spring

The student will engage in clinical experiences in the pediatric dentistry clinic as a member of the care team, treating patients under the supervision of pediatric dentistry faculty. Consultation on pediatric patients referred for oral conditions via pediatric medicine will occur.

Course #	Course Title	Credits	Year	Term
OMFS 872	Clinical Clerkship: Orthodontics <i>4 hours per week for 8 weeks</i> CLIN	2	DS 4	Spring

Students will enter the orthodontic care team providing diagnostic and treatment services for patients undergoing orthodontic care under the auspices of orthodontic faculty in College of Dental Medicine clinics.

COMPETENCY ASSESSMENTS SUPPORTING STANDARD 2-24n

1. Clinical Procedures, (CP)
2. Problem Solving (PS)
3. Clinical Reasoning (CR)
4. Professionalism (P)
5. Ethical Decision Making (EDM)
6. Communication Skills (CS)

Competency assessment	Course number	Assessment method	Prerequisites	Comments
Orthodontic Growth and development assessment	OMFS 872	Patient Based CP, PS, CR, CS, P, EDM	In orthodontic clerkship or comp care clinic	1, 2, 3, 4, 5, 6, 7

NARRATIVE SUPPORTING STANDARD 2-24n

Provide a description of planned student experiences. Relate these experiences to the school's defined scope of general practice

Foundational knowledge in growth and development, malocclusion and space management occur in OMFS 652 and in pediatric dentistry OMFS 771. Student clinical experiences will be predominantly during rotations to orthodontics OMFS 862 and pediatric dentistry OMFS 752. In these rotations the student will engage in clinical experiences in the pediatric dentistry clinic as a member of the care team, treating patients under the supervision of pediatric dentistry faculty. Consultation on pediatric patients referred for oral conditions via pediatric medicine will occur. In the orthodontic rotation, students will enter the orthodontic care team providing diagnostic and treatment services for patients undergoing orthodontic care under the auspices of orthodontic faculty in College of Dental Medicine clinics.

Describe how students will be assessed

As noted above, a patient based competency assessment is performed while the student is on orthodontic rotation in which the student must assess and present the salient craniofacial and malocclusion findings, the treatment plan, interventions completed to the point of the CA and the outcomes or anticipated outcomes of care. This presentation is developed with a full orthodontic data base consisting of clinical photographs, models, cephalometric evaluation and other imaging.

Describe how competency will be met and ensured for all graduates

Competency in malocclusion and space management is ensured in that every dental graduate must complete the competency assessments noted in **Appendix 2-24 Mapping of all Competency Assessments** which are summarized as related to 2-24n in the listing above showing those CA's. Completion of all CA's are linked to the courses where they occur and are required for passing the course and thus required for all graduates.

STANDARD 2-24 (o)

2-24 At a minimum, graduates must be competent in providing oral health care within the scope of general dentistry, as defined by the school, including:

- o. Evaluation of the outcomes of treatment, recall strategies, and prognosis.

COMPETENCY STATEMENTS SUPPORTING STANDARD 2-24o

1. Provide verbal and written patient presentation that demonstrates the ability to present key findings and organize them in a fashion to make appropriate care decisions.
2. Utilize all pertinent biomedical knowledge to influence and optimize the care of the patient
3. Apply knowledge with critical thinking developed in the care of patients across all pertinent multiple domains.
6. Apply the tenets of ethical behavior and professionalism with exemplary leadership empathy, clinical behavioral understanding customized to the patient's needs.
7. Integrate all aspects of the practice management, systems-based practice, legal and regulatory requirements of practice and consistently applies this knowledge as a skill in clinical practice.

PROGRAM LEARNING OUTCOMES SUPPORTING STANDARD 2-24o

Patient-Centered Care: Demonstrate understanding of healthcare disparities and cultural awareness in patient counseling and patient advocacy

Evidence-Based Care: Apply current, evidence-based oral healthcare within the scope of general dentistry

Culturally competent, empathic communication: Demonstrate patient centered, empathic, and culturally competent communication and interpersonal skills

Critical Thinking: Utilize critical thinking, problem solving skills and systemic thinking in assessing and making reasoned, evidence-based decisions in patient care

Biomedical Sciences Knowledge: Demonstrate an understanding of the fundamentals of biomedical sciences and apply them appropriately in oral healthcare

COURSES SUPPORTING STANDARD 2-24o

While the outcomes of care and prognosis and recall are components of all clinical courses, these areas are most principally addressed in the course of care of comprehensive care patients and in junior and senior year seminars which are evidentiary and case based. Case conference and assessment of global competency during these student presentations in Odont 861 and 862 are the leading areas for this activity

Course #	Course Title	Credits	Year	Term
Odont 522	Cariology LAL	3	DS 1	Spring

The biology, phenotype, epidemiology, anatomical changes from caries is presented. The prevention of caries through CAMBRA is developed as well as strategies for management at all stages of the disease. The course introduces the pathways of caries as a regional and systemic disease.

Course #	Course Title	Credits	Year	Term
Odont 761	Comprehensive Care Family Dentistry CLIN	8	DS 3	Fall

This daily clinic will focus on students developing their family of patients in conjunction with other members of their team headed by the faculty team leader. Emphasis on diagnosis and treatment planning and completion of initial urgent procedures will be carried out.

Course #	Course Title	Credits	Year	Term
Odont 752	Periodontology Seminar SEM	2	DS 3	Spring

Using a case-based format, the treatment planning, outcome assessment, management of medical and dental comorbidities among others of the patient with diseases of the periodontium is presented. Patient-centered, health systems informed, and culturally aware aspects of care are discussed through the case-based format.

Course #	Course Title	Credits	Year	Term
Odont 762	Comprehensive Care Family Dentistry CLIN	8	DS 3	Spring

This daily clinic will further develop the completion of Phase 1 therapy, disease control mitigation of risk and initiation of preventive care in the patient family. The student will develop this under the leadership of the team leader. The student will also begin aspects of Phase 2 therapy, reconstructive dentistry and address other comorbidities in patient care.

Course #	Course Title	Credits	Year	Term
Odont 841	Periodontology Seminar SEM	2	DS 4	Fall

Using case-based format, interdisciplinary problems especially with orthodontics, endodontics and prosthodontic consideration will be developed through patient presentations of patients of record or via the OSCE format. Further exploration of comorbidities in periodontal diseases will be developed.

Course #	Course Title	Credits	Year	Term
Odont 851	Prosthodontics and Implant Dentistry: Implant Surgery and Prosthodontic Reconstruction LAL and LAB	3	DS 4	Fall

The replacement of missing teeth utilizing dental implants is presented. This course includes the biomechanics of implants, concepts of osseointegration, restoration options for implants, implant systems and the placement of implants. The laboratory will teach the placement of implants including appropriate assessment and osteotomies, and the restoration of implants using indirect and direct techniques.

Course #	Course Title	Credits	Year	Term
Odont 861	Comprehensive Care Family Dentistry CLIN	8	DS 4	Fall

This clinical practicum will focus on the daily clinical activities of a practicing dentist including all intake, comprehensive care, case management issue extant under the leadership of the team leader. The DS 4 will also demonstrate leadership of the oral healthcare team including DS2 and 3 students and the dental assisting and dental hygiene staff through cooperation and assessment of outcomes of care.

Course #	Course Title	Credits	Year	Term
Odont 862	Comprehensive Care Family Dentistry CLIN	8	DS 4	Spring

The final semester of comprehensive care family dentistry will focus on the completion of phase 2 care for patients of record, increasing facility in providing initial evaluation and care of the dental patient, and addressing complex issues in care including those associated to overall health, stages of life, cultural awareness among others.

Course #	Course Title	Credits	Year	Term
OMFS 752	Clinical Clerkship: Pediatric Dentistry 4 weeks, 30 hours per week plus call CLIN	8	DS 3	Spring

The student will engage in clinical experiences in the pediatric dentistry clinic as a member of the care team, treating patients under the supervision of pediatric dentistry faculty. Consultation on pediatric patients referred for oral conditions via pediatric medicine will occur.

Course #	Course Title	Credits	Year	Term
OMFS 872	Clinical Clerkship: Orthodontics 4 hours per week for 8 weeks CLIN	2	DS 4	Spring

Students will enter the orthodontic care team providing diagnostic and treatment services for patients undergoing orthodontic care under the auspices of orthodontic faculty in College of Dental Medicine clinics.

COMPETENCY ASSESSMENTS SUPPORTING STANDARD 2-24o

1. Clinical Procedures (CP)
2. Problem Solving (PS)
3. Clinical Reasoning (CR)
4. Professionalism (P)
5. Ethical Decision Making (EDM)
6. Communication Skills (CS)

Competency assessment	Course number	Assessment method	Prerequisites	Comments
Outcomes of periodontal therapy	Odont 752	Patient based CP, PS, CR, CS, P, EDM	Seminar participation	Patient selected for students' existing patients
Integrated perio care (at least 3) perio/pros/endo/ortho/oral medicine/oral surgery assessment	Odont 841	Patient based CP, PS, CR, CS, P, EDM	Seminar participation	Patient selected from students' existing patients
Comprehensive caries treatment	Odont 761	Patient based including comp evaluation of all restorations, application of CAMBRA and disease control CP, PS, CR, CS, P, EDM	Daily participation in clinic and case completion	
Demonstration of phase 1 therapy	Odont 762	Patient based CP, PS, CR, CS, P, EDM	Phase 1 therapy completed in at least 3 cases	

Completion of phase 1 and 2 therapy	Odont 861 or Odont 862	Patient based CP, PS, CR, CS, P, EDM	Odont 862 for at least 8 weeks	
Dental care of the child preschool	OMFS 752	Patient based CP, PS, CR, CS, P, EDM	In peds clerkship or in comp care clinic	
Dental care of the child K-12	OMFS 752	Patient based CP, PS, CR, CS, P, EDM	In peds clerkship or in comp care clinic	
Orthodontic growth and development assessment	OMFS 872	Patient based CP, PS, CR, CS, P, EDM	In orthodontic clerkship or comp care clinic	

NARRATIVE SUPPORTING STANDARD 2-24o

[Provide a description of planned student experiences. Relate these experiences to the school's defined scope of general practice](#)

Student experiences in the evaluation of the outcomes of treatment, recall strategies, and prognosis are given their foundation in the didactic aspects of courses in clinical dental medicine most principally in the Odontology and Oral and Maxillofacial Studies theme of the curriculum. Regarding specific diseases for which interventions are carried out:

Caries outcomes of treatment, recall strategies and prognosis are based with foundational knowledge in the Dental Caries course Odont 522. This foundational knowledge is applied in Comprehensive Care Dentistry in the D2, D3 and D4 year whereby patients present form initial caries assessment through assessment of caries risk, actions based upon that assessment and recall strategies. Students perform case presentations upon completion of phase one therapy that assesses these same issues. The senior global competency assessment for phase two comprehensive care as well integrates caries outcomes of treatment into the assessment.

Regarding periodontal disease, pulpal disease, and edentulism outcomes of treatment, recall strategies and prognosis, foundational knowledge is presented in didactic discipline based courses and each clinical component is as well presented in comprehensive care dentistry as a component of the case presentation format described above

Describe how students will be assessed

The competency assessment for outcomes of treatment is ubiquitous in all clinical competency assessments. However those most principally directed towards this are reprised to follow:

- **Outcomes of periodontal care:** a patient-based CA where the student presented the results/outcomes of treatment, presents recall strategies and prognosis.
- **Integrated periodontology care**
(at least 3) perio/pros/endo/ortho/ oral medicine/ oral surgery assessment: This is a patient based CA where the student has developed integrated care with at least two other disciplines that interface with periodontology outcomes to assess overall outcomes in all oral health domains
- **Comprehensive caries treatment:** a patient based CA where the student presents the outcomes of caries treatment and utilizing CAMBRA develops risk assessment and recall strategies
- **Demonstration of phase 1 therapy**
- **Completion of phase 21 and phase 2 therapy:** These patient based CA's demonstrate the students' ability to assess the outcomes of treatment across disciplines of a patient of record in Odont 861 Odont 862
- **Dental care of the child preschool**
- **Dental care of the child K-12**
- **Orthodontic growth and development:**
The outcomes of treatment of the preschooler, K-12 and orthodontic patient are presented by the student in a case-based CA including assessment for follow-up and prognosis

Describe how competency will be met and ensured for all graduates.

Competency in evaluation of the outcomes of treatment, recall strategies and prognosis is ensured in that every dental graduate must complete the competency assessments noted in [Appendix 2-24 Mapping of all Competency Assessments](#) which are summarized as related to 2-24o in the listing above showing those CA's. Completion of all CA's are linked to the courses where they occur and are required for passing the course and thus required for all graduates.

B. Supportive Documentation:

1. Student clinical assessment forms, as available

[Appendix 2-24 Competency Assessment - General Rubric for Clinical Dentistry](#)
[Appendix 2-24 Mapping of all Competency Assessments](#)

STANDARD 2-25

2-25 Graduates **must** be competent in assessing the treatment needs of patients with special needs.

Intent:

An appropriate patient pool should be available to provide experiences that may include patients whose medical, physical, psychological, or social situations make it necessary to consider a wide range of assessment and care options. The assessment should emphasize the importance of non-dental considerations. These individuals include, but are not limited to, people with developmental disabilities, cognitive impairment, complex medical problems, significant physical limitations, and the vulnerable elderly. Clinical instruction and experience with the patients with special needs should include instruction in proper communication techniques and assessing the treatment needs compatible with the special need.

A. Description:

1. Describe planned student experiences in assessing the treatment of patients with special needs.

The university is planning a CNU Hospital and clinics in Elk Grove to be completed in the next 4 years. The CNUCDM has requested that the inpatient service include two dental operating rooms for the care of ambulatory oral surgery, dental and pediatric dental patients especially those with special needs. This is an acute resource need in northern California where patients who require anesthesia services, behavioral management or are physically unable to have care in a traditional setting are given options. It is the university plan to highlight all health care including dental health care for patients with special needs.

In addition patients with special needs who can be mainstreamed into care in clinical activities will do so as well with the accommodations needed to carry out that care including room access, lifts and behavioral care.

2. Describe how students will be assessed in assessing the treatment needs of patients with special needs.

Students will, as noted in the standard, not be competent to treat patients with special needs at the time of graduation. However it is critical that students demonstrate the ability to assess and appropriately treat and/or refer patients for their oral health needs. The students will as part of the courses below: Senior medicine seminar, present one of their case based presentations on a patient with special needs approved by the faculty

Course description

Course #	Course Title	Credits	Year	Term
HS 821	Senior Year Medicine Seminar <i>SEM</i>	2	DS 4	Fall

Weekly case-based seminars presenting existing dental and comprehensive care patients and their medical comorbidities. Continued development of advanced based cases including those on hospitalized patients.

Course #	Course Title	Credits	Year	Term
HS 822	Senior Year Medicine Seminar <i>SEM</i>	2	DS 4	Spring

Weekly case-based seminars presenting existing dental and comprehensive care patients and their medical comorbidities. Development of advanced knowledge of cases presenting for medical treatment for which dental consultation is needed in the preanesthetic presurgical patient and in concurrence with major systemic disease including trauma, stroke, myocardial infarction.

Competency assessment description for special needs patient

1. Clinical Procedures, (CP)
2. Problem Solving (PS)
3. Clinical Reasoning (CR)
4. Professionalism (P)
5. Ethical Decision Making (EDM)
6. Communication Skills (CS)

Competency assessment	Course number	Assessment Method Domains	Prerequisites	Comments And Competency Statement Numerical links
Complex medical case assessment: Special Needs Patient	HS 821 HS 822	Patient based PS, CR, CS, P, EDM	Concurrent medicine seminar	2, 3, 4, 6, 7 Patient selected from preop pool evaluated by student

B. Supportive Documentation:

1. Student assessment forms, as available

An assessment form particular to this competency is not developed. The general rubric for assessing clinical dental competency assessment is in [Appendix 2-24 Competency Assessment - General Rubric for Clinical Dentistry](#).

2. List of planned rotations or sites intended to give students experience with special needs patients

Comprehensive Care Dentistry CNUCDM

Pediatric dental clinic CNUCDM

CNU Hospitals and Clinics

Community Based education sites

STANDARD 2-26

- 2-26** Dental education programs **must** make available opportunities and encourage students to engage in service learning experiences and/or community-based learning experiences.

Intent:

Service learning experiences and/or community-based learning experiences are essential to the development of a culturally competent oral health care workforce. The interaction and treatment of diverse populations in a community-based clinical environment adds a special dimension to clinical learning experience and engenders a life-long appreciation for the value of community service.

A. Description:

1. Describe plans for service-learning and/or community-based learning experiences, including the types of patient interactions and any planned requirements/prerequisites for students to participate. What criteria will be used to determine whether the experiences aid in the development of a culturally competent oral healthcare provider?

Service learning attached to academic courses occur in the following courses:

Course #	Course Title	Credits	Year	Term
BSS 861	Clinical Clerkship: Community-based Education 4 weeks, 30 hours per week plus call	8	DS 4	Fall

Affiliated health systems based practices will accept CNU students into their care teams where senior students will provide clinical care under the supervision of Volunteer Community-Based Faculty in those sites. Suitable transportation and housing will be arranged for where needed. The purpose of the course is to provide community engagement with the constituencies served, to gain experience in community-based clinical care and to interact with the interprofessional and intraprofessional care team

Course #	Course Title	Credits	Year	Term
BSS 862	Clinical Clerkship: Community-based Education 4 weeks, 30 hours per week plus call	8	DS 4	Spring

This course will be at a second community-based rotation site to elaborate on the activities of the first rotation and engage a new community and a new clinic. In addition to comprehensive care experience, the student will compare and contrast communities and clinical care entities and provide a reflective essay on their community care experience.

In the above courses the student will engage the communities they serve including the health system, the populations specific to the clinics as well as a direct participant in community

activities. This service learning environment includes the migrant worker Hispanic community, Asian immigrants, African American, American Indian and rural communities. All students are required to participate in service learning as BSS 861 and BSS 862 are required courses.

The development of a culturally competent oral health care provider is an aspirational goal. CNUCDM believes that cultural humility is the demonstration of an understanding of the essential role of culture in health and wellness, but does not imply abilities to manage all cultural issues. It should give the students the tools to be of assistance to all patients from all cultures utilizing the tools of cultural humility.

In that vein, the students must write a reflective essay at the completion of BSS 862 that describes their experiences with service learning in the community they serve and asks for recommendations on how to positively impact the health of patients they served during their 8 weeks of rotation

Community assessment	BSS 862	Reflective essay PS, CR, CS, P, EDM	Enrolled in BSS 862 and in senior seminar in public health	2, 3, 4, 6, 7
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2. Describe how students will be informed of these opportunities.

BSS 861 and BSS 862 are in the course catalogue. In addition to this, student and faculty led service learning opportunities are replete in the CNU academic health center and include oral health opportunities. These exist as well with the California Dental Association and the Sacramento District Dental Society.

3. If all students will not participate in service-learning and/or community-based learning experiences, how does the school intend to expose these students to community service or ensure that all students are culturally competent?

All students will participate in service learning

B. Supportive Documentation:

1. List of planned sites and experiences for students, as available

Sacramento Native American Health Center
Asian Health Services
HALO Health community clinics
Wellspace community clinics
El Dorado community health
Shingle Springs Indian Health

Colusa Indian Health
CDA cares events

2. School's policies and procedures for service learning

Appendix 2-3 2020-2021 CNUCDM Student Handbook

STANDARD 3 - FACULTY AND STAFF

STANDARD 3-1

- 3-1** The number and distribution of faculty and staff **must** be sufficient to meet the dental school's stated purpose/mission, goals and objectives, at all sites where required educational activity occurs.

A. Description:

1. Describe the hiring plan for the dental school for each year until the school is fully operational, and at all sites where required educational activity will occur including:
 - a. the planned distribution and balance of academic titles and experience within each department of the dental school,
 - b. the planned faculty/student instructional ratios during laboratory, preclinical and clinical sessions
 - c. the number of full-time equivalent faculty positions planned to be allocated to the dental program,
 - d. The percentage of full-time equivalent positions assigned to the school that will be filled by part-time faculty.

The hiring plan for the faculty of the CNUCDM is included in **Appendix 3-1 Faculty Hiring Plan**. The plan includes a pre-enrollment faculty of 15 with an increase of 15 FTE's per annum for a mature faculty of 60 by year 4. Among these 60 faculty, 42 will be FTE's assigned to the CDM budget. These 42 faculty are those responsible for the curriculum in dental medicine. The remainder will be basic science faculty, assigned to Common Pathway courses, paid by the College of Medicine at the agreed to rate of \$400,000 per annum and reimbursed through the dental medicine budget to the College of Medicine. Additionally, volunteer Community faculty will be salaried by their health systems entity while CNU students rotate on clerkships to those sites.

The plan is undergoing implementation at the current time with the completion of hiring as employees:

Dean, Leon Assael,

Associate Dean of Academic Affairs : Interim ADAA Rosemary Wu DMD MS

(This position was filled until April 25,2019 at which time it was vacated and reported to the ADEA Website. One in person and two phone interviews have taken place and a second in person interview is scheduled for June 10, 2019. An interim ADAA, Rosemary Wu DMD MS has been appointed as interim ADAA.)

Assistant Dean of Clinical Affairs, Kevin Keating,

Assistant Dean of research, Paul Glassman,

The Assistant Dean of Student Affairs and Admissions, Richard Simonsen.

Also discipline based leaders have been selected for hiring as needed 120 days ahead of

coursework. These include:

Periodontology, Rosemary Wu,
Prosthodontics, Jeffrey Nordlander
Oral maxillofacial surgery, Michael Cadra
Operative Dentistry/Preclinical: Nejleh Abed, David Graham
Endodontics: Kevin Keating
Public Health Dentistry: Huong Le

Pending leadership discussions are underway for hiring oral and maxillofacial radiology, oral and maxillofacial pathology, pediatric dentistry, and orthodontics. This will result in leadership positions identified for all dental specialties.

Some faculty whose start date has not yet arrived are currently under consulting engagement for the preparation of the self-study and will have start dates subsequently. This is summarized in [Appendix 3-1 Hiring Plan for Faculty Years 1 and 2](#) as well as in the President's project management timetable in [Appendix 1-1 President Report On the Planning For Dental College 2018](#).

As of April 15, 2019, 73 prospective full and part time faculty to provide didactic, laboratory and simulation education and experiential patient care education have committed to joining the College of Dental Medicine as clinical faculty as noted in [Appendix 3-1 SDDS Faculty Spreadsheet](#).

	Year 1	Year 2	Year 3	Year 4
Research Faculty	1	2	2	2
Teaching Faculty	14 (includes 5 administrator leaders)	28	43	58
Total	15	30	45	60

CNUCDM anticipates 42 FTE salaried faculty, 30 of whom will be full-time, making the salaried faculty make-up of 71% full-time. Our target is to have at least 50% of the faculty full-time and the other 50% part-time up to .8. 18 FTE non-salaried Volunteer Community Faculty will be utilized at health systems for which we have or are developing MOUs.

Teaching faculty will provide instruction for two classes per semester, while research faculty will teach one course per semester. Each class will be taught for 3-12 hours a week.

Faculty will also develop curriculum, with their focus on developing student learning outcomes, and faculty will be responsible for assessing student learning. Additionally, faculty will mentor students and serve on research project/dissertation committees. Faculty members will serve as academic advisors for a maximum of ten students. Research faculty are allotted 30 hours a week for research.

The Associate/Assistant Deans of Academic Affairs, Curriculum, Student Affairs and Clinical Affairs will lead the assessment of educational effectiveness by monitoring set norms and developing programs to address ongoing issues.

Supervision of students while at practicums and internships will occur on site. It is the responsibility of the training locations to have a clinical supervisor on staff to provide supervision and mentorship to the students. Separate faculty are not hired by the University for this purpose, though the Associate Dean of Clinical Education and the Field Placement Office will monitor placements to ensure that students are being trained in the key areas of the practice of dentistry and at the expected level proficiency.

Types of Faculty

- Basic Medical Sciences educators (in addition to COM Common Pathway educators)
- Preclinical educators
- Clinical educators - general dentistry
- Clinical educators - dental specialties
- Part-time clinical educators
- Volunteer Clinical Adjunct Faculty (no cost) associated to affiliated sites

A breakdown of faculty duties into hours per week, including a list of responsibilities will be noted in the annual effort statements for individual faculty against which they will be assessed. This is discussed further in Standard 3-4. The number and type of all CNUCDM faculty are outlined in **Exhibit R**.

The College of Dental Medicine at CNU will provide didactic, laboratory and simulation education and experiential patient care education with a team of primarily full-time faculty. Our target is to have at least 50% of the faculty full-time and the other 50% part-time for up to eight full time equivalent salaried positions. While the part-time faculty will include the administrative team and content experts across the spectrum of dental medicine, its disciplines and its specialties, part-time clinical educators from the Northstate region will provide clinical preceptorship/education, mentorship, lecture and small group learning seminars at the primary campus and in community-based education sites.

A planning group of over 70 future faculty associated to the Sacramento District Dental Society has met several times to develop curriculum. The 12 original members of the planning group for the College of Dental Medicine will also serve in part-time faculty capacity. The hiring plan calls for 60 FTEs comprised of full- and part-time faculty; this plan provides a comprehensive mix to accommodate instructional, clinical, service and scholarly needs of the college.

CNUCDM will utilize a cohort registration model. All students will be admitted as full-time only. The program will initially admit 80 students to the program and 80 in each subsequent year of the program. Class attendance and attendance in laboratories and clinics is required. Incomplete is offered as a grade per policy as contained in the student handbook and each syllabus.

Year	BMS Educator	Preclinical Ed	Clinical Ed (gen)	Clinical Ed (spec)	Total Teaching Faculty	Cohort Size	Enrollment	Total Classes Covered (yr)	Student: Teacher Ratio
1	6	5	2	2	15	80	80	20	6:1
2	6	8	10	6	30	80	160	36	6:1
3	6	8	20	11	45	80	240	62	6:1
4	6	8	30	16	60	80	320	76	6:1
5	6	8	30	16	60	80	80	76	6:1

*Fifth year in this chart represents our ability to accommodate students who fall behind cohort and need to make up coursework

Hiring Plan for CDM Faculty: 2020-21 and 2021-22

Academic Year	Position	Course	Name	Hire Date
2020-21	*Assistant Professor of Pathology	Hematology	Nazila Hejazi	5-1-2020
	*Associate Professor of Anatomy	Integumentary and Musculoskeletal	Nripendra Dhillon	5-1-2020
	Professor	Foundations of Odontology	Kevin Keating	3-1-2019
	Professor	Dental Anatomy	Wai Chen	6-1-2020
	Professor	Dental Anatomy Foundations of Dental Medicine Surgical Anatomy of the Head and Neck	Leon Assael	12-1-2018
	Professor	Managing Student Life Ethics in Dental Medicine and Health Care	Richard Simonsen	2-14-2019
	*Professor of Clinical Neurology	Neuroscience	Forshing Lui	5-1-2020
	*Associate Professor of Emergency Medicine	Cardiovascular and Pulmonary Systems	Darilyn Falck	10-1-2020
	*Associate Professor of Physiology	Cardiovascular and Pulmonary Systems	Tracy Yarbrough	10-1-2020
	Professor	Cariology	Kevin Keating	3-1-2020
	Assistant Professor	Oral Microbiology/Immunology	Pending	10-1-2020

Academic Year	Position	Course	Name	Hire Date
2021-22	*Associate Professor of Physiology	Renal System	Tracy Yarbrough	5-1-2021
	*Professor of Molecular Biology, Immunology and Microbiology	Gastroenterology	Nehad El-Sawi	5-1-2021
	*Associate Professor of Physiology, Endocrinology and Clinical Skills	Endocrine System	Mark Sheffield	5-1-2021
	Assistant Professor	Clinical Pharmacology 1	Pending	5-1-2021
	Assistant Professor	Operative Dentistry	David Graham	5-1-2021
	Assistant Professor	Periodontology	Rosemary Wu	5-1-2021
	Assistant Professor	Dental Anesthesiology 1: Local Anesthesia Dental Anesthesiology 2: Pain and Anxiety Control, Analgesia, Medical Management of Local Anesthesia	Michael Cadra	5-1-2021
	Assistant Professor	Oral Radiology 1	Shikha Rathi	5-1-2021
	Assistant Professor	Clinical Pharmacology 2/Oral Pharmacology	Jagdev Heir	5-1-2021
	Associate/Assistant Professor	Prosthodontics and Implant Dentistry: Removable Prosthodontics	Jeffrey Nordlander	10-1-2021
	Professor	Comprehensive Care Family Dentistry Endodontology, Diseases of the Pulp and Pathways of Odontogenic Infection	Kevin Keating	3-1-2019
	Associate/Assistant Professor	Oral Pathology/Oral Medicine 1	Pending	10-1-2021
	Associate/Assistant Professor	Orthodontics and Craniofacial Growth and Development	Pending	10-1-2021
	Associate/Assistant Professor	Behavioral Medicine	Bret McGlaughlin	10-1-2021
	Associate/Assistant Professor	Dental Medicine at all Stages of Life	Pending	10-1-2021

3. * Faculty shared with College of Medicine

2 Describe criteria that will be used to assign faculty job responsibilities and workload, including at all sites where required educational activity will occur.

Faculty assignments, job responsibilities and workload depend upon the following criteria:

1. Needs of the college of dental medicine
 - i. Pedagogic
 - ii. Student life
 - iii. Patient care

- iv. Service
 - v. Research
 - vi. Advancement
2. Capacity of the faculty member to achieve those needs
 - i. Each year assignments are made taking into account the overall capacity and abilities of the faculty member
 3. Faculty retention and development
 - i. Faculty education and development that promotes success
 - ii. Work/life balance

Assignments of faculty in these areas are made on an annual basis and are included in the annual review of each faculty member to assess the utility of the assignment with the above criteria, the capacity of the faculty member to achieve that assignment and the extent to which it contributes to the faculty member's success and retention. Resources, faculty development, staffing, and educational needs associated to those tasks are reviewed to ensure that the assignment is appropriate in the environment and is consistent with institutional capacity.

While the above assignments are for the Elk Grove primary campus site, beginning in 2023-2024, community based faculty will have students on rotation for BSS 861 and BSS 862, community based education as well as in rotations on Oral surgery and pediatric dentistry. The teaching assignments in those locations are clinical and associated to the patient care ongoing at those sites. It is expected that the calibrated faculty at those sites will provide clinical education for patients being treated by students chairside and provide mentorship, understanding of systems based practice and related activities at the site, as well as participate in appropriate case based conferences.

3. Specify the number of full-time equivalent faculty positions allocated to the dental program, including all sites where required educational activity will occur. Comment on the percentage of full-time equivalent positions assigned to the school and all sites where required educational activity will occur that are filled by part-time faculty.

The FTE allocated to the dental program is noted in the above section and is reprised her. Equivalent of 8 FTE faculty in the Humans systems component in the college of medicine consists of a mix of full and part time faculty. The course directors of each of the courses noted above are full time faculty. Of the 60 FTE's associated to the CNUCDM directly, the pro forma has \$7 million for full time faculty salary which is for 45 full time faculty. This is noted in [Appendix 1-5 Detailed Working Pro forma](#). The remaining 15 FTE's will be for part time faculty most of whom will be 20% at \$20,000 per year, producing positions for 50 part time salaried faculty. In addition, all community based faculty will be salaried by the health system to which they are associated and not by CNUCDM.

4. List all vacant full-time faculty positions along with current disposition of the vacant positions.

This is noted earlier in this section. As of April 2019, the key position meant to be hired and is vacant at this time is for Associate Dean of Academic Affairs. While this position was filled, the job offer was eventually denied and as of April 19, 2019 the position was reopened. Since

reopening the position, 4 more candidates have applied and interviews have been scheduled for two.

Other positions that are not yet hired are consistent with the hiring plan. While many have been identified, the hiring dates will be determined based upon CODA status with regard to start date of the DMD program which is intended for the fall of 2020.

5. In the context of the dental school's stated purpose/mission, goals and objectives, describe how the number and distribution of the full-time faculty will ensure time for:
 - a. course preparation and teaching
 - b. mentoring of fellow faculty
 - c. student advising and counseling
 - d. research/scholarly activities
 - e. faculty development, including calibration instruction for sites where required educational activity will occur,
 - f. participation in faculty clinical practice
 - g. participation in dental school and University committees
 - h. professional presentations (continuing education), and contributions to professional organizations

A: The mission of the College of Dental Medicine is to advance the art and science of health care through excellence in oral health education, practice, research service and social accountability. To accomplish this mission, the number and distribution of faculty in the plan is based upon the needs of the university to provide instruction, faculty development, student services, research and scholarship, development of the clinical program, university service and contributions to dental practice and dental education in the region and nationally.

Specifically, in order to achieve proper course preparation including the development of course materials, lectures, active learning, laboratory materials, student projects, among others, hiring for course faculty is anticipated 120 days prior to the beginning of each course. This is why the hiring plan extends from 15 to 30 to 45 and 60 faculty by year 4. At that point faculty will have developed all aspects of their teaching, practice, research and service roles.

B: Once hired, each faculty will communicate with and mentor or be mentored by existing faculty.

C: All faculty will be engaged in student life as advisors, mentors, counselors, academic and clinical resources. Appropriate time and resources to accomplish student life roles will be made available.

D: Every full time faculty member is granted time for research and scholarship at a minimum of 10% time and for active career path faculty members, a minimum of 20% time. During this time, faculty members will develop research projects with the discipline leaders in their area, with the Dean of Research and with the aid of mentors.

E: Time is allocated on a regular basis for faculty development and education. The faculty development seminar series occurs during time in which no other instruction occurs. Mandatory calibration of faculty in their discipline is scheduled during normal work days and clinical activities will adjusted to accommodate those schedules. Typically this will be done by

performing calibration on a discipline by discipline basis so that general clinical activities will be able to continue.

F: All clinical full time faculty are granted one day a week to perform clinical dental practice in CNUCDM clinics wherever possible or as agreed to by the Dean, in outside practice approved by CNUCDM.

G: Every full time faculty member will periodically be asked to serve o committees of the CDM and of the university.

H: It is the goal of the CNUCDM that every full time faculty member participate in professional organizations that are discipline based, advance biomedical research, and advance dental education. Faculty travel funds will be made available each year as well as time for this endeavor to assure CNUCDM is recognized as an active , capable, and meaningful participant in professional organizations.

Additional: The mission of the College of Dental Medicine - to advance the art and science of health care through excellence in oral health education, practice, research service and social accountability - is clearly addressed in this query 5 a-h, above with the exception of our mission to be socially accountable. The CNUCDM mission to be socially accountable must be addressed by every full time faculty member as part of their job responsibility. This can be accomplished through health related community service, clinical care, education to the public, inspiring pipeline applicants among other means. An individual plan for social accountability will be developed as in all other areas noted above for every full time faculty member. It is expected that this will support the mission of the university and the college.

6. Describe how the planned faculty/student instructional ratios during laboratory, preclinical and clinical sessions will be adequate to provide individualized instruction, guidance, and evaluative supervision, including sites where required educational activity will occur.

Each active learning environment, laboratory, small group active learning, preclinical and clinical education has needs individual to that environment with regard to access to faculty that needs to be addressed in the needs assessment for each course. The course director will propose for each session what the faculty needs are and the administration and discipline leaders will provide those faculty resources necessary for the task. The basis for those needs will be what is needed for individualized instruction, guidance and evaluation/assessment. Additionally, clinical settings require adequate supervision for the clinical care activity as well.

In principle it is expected that the following radios will be needed as a minimum, though specific sessions might require greater support. These ratios are based upon the leadership teams experience in dental education.

1. Small group learning CCMP in Human studies: 20:1
2. Human anatomy laboratory: 10:1
3. Dental anatomy laboratory 8:1
4. Operative dentistry laboratory 8:1
5. Periodontology laboratory 16:1
6. Oral surgery laboratory 16:1

7. Behavioral health clinic 1:1
8. Local anesthesia laboratory 4:1
9. Prosthodontic laboratory 8:1
10. Endodontic laboratory 8:1
11. Pediatric dentistry clinic 4:1
12. Oral surgery clinic 6:1
13. Special needs clinic 1:1
14. Comprehensive care clinic 4:1 (one group leader and one discipline based faculty for each 8 student pod)
15. Community based education 2:1

7. In the context of the dental school's stated purpose/mission, goals and objectives describe the planned staff resources that will be available to the dental school and describe the adequacy of staff, including sites where required educational activity will occur:
 - a. administrative assistants
 - b. secretaries
 - c. student services personnel
 - d. teaching assistants
 - e. dental laboratory technicians
 - f. dental assistants
 - g. information technology personnel

The staff salaries to support activities of the college are planned for an overall staffing of 60 FTE's to support the 60 full time faculty, students and patients

Here is the anticipated staff and roles associated to those staff to be completed by 2024. The above categories are coded with the categories below which are inclusive of the CODA provided list above. Note that categories for administrative assistants, secretaries and student services personnel are noted in category "a" below. No teaching assistants in the university sense as in graduate student who teach will be utilized however teaching specialists are noted in category A also.

Note that these positions are those added to existing positions for the service of the entire university in areas such as IT, security, admissions, and institutional effectiveness among others.

- a. **administrative** (includes a, b and c above from CODA query)
- b. **Clinics** (includes e and f above from CODA query)
- c. **Technical, buildings and grounds** (includes G from CODA query above)

CATEGORY	TITLE	SUPERVISOR	FTE
Deans office a	Admin officer	Dean	1
Deans office a	Institutional research/institutional effectiveness/ accreditation	Dean	1
Deans office a	College business and finance officer (CBFO)	Dean	1

Deans office a	Community relations, communication, marketing	Dean	1
Academic admin a	Curriculum specialist	ADAA	1
Academic admin a	Dental medicine registrar/scheduling	ADAA	1
Academic admin a	Compliance/faculty development	ADAA	1
Academic admin a	Teaching and learning specialist	ADAA	1
Clinical admin a	Clinic director	ADCA	1
Clinical admin a	Sterilization and infection control supervisor	ADCA	1
Clinical admin a	Medical record/billing supervisor	ADCA	1
Student affairs a	Student services coordinator	ADSAA	1
Student affairs a	Admissions services coordinator	ADSAA	1
Department admin a	Academic admins/secretarial by discipline	Dean/discipline heads	9
Clinics b	Registration and billing specialist	ADCA	4
Clinics b	Practice group coordinators	ADCA	8
Clinics b	Dental assistants	ADCA	12
Clinics b	Dental laboratory personnel	ADCA	1
Clinics b	Sterilization and dispensary	ADCA	5
Technical buildings and grounds c	Equipment technician	CBFO/Dean	2
Technical buildings and grounds c	Housekeeping	CBFO/Dean	2
Technical buildings and grounds c	Security	CBFO/Dean	3
Technical buildings and grounds c	Information technology	CBFO/Dean	1
TOTAL			60

8. Indicate those individuals who have additional teaching and/or administrative responsibilities within the institution, and at sites where educational activity will occur, and describe the extent of these responsibilities.

All faculty with administrative appointments will have the responsibility to teach, practice, provide service and perform scholarly work. This will support the culture of the college and develop the engagement of faculty and administrators in a more horizontal organization.

B. Supportive Documentation:

1. Departmental listing of faculty (Example exhibit K)

See Exhibit K.

2. Alphabetical listing of faculty (Example exhibits L through N)

See Exhibits L, M, N.

3. Summary of faculty (Example exhibits O, P, Q)

See Exhibit O, P, Q and Appendix 3-1 SDDS Faculty Spreadsheet. Exhibit S is also included with Faculty BioSketches.

4. Yearly hiring plan for faculty and staff (Example exhibit R)

Exhibit R, Appendix 3-1 Hiring Plan for Faculty Years 1 and 2, Appendix 3-1 Faculty Hiring Plan and Appendix 3-1 Secretarial and Clerical Support for CDM

5. List the secretarial and clerical support provided for the dental program, including at sites where required educational activity will occur. List the number and provide a brief description of full-time positions that are designated solely for the school. List the number and provide a brief description of any support, provided by a centralized clerical/duplicating service.

This is shown above in the context of all staff hires and in Appendix 3-1 Secretarial and Clerical Support for CDM as a detailed report

6. List the support secretarial and clerical services provided by the institution to the dental program, including at sites where required educational activity will occur.

The College's secretarial and clerical services will be provided by dedicated College of Dental Medicine employees. Detailed response in Appendix 3-1 Secretarial and Clerical Support for CDM.

7. List current faculty/student instructional ratios during all laboratory, preclinical and clinical sessions.

Year	BMS Educa tor	Precli nical Ed	Clinical Ed (gen)	Clinical Ed (spec)	Total Teaching Faculty	Cohort Size	Enroll ment	Total Classes Covered (yr)	Student: Teacher Ratio
1	6	5	2	2	15	80	80	20	6:1
2	6	8	10	6	30	80	160	36	6:1
3	6	8	20	11	45	80	240	62	6:1
4	6	8	30	16	60	80	320	76	6:1
5	6	8	30	16	60	80	80	76	6:1

*Fifth year in this chart represents our ability to accommodate students who fall behind cohort and need to make up coursework

8. Policy document for faculty activities such as administrative duties, research, advising and counseling students, supervision of clinical experiences (including clinical experiences at sites where educational activity occurs) and committee assignments.

See Faculty Handbook, [Appendix 3-1 Faculty Handbook](#).

9. Faculty recruitment and retention policies and procedures

See [Appendix 3-1 Faculty Retention Report 2019](#) and [Appendix 3-1 Faculty and Staff Retention Policy and Procedures](#).

10. Policies and procedures for faculty use of any centralized administrative service.

Faculty will use dedicated College of Dental Medicine administrative services.

STANDARD 3-2

3-2 The dental program **must** show evidence of an ongoing faculty development process.

Intent:

Ongoing faculty development is a requirement to improve teaching and learning, to foster curricular change, to enhance retention and job satisfaction of faculty, and to maintain the vitality of academic dentistry as the wellspring of a learned profession.

Examples of evidence to demonstrate compliance may include:

- Participation in development activities related to teaching and learning
- Attendance at regional and national meetings that address education
- Mentored experiences for new faculty
- Scholarly productivity
- Maintenance of existing and development of new and/or emerging clinical skills
- Documented understanding of relevant aspects of teaching methodology
- Curriculum design and development
- Curriculum evaluation
- Student/Resident assessment
- Cultural Competency
- Ability to work with students of varying ages and backgrounds
- Use of technology in didactic and clinical components of the curriculum
- Records of Calibration of Faculty

A. Description:

1. Describe the planned faculty development program sponsored by the dental school, including any procedures faculty must follow to participate. In particular, give a brief description of the policy, procedures and criteria that will be used to select faculty development programs.

The faculty handbook describes the features of faculty development at CNUCDM as follows:

Faculty development is an ongoing process designed to enhance the teaching and research skills of academics throughout the careers of University faculty. The goal is to increase both teaching effectiveness and scholarly productivity. The success of the program is highly dependent on the sustained commitment of the administration to provide the appropriate space and resources and the faculty's commitment to continuous development of their skills. The purpose is to provide an academic environment that stimulates innovation in teaching, research, and scholarly activity, and encourages University faculty to develop and grow intellectually and professionally and maximize their academic productivity.

Basic resources needed for a successful faculty development program include:

- ☐ Encouragement and support from administration for developmental activities
- ☐ Release time away from certain faculty and patient care responsibilities when necessary and appropriate subject to the discretion of the Dean
- ☐ Funds for travel, research expenses, and equipment consistent with the University's Policies and budget
- ☐ appropriate space and routine equipment to conduct research

Programmatic responsibility for the Faculty Development Program is shared between the Department Chairs and the individual faculty. It is the responsibility of the Department Chair to provide the guidance and counseling necessary to assist the faculty member in focusing on specific needs and facilitating activities to address those needs. Ultimate success of a Faculty Development Program rests with the individual faculty member. Each faculty member should address his or her own needs, and through discussions with the Department Chair, focus on and address those needs through the Faculty Development Program.

Additionally the CNUCDM has developed with CNU a faculty mentoring program. The goal of the Mentoring Program is to assist faculty in becoming accomplished, productive, and successful in their chosen endeavors of teaching, research, patient care, or administration. Mentoring relationships have proven to be an excellent way to enhance professional growth and the University strongly supports such activities. When you meet with your supervisor throughout the year, we encourage you to use these activities as a resource to assess your mentoring needs as they relate to your professional development.

CNU departments support the mentorship process. When faculty are first hired they will be assigned a mentor. This relationship may remain, but after three months the mentee has attended University functions and interacted with other faculty enough to make their own selection. During these initial three months of mentoring, all new faculty should meet with their mentor monthly and document their interaction at each meeting. It is the mentee's responsibility to keep and maintain the Mentoring Form as it may be reviewed during their annual evaluation.

The Associate Dean of Academic Affairs for the DMD program will be reviewing the mentor/mentee pairings using two forms for the evaluation: the assessment form for mentees and the assessment form for mentors. They will also periodically provide faculty with the "Could I Benefit or be a Mentor?" form to monitor need and demand of the program.

The mentoring program helps faculty to:

- Determine if they are in a position to be a mentor
- Describe the rewards associated with mentoring
- Offer direction on how and why to seek a mentor
- Provide a checklist of qualities to look for when seeking a mentor or a mentee
- Offer alternatives to traditional mentoring
- Offer suggestions for colleges, departments, and divisions in devising mentoring programs

- Point out potential obstacles to mentoring
- Provide template forms to assess need and monitor mentoring relationships
- Offer additional resources for more detailed information on mentoring

Importance of Mentoring

The following are possible relationships between a junior and a senior professional in an academic setting:

- Advisor, tutor, or preceptor (assigned by the institution)
- Role model or mentor (chosen by the learner)

Institutionally assigned roles are professional: the senior ensures that the junior completes institutional requirements, is progressing appropriately in his or her field of study, and has the knowledge necessary to achieve career success. Relationships chosen by the learner often involve a personal element in addition to professional guidance: a role model or a practicing professional who may not be at a senior level but can provide a perspective of professional employment. A role model can be a professional equal, but mentors are senior representatives in their fields. They are chosen specifically for their positions and experience in developing early careers.

Benefits to Mentors:

Mentoring is a developmental stage in one's professional life and by becoming a mentor you have the opportunity to affect the future. Mentors often gain:

- A sense of self-worth
- An opportunity to shape careers
- A deeper connection with colleagues
- A further contribution to the school
- An increase in future Productivity
- Career satisfaction and rejuvenation
- Organizational recognition

Although there are a number of benefits to be gained from the role of a mentor, there are also quite a few responsibilities. Before entering such a relationship it is important that faculty consider the following expectations.

Mentors Will:

- Encourage and demonstrate confidence in mentee
- Recognize mentee as an individual with a private life
- Value them as a person
- Recognize own limitations
- Provide feedback
- Encourage independent behavior
- Provide accessibility and exposure to mentee
- Stress importance to mentee of networking

- Allow mentee to assist in projects
- Give appropriate credit to mentee
- Make sure the mentee has your contact information
- Tell mentee about your expectations
- Ask mentee what they expect from you
- Develop a checklist concerning mentee career goals
- Set up a regular time to meet
- Write out one and three year goals
- Facilitate mentee's membership in committees
- Offer assistance in publications
- Never see the mentee as a threat

Characteristics That Should be Sought in a Mentee

When trying to determine if a mentee is ready to begin the mentoring relationship, consider the following traits and interests:

- Eagerness to learn
- Understanding of the seriousness required in a mentoring relationship
- Flexibility and an understanding
- Acceptance in giving and receiving feedback
- Interest in the process
- Mutual respect
- Ability to maintain confidentiality
- Ability to seek out additional mentors as needed
- Willingness to explore new areas of interest

As a mentor, you need to ensure that your mentee maintains productivity; has protected research time; understands the requirements for promotion; and receives exposure via local, national, and international organizations. You also need to be aware and sensitive to obstacles that may be present in the mentee's life and have the potential to interfere with his/her professional demands.

When Mentees are Seeking a Mentor

When Mentees are deciding whom to approach as a potential mentor, they should keep the following questions in mind:

- Of those in my department junior to me, who is pursuing work or has strengths similar to my own?
- Who appears to be struggling in an area that is my strength?
- To whom do I gravitate before and after staff meetings or at social functions?
- The most effective mentoring experience occurs where the seeker and the sought mutually agree to the relationship
- Familiarize yourself with the department's senior faculty, their publications, their

practice, and research areas

- Closely observe the senior staff during department meetings
- Match the professional expertise you admire with the personal qualities that would make for a collegial relationship
- Personal “fit” should be considered
- The mentor – mentee relationship is always a dynamic one

Evaluate the Relationship

Both the mentor and mentee should monitor and evaluate the relationship to ensure that it is mutually beneficial to both parties.

- Has your mentor continued to be academically successful?
- Are you still interested in their areas of research or teaching?
- Is the mentor easy to approach and have a conversation?
- Does your mentor advise and encourage your independent goals?
- Do you meet regularly?
- Do you receive feedback and constructive criticism?
- Does the mentor facilitate professional opportunities?
- Does the mentor facilitate opportunities within the university?

Particular to the CNUCDM, development will focus on the development of pedagogic skills for clinical faculty, many of whom have not had formal training as educators.

The Faculty Handbook and Faculty mentorship program contain further information on the program to improve faculty performance and career path. [Appendix 3-2 Faculty Mentoring Program](#), and [Appendix 3-1 Faculty Handbook](#).

[2. In what ways will members of the faculty be encouraged to attend meetings of professional organizations?](#)

The college will support faculty participation in ADEA activities through institutional membership which was obtained in 2019 at the ADEA House of Delegates meeting. This permits all faculty of CNUCDM to fully participate in ADEA activities. All faculty will be encouraged to be members of the CDA and ADA for which there is an educator rate and to participate in activities of these organizations. All faculty will be encouraged to be active in the AADR and in the faculty discipline based scientific specialty activities.

[3. Describe the availability of continuing education courses for faculty in the community.](#)

CNUCDM is a continuing education provider with the AEGD. Course will be given for CE credit with the college. In addition, the Sacramento District Dental Society has extensive CE offerings in Sacramento. The CDA has extensive online offering and an annual northern California meeting.

4. How will faculty maintain and improve their clinical skills? What will the institution do to encourage clinical skills improvement and calibration, including at sites where required educational activity occurs? If faculty members will be located at distance sites, explain how faculty members will be provided the same opportunities as faculty at the primary program location.

In house workshops to develop clinical skills, for clinical collaboration and for calibration both in performance and clinical decision making is planned for faculty development. While this will be used for competency assessment, it will also serve as valuable support for clinical practice development. Community based faculty will have on site calibration and continuing education and Web based conferencing for these faculty is also planned.

B. Supportive Documentation:

1. List of meetings/seminars/courses which dental faculty attended during the last calendar year, as available.

See **Appendix 3-2 Seminar Attendance.**
Appendix 1-9 Faculty development series

2. List examples of dental school sponsored in-service programs/meetings/seminars/courses that will be presented to full- and part-time dental faculty including, but not limited to, the following categories:
 - a. pedagogy (the art and science of teaching) and learning
 - b. curriculum design and innovation
 - c. mentored experiences
 - d. scholarly productivity
 - e. clinical skills development
 - f. other education-related
 - g. records of calibration of faculty

Also, see **Appendix 3-2 Faculty Mentoring Program.**

3. List all financial resources that will be used to support the faculty development program.

Appendix 1-5 Detailed Working Pro forma shows an annual budget of 100,000 for faculty development. Dues for institutional membership in ADEA are paid at \$27,000 per annum.

STANDARD 3-3

3-3 Faculty **must** be ensured a form of governance that allows participation in the school's decision-making processes.

A. Description:

1. Describe how faculty governance process allows for effective faculty input in organizational decision-making.

Faculty governance in the College of Dental Medicine will have the following layers: the university senate, the CNUCM faculty council, The President's executive committee, and the Dean's executive committee

All faculty are now represented by the **California Northstate University Faculty Senate**. Three voting positions on the senate are reserved for dental faculty who will be elected by their peers consisting of all full and part time faculty of the CDM. **Appendix 3-3 Faculty Senate Bylaws**

Shared governance is defined by the Senate as follows: "Shared governance" as applied to the University community in general is defined as the process of the council, committee, or person responsible for making a decision obtaining input and feedback when appropriate from various other constituencies of the University community, so that an informed decision can be made; shared governance does not necessarily mean that a particular constituency is part of the actual final decision making process.

The charge to the faculty senate is in shared governance to review academic and faculty policies, procedures, and regulations, and seek consensus, provide input, or recommend actions regarding these issues as they affect the Faculty in the following areas:

- Educational standards
- Academic standards and student achievement
- Faculty qualifications
- Faculty recruitment, rank and promotion, and retention
- Faculty development and career progression
- Academic resources and staffing
- Scholarly activities including research
- Policies relating to standing committees, *ad hoc* committees, task forces, and faculty search committees
- Long range strategic planning and development regarding the University

The President of the Faculty Senate sits as a voting member of the President's Executive Council (PEC) where the actions of the Senate are brought for consideration and action by the university. The PEC presents any actions that require Board action to the Board of Trustees for

final approval.

2. Describe and assess the roles planned for faculty, department chairs, and administrators in the decision-making process.

The actions of the faculty senate will as well be reviewed by each college council including the Faculty Council of the College of Dental Medicine for their input and actions pertaining to the activities of the respective college.

The Faculty Council of the College of Dental Medicine will be a deliberative and voting body consisting of all full and part time faculty with equal vote. It will consider the actions of the DEC the PEC and the university Senate as well as consider items for their agenda regarding any aspect of College activities. The chair of the of the CDM faculty council will sit as a voting member of the Deans Executive Committee.

The Dean's executive committee will meet weekly to consider the concurrent operational issues in the execution of policies related to academic, clinical, research affairs, outreach, community relations and business operations.

B. Supportive Documentation:

1. List committees and the intended membership (Example exhibit T)

See **Exhibit T**.

2. Institutional policies and procedures governing faculty

See Faculty Handbook in **Appendix 3-1 Faculty Handbook**.

3. Diagram outlining the planned dental school's decision-making process.

Appendix 3-3 Diagram outlining CDM decision making

STANDARD 3-4

3-4 A defined process **must** exist that ensures objective measurement of the performance of each faculty member in teaching, patient care, scholarship and service.

A. Description:

1. Describe the criteria that will be used to evaluate full- and part-time faculty. Who will determine the criteria? What input will faculty have in the process?

The criteria for faculty evaluation are noted in the Faculty Handbook and include sections on supervisor evaluation, peer review of teaching, criteria for promotion, and student reviews.

Appendix 3-1 Faculty Handbook

Each faculty member upon hiring will have a full job description that will be reviewed annually as part of annual review by their discipline based leader or as appropriate for supervisory personnel. The criteria for evaluation will be based upon the job description and the relative effort applied to each component. Components typically in a job description will include a percentage of time for each component. Components will include:

- Teaching didactic
- Teaching: active learning
- Teaching laboratory
- Clinical Education
- Clinical practice
- Faculty development
- Mentoring
- University service
- Community service
- Research
- Professional activities

Annually a percentage time will be assigned to each of these components. Included under these designations will be goals for the year. This form will be attached to the annual review in a form as follows:

Faculty effort form CNUCDM

Name:

Academic year:

Narrative statement of faculty effort:

Category	Percent effort	Course numbers/grant numbers or other designations	Goals for year
Teaching: didactic			
Teaching: active learning			
Teaching: laboratory			
Clinical education			
Clinical practice			
Faculty development			
Mentoring			
University service			
Community service			
Research			
Professional activities			

The criteria for these components will be specific to the tasks assigned and will generally include:

Self-evaluation
Student evaluation
Peer evaluation

Supervisor evaluation
 Assessment of work product by knowledgeable colleagues
 Course evaluation for course directors

Input from the faculty will include their opportunity to self evaluate, their ability to answer queries and formulate replies on evaluations and to provide any additional information to support the review.

These are reprised in the faculty evaluation form found in [Appendix 3-4 Faculty Evaluation Form](#)

The criteria specific to the review are reprised in this table which describes the assessment rubric for faculty review.

Scoring Rubric

CATEGORY	POOR	DEVELOPING	ADEQUATE	SUPERIOR	EXCEPTIONAL
TEACHING DIDACTIC	Poor communication or outcomes of teaching	Students with deficits in didactic education	Students consistently perform as expected	Inspires extra effort in students	A didactic leader who creates a learning community
TEACHING ACTIVE LEARNING	Unable to engage students in active learning	Developing skills to have students engage one another and be inquisitive	Has a successful learning community of active learners	Develops synthesis and discovery among active learners	Has a self-sustaining community of learners that will be sustained
TEACHING LABORATORY	Unable to demonstrate or assess skills	Can show and assess some aspects of laboratory exercise	Can consistently apply objective measures toward assessment and is an understandable demonstrator and teacher in the laboratory	Is a sought after resource in the teaching laboratory for expertise and nuance of skills	Supports a team of students in the laboratory to further develop their skills and can be relied upon as an expert resource
CLINICAL EDUCATION	Cannot demonstrate or assess clinical care	Is developing ability to demonstrate and assess clinical care and understand calibration requirements	Has the ability to demonstrate and assess clinical care and understand calibration requirements	Is a sought after resource who can bring students to the level of initial competency and further	Is a mentor an role model for students in the clinic as an exceptional clinical educator

			and the integration of knowledge and values with skills in the clinic	develop their skills	
CLINICAL PRACTICE	Unable to diagnose, treat, apply evidence based care or perform care needed	Developing clinical skills but with cognitive or psychomotor gaps in development	Capable of proper diagnosis, treatment, applying evidence based care and necessary care	High level of knowledge and skills to provide superior patient care	A sought after clinician who is a resource to peers and leaders in their discipline. A clinical thought leader
FACULTY DEVELOPMENT	Not carrying out faculty development activities	Does inadequate amount of faculty development	Participating in internal and external faculty development opportunities	Has a FD plan and is adhering to it to advance their capacity as an academic	Is a leader in faculty development recognized as both a participant and a presenter of faculty development programs
MENTORING	Not providing mentoring	Learning about mentoring program	Actively providing mentoring utilizing CNU criteria	Demonstrates exceptional outcome of mentorship for CNU faculty students or staff.	Is a recognized leading mentor both at CNU and nationally in their area of expertise.
UNIVERSITY SERVICE	Not providing university service	Beginning service on committees and taskforces	Is an active participant in CNU committees, council, senate or taskforce	Is chairing or providing other necessary leadership in CNU service	Is a sought after leader in providing service at multiple levels at CNU
COMMUNITY SERVICE	Not providing community service	Has participated in community service	Is actively engaged in community service	Provides leadership in community service	Provides inspirational leadership in community service that has been recognized
RESEARCH	Not performing research	Is developing ideas for research	Is successfully performing research	Has gained external funding or other	Is a known research content expert and has gained national

				equivalent peer recognition for performance of research	recognition for their excellence in research
PROFESSIONAL ACTIVITIES	Not participating in professional activities	Is beginning to participate in organized professional activities	Is an active participant in professional activities	Demonstrate s leadership in organized professional activities	Demonstrates local, national and international leadership in professional activities that have advanced their field.

2. How often and by whom will faculty be evaluated and how will the evaluative data used? Will the evaluation include clinical as well as didactic teaching evaluation criteria?

Reviews is performed as described above annually. As described above the discipline chief or supervisor is assigned to the evaluation and those providing reviews include the faculty member under review, students, peers, supervisors, colleagues, and discipline expert fellow faculty.

Clinical evaluation is part of the quality assurance process and the appointment and credentialing process in the clinics. Every faculty member is appointed based upon adequate credentials such as licensure, board certification, continuing education, measures of continued competence and peer recommendation. Clinical privileges are offered based upon those findings. Clinical privileges are reviewed annually utilizing objective information on case volume, quality care indicators and 360 degree evaluation in the clinic.

3. If the intended criteria used to evaluate administrators will be different than that used to evaluate faculty members, please explain.

Evaluation is the same for administrators who will undergo evaluation in the same manner as all faculty. Additionally, the President will provide an annual review of the Dean and the Dean will provide annual review regarding administrative responsibilities only for administrative component while all faculty (including administrator) who teach treat patients perform service or research will be evaluated in the same fashion

4. How often and by whom will administrators be evaluated, and how will the evaluative data used?

Evaluation of administrators is also annually as for all faculty and by the means described above.

The data from all evaluations will be used to support the advancement and retention of faculty and the development of tasking appropriate to their success and consistent with the needs of the university.

5. How will results of the evaluation be communicated to the faculty members?

The annual review of faculty is communicated verbally and in the review form by faculty member responsible for the review. This includes a conversation about its content and the ability of the faculty being reviewed to provide additional information.

B. Supportive Documentation:

1. Evaluation Forms planned for:
 - a. full-time faculty
 - b. part-time faculty, if different from above
 - c. administrators, if different from above

Appendix 3-4 Faculty Evaluation Form

STANDARD 3-5

- 3-5** The dental school **must** have a stated process for promotion and tenure (where tenure exists) that is clearly communicated to the faculty.

A. Description:

1. Describe the schools' promotion and, if applicable, tenure policy and process. How will the policy be communicated to the faculty? Provide non-tenure and tenure track promotion policies, guidelines and norms.

A key component of creating a doctoral level culture is the appointment of appropriately qualified faculty members. The Rank and Promotion Committee of CNU will examine the CV of each candidate for examples of accomplishments in the areas of teaching, scholarly activity, and professional service to determine their placement in one of four academic ranks: Instructor, Assistant Professor, Associate Professor, and Professor.

At the Instructor level the applicant must have a DDS or DMD and they must have teaching or extensive professional experience. Applicants will need to have experience in the areas of teaching, research, and professional service. Those faculty who were previously hired as Instructors must have at least one year of experience at that rank. An Associate Professor must meet all the qualifications for an Assistant, with the addition of significant accomplishments in teaching, research, and professional service. They must have at least five years of experience as an Assistant Professor at CNU. This timeframe may be amended by the Rank and Promotion Committee due to previous time and service as determined by the Dean and awarded by the President. They must excel in two of three core competencies: teaching, research, or service. To reach the rank of Professor, a candidate must meet all the requirements for Associate Professor at CNU with the addition of a significant and outstanding record of teaching, research, and professional service. They must have spent a minimum of five years at the rank of Associate, though they may apply for early promotion (

B. Supportive Documentation:

1. Institution's promotion and tenure policy guidelines and norms
Appendix 3-1 Faculty Handbook

STANDARD 4 - EDUCATIONAL SUPPORT SERVICES

Admissions

STANDARD 4-1

- 4-1** Specific written criteria, policies and procedures **must** be followed when admitting predoctoral students.

A. Description:

1. List the admission criteria for the dental program. Are the criteria weighted? If so, explain.

Students seeking admission to the DMD program will use the centralized application service for dental school admission called ADSAS, administered through WebAdmit and the American Dental Education Association. Minimum requirements for entrance to the program are: undergraduate minimum GPA of 2.8 (preferred 3.2), DAT score of 17 or greater with a preferred DAT of 19.

Minimum Requirements

California Northstate University College of Dental Medicine prefers a baccalaureate degree from a regionally accredited, four-year institution within the United States; or a non-U.S. equivalent institution. Required minimum coursework:

- ☐ 2 semesters, 3 quarters, or 1 year of college level English (*IB or AP credits may be considered if they are accepted by the undergraduate program*)

IB or AP credits not accepted for the following:

- ☐ 2 semesters, or 3 quarters, or 1 year of Biology with Laboratory
- ☐ 2 semesters, or 3 quarters, or 1 year of Inorganic (General) Chemistry with Laboratory
- ☐ 2 semesters, or 3 quarters, or 1 year of Organic Chemistry with Laboratory
- ☐ 2 semesters, or 3 quarters, or 1 year of Physics
- ☐ 2 semesters, or 3 quarters, or 1 year of college level Math (*Statistics and/or Calculus preferred*)
- ☐ 1 semester, 1 quarter, or 3 units of Biochemistry

Recommended Coursework, but not required:

- Social sciences
- Anatomy
- Microbiology
- Behavior Sciences

- Physiology
- Immunology
- Foreign languages

Standards in five areas must be met by all candidates: Observation, Communication, Motor Function, Cognitive, and Professional.

Further information regarding academic admission goals.

Course Credits

Most students complete a bachelor's degree before entering a dental school. However, a minimum of 90 semester credits or 135 quarter credits from an officially accredited US or Canadian College, or equivalent foreign institution, is required.

Admission Requirements:

1. At a minimum, an applicant must possess both a science and a total GPA over 2.80 (although 3.40+ will be the likely mean for each class) on a 4.00 scale as well as a bachelor's degree. A minimum science and overall GPA of 2.80 on a 4.00 scale is required to receive a supplemental application.
2. To be competitive, an applicant should complete a bachelor's degree at an accredited North American college or University prior to matriculation. Applicants participating in special affiliated programs with the College and other exceptions to this policy will be considered on an individual basis.
3. The prerequisite courses have been noted above:

In addition to those noted it is advantageous for applicants to have course credit in cellular, molecular biology and histology. To augment the social sciences and holistic admissions course in sociology, psychology, history, arts, ethics and humanism are of value.

Written documentation and explanation is required concerning any academic difficulties, such as grades of I (Incomplete), W (Withdraw), D or F grades. Only under unusual circumstances with credits graded on a Pass/No Pass evaluation process be accepted for required courses. Applicants may submit a maximum of 15% of the minimum total credits for other-than-required courses.

4. Dental Admission Test

The DAT (Dental Aptitude Test) is a requirement for admission. The DAT is scored from 1-30 with 18 being the national average.

An applicant must submit competitive scores on the Dental Aptitude Test (DAT). An Academic Average score of 18 or above and a Perceptual Ability score of 17 or above is desired. The DAT test must have been taken no more than three years prior to application.

Each application will be thoroughly reviewed by the Admissions Committee and all areas of the application will be carefully considered. The AADSAS application has a required personal statement and a required section that asks whether the student is from a disadvantaged background. The personal statement prompt pertains to a student's community engagement and community service background.

It is important that the student body of the DMD program represents the best of future clinicians, and the Admissions Committee will pay particular attention to professional, research, education, and life experiences. Along with academic excellence, the committee will be looking for students with diverse cultural, socioeconomic, work, and educational backgrounds. CNU has a diverse faculty and student body and it is the admissions policy of the University that no applicant will be discriminated against on the basis of race, religious creed, color, national origin, ancestry, citizenship status, sex, gender, gender identity, sexual orientation, mental disability, medical condition, genetic information, age, military or veteran status, physical appearance, or any other consideration made unlawful by federal, state, or local laws.

In the interview, we are looking for demonstration of each of the following: 1) Demonstrated academic ability/capacity, 2) critical thinking skills, 3) interpersonal and social skills, 4) commitment to diversity, 5) commitment to community service, 6) a candidate's match in terms of the culture and expectations of CNUCDM (i.e., commitment to the profession and to becoming a healer).

Refer to [Appendix 4-1 DMD Admission Requirements.pdf](#).

The type of student targeted, profile and qualifications required for the program is described further as follows:

The DMD program admits students who demonstrate sufficient preparation, potential for professional education, and ability to perform the essential functions needed to practice as a licensed dentist.

Proposed Student Body Profile for California Northstate University College of Dental Medicine

Public and private dental education in the United States has not served the needs of the emerging demographics of American citizens. Current dental students are weighted heavily into those who have family members who are dentists or physicians, students from the most densely populated urban and coastal centers, those from the most competitive public and private universities and those with incomes more than two times the national average. Nearly all dental schools are located in the major population areas of their regions and generate more than substantial workforce for the major cities and suburbs, while inner city communities and rural areas and small cities are left behind. These are referred to as Dental Health Professional Shortage Areas (DHPSA) by HRSA. Inner city California and most of interior California, the Sierras, desert and Northstate are all heavily represented as DHPSA shortage areas.

Students applying from underserved communities, from these areas have usually attended regional universities and though qualified, do not perform as highly on the DAT, the Dental Admissions Test. While over 6000 of the 13,000 applicants to dental school will gain admission, those who do not get in or must travel hundreds to thousands of miles to attend are disproportionately from these areas, and nowhere more so than in California where over ten million people live in these areas.

In addition, as a health profession dentistry is unable to keep pace with peer professions such as medicine in the recruitment of underrepresented minorities, especially black, Hispanic and American Indian students. For example, California's dental schools bring fewer dentists to rural and/or economically distressed communities than any other state system (4-6% as compared to over 30% for states such as Minnesota and Oregon) DHPSA areas are also heavily represented by the immigrant and migrant communities for whom the barriers to health services are the greatest.

California Northstate is committed to being a California school committed to gaining a student body from underserved communities, including rural California communities, immigrant and migrant communities, underrepresented minorities and other chronically underserved communities. Through our pipeline program we will identify, mentor, and support community members who will seek careers in the health professions broadly and dental medicine specifically. These programs are presented elsewhere in these documents regarding admissions.

In addition, we are committed to having a faculty that broadly reflects the communities we serve. Partnerships with Asian Health, Indian Health, La Clinica de la Raza, West Oakland Community Health, San Diego homeless Veterans clinic, and rural sites in Shasta Lakes will produce community-based faculty to serve as role models for our students while assisting in developing the pipeline for future community health leaders. These efforts will have inestimable benefits in advancing the lives of patients and improve the health related quality of life in populations impacted by these programs.

Special efforts will be made to recruit and select a diverse set of candidates from Sacramento and its surrounding counties.

HPSA Find (<https://data.hrsa.gov/tools/shortage-area/hpsa-find>)

Additional Information at time of admissions

Admissions Committee: The College of Dental Medicine Admissions Committee will be appointed by the Dean and will function as a standing committee. It will be charged with the responsibility of evaluating applicants and making recommendations to the Dean.

The Admissions Committee accepts applicants based on scholarship, Dental Admission Test scores, a personal interview, a personal essay, recommendation letters and the applicant's overall suitability for the study and practice of dentistry.

Admissions criteria are weighted with an emphasis on academic performance, which includes science GPA, non-science GPA, total GPA, number of hours completed per quarter and institution(s) attended. DAT scores, documented community service, motivation, experience, recommendations, and the interview evaluation also contribute to the candidates rank. Ongoing

efforts will be made to recruit minorities by visiting schools and programs with a high percentage of minority students.

5. Letters of Recommendation

The California Northstate University College of Dental Medicine requires applicants to submit three (3) letters of recommendation—all three (3) letters should be from people who can speak to your character and life experience. All three (3) letters must be submitted before your application can be considered to be complete.

Before asking someone to write about you:

- consider who can best describe your character and experiences
- choose people with strong written communications skills who will submit letters in a timely fashion
- be sure authors can meet AADSAS deadline
- tell them why you have asked them to write on your behalf
- tell them why you are applying to dental school and why you believe you are a good candidate

Letters can be submitted to the Associated American Schools Application Service (AADSAS) or directly to CNU. (ADDRESS) Letters written by immediate family members will not be accepted. All letters of evaluation must be submitted directly from the evaluators. The Office of Admissions does not accept letters submitted by students.

6. Applicants must demonstrate a sincere understanding of, and interest in, the humanitarian ethos of health care and particularly dental medicine.
7. Applicants should reflect a people/service orientation through community service or extracurricular activities.
8. Applicants should reflect proper motivation for and commitment to health care as demonstrated by previous work, volunteer, or other life experiences.
9. Applicants must possess the oral and written communication skills necessary to interact with patients and colleagues.
10. Applicants must pass a criminal background check.
11. Applicants must be drug free and agree to abide by California Northstate University Policy.

Dental office shadowing

“Shadowing” is a term in common use to indicate an observational experience that demonstrates and understanding of the role, capacity and activities of another. It should be noted that these are observational, not experiential activities in that the student is not expected to have experience in the provision of any oral health services. “Shadowing” is a fruitful exercise in determining ones suitability and desires for a career in dental medicine. The CNUCDM does not require a

minimum number of hours of shadowing experience in general dentistry clinics or other oral health settings. However, applicants are encouraged to shadow more than one dentist and to experience different practice settings. Specialty practice shadowing is also acceptable.

Diversity essay concerning how you will contribute positively to the program

As described in AADSAS, Applicants must submit a written essay about how they will contribute to the overall dental program and its diversity. In evaluating an applicant's potential contribution to diversity, the CDM Admissions Committee considers the following factors: geographic diversity (e.g. rural), first generation college student, financial need, disadvantaged educational background, racial and ethnic diversity, evidence of outstanding leadership, special talents, high academic potential, unique work or service experience, community involvement, career goals, experience and/or interest in research or teaching, and interest in providing dental services to underserved areas. The School of Dental Medicine is committed to enrolling and graduating a diverse student body of thought, interest, background, and intellect. Diversity enhances the educational experience of all students and better prepares our graduates to practice dentistry in today's world. The essay has a limit of 6000 characters with spaces.

Official Transcripts

Upon acceptance and prior to matriculation, official transcripts must be sent directly to the CDM from each undergraduate and graduate institution attended, and must verify sufficient credits and correct courses. Basic science coursework that is older than five years may be considered obsolete. Dental Admissions Test scores must be less than three (3) years old to be evaluated.

Weighting of Admissions Criteria

The various criteria for admission are weighted accordingly:

Initial “paper” Evaluation:

Overall GPA	15
BCP GPA	15
DAT	15
Letters	05
Essay	05
Interpersonal skills	05
Score out of 60 to determine interview (unless all applicants are offered interview)	

Personal Interview 40

Final score out of 100

2. Describe the planned process for selecting dental students. Indicate names and titles of individuals who will participate in the process.

The College of Dental Medicine Admissions Committee accepts applicants based on scholarship, Dental Admission Test scores, a personal interview, a personal essay, recommendation letters and the applicant's overall suitability for the study and practice of dentistry.

Process: All applicants must apply through the American Dental Schools Application Service. Application materials will be reviewed by the committee and decisions made regarding eligibility for an interview. The completed applications are received from AADSAS and reviewed and given an initial evaluation and given a weighted score on a rubric based around the DAT scores, the overall GPA, the BCP GPA, the letters of recommendation and the personal essay. Candidates will be interviewed during the fall and winter, spending 30 minutes with the Assistant Dean and one or two members of the committee. The interview day, always conducted in Elk Grove, California, also includes time to talk with other CNU students and staff, a one-hour tour of the facilities, a 45-minute slide and video tape presentation, a one-hour lunch with students and faculty and a discussion regarding financial matters.

The students will be welcomed to the CNU campus and the CDM. A presentation (from Dean or Assist Dean) will follow highlighting the plans for the school, the history of CNU, with time for questions and answers. A Financial Aid presentation will be made. The applicants will then be interviewed by one or two members of the Admissions Committee with one medical/pharmacy student as an observer/participant. The goal will be to adopt the Multiple Mini-Interview process as the number of available interviewers and space available grows with the size of the faculty, but this will not be possible in the first year for the inaugural class.

The Dental Admissions Interview team consists of:

Chair: Assist Dean for Student Affairs and Admissions
Members: Dental Basic Science faculty member, Dental Clinical faculty member, Dentist from community, Medical or Pharmacy student. Lay Person

3. To what extent will the administration and faculty participate in the modification of admission criteria and procedures?

Each year, the Admissions Committee will meet to review the past year's activities and establish minimum threshold standards for GPAs and DAT scores for applications in the coming year. The committee will review the ranking formula, and make adjustments as required. The Dean and Admissions Committee, in consultation with the University Vice President of Admissions and Student Services, will set the policy for the admissions process within the guidelines of the University. There will be a variety of options for other administration members and faculty members to participate in modification of the admissions criteria and procedures. At the annual review meeting of the Admissions Committee, the meeting will be open to anyone with input to the process (including students, faculty, administration and staff). Additionally, admissions criteria and procedures will be on the agenda at each annual faculty retreat with the opportunity for constructive input from all attendees. Finally, anyone with input on criteria and procedures is invited to send such comments to the Admissions Committee Chair at any time. This option will be communicated regularly at faculty and staff meetings.

4. How will applicants be informed about the program's criteria and procedures for admission and the program's goals?

All changes and notifications are continually updated and posted to the ADEA web site and to the ADEA *Official Guide to Dental Schools*. Also the California Northstate College of Dental Medicine web site, under *Admissions*, will be continually updated. Applicants will find the Student Handbook (attached) online and individual mailing to applicants selected for the interview process will be carried out.

5. If students are admitted who do not meet the program's admission criteria what are the school's intended policies and procedures for providing remediation to those students?

All admitted students must meet the program's admission criteria.

6. Describe how the program will monitor and evaluate both attrition rates and performance of students in relation to admission criteria.

Attrition rates are expected to be small, but will be carefully monitored and will include exit interviews (where possible) with all students who leave the program. Reasons for leaving will be analyzed by the Assistant Dean for Admissions and Student Affairs and corrective action will be recommended to the Dean where warranted and improvements to the Admissions criteria will be put into place as necessary.

B. Supportive Documentation:

1. Sample rating sheets for student selection

Appendix 4-1 Sample Rating Sheet for Student Selection

CNUCDN rating sheets are identical to those contained in AADSAS, the ADEA administered common application service and will be used without alteration.

2. Application form and/or packet

CNUCDM application form will be identical to the AADSAS form without any alterations.

STANDARD 4-2

- 4-2** Admission of students with advanced standing **must** be based on the same standards of achievement required by students regularly enrolled in the program.

A. Description:

1. If applicable, describe the policies and procedures that will be used to award advanced standing credit. Indicate the type of courses for which advanced standing will be granted and the maximum number of credits that can be awarded.

This would only be performed on a special needs basis at the present time and a request would be made to CODA prior to accepting any transfer student. This has occurred in the past at other dental schools during a national emergency such as Hurricane Katrina and with the closing of dental schools unexpectedly when there became a need to find students new educational opportunities.

Transfer students can generally only be considered for EXTRAORDINARY REASONS DESCRIBED IN PART ABOVE and transfer at the start of year three between preclinical and clinical programs due to the differences in programs. At that time, all requests for advanced standing by newly admitted, transfer, or enrolled students are processed on a course-by-course basis by the Office of the Dean. To request such consideration, a student should submit a letter of request to the Office of the Dean in which the student lists the course(s) previously taken, which might be similar in content to a professional course(s) that he/she is scheduled to take. The student is advised to provide an official course description(s) and a syllabus (syllabi) of the course(s) previously taken, as well. All requests must be submitted prior to the start of year three. If a request is internally approved submission to CODA will be required that will include description of extraordinary circumstance.

B. Supportive Documentation:

1. Policies and procedures on advanced standing, if applicable

This is not applicable at the present time and would be submitted if such a program/individual for transfer were proposed.

2. Course equivalency or other measures to demonstrate equal scope and level of knowledge

This is not applicable at the present time and would be submitted if such a program/individual for transfer were proposed.

STANDARD 4-3

- 4-3** Transfer students with advanced standing **must** receive an individualized assessment and an appropriate curriculum plan that results in the same standards of competence for graduation required by students regularly enrolled in the program.

***Intent:** Advanced standing refers to applicants that may be considered for admission to a training program whose curriculum has been modified after taking into account the applicant's past experience. Examples include transfer from a similar program at another institution, completion of training at a non-CODA accredited program, or documented practice experience in the given discipline. Acceptance of advanced standing students/residents will not result in an increase of the program's approved number of enrollees. Applicants for advanced standing are expected to fulfill all of the admission requirements mandated for students/residents in the conventional program and be held to the same academic standards. Advanced standing students/residents, to be certified for completion, are expected to demonstrate the same standards of competence as those in the conventional program.*

Examples of evidence to demonstrate compliance may include:

- Policies and procedures on advanced standing
- Results of appropriate qualifying examinations
- Course equivalency or other measures to demonstrate equal scope and level of knowledge

A. Description:

1. If applicable, describe the planned policies and procedures for awarding transfer credit.

N/A

B. Supportive Documentation:

1. Policies and procedures on transfer students with advanced standing, if applicable
2. Course equivalency or other measures to demonstrate equal scope and level of knowledge

N/A

N/A

STANDARD 4-4

- 4-4** Admission policies and procedures **must** be designed to include recruitment and admission of a diverse student population.

Intent 4-1 to 4-4:

The dental education curriculum is a scientifically oriented program which is rigorous and intensive. Admissions criteria and procedures should ensure the selection of a diverse student body with the potential for successfully completing the program. The administration and faculty, in cooperation with appropriate institutional personnel, should establish admissions procedures that are non-discriminatory and ensure the quality of the program.

A. Description:

1. Describe how the dental school's recruitment program will be evaluated in terms of providing a pool of well-qualified and diverse applicants for the available positions. Include the planned measures and outcomes that will be used to determine whether diversity is being achieved.

California Northstate University does not discriminate on the basis of race, color, national and ethnic origin, gender, sexual preference, or handicap in the administration of educational policies, admission policies, financial aid, employment, or any other University program or activity. It admits qualified students to all the rights, privileges, program and activities generally accorded or made available to students.

All applicants must meet the criteria stated in the Student Handbook and Admissions criteria in order to be considered for admissions. The CNUCDM Admissions staff will participate in annual recruitment events and the CDM will be an integral and important part of these activities in the future. These events consist of predoctoral career fairs, graduate fairs, speaking to pre-dental students and visiting health care advisors. During each academic year, Admissions will host fall and spring Open Houses.

Recruitment is a vital component of the admissions process. Admissions criteria are weighted with an emphasis on academic performance, which includes science GPA, non-science GPA, total GPA, number of hours completed per semester and institution(s) attended. DAT scores, motivation, experience, recommendations, community service and the interview evaluation also contribute to the candidate's rank.

Ongoing efforts will be made to recruit minorities by visiting schools and programs with a high percentage of minority students.

Concurrent planning and outcomes assessment of these programs will be linked to Goal 1 Strategy 2 of the Strategic Plan and linked to Table 2 as follows:

Goal 1: Strategy 1.2 Recruit and retain exceptional dental students

Tactics:

- Recruit a qualified class ensuring scientific clinical ability with a holistic approach to promote social consciousness and action
- Retain all these qualified students with timely completion of the DMD program

Tactic	February 2019 Status	Development Plan	Critical Success Factors	Party responsible for report	Evidence of Achievement
Recruit a qualified class ensuring scientific clinical ability with a holistic approach to promote social consciousness and action	The college has begun to integrate into university recruitment and admissions processes. Participation in the university wide admissions and student affairs retreat in January 2019	Implement the admissions marketing plan as in the CODA self-study Appendix D-8 CDM Marketing and Recruitment Plan	Application pool from the region (central valley, delta, Shasta, Humboldt, Sierras) in excess of applicants to other California dental programs. Social science majors represented. Students from universities of the Delta, Central Valley, mountains and Northern California HPSA shortage areas represented Immigrants and underrepresented minorities exceed the region	Dean of admissions and student affairs	More than 50% of students from the underserved region and colleges associated to the region 20% social science majors Immigrants and underrepresented minorities in excess of other regional dental programs

B. Supportive Documentation:

1. Mission statement/goals/purpose of admission committee that recognizes the institutional and educational benefits of admitting a diverse student body

See [Appendix 4-4 Mission Statement Admissions](#).

2. List of planned dental school sponsored outreach programs/pipeline programs targeted to underserved minority high school and college students

See [Appendix 4-4 List of planned outreach](#).

3. Qualifications for serving on the admissions committee, including a commitment to diversity and diversity-related issues

See [Appendix 4-4 Admissions committee membership criteria/qualifications](#)

STANDARD 4-5

4-5 The dental school **must** provide adequate and appropriately maintained facilities and learning resources to support the purpose/mission of the dental school and which are in conformance with applicable regulations.

A. Description:

1. Describe all existing and planned facilities in which didactic and/or clinical teaching will occur and describe how both the existing and planned facilities are (or will be) adequate for the teaching, research and service activities of the dental school. Include in the description of facilities:
 - a. the year the facility was (or will be) constructed;
 - b. a description of any renovations that will occur in existing facilities to make them available for the dental education program;
 - c. the number, location and layout of existing or planned classrooms, biomedical laboratories, lecture halls, and student work rooms that will be available to the dental school;
 - d. the number, location and layout of planned preclinical instruction areas; and
 - e. the number, location and layout of planned treatment areas in the dental clinic.

The CNU campus currently encompasses more than 200,000 square feet and includes the Elk Grove and Rancho Cordova facilities. Renovations (b) of existing facilities in Elk Grove include the division of 2 of the 5 classrooms built for 240 students into rooms that will accommodate pods of 80 students. These spaces are also built for active learning and can be configured as theatre, round table bench or groups of 4-8 with audiovisual access across all sites that can be individualized to the working group or as a plenary audiovisual display. Thus the number, location and layout of classrooms(c) will be in excess of what is needed to support the dental program. In addition, facilities in the library are being expanded to seat 120 students and small group learning sites in the Elk Grove site will support small group learning. 29 individual carrels for study are also now in place.

Constructed in 2012 (a) the DMD program will be housed in 2400 Maritime Drive as well, a building of 16,000 square feet to house the preclinical laboratories and the first teaching clinic of the college. There will be two dedicated classrooms additional CNU class space, two laboratories, (c) a library, distributed study rooms in both Elk Grove buildings, a cafeteria, and various offices. With this addition, the physical impact of the additional students will be minimal.

All dental students will begin clinical training in their first year, utilizing the preclinical laboratory and clinical simulation labs that are planned to be built on campus as well as with initial clinical experiences as part of the care team in the clinic. The clinical labs will be located near the main campus at an acquired facility. Students will also be able to practice their clinical

skills on the main College of Dental Medicine campus. A classroom on the main campus will contain 40 dental simulation units (d) where the students will be able to practice the skills taught within the classroom. The unit will contain instruments and configurations, compartments to store instruments, a torso with adumbrated arms and shoulders, height adjustment. The unit will be on wheels and have the ability to fit comfortably under workstations.

The main clinical practicum of the CNUCODM program will be in two clinics operated by the university (e). The first of 32 operatories is under contract for construction in Elk Grove. Like other dental school based clinics, CNU's clinics will feature faculty and students working side by side and providing the highest level of clinical care while completing competency assessments and gaining clinical experience for the DMD students.

The second clinic is under architectural planning and will be part of 1,000,000 square feet of ambulatory medical and surgical clinics led by the California Northstate University College of Medicine and attached to the 250 bed first phase teaching hospital to be completed in 2022-23. It is expected that the first two years of the program will operate with D1 and D2 students in the Maritime drive clinic and that rising D3's will be the first to access the second clinic in the ambulatory care facilities of the hospital. This is planned as a 48 operatory clinic to accommodate 6 teams of 8 students per class and additionally pediatric dentistry and oral and maxillofacial surgery clinic and support services including patient spaces, business operations sterilization and radiology.

2. Describe the procedures that have been established for assessing program facilities and equipment in relation to current concepts of dental practice and dental education? What is the program's long-range plan for maintaining, replacing and adding equipment?

The College is working closely with A-dec and Patterson to assure that all facilities and equipment achieve the highest levels of current dental practice and are suitable to the dental education environment. After working with several vendors in discussion over the last year, these two were chosen due to their extensive track record in dental education environments. The dental chairs are ADEC 511 the most ergonomic, delivery system will include both air and electric attachments. Recommendations with regard to the adding and replacing of equipment in the coming years will be based upon concurrent technology assessment and recommendations of thought leaders in the college of dentistry to be brought to the Dean's executive committee where the annual budget request including capital budget items will be considered for proposal to the university. These request will be linked to the strategic plan and to the PLOs and defined competencies of graduates in dental medicine at CNU.

3. If the clinic is shared with other program(s), how many hours per week is it used by each program? How many treatment areas are used each session? What procedures have been established for scheduling utilization of the clinic?

The clinical facilities are not being shared with any other program

B. Supportive Documentation:

1. Blue-print, schematic or line drawing detailing the shape and dimensions of the facilities

See **Appendix 4-5 CNUCDM Facilities Schematics**

2. Certification that from appropriate authorities that all building regulations pertaining to access for disabled persons is met

The building certificate for 9700 W Taron Drive and for 2400 Maritime Drive includes an assessment that they are ADA compliant. Both have broad hallways and doors and are inclusive of ramp access.

Written Agreements

STANDARD 4-6

- 4-6** Any site not owned by the sponsoring institution where required educational activity occurs must have a written agreement that clearly defines the roles and responsibilities of the parties involved.

A. Description:

1. Describe the extent to which the program will use sites not owned by the sponsoring institution where required educational activity will occur.

The sponsoring institution owns and operates all sites where patient care, didactic, laboratory and clinical education will occur with the exception of two courses BSS 861 and BSS 862 in the fourth year entitled Community Based Education and Practice. This 8 week period will be for sites previously listed in Standard 2-26 as follows:

Sacramento Native American Health Center
Asian Health Services
HALO Health community clinics
Wellspace community clinics
El Dorado community health
Shingle Springs Indian Health
Colusa Indian Health
CDA cares events

2. Define the expected roles and responsibilities of the parties involved in use of the educational activity site. If roles and responsibilities vary by site, provide information on the variance.

The institution operating the site is responsible for the quality of care, staffing, credentialing, clinical operations at the above sites. CNUCDM is responsible for the appointment of faculty at the site as VCF (volunteer clinical faculty) assignment of teaching responsibility, calibration of faculty, faculty development, faculty service and engagement with full time faculty.

B. Supportive Documentation:

1. Provide a list of all sites where required educational activity will occur, identifying whether the site is owned by the sponsoring institution, and how the site is used for educational activities (didactic, laboratory, preclinical, clinical).

See [Appendix 4-6 Educational Sites](#)

2. Provide written agreements for any site not owned by the sponsoring institution where required educational activity will occur, including within the agreement the defined roles and responsibilities of the parties involved.

See [Appendix 1-6 MOUs Clinical](#)

Student Services

STANDARD 4-7

- 4-7** Student services **must** include the following: (address separately)
- personal, academic and career counseling of students;
 - assuring student participation on appropriate committees;
 - providing appropriate information about the availability of financial aid and health services;
 - developing and reviewing specific written procedures to ensure due process and the protection of the rights of students;
 - student advocacy;
 - maintenance of the integrity of student performance and evaluation records; and
 - Instruction on personal debt management and financial planning.

Intent:

All policies and procedures should protect the students as consumers and provide avenues for appeal and due process. Policies should ensure that student records accurately reflect work accomplished and are maintained in a secure manner. Students should have available the necessary support to provide career information and guidance as to practice, post-graduate and research opportunities.

A. Description:

1. Describe each area of student services separately. Include specific description of the planned services provided.
 - personal, academic and career counseling of students;
 - assuring student participation on appropriate committees;
 - providing appropriate information about the availability of financial aid and health services;
 - developing and reviewing specific written procedures to ensure due process and the protection of the rights of students;
 - student advocacy;
 - maintenance of the integrity of student performance and evaluation records; and
 - Instruction on personal debt management and financial planning.

- a. Personal, academic and career counseling of students

California Northstate University has a variety of student services including advising programs, alumni and career services, disability accommodations, mental health counseling, leadership

organizations, wellness committees, financial aid assistance, library services, and centers for research. All formal counseling is an independent function of the Office of Student Services.

Students have access to a broad range of personal, academic and career counseling services provided through the CNUCDM office of student services. Personal counseling services are provided on a referral basis. The office of student services maintains a list of counselors that are available in the community. Additionally, the office of student services maintains a list of, and appropriate contact information for, support groups that may be required by students or their families.

In addition, the Dean, and the assistant dean of students, a full-time on-campus counselor are available to assist students 24/7. Academic and career counseling, will be provided by the CDM Dean and designated faculty. All students will be assigned faculty and student (from higher classes) mentors to provide first-line counseling and assistance with academic and personal issues. The Assistant Dean of Students is available to meet with any student who has questions or problems related to student life, or academics.

Personal Counseling

The Office of Student Affairs and Admissions manages programs that promote student health and wellness. Services include providing information regarding alcohol and drug awareness and prevention and assisting with referrals to local agencies, treatment facilities, and clinical professionals. The OSAA staff are available for confidential referral assistance on a walk-in basis or by appointment. The office also provides guest presentations from health practitioners, and referral information to assist students with healthy lifestyle practices throughout the year. Information regarding programming is sent via campus email to all students at least two weeks in advance or posted on the campus information boards. Examples of programming include time management skills, nutrition guidance, stress reduction strategies, and work/life balance practices. Brochures offering guidance and tips for managing and understanding student focused problems are available from the OSAA. Assessment and evaluation of offerings through surveys and usage statistics enables the OSA to adapt to current program demands and develop new initiatives to better serve students.

Any student requiring disability assistance may apply for services through the Dean of Student Affairs. The University is committed to promoting equal access to programs and facilities, thereby insuring that students with disabilities experience the opportunity to participate fully in all academic experiences. Specialized services and academic accommodations are provided to meet the individual needs of students with disabilities to help them achieve successful completion of their professional degree.

Two of three licensed therapists provide personal counseling to students and are on campus every day of the week, with varying hours to accommodate students' schedules. This is an active and highly engaged program. Among the current student body over 200 students are currently availing themselves of these services. These counselors do not teach any classes nor evaluate students' academic performance. Along with individual therapy, the counselors have made available to students a variety of group sessions and workshops covering topics such as stress, depression, and healthy relationships. The counselors are also available for faculty consultations and behavioral assessments and have also been active participants in CNU events, including student orientation, club day, suicide awareness and prevention programs, wellness day, and time

management events. Due to increasing usage of counseling services and attendance at counseling-developed workshops and events, counseling hours available to students have increased this year, and the number of counselors working with CNU students has increased from two to three. **Appendix 4-11 Counseling Usage** details the presenting issues for which students utilize the counseling services.

California Northstate University provides students with a full-time, on-campus licensed clinical social worker for counseling issues that may arise while enrolled at CNUCDM.

- The Director of Student Financial Services is available to help students seeking assistance in managing his/her finances. The Residence Life staff members are available to assist students with issues pertaining to housing.
- California Northstate University understands many students have personal concerns that may affect his/her academic and personal lives. In most instances, the student can overcome such issues independently. In other instances, normal peer-to-peer, student-faculty, or student-administrative assistance can serve either as motivation or guidance to the student helping to resolve problems.
- California Northstate University believes it is in the interest of the student, the student's family, and the University to provide on-campus counseling to help students deal with a variety of personal concerns.

The Student Counseling Services will handle such problems in the following way:

1. The University recognizes that almost any human concern can be successfully treated provided it is identified in the early stages and referral is made to an appropriate modality of care.
2. The purpose of the policy is to assure students that if they have personal concerns that are affecting their academic and personal lives, they will receive assistance to help resolve their problem in an effective and confidential manner.
3. Students are assured that utilizing the student counseling service will not jeopardize their status as a student, their future or their reputation.
4. Concerns will be handled in a forthright manner.
5. Students who have a problem that they feel may affect academic performance are encouraged to voluntarily seek counseling and information on a confidential basis by contacting the student counseling service.
6. It is strongly encouraged that the students comply with referrals and recommendations of the student counseling service.

Academic Counseling

The principal source of academic counseling for students is the faculty. CNUCDM has established faculty and peer mentor programs. It is anticipated that the dental school will use the model provided by the other disciplines to establish a similar faculty and peer mentoring program. Should it be required, the office of student services can link students to community-

based professionals who specialize in learning disabilities and/or learning enhancement programs.

Instructional services

The Learning Resource Center is available for students, faculty, and staff. It includes 800 square feet of space devoted to the following: the library facility and its collection, the computer lab, classroom resources, the interlibrary loan program, and the career resources center. Space is also provided for individual and group study. Library staff and schedules are addressed in C.5.

The Learning Resource Center also maintains an Electronic Learning Resources System. Its purpose is to provide library and learning resources to students, faculty, and staff, and serve as an entry point for all users to meet their academic and research needs. A designated area of the learning resource center is also dedicated as a computer lab. The computers in the lab are available to students, where they can access the electronic resources and library materials. Additionally, the lab provides students with general PC software, access to the internet, and the ability to print desired materials.

Library systems

The Learning Resource Center subscribes to approximately 1,000 scholarly electronic journals and uses an integrated library system, "Library World," that contains modules for acquisition, cataloging, circulation, and inventory of physical library resources such as print books, print journals, models, kits, assessment tools, etc. The library's webpage contains a link to the online public access catalog (OPAC) which links to the ILS catalog records. For accessing electronic material, the library provides six public access terminals and wireless internet throughout the facility. Using a single sign-on, University users can access the library's electronic databases. These currently include the journal databases ScienceDirect, LifeSciences, OVID journals, electronic book collections, AccessMedicine, the Cochrane Database, PsychInfo, and PsychArticles. CNU is also a member of the National Network of Libraries of Medicine which allows students and faculty to obtain books and articles from numerous other universities. The DMD program has budget items for purchasing additional journals and assessment tools.

CNU is both a wired and wireless institution with computers and data ports available to students and faculty for access to the internet and academic portals.

Information resource instruction and staffing

At the beginning of each semester, a Learning Resource Center orientation session by the Library is scheduled to accommodate all interested students and faculty. The attendance is mandatory for all first-year students and optional for others. During this orientation, students are introduced to the learning resources available as well as the policies and procedures relevant to their usage. The library staff is also available to assist students in further instruction as needed and to provide individual instruction assistance.

The CNU library is managed and operated by a combination of a full-time health sciences librarian and a part-time library assistant. An information technology specialist works with the librarian to update, maintain, and operate electronic systems in the resource center. The librarian is available from 9 a.m. to 5 p.m. Monday through Friday. The library assistant is available from

12:30 p.m. through 9 p.m. Monday through Thursday and 9 a.m. through 5 p.m. on Friday. Both may be contacted through email, in person, or by telephone.

The library currently supports the doctoral research of the MD and PharD doctoral programs. In the proposed budget for DMD program, there is additional funding for library resources including assessment materials and yearly subscriptions to all major scientific and clinical journals

Technologic Capacity

CNU's IT infrastructure includes fully networked classrooms, each having data and power ports. Many of the labs are outfitted with individual workstations. A state-of-the-art media center sends and receives signals throughout the campus.

There are currently faculty and staff training sessions hosted by the IT department to ensure proficiency with University applications, including Canvas, Examsoft, and Mediasite. In addition, the Director of IT ensures that a software program specialist is available to provide continuous assistance to faculty and staff in their use of University applications.

The information technology department provides computer, CANVAS, email, and system assistance to all faculty, staff, and students. CANVAS is the University's learning management system which contains course information, assignment grades, and class documents and assignments. An introductory session to CANVAS is provided to new students during orientation. All students are assigned a unique campus email address for use during the program. The IT department offers assistance to students who experience problems with their account during normal business hours.

The informational technology support for students and faculty includes a minimum of one help desk staff member on site between the hours of 8 a.m. though 5 p.m. The IT team includes an IT Director, Systems Administrator, Network Administrator, Academic and Special Projects Administrator, Help Desk Administrator, Database and Web Administrator, and a Systems and Server Room Administrator.

Career Counseling

The Career Services Coordinator directs professional career planning and career counseling services. Information about career opportunities at various companies can also be found in the Career Resource section of the library or on the CNU website. In-class and extracurricular workshops are conducted throughout the program to assist students in analyzing their strengths and weaknesses. A job exposition is hosted on campus during the Fall semester to provide students with direct contacts for obtaining part-time employment during the summer months and possible post-graduation opportunities. Students are also encouraged to attend seminars and workshops in writing resumes, developing interview skills, and preparing for career placement. The Career Services Coordinator, in collaboration with the Alumni Coordinator, also follows up with graduates for the first 5 years after graduation through phone interviews and surveys to monitor how graduates' careers are progressing, and to solicit solutions for improvement in their respective programs and in the University as a whole.

Working with ADEA, the CNUCDM will develop career days for dental medicine to include information on the dental specialties, uniformed services, public health, dental education careers among others. The dental medicine faculty through their mentorship will also offer career counseling to DMD students. As well as students across the university.

Alumni Services maintain graduates' relationship with the faculty, staff, and student body at CNU by building lifelong connections with the alma mater community. They sponsor alumni social events, continuing education course information, career resources and services, fundraisers, speaking engagements, e-newsletters, news about what fellow classmates are doing, and the current faculty research.

b. Assuring student participation on appropriate committees

At CNUCDM, student representation is provided on appropriate college and University committees. The CDM will set up committees in accordance with prevailing University policies that include student participation. Any full-time student in good academic and professional standing is qualified to seek appointment or election to serve in a representative capacity on college and University committees. Interested students must apply by the posted deadlines to the respective college's Student Council for consideration.

Students participate in the admissions process but not as voting members of the respective college admissions committees. Rather, students participate on prospective student interview panels as observers where they can answer applicant questions, as tour guides, and as student ambassadors.

Students also serve on a multitude of student-based committees related to the student senate, student government and to our many student clubs and organizations. The *Student Handbook* has a listing and full description of all student government offices, clubs, and organizations for the various colleges and programs.

Students are selected for committees based upon recommendations from the Assistant Dean of Student Affairs and Admissions and appointments are made by the Dean. For college committees these include, the admissions committee, the curriculum committee, the institutional effectiveness committee and the honor council. The dental school administration additionally will meet on a scheduled basis with the class officers of each class and will select students as needed to serve on ad hoc committees and task forces. For example, a student will serve as a member of the search committee for the position of Dean of the College.

- c. providing appropriate information about the availability of financial aid and health services

Student Financial Services

The Elk Grove Campus has an Office of Student Financial Services. The office staff services the needs of students in all facets of financial aid counseling (debt management, financial literacy and financial planning) and provides them with information regarding available private, state, institutional and federal funding sources. The office has an open door policy regarding student counseling. Students are seen on a first-come, first-served basis. However, students may schedule an appointment with an administrator, if necessary.

CNU offers two installment options and two private education loan programs. They are available through the Financial Aid Office along with a list of scholarships, grants, and loan repayment programs.

The director is responsible for the overall administration of Federal Title IV, Federal Title VII, and institutional and private funding sources for the Elk Grove Campus. The director also supervises and oversees the functions and responsibilities of two full-time accounts receivable representatives. The accounts receivable representatives provide electronic billing and payment services to all enrolled students.

Processes and systems have been implemented to allow students to apply for financial aid electronically. The students can also view their financial aid award letter, level of indebtedness and their tuition statement of account electronically at any time. In addition, the student financial services office has a very comprehensive financial aid web site for the matriculating students as well as the continuing students.

Formal financial aid presentations are given to all applicants. Presentations are also given to enrolled students during orientation. Every student who receives financial aid is required to participate in an exit interview near the time of program completion. Presentations regarding federal regulatory updates and internal office policy and procedure revisions are also given as the need arises. All student financial services policies and procedures are publicized each academic year in the CNU Student Handbook.

Health Services

All students are required to acquire health insurance and provide evidence of coverage at the beginning of every semester. The University offers a group plan for students to purchase, or students can purchase health insurance on their own. The University provides mental health support through LCSW counselors on a drop-in or appointment basis on campus. The University's policy on health insurance is provided as follows:

Policy of Mandatory Student Health Insurance

Policy Statement

California Northstate University (CNU) requires all students to have health insurance coverage meeting certain standards. An active health insurance is required due to the nature of the health care educational programs at CNU, in addition to the wellbeing of the students.

Purpose

To state the requirements of student health insurance coverage as a condition of enrollment for CNU.

Scope/Coverage

This policy is applicable to all enrolled CNU students.

Procedure

- A. The health insurance coverage must include:
 - 1. Inpatient Care and Outpatient Care
 - 2. Urgent Care and Emergency Care
 - 3. Mental Health Care

- B. International students are required to subscribe to and maintain their enrollment with the school designated health insurance plan.

- C. New enrolled students are required to provide proof of health insurance coverages to the Student Affairs Office no later than **5 calendar days** before the start of orientation. Failure to provide proof of health insurance coverages by the deadline, students will not be allowed to attend orientation, the White Coat Ceremony, and may lose their seats if requirement is not met.

- D. Continuing enrolled students are required to provide proof of health insurance coverages to the Student Affairs Offices no later than **14 calendar days** before the first day of classroom instruction each semester. Failure to provide proof of health insurance coverages by the deadline, students will be subject to the following consequences:
 - 1. Students will be emailed with information of insurance carriers.
 - 2. Failure to enroll and pay the cost of the insurance premium in full will result in transcript hold, progression hold, registration hold, and library hold (student will not be able to check any materials out from the library).

- E. Students are expected to maintain health insurance coverages at all times as a student of CNU. If a student's health insurance coverage is lapsed, the student is required to contact the Student Affairs Office within 72 hours and must provide proof of insurance.
- F. Students will be randomly selected throughout the academic year to provide proof of health insurance coverage verification.
- G. When student is selected for health insurance coverage verification, student(s) will have 5 days to provide proof of insurance.

d. developing and reviewing specific written procedures to ensure due process and the protection of the rights of students;

These procedures are completed. All specific written procedures to ensure due process and protection of the rights of students are noted in the student Handbook: [Appendix 2-3 2020-2021 Student Handbook](#) and in the General Catalogue, [Appendix 2-2 General Catalogue](#).

The review of these procedures will be ongoing at the university through the President's Executive Council and with the University Attorney which review the status of university functions including due process.

Student Judicial System

This student judicial system is designed so that a student may have the opportunity to be fairly and justly treated when his/her personal academic or professional conduct allegedly violates the Bylaws and Regulations of the Code of Responsibilities and Rights of the Students of California Northstate University that are stated below in this section. This section does not apply with respect to infractions related to student academic and professional performance that are dealt with by the appropriate faculty, in regards to the filing of Student Academic and Professional Incident Report Forms or in terms of dealing with unsatisfactory academic performance issues that are stipulated in either the Academic Section of the college catalog or the student's respective course syllabi. Although faculty and college administrators have the option to deal with such issues within their respective colleges, they must still provide students the opportunity to be fairly and justly treated and to be given the fundamental right to address any issues related to unsatisfactory academic progress or allegations of misconduct.

Student Complaints

Any student or group of students may initiate a complaint procedure on any student concern, including complaints against faculty, staff, or other students. Guidelines for filing student complaints are listed in the *Student Handbook*.

e. student advocacy;

The Assistant Dean of Students and the Office of Student Services is committed to serving all of CNUCDM's students. The mission is to minimize student stress and maximize student academic and professional successes – including their social, medical and emotional well-being. This is

primarily accomplished through the University's open-door policy. Students are always welcome and are encouraged to discuss their concerns, particularly with the faculty, the administration and especially the Assistant Dean of Students who routinely counsels students on academic and non-academic issues. The Assistant Dean of Students also works closely with the academic deans on establishing academic and non-academic student policies as well interdisciplinary education for our students. The Assistant Dean of Students and his staff also serve as advisors to the student council and will provide yearly training sessions on student leadership to student leaders. In addition, the Assistant Dean of Students acts as a student's advocate on all academic issues through serving as an *ex officio* member of each Student Academic Review/Promotion and Graduation Committee for students who are in academic difficulty.

f. maintenance of the integrity of student performance and evaluation records;

The uncompromised integrity of all student grades, assessments and evaluations is the shared responsibility of all faculty, staff and students of the College of Dental Medicine and most directly by the office of the registrar and the office of the Associate Dean of Academic Affairs where such information is collected, used and archived.

In that regard, all faculty, students and staff will have FERPA training to ensure that academic performance information is not released without the individual student approval. Policies for posting grades are noted in the student handbook.

Transcripts, grades evaluations in the college and university are kept as electronic files and are password protected. Written release by the student is required before the release of transcripts or other protected information.

g. Instruction on personal debt management and financial planning.

The Office of Student Financial Aid will provide for the needs of students in all facets of financial aid counseling (debt management and financial planning) and will provide them with information regarding available funding sources. The office has an open door policy regarding student counseling. Students will be seen on a first-come, first-served basis. However, students may schedule an appointment with an administrator, if necessary.

Formal financial aid presentations will be given to all applicants. Presentations will also given to enrolled students during orientation. Every student who receives financial aid will be required to participate in an exit interview near the time of program completion. Presentations regarding internal office policy and procedure revisions will also be given as the need arises. All student financial services policies and procedures will be publicized each academic year in the CNU College of Dental Medicine Student Handbook.

Instruction on student debt and financial planning is also contained in BSS 501 given in the D1 year.

Course #	Course Title	Credits	Year	Term
BSS 501	Managing Student Life LAL, Lab	1	DS 1	Fall

Resilience, sustainability as a student and future health professional will be presented. **Managing student debt**, stress management, effects of social media, interpersonal relationships, and ethics in student practice will be discussed. The problems of drug and alcohol abuse will be shown. Respect in the University including cultural, gender, and sexual conduct issues will be presented. Students will be made aware of resources to promote student wellbeing.

2. Describe plans for early identification of students in academic difficulty.

Ongoing advising and academic support

All students in the DMD program will be assigned an academic advisor with whom they will meet at least twice per semester. These sessions will include discussions about progress towards their degree, academic performance, career questions, engagement with practicums, and any other matters of concern. At the end of the first year of study, the academic advisor will make a formal recommendation for the student's continued progression in the program. During the first semester of year four, the academic advisor will also review with the student their progression towards graduation and address any outstanding requirements including completion of the defined competency assessments. Students will be assigned an academic advisor based on their career interests and faculty experience. First-year students will also meet with the Dean and Associate Deans individually to establish personal contact with the program administrators. The DMD faculty will be expected to be available to students for academic advising during regularly scheduled office hours and through personal appointments.

Students who experience difficulty in any course will be urged to seek help and assistance from the course instructor or their academic advisor before the problem becomes unmanageable. If academic problems arise, school-funded tutoring services will be available through the OSA. Students who require this assistance will be referred by the faculty of the course or their academic advisor. Additional tutoring will be offered by students and these tutors typically post their contact information on campus bulletin boards. The OSA keeps a list of recommended tutors.

Utilizing a competency-based grading system, all students must reach a threshold for clinical competency in knowledge and skill set at 75%. Structured remediation activities for each didactic course will ensure a higher level of knowledge for the cohort of students earning a Y, 60-75%. Students earning below 60% receive an F requiring repeat of the course or further academic action. Expectations for classes are defined on individual syllabi with any opportunity for make-up assignments. Students who miss two or more sessions are required to work with the faculty of each class to define make-up opportunities.

If a student fails to meet the above minimum requirements, he or she will be placed on probation. Probation formally begins with a written notification to the student from the advisor. It will include the reason for probation, probationary conditions, and the duration of probation. Students can be removed from probation by addressing the area of concern. Students may be terminated from the program if they fail to return from probation in the timeframe allotted, if they receive two Cs or lower within an academic year, if they are acting in a manner that violates the ethical and professional standards of CODA as determined by faculty vote, if they fail to return from a leave of absence by the date specified, or if their academic or

professional actions have created a situation for which a warning or probation is inappropriate or impossible.

A student may petition for readmission to the program with an endorsement from his or her advisor. The petition will be voted on by the DMD, and the approval must be unanimous. The petition is then sent to the Dean for final approval or rejection.

Students will have the opportunity to remediate a maximum of four (4) courses that resulted in a grade below 75% throughout the didactic program; hence more than 4 courses with a grade of 60-75% (before remediation) will require that additional courses resulting in that grade be repeated. Remediation is not available for a course that resulted in a score of 60% or below. A particular course can be repeated only once. Failing more than two (2) courses (before repeating), below 60%, will result in dismissal.

Incomplete or Withdrawal from a Course

During a semester, a student may withdraw or fail to complete all required assignments and/or examinations due to extenuating circumstances, such as, but not limited to, an illness or a family emergency. In such cases, the course coordinator may give a grade of Incomplete for the course. All missed assignments and exams must normally be completed within 10 business days after the end of the semester in which the Incomplete was received, or within a timeframe determined by the course coordinator. Failure to successfully complete the course will result in an earned F grade for the course and placement on Academic Probation. Withdrawal from a course must first be approved by the course coordinator and the Office of Academic Affairs. Where a student has had to withdraw from a course a grade of W will be applied and the student will have to repeat the course next time it is offered.

Dismissal

A student may be dismissed from CNUCDM if any of the following conditions exist and the Academic Review/Promotion and Graduation Committee determines that dismissal is warranted: a. Failure to meet any terms of Remediation or Academic Probation; b. Conduct subject to dismissal as described in the Honor Code section of the Student Handbook; c. Foregoing an academic semester without obtaining an approved leave of absence; or, d. Failure to complete the degree requirements in five consecutive academic years from the date of the first day the student begins the program.

Appeal of Dismissal

Students dismissed from the College may appeal the decision in writing within thirty (30) calendar days of notification of dismissal to the Dean of the College. The Dean will render a decision in writing within 15 calendar days of receipt of the formal written appeal. The Dean's decision is final.

Students will be allowed to remediate a maximum of 4 courses over the duration of the CDM Program; students will be dismissed if cumulative GPA falls below 60%; GPA will be calculated on completion of remediation; failed courses must be repeated; a failed course can be repeated only once.

Students are not permitted to begin a course if prerequisite course(s) has/have not been successfully completed and passed. Consequently, if a prerequisite course is not passed, the student's academic progression may be delayed by at least one academic year.

3. What are the planned outcomes for each of the student service areas? How will the effectiveness of the counseling system be measured, by whom and how often?

The planned outcomes of the student service areas noted above are summarized in the following table. The method of analysis, time of analysis, and responsible party is noted. The results of this process will be presented annually to the Institutional Effectiveness Committee for their consideration and action.

STUDENT SERVICE AREA ASSESSMENT PROCESS

SERVICE AREA	METHOD OF ANALYSIS	RESPONSIBLE PARTY	FREQUENCY	ACTION PROCESS
COUNSELING PERSONAL	Utilization review with outcomes aggregated	OSA Dean	Annual report	IEC to Dean and DEC
COUNSELING ACADEMIC	Utilization review and outcomes of interventions	AD academic affairs	Annual report	IEC to Dean and DEC
COUNSELING CAREER	Survey of users	Career counseling director	biennially	Dean of student affairs
COMMITTEE PARTICIPATION	Review of list of students and attendance	Dean's office	annually	Dean
FINANCIAL AID	Assessment of financial literacy of DMD students	Course director BSS 501	annually	ADAA
HEALTH SERVICES	Confirmation of insurance	registrar	On registration	Review by PEC
DUE PROCESS STUDENT RIGHTS	Case based review of effectiveness of processes	Dean, university attorney	concurrent	Review by PEC
STUDENT ADVOCACY	Survey of students	Dean student affairs	Biennially	To DEC
ACADEMIC RECORDS	Concurrent assessment of all FERPA protected material	Faculty, students, staff, registrar	concurrent	DEC
DEBT MANAGEMENT	Survey of student debt	Student financial services	annually	DEC

B. Supportive Documentation:

1. List the committees to which students will be assigned, the mechanism for appointment, and whether they will be voting members

See **Exhibit T**

2. List the dental school or University staff member who will be responsible for coordinating each of the following areas for dental students:
 - a. personal, academic, and career counseling
 - b. financial aid
 - c. health services
 - d. due process and protection of student rights
 - e. student advocacy
 - f. maintenance of integrity of student performance and evaluation records and
 - g. instruction on personal debt management and financial planning.

See **Appendix 4-7 Student Affairs Staff Assignments.**

1. Describe the typical class size throughout the program.

Class sizes are kept to 20 students or below for small group learning and 80 in large group learning formats. In preclinical laboratory, classes will be 40 students per section.

2. Describe how timely and appropriate interactions between students and faculty, and among students will be assured, including detailed information for online courses. For programs being offered via distance education, describe the provisions available to faculty to ensure that the enrolled student is the student completing the coursework.

Courses will be offered in the regular semester manner. There are no distance or online courses. Students will meet with their academic advisor four times a year to gauge their progress in the program and to determine if additional resources are necessary to ensure their success. Classes designed to prepare students for practicum work, a class to guide them through the internship application process, and workshops to provide support and encouragement through the completion of the dissertation are built into the program. Students may also utilize the resources available through the Associate Dean of Academic Affairs, whose responsibilities include informing students about degree requirements, leaves of absence, registration for classes, how to obtain fellowships and grants, procedures regarding violations, transfers, withdraws, and degree deadlines. University-wide support includes academic advising and educational planning, a computer lab and library, academic success and financial literacy workshops, and peer mentoring.

Timely and appropriate interactions between faculty and students will be fostered through course and program electronic support. E-mail will be frequently used to allow for continuous communications and many courses include supplementary web-based tools that include forums and discussion boards.

3. Institutional policies and procedures related to Students Rights and Responsibilities, including Student Complaint Policy

Appendix 2-3 2020-2021 Student Handbook and in the General Catalogue, Appendix 2-2 General Catalogue, Appendix C-2 Complaints Policy, Attachment C-3 Grievance-Complaint Form NonAccreditationIssue, Attachment C-4 Grievance-Complaint Form CODA, and Attachment C-5 Complaint Log
And Appendix 4-7 Complaint Process CNUCDM

STANDARD 4-8

- 4-8** At the time of acceptance, students **must** be advised of the total expected cost of their dental education.

Intent:

Financial information should include estimates of living expenses and educational fees, an analysis of financial need, and the availability of financial aid.

A. Description:

1. Describe how the school will inform potential students of the full cost of dental education and financial needs assessment prior to enrollment.

Formal financial aid presentations are given to all applicants at various stages of the enrollment process. These presentations are given during the admissions interview process, the orientation process, the first-year core course, the half-way point of the student's program, and during the exit interview process. Optional lunchtime and evening sessions are also offered throughout the year. Smaller-group presentations regarding federal regulatory updates and internal office policy and procedure revisions are when necessary.

Prior to being admitted to California Northstate University, the Student Financial Services office will conduct a 30-minute financial aid presentation during the applicant's interview day. This presentation provides each applicant with the total expected cost, estimates of living expenses, and detailed explanation of availability of all institutional, state, federal and private sources of financial aid. Each applicant receives a packet of financial aid information for future reference.

2. Describe how during each year of enrollment students will receive a statement on the accumulated debt, future needs assessment and availability of future financial aid.

Student Financial Services will have a comprehensive financial aid web site for matriculating and continuing students. Processes and systems will be implemented to allow students to apply for all types of financial aid electronically. Each academic year, the students can electronically, on a daily basis, view their financial aid award letter, level of indebtedness and their tuition statement of account. In addition, all continuing students can access the CNUCDM *Student Handbook* and financial aid website electronically.

3. For each separate item below, describe how the school will inform its students prior to graduation of:
 - a. repayment schedules and specific billing procedures,
 - b. grace periods and their impact on repayment schedules,

- c. deferments and their implications,
- d. cancellation provisions, and
- e. available consolidation options and the time frame in which students would be eligible for them.

All students who have borrowed at least one educational loan must attend the exit interview presentation and complete an on-line exit interview counseling session prior to graduation. This presentation discusses in great detail (a) repayment options and combined billing opportunities. In addition, a Loan Deferment and Repayment Timetable Chart will be provided to all students to assist them through the repayment process. Answers to questions students have regarding grace (b), deferment and forbearance periods (c) are included in the Financial Aid Packet provided to each student. Each student also will receive an individualized portfolio which includes information regarding loan repayment, deferment, consolidation options (e) and cancellation provisions (d).

It is planned that each academic year, the Office of Student Financial Services will bring in a guest speaker from Sallie Mae to conduct two to three consolidation presentations. This hour-long presentation is designed for all graduating students and includes detailed information regarding the eligibility requirements, advantages/disadvantages, loan limits and terms/conditions of consolidating student loans.

B: Supportive Documentation:

1. Samples of planned accumulated debt reports that will be provided to students during matriculation and before graduation

Appendix 4-8 student accumulated debt report

2. Student Financial Aid Handbook

Appendix 4-8 Student Financial Aid Handbook

Appendix 4-8 Student Financial Aid Resources

STANDARD 4-9

- 4-9** The institution **must** be in compliance with all federal and state regulations relating to student financial aid and student privacy.

A. Description:

1. Describe the dental school's policies and procedures that will ensure that the institution is in compliance with all federal and state regulations relating to student financial aid and student privacy (FERPA).

Formal financial aid presentations are given to all applicants at various stages of the enrollment process. These presentations are given during the admissions interview process, the orientation process, the first-year core course, the half-way point of the student's program, and during the exit interview process. Optional lunchtime and evening sessions are also offered throughout the year. Smaller-group presentations regarding federal regulatory updates and internal office policy and procedure revisions are when necessary. The students are expected to become aware of this information through the multiple presentations and to follow all federal and state regulations relating to their financial aid. All student financial aid information will be maintained as highly confidential information within University records and will only be released upon student authorization.

B. Supportive Documentation:

1. Student Financial Aid Handbook

See [Appendix 4-8 Student Financial Aid Handbook](#).

2. Policy and procedures related to student privacy

See [Appendix 4-9 1904-Student Records \(FERPA\)](#).

3. Student authorization form for release of information

See [Appendix 4-9 CNU_LOR Request FERPA Form](#).

STANDARD 4-10

4-10 The dental school **must** advise prospective students of mandatory health standards that will ensure that prospective students are qualified to undertake dental studies.

A. Description:

1. Describe the school's pre-matriculation health standards.

California Northstate University requires that all students submit documented laboratory proof of the absence of tuberculosis (updated yearly) and proof of immunization against measles, mumps, rubella, varicella (chicken pox), diphtheria/tetanus, and hepatitis B prior to matriculation for all students enrolled in a clinical program (a one-month grace period is typically allowed). In addition, students are further required to prove the efficacy of their immunizations through blood titers, which involve laboratory assessments of their blood, to measure the level of circulating antibodies associated with these various diseases. Depending on the program or particular rotation, students may be required to submit to a drug screen. All students enrolled in clinical programs must submit a completed physical form, signed by a physician, indicating the student is medically cleared to be a student and to participate in clinical rotations.

B. Supportive Documentation:

1. Student Medical History Form

California Northstate University utilizes *myrecordtracker*. All students will be required to upload all current medical records and updates on that system. This does not include a CNU form as medical record forms are health system and physician specific. This is as well true for the Colleges of Medicine, Pharmacy, Psychology and Health Sciences. This is done to prevent the errors associated with self-reported medical histories obtained without the review of a care giver. Myrecordtracker corrects this problem by supplying the actual medical record.

2. Pre-matriculation letter to students

The current prematriculation letter for all CNU students is under revision and will be available as revised at the time of the site visit.

STANDARD 4-11

4-11 There **must** be a mechanism for ready access to health care for students while they are enrolled in dental school.

A. Description:

1. Describe the school's plan for health care service for its students, including education of students about bodily fluid exposure, needle-stick policies, and other infectious and environmental hazards associated with learning in a patient care setting.

The University requires that all full-time and part-time students enrolled at California Northstate University be covered under a health insurance plan acceptable to the University. California Northstate University has made the Student Medical Health Care Plan available to students. Students may choose health care insurance through California Northstate University or may choose their own. Evidence of acceptable non-University health insurance coverage must be provided prior to program matriculation and prior to registration for the fall quarter each succeeding year thereafter.

Short-term or catastrophic coverage is not deemed comparable and cannot be an acceptable health insurance plan. A student's health insurance coverage may be randomly verified. Failure to maintain health insurance may result in immediate dismissal.

Students are automatically enrolled for disability insurance through the University. This charge will appear on a student's bill along with his/her tuition, housing, and meals. Coverage ends upon graduation. Students on a leave of absence have the option to retain disability coverage, but must prepay the entire premium for the period of the leave. For information, contact the Office of Student Services. Disability insurance is mandatory for all students in full-time programs.

California Northstate University also provides student counseling by an on-campus counselor to help students deal with a variety of academic and personal concerns. Short-term counseling is provided at no cost for all students currently enrolled in classes at California Northstate University. Students who present with long-term issues are referred to off-campus specialists for assessment and treatment. All efforts are made to make referrals to providers on the student's health insurance network so that the student does not incur additional costs.

B. Supportive Documentation:

1. Student Handbook

See [Appendix 2-3 2020-2021 CNUCDM Student Handbook](#).

2. Student Health Brochure

California Northstate University does not provide health services for its students. All students are required to have health insurance that can be obtained through a CNU student health

insurance exchange or on their own. The University utilizes *myrecordtracker* to monitor the active health insurance status of students at the beginning of each semester, with periodic audits throughout the year. The policy on student health insurance can be found in [Appendix 4-11 Student Health Insurance Policy](#).

The University does provide mental health counseling for its students on a drop-in or appointment basis. [Appendix 4-11 Counseling Usage](#) summarizes the major areas for which CNU students seek counseling support services through the University.

3. [School policies and procedures for infectious disease and environmental hazards exposure in clinical settings](#)

STANDARD 4-12

- 4-12** Students **must** be encouraged to be immunized against infectious diseases, such as, mumps, measles, rubella and hepatitis B, prior to contact with patients and/or infectious objects or materials, in an effort to minimize the risk of infection to patients and dental personnel.

A. Description:

1. Describe how students will be encouraged to be immunized against infectious diseases.

CNU University requires that all students submit documented laboratory proof of the absence of tuberculosis (updated yearly) and proof of immunization against measles, mumps, rubella, varicella (chicken pox), diphtheria/tetanus, and hepatitis B prior to matriculation for all students enrolled in a clinical program (a one-month grace period is typically allowed). In addition, students are further required to prove the efficacy of their immunizations through blood titers, which involve laboratory assessments of their blood, to measure the level of circulating antibodies associated with these various diseases.

B. Supportive Documentation:

1. University policy on student health and immunizations

See **Appendix 4-12 Immunization Policy**.

STANDARD 5 - PATIENT CARE SERVICES

STANDARD 5-1

- 5-1** The dental school **must** have a published policy addressing the meaning of and commitment to patient-centered care and distribute the written policy to each student, faculty, staff, and patient.

Intent:

A written statement of patient rights should include:

- *considerate, respectful and confidential treatment;*
- *continuity and completion of treatment;*
- *access to complete and current information about his/her condition;*
- *advance knowledge of the cost of treatment;*
- *informed consent;*
- *explanation of recommended treatment, treatment alternatives, the option to refuse treatment, the risk of no treatment, and expected outcomes of various treatments;*
- *treatment that meets the standard of care in the profession.*

A. Description:

1. Describe how the statement of patients' rights will be distributed to students, faculty, staff and to each patient.

The College of Dental Medicine will adhere to a Patients' Rights Policy that addresses each of the intent statements noted above. It is attached in **Appendix 5-1 Patient Rights Policy**.

The CNU statement of Patient's Rights Policy will be provided through a variety of means to students, faculty, staff, and to the patients of the College of Dental Medicine. For patients, we plan on providing access to the Patient's Rights Policy in one of two ways. For those individuals searching the college's website, the plan is to have this policy be part of the patient portal. In addition, as part of the registration documentation for those who do register as patients of the College, the Patient's Rights Policy statement will be provided in the registration packet for the patient to keep as part of their records.

For students, faculty and staff a similar method of introduction to the Patient's Rights Policy will be provided on their respective website portal/portals. Each student, faculty or staff member will receive a copy of the policy in their student enrollment or employment package. For employees, it is anticipated that a signed copy of the policy will become part of the employee record as an indication they understand fully their responsibilities to ensure patient's rights are fully met and respected.

To further ensure a humanistic educational and quality patient care culture within the college, the college's leadership team is fully committed to modelling behaviors and beliefs that reinforce the philosophies set forth in the Patient's Rights Policy. The College's leadership team will further develop ongoing training for faculty, staff and students to reinforce the humanistic and patient

care policies that focus on optimum patient care, respectful of the patients' rights relative to that treatment.

B. Supportive Documentation:

1. Patients' Rights Document, as available

See [Appendix 5-1 Patient Rights Policy](#).

STANDARD 5-2

5-2 Patient care **must** be evidenced-based, integrating the best research evidence and patient values.

Intent:

The dental school should use evidence to evaluate new technology and products and to guide diagnosis and treatment decisions.

A. Description:

1. Describe the process and procedures that will be used to integrate evidence-based dentistry with the provision of patient care, including diagnosis, treatment planning, caries control; treatment of periodontal conditions; restorative material and dental product selection; and treatment outcomes.

The American Dental Association defines the term “evidence-based dentistry” as follows:

“Evidence-based dentistry is an approach to oral health care that requires the judicious integration of systematic assessments of clinically relevant scientific evidence, relating to the patient's oral and medical condition and history, with the dentist's clinical expertise and the patient's treatment needs and preferences. (Trans. 2001:462) In 2007, the Association established the ADA Center for Evidence-Based Dentistry to provide leadership in implementing ADA programs and initiatives related to EBD.”

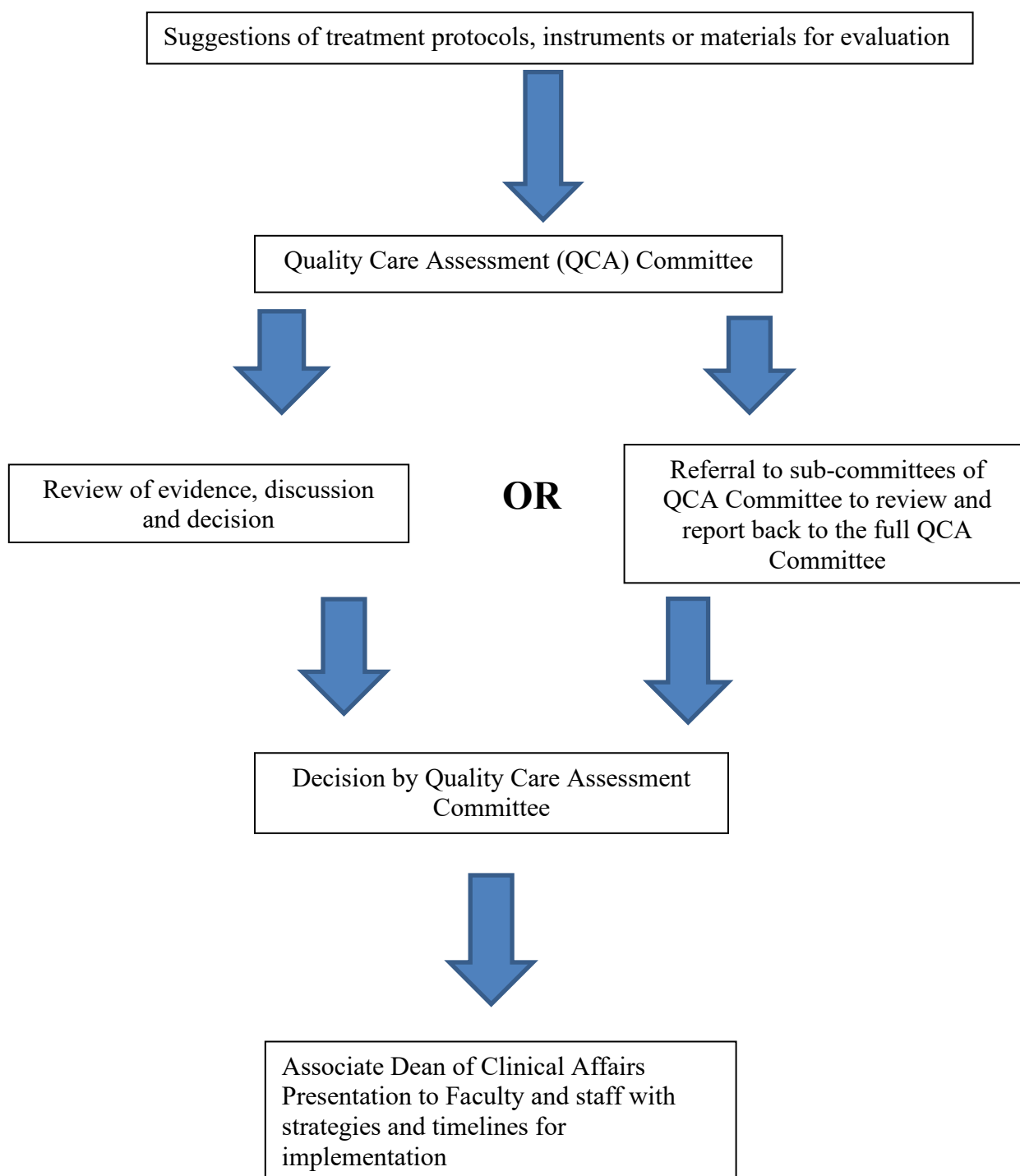
To realize its vision of disseminating the best available evidence and helping practitioners implement EBD, the ADA Center for Evidence-Based Dentistry works in collaboration with the Council on Scientific Affairs to convene expert panels that review the collective research evidence and develop evidence-based recommendations on key clinical issues.

The College of Dental Medicine plans to establish a Quality Care Assessment Committee. This committee will be charged with evaluation of the various treatment options for patient care using an evidenced based model to develop the CNU methods of patient care to be taught at the CNU College of Dental Medicine. The committee will integrate the best research evidence that supports the various treatment options from which patients are able to choose. The patient's decisions can be fully informed and made in light of their individual values, desires, and financial circumstances. The Quality Care Assessment Committee will also be charged with an evidenced-based evaluation of the products, techniques, and technology that enhance the value and quality of the diagnosis, treatment materials, and treatment techniques. To ensure quality of care outcomes, the committee will also provide an outcome assessment of the student treatment outcomes for their patients.

To ensure the evaluation is comprehensive, the committee members will be broad-based in their experience and areas of expertise. The goal is to evaluate all phases of patient care from initial

contact with the College through the completion of patient care. To be more specific, all aspects of patient care will be carefully evaluated from diagnosis, to treatment planning, through providing actual care whether it be dental hygiene, caries control, and restoration of teeth, treatment of infections of endodontic or periodontal origin. The evaluation will also include the choices of material and methods to provide that care. The final hallmark of quality care includes ongoing self-evaluation of treatment outcomes. The committee will be working with other institutional committees to develop outcome assessment tools and processes to ensure adequacy of educational effectiveness of both the college as well as developing assessment tools to ensure competency of the students we teach. At times, sub-committees or task forces within the committee can be designated with specific tasks to analyze and develop recommendations for action by the committee for the purpose of improving patient care and student teaching quality and effectiveness.

Evidence-based process for evaluation of treatment protocols, technologic instruments, or materials



B. Supportive Documentation:

1. Description of the planned school-wide committee that is charged with evaluating patient care

Appendix 5-2 Quality Assessment Committee

The Quality Assessment Committee will be comprised of the following members of the faculty and staff:

Charge:

The Quality Assessment Committee will be charged with developing the assessment directly or through subcommittees for

1. Infection and biohazard control assessment,
2. Patient record quality and safety assessment,
3. Development of and compliance with standards of care
- 4 Concurrent case review
5. Appointment and credentialing of faculty dentists
6. Systematic review of quality measures
7. Other assessment duties it deems necessary
8. Make recommendations to the Institutional Effectiveness Committee regarding the needed areas for annual assessment
9. Make recommendations to the Dean's Executive Committee regarding policies and resources to improve quality patient care.

Chair: Associate Dean of Clinical Affairs

Committee members:

Ex officio

Associate Dean of Curriculum and Clinical Education,
Clinic manager,
Dental Director of Clinic Operations,
Dental Director of Quality Assurance and Infection Control,

Additional members

Discipline Representatives for Radiology, Restorative Dentistry, Endodontics, Periodontics, Oral and Maxillofacial Surgery, Pediatric dentistry, Orthodontics, and other committee members as needed.

Two clinical staff representatives

Appointment and Terms:

Ex officio membership is continuous. All other members are for 3 year terms with unlimited renewal.

Meetings: Monthly as directed by the Dean of Clinical Affairs

2. Clinic policies and procedures, if available

Clinical policies and procedures are in development, not yet available

3. The school's planned treatment/care philosophies

The College's planned treatment and care philosophies are clearly defined to be a patient-centered and humanistic care philosophy, the Quality Care Assessment Committee is still in the very earliest phase of development of specific treatment and care philosophies that fulfill those philosophies. They are noted in [Appendix 5-2 Patient-Centered Care Policy](#).

STANDARD 5-3

- 5-3** The dental school **must** conduct a formal system of continuous quality improvement for the patient care program that demonstrates evidence of:
- standards of care that are patient-centered, focused on comprehensive care and written in a format that facilitates assessment with measurable criteria;
 - an ongoing review and analysis of compliance with the defined standards of care;
 - an ongoing review of a representative sample of patients and patient records to assess the appropriateness, necessity and quality of the care provided;
 - mechanisms to determine the cause(s) of treatment deficiencies; and
 - implementation of corrective measures as appropriate.

Intent:

Dental education programs should create and maintain databases for monitoring and improving patient care and serving as a resource for research and evidence-based practice.

A. Description:

1. Describe the school's planned quality assurance plan

California Northstate University is committed to ongoing development of its outcomes assessment program to ensure patient care that meets or exceeds the College of Dental Medicine's goal of providing patient-centered care through its humanistic educational teaching methods. The University is committed to developing a state-of-the-art assessment program and is currently sending its College of Medicine's Assistant Dean of Assessment, the College of Psychology's Dean, and College of Dental Medicine's Assistant Dean of Clinical Affairs to the Harvard Macy Institute to develop its clinical and academic assessment program. The clinical and academic assessment process is currently under development and refinement for the College of Dental Medicine. The Quality Assurance Plan as it is currently envisioned will have multiple layers of assessment through various Quality Assurance Committees. For example, the quality of clinical care assessment will be a charge of the Clinical Quality Assessment Committee. We also envision additional committees to assess quality and safety of patient health records as well as a committee to assess the quality, safety, and effectiveness of ongoing training for clinical infection control standards. Each quality assurance committee once fully formed will meet to develop their standards, assessment methods, and strategies for implementation.

2. Describe the development and planned implementation of the school's standards of care. Describe how these standards of care will be used to review the quality of patient care.

The Clinical Quality Assessment Committee will be charged with the development of the schools standards of care and the implementation of those standards. The Clinical Quality Assessment Committee's composition of members was described earlier in Standard 5. This committee will be working under the leadership of the Assistant Dean of Clinical Affairs to fully define the college's standards of care. Standards of Care are established based on the standards of the general professional community in which one practices. The committee will utilize many sources to develop its criteria for assessing quality of care relative to the standards of care in the

community. One resource for the committee will be the Guidelines for Assessment of Clinical Quality and Professional Performance of California Dental Association's Peer Review Council. The CNU Clinical Quality Assessment Committee will also rely on the expertise of the committee members and local community experts to help develop the CNU College of Dental Medicine standards of care guidelines and assessment criteria.

The Standards of Care guidelines will be implemented into its preclinical and clinical educational planning. The utilization of the standards of care in course planning ensures the educational outcomes lead to a patient-centered quality clinical care outcomes. The standards of care guidelines set clear goals and expectations for faculty, staff and most importantly our CNU students. As clinical care is being delivered, the standards of care define the expectations for clinical faculty in their assessment of the care delivered to patients on an ongoing basis. In addition, a clear understanding of the standards of care provides the basis for regular assessment of the quality of patient care as the College develops its program of Periodic Review of Care relative to the standards of care.

To summarize, there are several layers to the implementation and use of the CNU College of Dental Medicine's Standards of Care Guidelines once they are developed. The standards of Care guidelines will include the following:

- a. Development of preclinical and clinical educational course work
- b. Development and implementation of clinical outcome assessment and grading by clinical faculty in an ongoing and contemporaneous fashion on a daily basis during patient care.
- c. Development and implementation of periodic review and assessment of clinical outcomes in both episodic or regular focused reviews by staff or the Clinical Quality Assurance Committee

3. Describe the schools planned process for review of patient records. How often will records be audited? Who will perform the audits? How will corrective actions be monitored?

Each patient record will be reviewed at the conclusion of treatment by clinical faculty. The faculty serving as the attending supervisor of clinical care has immediate responsibility for reviewing the patient records ensuring the student has made accurate and complete representation of all pertinent information for that appointment and the procedure rendered. Ongoing review of records will be routinely done on a monthly basis. The ongoing review of records is anticipated to be a focused review of records by the clinic director or by designated staff. The focused review of records can take the form of review of specific charts or randomly selected charts of patients seen over the prior 30 days. For any errors, omissions, inconsistencies the student and/or faculty member creating the chart entry that is deficient in some manner will then be notified of the issue and counselled in such a manner to educate and improve future performance in record keeping. Following the counselling, a focused review of records from the individuals that were counselled will occur to provide assurance that the counselling was effective.

4. Describe how the school will determine patient treatment deficiencies?

Quality assessment is concurrent at the time and place of treatment. It is the duty of the attending faculty member to assess the quality of care at the time of treatment. Almost all treatment deficiencies will be identified by Clinical Faculty during the course of treatment. Any deficiency that would lead to a clinical outcome that does not meet the standard of care that can be remedied at the time of treatment will be managed through thoughtful instruction by faculty and the diligent effort of the student. For those deficiencies that cannot be remedied at the time of treatment, the faculty will need to identify the need for further care to correct the deficiency coordinate a suitable time and means for the deficiency to be remediated. On occasion, it may be necessary for faculty to stop treatment or to take over the clinical care directly to prevent harm to the patient or student.

For those deficiencies identified by faculty not remediated at the time of the initial treatment will be referred to the Dean of Clinical Affairs. The Dean of Clinical Affairs will then determine an appropriate course of action for remediation. This course of action will be determined in consultation with the clinical faculty using Clinical Quality Assurance (CQA) Guidelines to be developed by the Clinical Quality Assurance Committee. The remediation can include many possible options including re-treatment by student clinicians, referral for treatment by faculty member in Faculty Practice environment, or as indicated in the CQA Guidelines.

On occasion patient treatment deficiencies do not become apparent until the patient determines something does not seem right. Once the patient determines that in their opinion something is deficient, they then can make the student and faculty aware of the issue. The treating student under the supervision of clinical faculty will then make every effort to determine the source of the patient's complaint, the nature of the deficiency if any, and possible solutions if there is a deficiency. Once a deficiency is confirmed, then treatment solutions can be identified and proposed to the patient in an informed consent discussion which leads to a treatment decision. The CQA Committee will also be developing a means for patients to report in writing to the clinic director any perceived deficiencies so that a review process utilizing students, faculty and staff can be made. Once the review is completed, if a deficiency does exist, then treatment options can be then provided for the patient to consider as a means to resolve the deficiency.

B. Supportive Documentation:

1. Standards of Care document

Appendix 5-3 Standards of Care

2. Clinic Manual, as available

See below #5

3. Sample patient satisfaction survey, if available

See below #5

4. Patient records audit protocol form, if available

See below #5

5. Patient case completion review protocol form, if available

The following documents are currently under development as the clinics are not planned for operations for DMD students until 2020-2021:

1. Clinic Manual

2. Sample patient satisfaction Survey
3. Patient records audit protocol form
4. Patient case completion review protocol form

Standards of Care Document resource material:

Guidelines for Assessment of Clinical Quality and Professional Performance of the
California Dental Association's Peer Review Council

STANDARD 5-4

5-4 The use of quantitative criteria for student advancement and graduation **must not** compromise the delivery of comprehensive patient care.

A. Description:

1. Describe the school's philosophy on comprehensive patient care. How will patients be assured of receiving comprehensive care?

The Task Force of Dentists that led the decision to develop the CNU College of Dental Medicine envisioned in its strategic plan a clinical educational model that was focused on comprehensive care. The CNU College of Dental Medicine has adopted the philosophy of Comprehensive Patient Care envisioned by the developing Task Force. The College's leadership in designing its model of clinical care, strongly believes the following patient care educational model is the most effective model for ensuring comprehensive care for patients. Unfortunately, the enemy of comprehensive patient care in a dental school at times can be a quantitative patient care model which places a priority on student requirements for graduation. Our model of comprehensive care is built on the following criteria which we believe will ensure the priority is clearly on patient needs and comprehensive patient care. The following is our model to ensure comprehensive care takes precedence over student advancement requirements and graduation.

Patients will be assigned to a comprehensive care Treatment Group. Each Treatment Group will have a Treatment Group Leader, who is a dentist licensed in the State of California. For each Treatment Group there will also be a staff person identified as the Treatment Group Coordinator. To each Treatment Group, students will then be assigned to provide care under the supervision and guidance of the Treatment Group Leader aided by the Treatment Group Coordinator. The Treatment Group Coordinator's responsibility will be to schedule each patient in a fashion that ensure the patient receives the care they have been determined to need. It is the duty by nature of licensure for the attending licensed Dentist to ensure quality comprehensive care is fully delivered to each patient of record. The patients assigned to the treatment group become the patients of record of the Treatment Group Leader. In addition, it is the responsibility assigned by the College on the role of the Patient Care Coordinator to schedule each patient in a fashion that ensures they receive comprehensive care in a timely fashion.

This model relies in large part on the duties and responsibilities of being a licensed dentist in the State of California. A license to practice health care by its nature, carries a legal and ethical responsibility. As such it requires the Attending Doctor to provide comprehensive dental care in a fashion that meets or exceeds the minimum standards of care as establish by the community. These duties and responsibility associated with patient care are also is a job requirement associated with the appointment as Clinical Faculty of the CNU College of Dental Medicine.

The College recognizes that students do have requirements to meet for advancement and graduation. To be clear, the student's needs for requirements will not take priority over the patient's needs. This model while ensuring comprehensive care for patients as its priority, it also does allow for consideration of student requirements to be met in the following fashion. A

Treatment Group is a team of professionals in training whose role is to collectively manage and treat the patient in the best and most comprehensive fashion. This is not unlike the team of dentists that may provide care in concert through referral with the primary dentist. The Treatment Group Coordinator and the Treatment Group Leader routinely assess the needs of a patient and assign treatment to students based on their clinical skills and experience. It is also possible to consider the needs of students relative to the treatment needs of the patients presenting for treatment on any given day. It is possible that with the primary focus on quality comprehensive care for patients that students within the Treatment Group can be scheduled in a fashion similar to a referral practice where multiple practitioner provide comprehensive quality patient care.

2. Describe how patients will be assured of best practices care and not care related to quantitative requirements

The primary responsibility for ensuring best practices is the model we plan to employ wherein it is recognized that the legal responsibility associated with licensure and the job requirement to provide care that follows best practices as defined by the Quality Assurance Committee evidence based guidelines. In addition the Routine Periodic Audit review of Patient records and Focused Audit Review of Patient records as described in Standard 5-3 allow for assessment ensuring minimal opportunity to lose focus on the goals and application of the CNU comprehensive quality patient care standards. Furthermore, focused patient record review for those individuals who have lost sight of the goals of comprehensive care ensures

STANDARD 5-5

5-5 The dental school **must** ensure that active patients have access to professional services at all times for the management of dental emergencies.

A. Description:

1. Describe the school's planned policy and procedures for providing emergency services, including after- hours care for patients.

Having access to emergency dental care at all time is important for the active patients of California Northstate University College of Dental Medicine.

It is the policy of California Northstate University College of Dental Medicine that a faculty member and a backup faculty member will be on call after hours to manage dental emergencies of patients of the College of Dental Medicine.

Currently the student clinic and faculty clinic are still in architectural development. The full scope of the emergency care policy and its procedures manual are still in development.

The purpose of this call schedule is to answer queries regarding care but not to provide onsite treatment after hours. After hours onsite treatment will be through arrangement with local emergency Department and after opening by the California Northstate University Hospital and Clinics. The Emergency Department at CNU is planned to have a dental/OMS/ENT room for urgent treatment.

B. Supportive Documentation:

1. Information provided to patients regarding emergency services and after hours care, if available

This form is not yet available as no clinics are operating. However, the plan to cover emergency services after hours are noted above

STANDARD 5-6

- 5-6** All students, faculty and support staff involved in the direct provision of patient care **must** be continuously recognized in basic life support (B.L.S.), including cardiopulmonary resuscitation, and must be able to manage common medical emergencies.

A. Description:

1. Identify and describe the location of the emergency materials and equipment that will be available for use in the dental clinic and for instruction in the management of dental office emergencies. Describe plans for additional emergency equipment and supplies that may be accessible to the clinic and the planned location.

Because the architectural plans are in the early stages of development, we are unable at this time to identify specific locations of the emergency equipment and supplies other than to say that they will be in clearly marked or identified locations in the clinic, simulation laboratories, and OSCE simulation settings. The needs for each location will be identified based on the level of care provided in that location. For example, the preclinical simulation lab will require only basic emergency equipment suitable for any other large space occupied by students. The clinical treatment areas will have emergency equipment and supplies appropriate for the location. As a general campus wide emergency supply, there will multiple AED stations located throughout the campus whether they be patient care clinics, education halls and labs, or administrative quarters. As the plans become fully developed, the specific location and level of emergency care will be identifiable.

2. Describe how the emergency equipment will be monitored to assure it is functional.

The clinic director will have this as their duty to ensure the emergency equipment is monitored to assure functionality of equipment and currency of medical supplies. This requires several levels of monitoring to maintain functionality of emergency equipment to ensure all systems are functioning when needed. The first level of monitoring is personal inspection by a trained and knowledgeable designated individual who will inspect and document the level of readiness of equipment, supplies, organization, and ease of access to those materials. There will be monitoring logs recording the level of readiness. Following each reported use of the emergency cart, an inspection will be mandated so that the emergency cart equipment and supplies are fully ready to be deployed at the next emergency. Part of this duty will be documentation that regular examination and resupply have been done verifying functionality of emergency equipment. Documentation would include:

- a. Supplies are checked for both quantity and current useable date stamps
- b. Equipment is fully functional
- c. Location of equipment is clearly marked and unobstructed for easy access
- d. Routine training logs for staff, faculty and students are maintained. Training logs would contain at the least the attendee's names, dates, and training summary.

- e. Location and accessibility of emergency call stations are clearly identified and faculty, staff, and students serving in those locations can identify them.
3. Describe the dental school's planned policy regarding basic life support recognition (certification) for students, faculty and support staff who are involved in the direct provision of patient care.

The College of Dental Medicine planned policy will be all faculty, staff, and students who will be involved in direct provision of patient care will be trained and certified in Basic Life Support. There is strong support currently among the College's leadership to provide Advanced Life Support Certification to all those directly involved in patient care. The current discussion recognizes that repetition generates familiarity and skill enhancement so there is exploration of how best to provide certification to students on a yearly basis beginning in their first year. The level of certification from Basic Life Support raising to Advanced Life Support as they transition into clinical care. Documentation of training at the College has two levels of monitoring. The first is all clinical care faculty are required to be licensed in the state of California which requires by statute recertification every two years in BLS or ALS training. The College will require proof of currency of license as well as proof of BLS or ALS certification. As part of its educational program, the College will provide BLS and ALS certification for students, faculty, and the general dental community. This carries the duty of maintaining records of current certification of all attendees, including faculty, staff, and students

4. Describe how the dental school will ensure that recognition of these individuals is obtained and does not lapse.

The process to ensure recognition of certification of training if faculty, staff, and students is ensured was in large part answered in item 3 above. For faculty and staff, at the University all contracts for the Colleges of Medicine, Pharmacy, and Psychology are year to year. As part of the annual review of employment, it is Human Resources obligation to ensure documentation of licensure, currency of training and other employment mandated requirements. This annual reappointment will include the submission of the BLS certificate. The dental staff office will maintain a record of all BLS certificates of faculty and staff.

5. Does the school plan exceptions to this policy for persons who are medically or physically unable to perform such services? If so, how will these records be maintained by the program?

Americans with Disabilities Act mandates exceptions for persons who are medically or physically unable to perform for reasons related to their disability. The College of Dental Medicine will work to identify and document all those who are unable to perform these tasks, make appropriate adjustment and accommodations in light of the specific disability, and maintain written documentation signed by the individual and University representative. All of this will occur in a respectful, professional manner appropriate for a University and College that places a high value on the philosophy of Humanistic Education and Quality Comprehensive Clinical Care.

B. Supportive Documentation:

1. Copy of policy on managing emergency situations in the treatment area(s), if available

The policy on managing emergency situations in the clinic areas is in development. The policy in some aspects may need to consider location and design elements of the treatment areas that could impact the application of or suitability of the policy. Once the design of the clinic/clinics is established then specific policy can be developed that is appropriate for general use and specific each clinic location for the application of policy.

2. Copy of policy on basic life support recognition (certification)

Appendix 5-6 BLS policies

Basic Life Support: It is required that all faculty involved in patient care at the CNU College of Dental Medicine must possess a current license to practice in the state of California. The Dental Practice Act of California mandates biannual certification of Basic Life Support as a requirement of licensure. It is required that all faculty maintain licensure including BLS certification.

It is required that all clinic staff directly involved in patient care maintain BLS certification.

Records of certification in BLS are maintained in the dental staff office.

Students will be required to be BLS certified in Year 1 as a component of the curriculum. All matriculating students and students completing the second year will be offered the BLS course at CNSU, first in Foundations of Odontology (Odont 511) and at the end of the second year in Local Anesthesia (OMFS 632). It is the student's responsibility to provide the signed BLS certification card to *myrecordtracker*.

CNUCDM will sponsor a BLS certification course each semester at CNU available to students faculty and staff at no cost.

STANDARD 5-7

5-7 Written policies and procedures **must** be in place for the safe use of ionizing radiation which include criteria for patient selection, frequency of exposing radiographs on patients, and retaking radiographs consistent with current, accepted dental practice.

A. Description:

1. Describe the school's policy on the use of ionizing radiation. Describe the planned procedures to be used when working with ionizing radiation.

Recognizing that dentistry plays a significant role in maintaining safe radiation exposure of patients and to ensure not only the safety of patients but if students and staff it is paramount to provide training so that dental students, staff and faculty have clear guidelines to keep radiation exposures As Low As Reasonably Achievable (ALARA). The College is committed to ensuring the health and safety of patients, students, staff, and faculty who may be subject to radiation exposure. The policy will dictate that exposures have the following criteria:

- a. the exposures are justified in relationship to their potential benefits,
- b. necessary exposures are kept as low as reasonably possible (ALARA).
- c. Doses received by patients, students, or staff are kept below the allowable limits
- d. The policy will include criteria for patient selection, frequency of exposing radiographs on patients, retaking of radiographs

Radiation safety guidelines: The policy and procedures manual will provide radiation safety guidelines for the dental persons utilizing equipment including any restrictions of the operating technique for the use of that particular x-ray equipment being utilized. Once the equipment has been obtained then the safe operating techniques and guidelines can be then be developed specific for the equipment utilized.

Training: The policy will require that any dental personnel (students, staff, faculty) utilizing an x-ray generating equipment and imaging software be trained and demonstrate competence in that piece of equipment and be able to comply with radiation safety rules during its use. In addition adequate records of those trained and verified to be competent in the use will be kept.

Radiation Monitoring: Any individual whose job involves the use of x-rays should be provided an x-ray monitoring device. It is recognized that Monitoring devices must be provided if the anticipated annual dose exceeds the annual occupational limits as established in the U.S. Nuclear Regulatory Commission's Occupational Dose limits guidelines. Monitoring will be recommended for known pregnant employees. If the annual monitored exposure is less than 10% of the maximum allowable dose (5 rems), then monitors need not be worn.

If a student, staff or faculty is exposed to ionizing radiation at more than one facility then we will obtain from the other facility a copy of dosimetry report or documentation that confirms exposure is not likely to be greater than 10% of annual exposure.

2. Describe how the school plans to ensure safe use, application, and exposure of ionizing radiation for patients.

The policy and procedure manual will include the following to ensure safe use, application of, and exposure to Ionizing Radiation for patients and the personnel utilizing the equipment:

- a. criteria for patient selection consistent with the joint ADA-FDA guidelines
- b. frequency of exposing radiographs on patients
- c. retaking radiographs consistent with current accepted dental practice

B. Supportive Documentation:

1. Policy of use of ionizing radiation, if available

See **Appendix 5-7 Ionizing Dental Radiation Safety Proposed Policy.**

STANDARD 5-8

- 5-8** The dental school **must** establish and enforce a mechanism to ensure adequate preclinical/clinical/laboratory asepsis, infection and biohazard control and disposal of hazardous waste, consistent with accepted dental practice.

A. Description:

1. Describe the policy for handling and disposing of hazardous waste. Explain how the school will enforce this policy.

The policies for handling and disposing of hazardous waste at CNUCDM are based on the California Medical Waste Management Act. The CNUCDM Policy is to handle and dispose of hazardous waste in a fashion that meets or exceeds state and federal mandates. The current waste management plan for this Policy is under development using the California Dental Association's Regulatory Compliance Manual as is recommended for Medical Waste management and disposal as well as for the management and disposal of Hazardous and Universal Waste. The California Dental Association's Regulatory Compliance Manual used as reference (available on site or at cda.org) to develop these plans is found in **Appendix 5-8 CNUCDM hazardous waste plan**. The plans for both the medical waste and hazardous waste disposal are under development and will be completed once the contracts with licensed hazardous waste management companies and regulatory agencies are established, and the individuals responsible for its management are hired and identified. The Medical Waste Management Plan and Hazardous Waste Management Plans as they currently exist are found in **Appendix 5-8 CNUCDM medical waste plan**.

2. Describe the school's policy for preclinical/clinical/laboratory asepsis and infection and biohazard control. Explain how the school will enforce this policy.

Mandatory educational sessions of standard precautions for blood and airborne pathogens are provided during Orientation within the first week of the first year. Students receive additional training in proper blood-drawing techniques and patient related infection control policies prior to the clinical aspects of the program. The appropriate use of personal protective equipment such as gloves, face shields, gowns, masks, and hand washing will also be presented at these times. Additionally, all students will be expected to adhere to California Northstate University College of Dental Medicine's vaccination policy available in the student handbook.

Students must immediately report any occupational exposure incident to their clerkship/elective faculty member or immediate supervisor who will assist them in contacting the appropriate entities to follow the established protocol of that facility regarding occupational exposure incidents. In some circumstances, the costs incurred in dealing with occupational exposure incidents (such as testing) will be covered by the healthcare facility at which the exposure

occurred. In some circumstances, the healthcare facility may refuse to bear financial responsibility for the exposure. For these cases, the College of Dental Medicine's supplemental policy that covers blood and bodily fluid exposure/needle-still will take effect.

Students should also be aware that if, in the course of the testing required by occupational exposure incident protocols, they test positive for potentially infectious agents such as AIDS, HIV, or TB, the Occupational Safety and Health Officer is required by law to report this information to the County Health Department.

In the event of an infectious and/or environmental disease or disability, the Director of Student Affairs, Admissions and Outreach will work with the student, on a case-by-case basis, to ensure student wellness and minimize time lost in educational activities.

Enforcement of the infection control policy is led by the Director of infection control and asepsis, a staff position in the clinics and is as well the joint responsibility of every licensee whether faculty or staff. A monthly report of Quality measure implementation for infection control is made to the Clinical Quality Assessment Committee.

B. Supporting Documentation:

1. Infection and biohazard control policy, as available

Appendix 5-8 infection and environmental hazards control policy

Appendix 5-8 CNU medical waste plan

Policies are based on guidelines from the CDC, California Statute, and practice guides developed by Organization for Safety, Asepsis and Prevention (OSAP).

2. Hazardous waste control policy, as available

Appendix 5-8 CNU medical waste plan

Appendix 5-8 CNUCDM Hazardous waste plan

3. Post-exposure control plan, as available

Appendix 5-8 parenteral exposure and blood born pathogen policies

Appendix 5-8 exposure to infectious or environmental hazards

4. Sample monitoring report, as available

Appendix 5-8 Biohazard exposure incident report

STANDARD 5-9

5-9 The school's policies **must** ensure that the confidentiality of information pertaining to the health status of each patient is strictly maintained.

A. Description:

1. Describe how confidentiality will be maintained for each patient.

The current University healthcare colleges have arrangements with the various hospitals and other health institutions to provide experiential clinical learning opportunities for their medical, pharmacy, and psychology students. In these arrangements, the University has relied on the institutions providing the clerkships and preceptorships to provide the required HIPAA compliance training and security for protected health information. Specific to the College of Dental Medicine's Community Based Clinics, a similar working relationship is envisioned for each non-university based experiential clinical learning experience.

The College of Dental Medicine is establishing the first University based clinic to be involved in direct patient care. Consequently, the CNU College of Dental Medicine is currently proceeding with establishing the first University Policy and Procedures for Health Information Privacy. We are currently developing standards, protocols and methods for training staff, faculty, and students, as well as leading the University in developing the Information Technology infrastructure and staffing necessary to maintain protection of protected health information.

The College of Dental Medicine will have in place the required Physical, Administrative, Technical, Documentation Requirements, and Policies and Procedures that ensure compliance with State and Federal law for the protection of personal health information. The HIPAA compliance program as it is being developed by following the *ADA Practical Guide to HIPAA Compliance Privacy and Security Kit*. We are currently developing the following as is mandated for Protected Health Information.

1. Notice of Privacy Practices (NPP)
 - a. Use and Disclosure of Personal Health Information Policy and Procedures Statement
 - b. Signed Authorization defining the "Designated Record Set" of PHI for medical records and billing records.
2. Breach Notification Compliance Policy and Procedures
3. Business Associates and Subcontractors Policy and Procedures
4. Restricted Disclosure to a Health Plan
5. Patient requests to see and get copies of Records
6. Subsidized Marketing Communications
7. Sale of Patient Information
8. Decedents
9. Research

Specific to the need to address the Physical protections for providing HIPAA compliance for protection of PHI, the Dean and Planning Committee members have met with the architect, Adec, and Patterson Dental companies to develop the clinical design in light of the need for protection of individual health information. Additional meetings are currently scheduled to continue the development and to adopt the final plans to begin construction of the facilities that will house the Simulation labs and clinics.

The Technical aspects of protection are also being currently developed. Planning meetings have occurred and are ongoing with Simon Tan, the Manager of CNU IT Department. These meeting were to assess the university current IT capabilities and strategically plan for the additional security and infrastructure changes that are required to provide a stable and secure Electronic Health Record system. Further meetings are scheduled with the companies that provide institutional level dental specific Electronic Health Records (HER), specifically the purveyors of Wisdom and Axium. These meetings will help us better understand the IT needs and expectations for the College and will lead to Request for Proposals from these companies for their EHR systems. Each step in this process will lead to further development the Technical aspects of our protection plan and IT infrastructural development prior to the opening of the clinical training of students.

Once a decision is made for Electronic Health Record (EHR) is made, administrative decisions on Policies and Procedures can then be made that would be specific to the EHR system chosen by the College. These Policies and Procedures would be specifically designed to ensure access to Protected Health Information is limited to appropriately to specified faculty, staff and students based on specific needs for access to that information. In addition once the EHR system is determined, then appropriate HIPAA training modules for faculty, staff and students can then be developed. The final administrative role that would be determined once the EHR system is determined, is the administrative documentation necessary to fulfill HIPAA compliance expectations.

The CNU Health Information Privacy Policies and Procedures as they are developed over the course of the next few months will delineate for staff, faculty and students their obligation to protect individually identifiable health information that is generated, received, or maintained as health care providers and a health care institution. These policies and procedures are implemented as a means to protect the interest of our patients. It is implemented to fulfill legal obligations established by the Health Insurance Portability and Accountability Act (HIPAA) of 1996, its regulations for implementation, and any state law that provides greater protection.

These Policies and Procedures will be designed to address the basic expectations of HIPAA and the Privacy Rules that apply to the dental clinic of CNU College of Dental Medicine (CDM). These Policy and Procedures as well as the Privacy Rules are intended to apply to CNU CDM patients which included prospective patients, patients of record, former patients, their authorized representatives, and any others identified in the Privacy Rules.

The College has or will have to guide the process of developing its HIPAA Compliance, Privacy, and Security plan, one or more guides available on the market, such as the *ADA Practical Guide to HIPAA Compliance Privacy and Security Kit*.

B. Supporting Documentation:

1. Dental school's policy on patient confidentiality, as available

CNU will utilize the *ADA Practical Guide to HIPAA Compliance Privacy and Security Kit* to develop its policies on patient confidentiality.

STANDARD 6 - RESEARCH PROGRAM

STANDARD 6-1

6-1 Research, the process of scientific inquiry involved in the development and dissemination of new knowledge, **must** be an integral component of the purpose/mission, goals and objectives of the dental school.

A. Description:

1. Describe how research will be integral to the dental school's purpose/mission and list the school's research related goals and objectives.

The dental industry is going through significant changes that will continue in the foreseeable future. The large number of people not receiving dental care, the concentration of dental services being provided to the most affluent members of society who need these services the least, the traditional delivery model where oral health services are delivered in increasingly high priced surgical suites, and the development of preventive and behavior support sciences facilitating new models of care, all are driving disruptive innovations that are changing the nature of dental services delivery. These challenges, innovations, and changes represent opportunities for the College of Dental Medicine to excel by addressing these issues, obtaining extramural funding to do so, and documenting and publishing and results of these efforts.

The Mission of the College of Dental Medicine includes the following statements:

Research: Promulgate scientific inquiry throughout the curriculum and support student and faculty research that creates an environment of scientific curiosity and an evidence based foundation for clinical practice.

Service: Provide individual patient care services at all clinical sites under the auspices of CNUCDM that produces the very best oral health outcomes and clinical value.

Social Accountability: Advocate for and help build stronger communities in California and globally through improved oral health care, disease prevention, health promotion and protection from oral diseases through community-based approaches.

In addition, the Vision of the College of Dental Medicine is to provide constructive innovation in its education programs, and leadership in integrating oral health care into human health care systems. This vision includes the following values:

- Patient-centered didactic and clinical education that always puts improved health outcomes first
- Foster a humanistic and character-developing environment for dental students
- Making better communities and a better world through improved oral health
- Understanding the professional responsibility of the dentist as the head of the oral health care team

- Practicing health promotion and disease prevention and protection
- Advancing California Northstate University through excellence in all we do

The reason these points are listed here in the standard on **Research** is that this Mission, Vision and Values will be primary drivers of the research agenda for the College. The College is the only dental school located in the northern Central Valley in California, a large geographic area with significantly lower than average income for California and higher than average challenges for the population to have and maintain good oral health.

The initial research portfolio for the College, already established prior to the College starting to enroll students, is based on grants and contracts brought by Dr. Paul Glassman, Assistant Dean for Research. These grants all focus on translation of dental prevention and behavior support science into clinical care, integrated into communities, and using innovative delivery models to demonstrate the ability to improve access to oral health services, improve health outcomes, and lower the cost of care.

These focuses, being at the forefront of preventive science, applying cutting edge behavior support science, developing and deploying innovative delivery systems, and integrating oral health services with educational, social service, and general health delivery systems, align with the Mission, Vision, and Values of the College of Dental Medicine. They will help guide the development of the new funded inquiry and drive the creation of scholarship within the faculty and student body.

In addition, the College is in a unique position, being co-located with professional programs in Medicine, Pharmacy, and Graduate Psychology, to foster cross-disciplinary research and scholarship that apply the expertise in all these disciplines to improving the health of the population in the Central Valley of California.

2. Describe how the dental school will determine whether its research goals and objectives are met on an annual basis. If goals and objectives are not met, what steps will be taken to correct the deficiencies?

The College will be developing tracking mechanisms in multiple areas to determine whether its research objectives are met. These include tracking applications and awards for grants and contracts and tracking submitted manuscripts and publications. The College will also review annually the degree to which research pursuits and findings are influencing and incorporated into the curriculum and academic programs.

The role of the Assistant Dean for Research will include managing this tracking system and responding to annual assessment findings.

3. Describe how the dental schools' research program will support the overall educational program at the school, including research-driven changes in curriculum and/or clinical training.

Given the orientation of the College of Dental Medicine, as articulated in its Mission, Vision, and Values, to improve the oral health of the population of the Northern Central Valley of California, the focus of the research and scholarship activities of the faculty on these challenges

is integral to aligning resources and activities to achieve these goals. This focus will provide expertise and a rich source of information to drive the educational program in the direction of producing graduates prepared to contribute to addressing the challenges related to oral health facing the profession and society.

B. Supportive Documentation:

1. Mission and Goals Document

Appendix 1-2 CDM Strategic Plan

2. Research goals and outcomes

Research Goal:

Given the orientation of the College of Dental Medicine, as articulated in its Mission, Vision, and Values, to improve the oral health of the population of the Northern Central Valley of California, the focus of the research and scholarship activities of the faculty will be on addressing the challenges faced by the population of this area in achieving and maintaining optimal oral health.

Specific Research Objectives:

CNUCDM will encourage and support research and scholarship activities that address the following:

1. Document and understand the challenges faced by the population of the Northern Central Valley of California in achieving and maintaining good oral health.
2. Design and test interventions to address the oral health needs of the population of the Northern Central Valley of California including:
 - a. Address oral health literacy
 - b. Develop, deploy and test innovative delivery systems
 - c. Create and support “Community/Clinical Linkages” programs.
 - d. Apply of modern preventive oral health science as applied to community-based delivery systems and underserved populations.
 - e. Apply modern behavior support science as applied to community-based delivery systems and underserved populations.
 - f. Document the role of traditional dental disciplines as taught in the College of Dental Medicine in addressing the oral health needs of the population of the Northern Central Valley of California
 - g. Test and document use of allied oral health professionals working at the top of their education, license, and experience.
 - h. Develop and document the role of the College of Dental Medicine as the hub of a community-based delivery and oral health support network.
 - i. Document the ability to create and measure increased value in oral health delivery systems by improving oral health outcomes and lowering costs using the interventions described above.

- j. Create and document activities related to the “scholarship of teaching” to test and measure outcomes of innovative teaching approaches, with special emphasis on those that can impact understanding of issues related to population health.
3. Expose and involve dental students in research projects in the areas described above through linkages with faculty research, education about the potential to improve population health using the strategies described above, student projects woven into the educational curriculum, and elective participation in more extensive faculty-led projects.

Outcomes of the CDM Research Program:

CNUCDM will collect data and document its results in the following areas:

1. The number and dollar value of extramural research support obtained in grants and contracts related to the research agenda.
2. The number and descriptions of faculty-led research projects and scholarly activities started, completed and results published.
3. The number and description of student participation in required intra-course projects and elective participation in more extensive faculty-led projects.

STANDARD 6-2

- 6-2** The dental school faculty, as appropriate to meet the school's purpose/mission, goals and objectives, **must** engage in research or other forms of scholarly activity.

A. Description:

1. List faculty expectations and/or evaluation criteria for research and/or scholarly activity. Include expectations and/or evaluation criteria for the following categories of faculty, as appropriate:
 - a. full-time tenured,
 - b. full-time tenure-track,
 - c. full-time clinical track, and
 - d. part-time

Faculty are encouraged to engage in research and scholarship activities and are required to do so and document those activities for advancement through academic ranks from Instructor to Assistant Professor to Associate Professor to Professor. Structure and criteria for evaluation of faculty research and scholarly activities are described in the faculty handbook, found in [Appendix 3-1 Faculty Handbook](#). It should be noted that CNU does not offer tenure to its faculty.

The Rank and Promotion Committee will examine the dossier/portfolio of faculty for examples of sustained accomplishment in scholarship. The Committee uses the following guidelines in making its determinations.

Examples of indicators for accomplishments in the area of scholarship/research are, but not limited to:

Quality and number of publications, as defined by a published paper that meets the following criteria:

1. Book, primary author;
2. Book, secondary author;
3. Book, editor;
4. Primary author of a refereed Review article;
5. Primary author, patent – work is not otherwise published;
6. Publication of results of research in peer-reviewed journals or other professional publications;
7. Publication of other scholarly work in peer-reviewed journals and other professional publications;
8. Writes and submits as principal investigator research proposal or grant application to appropriate extramural or intramural funding agency that *receives funding*;
9. Primary author of original, peer-reviewed work not included in the above nine (9) items.
10. Book chapter, primary author;
11. Invited poster or platform presentation as primary author or principal investigator;

12. Publication of a peer-reviewed abstract as primary, secondary or senior author in which results of research or other scholarly work presented as a poster or platform presentation at a professional meeting;
13. Primary author of a refereed Case report;
14. Secondary author of a Book chapter;
15. Peer-reviewed review article as secondary or senior author;
16. Primary, secondary or senior author of a Continuing Education article;
17. Primary author of a peer-reviewed letter to the editor;
18. Secondary author of a peer-reviewed original work.

Additional Scholarly Activities that can be included in the dossier/portfolio include, but are not limited to:

1. Writes on average one (1) high quality research proposal or grant application that does not receive funding every two years and submits the proposal or grant application to an appropriate intramural, extramural, private or public agency or board;
2. Publication as primary, secondary or senior author of a non-peer-reviewed abstract in which results of research or other scholarly work is presented as a poster or platform presentation at a professional or scientific meeting;
3. Receiving an award and/or a commendation recognizing scholarly accomplishments;
4. Numbers of citations of papers published (impact factor) while a faculty member.
5. Scholarly/research activities also includes the development, demonstration, documentation and evaluation of innovative methods that increase effective teaching as long as such work results in the publication of the results of the innovation.

CNU currently has a well-established doctoral culture on campus with students enrolled in both the PharmD and MD programs and, more recently, in the PsyD program. The doctoral culture is pervasive across the University—with research opportunities and support for faculty and students. Research groups at the University have produced over 54 publications, 23 grants, 73 presentations, 37 scholarships and fellowships, four book chapters, and two patents.

Another component of creating a doctoral level culture is the appointment of appropriately qualified faculty members. The Rank and Promotion Committee of CNU will examine the CV of each candidate for examples of accomplishments in the areas of teaching, scholarly activity, and professional service to determine their placement in one of four academic ranks: Instructor, Assistant Professor, Associate Professor, and Professor.

At the Instructor level the applicant must have a DDS or DMD and they must have teaching or extensive professional experience. Applicants will need to have experience in the areas of teaching, research, and professional service. Those faculty who were previously hired as Instructors must have at least one year of experience at that rank. An Associate Professor must meet all the qualifications for an Assistant, with the addition of significant accomplishments in teaching, research, and professional service. They must have at least five years of experience as an Assistant Professor at CNU. This timeframe may be amended by the Rank and Promotion Committee due to previous time and service as determined by the Dean and awarded by the President. They must excel in two of three core competencies: teaching, research, or service. To reach the rank of Professor, a candidate must meet all the requirements for Associate Professor at CNU with the addition of a significant and outstanding record of teaching, research, and professional service. They must have spent a minimum of five years at the rank of Associate, though they may apply for early promotion.

2. Describe how faculty will receive mentorship for engaging in research and/or scholarly activity.

The Assistant Dean for Research plans to organize a faculty scholarship mentoring program. Faculty with scholarship and research expertise and experience will be assigned mentees. A series of educational programs will be convened to provide the fundamentals of scholarship and funded inquiry development.

In addition, as described earlier, a tracking mechanism will be established to assess individual faculty member's status and progress on developing scholarly activities. Collaborative groups will be encouraged to develop extramural funding for scholarly activities.

3. Describe the resources that will be provided to meet the school's research purposes/mission/goals including, but not limited to:

- a. financial support;
 - b. support related to writing and administering grants;
 - c. access to facilities and equipment;
 - d. faculty development opportunities; and
 - e. protected time dedicated to research for faculty.
- a. The Vice President for Research and the Dean share resources to provide financial support for institutionally supported research. This is budgeted in the working proforma at \$350,000 per year. **Appendix 1-5 Detailed Working Pro forma.**
 - b. The Institute for Teaching and Learning Excellence, the Dean for Research, mentors and other faculty resources including continuing education offer all CNU faculty the opportunity to improve scientific writing and grant writing.
 - c. The Vice President for Research administers lab space and facilities utilization for which use any faculty member can apply.
 - d. Clearly the formal research education of clinical faculty is an immense opportunity. The program at the University of Washington for clinical research, NIH sabbaticals and other research development opportunities will be made available to faculty.
 - e. Each year the faculty effort time will include time for research and scholarship and will support the development of faculty in research.

4. Describe any formal institutional programs available to support faculty research.

The vice President for Research sponsors a seminar series and the ITLE is a resource in development of the scholarship of teaching and learning among other opportunities at CNU

B. Supportive Documentation:

1. Institutional research report (Example exhibit U)

See **Exhibit U**

2. Faculty research information (Example exhibit V)

See **Exhibit V**

STANDARD 6-3

- 6-3** Dental education programs **must** provide opportunities, encourage, and support student participation in research and other scholarly activities mentored by faculty.

Intent:

The dental education program should provide students with opportunities to experience research including, but not limited to, biomedical, translational, educational, epidemiologic and clinical research. Such activities should align with clearly defined research mission and goals of the institution. The dental education program should introduce students to the principles of research and provide elective opportunities beyond basic introduction, including how such research is conducted and evaluated, and where appropriate, conveyed to patients and other practitioners, and applied in clinical settings.

A. Description:

1. Describe the ways that are planned for a student research program to be integrated with the dental school's purpose/mission and research related goals and objectives.

As described earlier, the College of Dental Medicine is in a unique position to develop a student education relevant focus on scholarship and research related to improving the oral health of the residents of the northern Central Valley of California. More than other areas of California, achieving this goal will require innovative, evidence-based approaches that emphasize integration into community structures. This emphasis will provide excellent opportunities for student participation, learning and contribution to scholarship.

Describe how students will receive mentorship for engaging in research and/or scholarly activity. How will students be informed of the opportunity to engage in research?

For the DMD program, establishment of a graduate culture will begin before students enter the program through appropriately rigorous admission requirements. These include a baccalaureate degree, demonstrated academic excellence and high GPA, evidence of scholastic engagement through letters of recommendation, and a driven desire to succeed in the profession as evidenced by their statement of purpose. Doctoral level course requirements are sequential and increase in difficulty and complexity as the student moves through the program gaining the skills and experience necessary to become a dentist. To ensure that students develop the skills and cultivate the attitudes and values needed for the profession, students will be mentored throughout the entire program.

Students in the DMD program will be integrated into the intellectual community of CNU in three fundamental ways. First, they will share the same semester schedule as the College of Pharmacy and the College of Medicine so that students are encouraged to interact through the same break times, vacations, and active class periods. Within this semester schedule, students in the DMD program will take Common Pathways courses with their fellow students in the College of

Medicine. These courses in Human Systems will provide opportunities for collaboration in coursework and projects.

Students will also be sharing learning spaces in the library and study halls. Additionally, each college has dedicated laboratory spaces, serving various functions inside the spectrum of research and clinical training. For instance, the College of Medicine has approximately 2,100 square feet of dedicated research space for benchtop research applications for faculty and their student mentees. In addition, the COM possesses a 619 square feet simulation lab composed of two digital manikins, PC read outs and emergency response equipment (crash carts, blood pressure cuffs, pseudo-meds, etc.). This space is allocated for simulated emergency room, trauma applications and ultrasound equipment. The manikins are highly interactive and give the students the opportunity to practice their clinical skills without the guilt or stress of potentially injuring a live patient. . CNUCOP has 3 classrooms of 5,000 square feet each, one sterile compounding lab, an IV sterile compounding lab. It shares the manikin lab with COM as well as an interprofessional education program. The COP has an Advanced Pharmacy Practice Simulation Lab and a new lab with 700 square feet finished in 2018 for drug discovery, pharmacology and virology.

CNU recognizes and promotes appropriate linkages among scholarship, teaching, assessment, student learning, and service. Each college of the University allots a percentage of faculty's time for pursuit of research and/or scholarly activities, including mentoring students in these. The institution clearly defines expectations for research, scholarship, and creative activity for its students. In the COM, students participate in a self-directed scholarly project. In the College of Pharmacy, students participate in scholarly activities, create scientific posters, participate in research with faculty mentors, participate in the CNUCOP Summer Research Fellowship Program, and receive travel assistance to represent the college at professional organization conferences. Additionally, students and faculty participate in a multitude of healthcare-related community service events each year. In fact, the COP students participated in 58 health fairs, health education and related health events from July of 2015 to July of 2016.

Students from the dental program also share certain courses and study groups with the students from the other graduate programs. These include sessions covering Statistics, pharmacology, and the yearlong Leadership in Health Professions course in the senior medicine seminar. Each of the Common Pathway courses in hematology, musculoskeletal/cutaneous, cardiovascular, pulmonary, neurology, gastroenterology and nephrology will have common small group learning sessions. While on clinical rotations in clinics, dental students will have interprofessional learning experiences with students in medicine, pharmacy, psychology and allied health programs from affiliated schools.

Students will be exposed, involved and mentored in research projects in the areas described in Section 6.1 in four ways:

- i. Through education about the potential to improve population health using the strategies described in Section 6.1
- ii. Through linkages with faculty research where students will be paired with a faculty research project, will be mentored in the purpose and methodology of the project and the specific role that they can play.

- iii. Through student projects woven into the educational curriculum where they will have specific assignments in academic courses to review literature, gather data, and document findings, and receive feedback from course faculty.
- iv. Through elective participation in more extensive faculty-led projects. Students will be offered elective participation of projects where will be mentored in the purpose and methodology of the project and the specific role that they can play.

2. Describe how the school will provide financial support; access to facilities, and equipment; development opportunities; and/or protected time dedicated to research for students.

The CDM and CNU will provide the following:

- i. Orientation of new faculty about the importance of research and scholarship and resources available to assist faculty in these areas.
- ii. Ongoing tracking, through the office of the Assistant Dean for Research, of faculty extramural support, research and scholarship activities,
- iii. A pool of intramural research funds to help faculty start research and scholarship activities, conduct preliminary investigations, hire staff for limited time in the start of a project, and transition to extramural funding.
- iv. Availability of the following resources:
 - 1. Assistance and mentorship from the Assistant Dean for Research
 - 2. Availability of a Research Coordinator to track faculty activities, help prepare funding proposals and reports, assist with pairing students to faculty research and scholarship activities, and other support services.
 - 3. Availability of a CNU biostatistician for help in designing projects, creation of data collection systems, and analysis of results.
 - 4. Availability of IT resources needed to conduct research and scholarship activities including tracking software, programming help with data collection and analysis tools, and training and support on the use of research and scholarship related IT tools.

CONCLUSION AND SUMMARY

Summarize in a qualitative appraisal and analysis the developing dental education program's strengths and weakness.

Standard 1 – Institutional Effectiveness

1. Assess the adequacy of institutional support for the dental education program.

CNU is a remarkable university in that it is a private, for-profit university, the first of its kind to successfully form MD, PharmD, PsyD and a baccalaureate level program and having done so in just a decade. Institutional support across each of these programs for dental medicine has been inestimable. Particularly the support of the College of Medicine and Dean John Silva has been remarkable. He has recognized for decades as chief of internal medicine and Dean at UC Davis that Sacramento and the Delta/Central Valley was in great need for dental education and that education must be integrated into health systems and interprofessionally with medicine.

President Alvin Cheung has been an indefatigable supporter of the College and its successful development with regard to applying the advocacy with the Board of Trustees, providing a new building purchased for the school, and demonstrating an in depth understanding of the requirements for a dental college. Remarkably, the case statement for the new school presented to the Board in June 2018 and shown in **Appendix 1-1 President Report On the Planning for Dental College 2018** was developed by President Cheung. In this presentation, he said strongly that the plans the college will meet the following interests:

- (1) The education program(s) must be of demand by the general public,
- (2) The program(s) must lead to gainful employment while serving humanity or society's needs,
- (3) The program must be affordable and compliant with regulations and accreditation,
- (4) The program(s) must be deliverable by multiple learning modalities /media and able to reach learners of the future,
- (5) CNU must continue to address diversity and access issues in education,
- (6) All colleges must operate in fiscally responsible manner to fulfill the education mission while maintaining long term sustainability and viability.

President Cheung and the Board demonstrated their institutional support by supporting these interests fully over the ensuing months. In April 2019, with the plans for the California Northstate Hospital and Clinics fully engaged, the investment strategy, architectural plans, building partners and local requirements are making fast progress. The team that recently completed the Zuckerberg San Francisco General Hospital has embarked on the CNU project. The ambulatory clinics of the Hospital will, as described in our self-study, include dental medicine including for DMD students within the fabric of the site. This is very much like the model of dental medicine education at academic health centers such as Columbia, Harvard and University of Connecticut where patients will present to the health care team integrated into the academic health center. This will offer incredible advantages in advancing human health through the integration of oral health at CNU.

2. Assess whether the program's outcomes assessment process will successfully measure whether the program is achieving its goals.

The goals of the program as noted in the CNUCDM strategic plan are

Goal 1. Educate effective practitioners of dental medicine

Recruit, retain, educate, and train the highest quality of DMD students

Goal 2. Develop a high quality faculty and staff

Develop and distribute resources to recruit, retain and promote the effective activities of faculty and staff. Promote research and scholarship in the college.

Goal 3. Achieve effective leadership in oral health care delivery

Provide patient care that becomes recognized as some of the best oral health care available anywhere. Gain the benefits of good oral health for the patients served and in our communities beyond.

Goal 4. Promote a diverse and inclusive environment in dental medicine and in the communities we serve

Create and sustain an environment that respects all its students, staff and faculty and the patients we serve. Promote multiculturalism and American values of equality and inclusiveness in the college and for community oral health.

Goal 5. Create exceptional facilities and infrastructure

Build an efficient infrastructure to support and sustain learning, teaching, communication, research and scholarship while keeping education affordable.

Goal 6. Ensure financial sustainability and growth

Build a financially sustainable budget that will provide effective support of existing programs while being poised for expansion through strategic growth of programs

As noted in the self-study EVERY activity of the College of Dental Medicine will undergo continuous outcomes assessment to assess the achievement of goals and to make useful changes in policies, procedures or paths designed for the continuous improvement of the college. This is especially important for a new college in that assessment of the bold and transformative ideas of the college are needed to understand their impact and make realistic changes to achieve the goals of the college.

The best way to assess this might be to look at multiple factors that relate directly to the goals of the program and to see how those explicit assessment integrate to the six goals noted in the strategic plan. Measurements of outcomes across many domains (clinical, academic, financial etc.) are needed to assess achievement of goals. Some examples of this process that will illustrate this are as follows:

- Example #1: Will the educational model of the **four themes of the curriculum (human studies, odontology, oral and maxillofacial studies, and behavioral and social sciences)** meet the needs of students and support the achievement of the defined competencies of the graduate? This links specifically to **Goal 1, 2, 3 and 6** of the program noted above

The course review process, which included the achievement of competencies through competency assessments (**goal 1 and 2**) will be one critical guide to this achievement. Faculty recruitment and retention (**goal 2, and 3**), student marketing and selection (**goal 3 and 6**), faculty and student engagement assessments will be guides to this assessment. By this holistic review, the effectiveness of the themes of the curriculum can be assessed tied to the goals of the college.

- Example #2: Will the **clinical education model** built around integration with the academic health center and strong community engagement, with a patient centered, team leader led model, allow students to effectively achieve the defined competencies of the program? This links specifically to **Goals 1, 2, 3, 4, 5, 6** of the program noted above.

The quality care evaluation process in the clinics (**Goal 3, 6**), the progress in clinical courses towards timely competency assessments (**Goal 1, 2, 3**), patient satisfaction surveys (**Goal 3**), assessment of access by an economically and culturally diverse community of patients (**Goal 3,4**), concurrent assessment of the performance of equipment and facilities, and assessment the financial performance of clinics will be some guide towards understanding this achievement and making necessary adjustments (**Goal 5 and 6**).

As part of the integrated assessment models described in our self-study of each of the standards, it can be seen how our outcomes assessment process will directly guide CNUCDM toward the achievement of its goals.

3. Assess the stability of the program's financial resources, as anticipated over the next five (5) years.

The university is on sound financial footing going forward as recognized in the WSCUC accreditation for dental medicine and the LCME accreditation for the MD program and ACP accreditation for pharmacy recently completed. The pro forma for the College of Dental

Medicine has been accepted by the President and the Board of Trustees. It ensure the successful development of the College of Dental Medicine.

Standard 2 - Educational Program

1. Assess the program's student applicant pool.

As noted in the self-study, California exports more dental students to other states than any other state, currently educating under 700 dentists per annum to replace 3-4% of the existing dentist workforce in California of about 32,000, equaling 1000-1200 dentists per annum. Less than half the applicants to US dental schools will gain acceptance this year which will also result in a high number of qualified applicants for CNUCDM. Other newly opened schools in this decade routinely have had exceptional opening classes with academic performance that meets or exceeds the national average. The same is expected for California Northstate

2. Assess whether the program will achieve its curricular goals through its stated competencies.

The program will achieve its stated competencies in every graduate through the implementation of the exceptional curriculum described in Standard 2. Of particular note is that each of the competency assessments have qualities that ensure that will be achieved in that they are linked to the Competencies described in every CODA standard. They are as well linked to the institutional defined competencies of the graduate and to the program learning outcomes. The exceptional pedagogic and clinical infrastructure of the program, its assessment process, and its faculty leadership will assure the achievement of these goals.

3. Assess the potential volume and variety of the program's patient pool.

As described in standard 2-9 narrative our region is undergoing a fortuitous transformation in patients accessing and receiving oral health care services. This is due to the changes in the Medical System which as improved access for children and adults especially with regard to the scope of services provided. Because of the exigencies of caring for poor patients including the fee schedule and developing cultural humility, this change has fallen to safety net institutions such as our new CNUCDM clinics and out affiliated health centers for care. In addition, our payer mix is likely strong because of the unique nature of Elk Grove as one of the most rapidly growing communities in the nation and its highly educated family oriented residents. Last year Elk Grove, the home of CNUCDM's two main clinics, is noted to be the single fastest growing economy in the nation as measured by population growth, unemployment rate, and regional GDP. For example, last year Apple increased its Elk Grove employees from 1200 to 6000. The development of the California Northstate expansion to include its teaching hospital and clinics, while a \$1.25 billion dollar direct expenditure will bring \$4 billion dollars in economic activity to the city. Many of those dollars will be returned to the CNUCDM in clinical care provision.

Standard 3 – Faculty and Staff

1. Assess the number and distribution of faculty and staff relative to the dental education program's stated purpose/mission, goals and objectives.

As noted in the Standard 3 narrative, the hiring plan for a full time faculty of 60 over the course of enrollment, will make CNUCDM comparable to its peer group of dental schools for faculty to student ratio and our capacity to achieve the stated purpose/mission goals and

objectives. Our outcomes assessment processes noted above will be essential in monitoring the number and distribution of the faculty and the pro forma allows for considerable flexibility in modifying our structure as needs arise due to changes in the environment or future identified needs. It is certain that as a new program, with emerging technology, providing culturally competent care to a new community and a variety of external and internal factors, modifications in the tasking and environment for faculty as well as for faculty size will be examined each year to result in the continuous improvement of the program.

Standard 4 – Educational Support Services

1. Assess the adequacy of the planned/existing facilities and learning resources.

The university demonstrates a strong commitment and capacity to develop facilities and learning resources. As described in the Standard 4 narrative, California Northstate is an exceptional learning community that devotes its resources and efforts towards developing the highest level of student experience. The College of Dental Medicine will be an effective leader within the university in furthering that goal. The purchase of a beautiful existing building adjacent to the campus and integrated into the campus expansion was coupled with the purchase of adjacent land. The integration of the dental clinics into the ambulatory clinics for the CNU Hospital is another example of the commitment for educational support. The library, the Institute for Teaching and Learning Excellence, classroom improvements among other investments demonstrate the adequacy of facilities and learning resources.

Standard 5 - Patient Care Services

1. Assess the appropriateness of the program's quality assurance system and standards of care.

The clinical quality assurance program as described in the narrative to Standard 5-3 is built around the desire for high quality patient centered care in every encounter. The narrative in Standard 5-3 supports this goal. Specifically to summarize this approach to quality assurance here are reprised the essential details of CNU's program:

In its current planned form the quality assurance system and standards of care provide an appropriate level of oversight and assure ongoing program assessment, outcomes evaluation and means for implementation and improvement. The quality assurance system plans for multiple layers of assessment of the patient care services provided by the clinic, its students and faculty. The system as envisioned will have multiple layers of assessment to ensure quality of care delivery. The assessments include:

1. Patient records
 - a. Medical history adequacy
 - b. Diagnosis and treatment planning assessment
 - c. Documentation of treatment
 - d. Faculty assessment of care, Out of Station Statement
2. Infection control
 - a. Quality
 - b. Safety

- c. Effectiveness
- d. Documentation
- 3. Quality of treatment provided
 - a. Timely faculty assessment during and at conclusion of procedure
 - b. Ongoing evaluation and updating of standards of care
 - c. Ongoing updating of treatment procedures using an evidenced based review

The Clinical Quality Assessment Committee and its subcommittees have their assigned areas of focus of assessment and will report the results of their committee's assessment reviews to the Dean of Clinical affairs. The Dean of Clinical affairs and the Clinical Quality Assessment committee will meet to consider the findings of the committees, evaluate and act on any areas needing improvement or modification.

As the clinic's Treatment Group Leaders, Infection control supervisor, and clinical faculty are identified an assessment and evaluation of the standards of care, quality of care, and infection control will be reviewed and modified as needed prior to initiation of actual patient care delivery. We believe this ensures the appropriate development of quality assurance in patient care at CNUCDM.

Standard 6 – Research Program

1. Assess the planned faculty and student research activities as they relate to the program's purpose/mission, goals and objectives.

The challenges, innovations, and changes facing the oral health industry and the unique position of College of Dental Medicine as the only dental school in the northern Central Valley of California represent opportunities for the College of Dental Medicine to excel by addressing these issues, obtaining extramural funding to do so, and documenting and publishing and results of these efforts. The College is well positioned to take advantage of these opportunities

California Northstate University

College of Dental Medicine

Volume 2

Exhibits

**Appendices for Compliance with Commission
Policies and Description of Program Initiation**



CNU IA Application – Predoctoral Dental Education Program

Submitted to the Commission on Dental Accreditation

May 2019

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EXHIBIT A

PERSONS RESPONSIBLE FOR EACH STANDARD

SECTION:	NAME:	ADMINISTRATIVE TITLE:	EMAIL:
Foreword	Dr. Leon Assael	Dean	Leon.assael@cnsu.edu
Institutional Effectiveness	Dr. Karen McClendon	Vice President for Institutional Research, Quality and Assessment	KMcClendon@cnsu.edu
Instruction Curriculum Management	Dr. Rosemary Wu	Acting Associate Dean for Academic Affairs and Faculty Development	rosemarywu@gmail.com
Critical Thinking	Dr. Leon Assael	Dean	Leon.Assael@cnsu.edu
Self-Assessment	Dr. Kevin Keating	Assistant Dean for Clinical Affairs	Kevin.keating@cnsu.edu
Biomedical Sciences	Dr. Raj Ramsamooj	Assistant Dean for Curriculum, College of Medicine	Raj.ramsamooj@cnsu.edu
Behavioral Sciences	Leon Assael	Dean	Leon.assael@cnsu.edu
Practice Management/Health Care Systems	Dr. Kevin Keating	Assistant Dean, Clinical Affairs	Kevin.keating@cnsu.edu
Ethics and Professionalism	Dr. Richard Simonsen	Assistant Dean for Student Affairs and Admissions	richardsimonsen@mac.com
Clinical Sciences	Dr. Kevin Keating	Assistant Dean for Clinical Affairs	Kevin.keating@cnsu.edu
Faculty and Staff	Dr. Leon Assael	Dean	Leon.assael@cnsu.edu
Admissions	Dr. Richard Simonsen	Assistant Dean for Student Affairs and Admissions	richardsimonsen@mac.com

Facilities and Resources	Shoua Xiong	CFO and VP of Finance	sxiong@cnsu.edu
Student Services	Dr. Richard Simonsen	Assistant Dean for Student Affairs and Admissions	richardsimonsen@mac.com
Student Financial Aid	Shoua Xiong	CFO and VP of Finance	sxiong@cnsu.edu
Health Services	Dr. Kevin Keating	Assistant Dean for Clinical Affairs	Kevin.keating@cnsu.edu
Patient Care Services	Dr. Kevin Keating	Assistant Dean for Clinical Affairs	Kevin.keating@cnsu.edu
Research Program	Dr. Paul Glassman	Assistant Dean for Research	Paul.glassman@cnsu.edu

CALIFORNIA NORTHSTATE
EXHIBIT B
OUTCOMES ASSESSMENT
(SUPPORTED IN TABLE 2)

TOPIC	ASSESSMENT ACTIVITY				RESULTS ANALYSIS	DISSEMINATION	IMPROVEMENT
Mission/Goal/Objective or Competency	Strategy (Measure)	Expected Results	When Assessed	Who is Responsible	Who is Responsible	To Whom	Resulting Actions
Provide excellence in teaching through development of an exceptional curriculum	A curriculum with four themes (human studies, odontology, oral and maxillofacial studies, behavioral and social sciences) has been presented to the planning committees. 226 course hours and course names have been identified and course directors have been selected	Completion of syllabi, development of course materials in Canvas, selection of source materials	Spring 2019	Curriculum committee, course directors Associate Dean of Academic Affairs and Faculty development	Global analysis by curriculum committee Each course director provided to Associate Dean of Academic Affairs and Faculty development	University VP of Academic Affairs, free universal dissemination with university approval	Cycle of improvement in curriculum in response to recommendations of curriculum committee
		2019-2020: presentation of D1 courses with assigned auditors and 360 degree course assessment	Spring 2020				
		Repeat this cycle for D2 2021, D3 2022, and D4 2023	Spring 2021, 2022, 2023				
	Participate fully in all	Demonstrated participation	Spring 2020	Associate Dean of	Associate Dean of Academic Affairs	Open dissemination to	Implementation of active

	activities of the ITLE with a broad engagement of full and part time faculty	resulting in incorporation of ITLE directed advance pedagogy in CODM courses		Academic Affairs and Faculty development	and Faculty development Institutional Effectiveness Committee (IEC)	the community of interest	learning in CODM courses Reports of course directors on implementation of ITLE training
Promote professionalism and ethics	Develop a student faculty mentorship program	<p>Train faculty in mentorship through faculty development program.</p> <p>Create assessment rubric for faculty to individually assess mentorship performance</p> <p>Assign each faculty member mentees</p> <p>Apply CDM resources to support mentorship activities</p>	<p>Spring 2020</p> <p>Spring 2020</p> <p>Fall 2020 Prior to formal training</p> <p>Ongoing as needed</p>	<p>Assistant Dean of Student Affairs</p> <p>Associate Dean of Academic Affairs and Development</p>	<p>ADAA to Faculty Council</p> <p>Institutional Effectiveness Committee (IEC)</p>	Open Dissemination	<p>EVALUATE</p> <p>Faculty council assessment</p> <p>Survey of students on the mentorship program</p> <p>Survey of faculty on the mentorship program</p> <p>Evaluations of student reflective essay on the mentorship program and its impact on professionalism</p> <p>ACT upon findings and specific</p>

							recommendations to influence and develop the Faculty Mentorship Program
Recruit a qualified class ensuring scientific clinical ability with a holistic approach to promote social consciousness and action	<p>Integrate into university recruitment and admissions processes.</p> <p>Implement the admissions marketing plan as in the CODA self-study</p>	<p>Application pool from the region (central valley, delta, Shasta, Humboldt, Sierras) in excess of applicants to other California dental programs.</p> <p>Social science majors represented.</p> <p>Students from universities of the Delta, Central Valley, mountains and Northern California HPSA shortage areas represented</p> <p>Immigrants and underrepresented minorities exceed the region</p>	Annum 2019	Assistant Dean of Student Affairs	Assistant Dean of Student Affairs	To ADEA and ADSAS	<p>More than 50% of students from the underserved region and colleges associated to the region</p> <p>20% social science majors</p> <p>Immigrants and underrepresented minorities in excess of other regional dental programs</p>
<u>Develop</u> a high quality faculty and staff Develop and distribute resources to recruit, retain and promote the effective activities of faculty and staff.	<p>Implement hiring plan for 36 FTE faculty as well as Volunteer onsite faculty.</p>	<p>Administrators in place in critical areas of academic affairs, curriculum, clinical affairs and research.</p> <p>Course directors and sufficient faculty in place for each of the courses at least 90</p>	By Fall 2019	Dean	Dean	<p>CODA</p> <p>Community of interest</p>	Sufficient faculty to deliver curriculum and clinical care/clinical education at each stage of development

	Complete MOU's for community based faculty	days prior to course delivery Faculty in place to care for patients in CNU clinics ready for students to join care teams					
Complement faculty with appropriate staff	High functioning qualified staff hired in timely fashion associated with need	Complete hiring plan for all academic, administrative and clinical staff. Complete hiring of qualified personnel as needed during development.	Ongoing to match faculty hiring plan	VP for human resources Dean Dean of Clinical Affairs Dean of Academic Affairs	VP for human resources Dean Dean of Clinical Affairs Dean of Academic Affairs	To University leadership and community	Clinical staffing model achieved consistent with industry standards in all areas. Academic and administrative staffing consistent with CNU collaborative models and standards and task based needs
Develop a program of scholarship and research that supports faculty development	Onboard new Dean of Research	Develop collaborative public health oriented research program that engages faculty and students at a variety of capacities Active college research program with external funding including NIH, HRSA, state of California, industry and foundation grants	Measure Annually with Spring 2019 as first assessment	Dean of Research	Dean of Research	VP research	Research program in top 50% of the 67 dental programs in the US by the first 5 years of operation
Provide patient care that becomes recognized as some of the best oral health care available anywhere	Complete construction of 2 clinics each of 30 clinical treatment	60 operational units. Core radiology, digital clinical facilities, operational electronic health record system,	Measure annually in Spring 2020	Dean of Clinical Affairs Dean	Dean of Clinical Affairs Dean	Patients Community	Operational program attracts patients who communicate the triple aim

	units and appropriate supporting clinical facilities. Equip clinics and hire expert renowned, clinical staff. Complete MOUs with health systems in the region for clinical education and care partnerships	sterilization and equipment management program Marketing program to attract sufficient patients with oral health needs fulfilled by CNU clinics					in surveys of the highest quality of care at the lowest cost and with the best patient experience 10,000 new patients in the first year of operation and additional 5000 per year to threshold of 20,000 active patients. Measure: Press Ganey, faculty and staff engagement survey
Gain the benefits of good oral health for the patients served and in our communities beyond	Develop thresholds for impact on extant pathologic entities in clinics and utilize standards/parameters of care to develop rubrics regarding thresholds	Reduced recurrent caries rate for enrolled patients as compared to cohort Greater tooth retention and periodontal index in patients with periodontal disease Prevention of oral cancer above community standards in patients with	Measure annually	Clinical affairs committee IEC Dean of Clinical Affairs	Clinical affairs committee IEC Dean of Clinical Affairs	Patients Community	Chart review pre- and post-interventions to assess value based care model Community-based interviews with stakeholders to assess community engagement

	for high quality outcomes: e.g. CAMBRA assessment tools, cancer screening outcomes and disease management and control profile for periodontal disease.	premalignant disease and high risk factors.					
Create and sustain an environment that respects all its students, staff and faculty and the patients we serve.	<p>The humanistic environment for dental education will be addressed by the appointed Dean of academic affairs to interface with extant CNU activities.</p> <p>Both curricular and faculty development program will be initiated to promulgate a dental college</p>	Faculty and students demonstrate a respectful and inclusive culture in plenary activities, interest group development, and individual assessment.	<p>Ongoing by diversity committee</p> <p>Annual report to Dean each June June 2020</p>	<p>Diversity Committee</p> <p>IEC</p> <p>Dean</p>	Dean	Entire community	<ul style="list-style-type: none"> • Engagement survey • Interviews with community of students staff and faculty

	culture of respect for diversity in all aspects						
Promote multiculturalism and American values of equality and inclusiveness in the college and for community oral health	Promote multicultural activities that engage the CNU community and the larger regional community	<p>Achieve broad multicultural engagement with students, faculty and staff. Examples Celebracion de Salud, Indian dentistry day, Asian dental society activity, National Dental Association</p> <p>Engage Multicultural programs in the Northstate community: California state fair, other community events,</p> <p>International engagement with Asia for dental education and practice</p>	<p>Ongoing by diversity committee</p> <p>Annual report to Dean each June June 2020</p>	<p>Diversity Committee</p> <p>IEC</p> <p>Dean</p>	Dean	Entire community	<p>Assess CNU activities and outcome assessments for these activities</p> <p>Assess in engagement survey</p>

Build an efficient infrastructure to support and sustain learning, teaching, communication, research and scholarship while keeping education affordable.	Phase 1: Identify space for two clinics and one type 1 and 2 laboratory and simulation clinic Create plans with A-dec for the lab, simulation and first clinic. THIS WILL BE DEVELOPED TO ENROLL A CLASS OF 2023 LATE IN 2019 OR EARLY IN 2020 Complete construction in 2019 of lab and preclinical lab and in 2019-2020 for the first clinic	Completion of phase one of infrastructure plan Completion of phase two of infrastructure plan	January 1, 2020 January 1, 2022	Vice President Operations President Dean	President	Board of Trustees	Timely enrollment of class Timely opening of clinics Effective operation of all facilities

	Phase 2: Initiate construction on the second clinic in 2020 with vendor to be named for completion in 2021						
Build a financially sustainable budget that will provide effective support of existing programs while being poised for expansion through strategic growth of programs	<p>Expend funds for personnel, faculty and staff, for facilities, equipment and educational materials sufficient to enroll a class in late 2019 or 2020.</p> <p>Gain tuition funds during the first matriculation and growing to 4 classes of 80 student each</p> <p>Gain clinical income, grants, gifts and other sources of income to</p>	A balance sheet and annual closing statement demonstrating the COD in the black within the proposed return on investment	Annual financial report June 2019 and annually	<p>Dean</p> <p>President</p> <p>Chief Financial Officer</p> <p>VP Operations</p>	President	Board of Trustees	<p>Budget</p> <p>Balance sheets</p> <p>Annual report</p> <p>Audit results</p>

	support programs.						
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CNUCDM EXHIBIT C OUTCOMES ASSESSMENT

GOALS

Goal 1. Educate effective practitioners of dental medicine

Recruit, retain, educate, and train the highest quality of DMD students

Goal 2. Develop a high quality faculty and staff

Develop and distribute resources to recruit, retain and promote the effective activities of faculty and staff. Promote research and scholarship in the college.

Goal 3. Achieve effective leadership in oral health care delivery

Provide patient care that becomes recognized as some of the best oral health care available anywhere. Gain the benefits of good oral health for the patients served and in our communities beyond.

Goal 4. Promote a diverse and inclusive environment in dental medicine and in the communities we serve

Create and sustain an environment that respects all its students, staff and faculty and the patients we serve. Promote multiculturalism and American values of equality and inclusiveness in the college and for community oral health.

Goal 5. Create exceptional facilities and infrastructure

Build an efficient infrastructure to support and sustain learning, teaching, communication, research and scholarship while keeping education affordable.

Goal 6. Ensure financial sustainability and growth

Build a financially sustainable budget that will provide effective support of existing programs while being poised for expansion through strategic growth of programs

	Goal #1	Goal #2	Goal #3	Goal #4	Goal #5	Goal #6
Evaluation mechanism	NBDE grades WREB outcome Academic program assessments	Number and qualifications of faculty and staff compared to hiring plan	Press Ganey Outcomes based measurements in clinical care	Engagement survey focused on diversity Focus groups of patients and students	Comparison with peer groups in dental education	Annual Budget Annual financial performance statements
How often conducted	Annually	Monthly meeting with HR with annual report	Ongoing with annual report	Initial assessment followed by biennial	Upon completion of first phase and as part of annual capital expense planning	Annually
Date to be conducted/ finished by	Spring annually with presentation to faculty in fall annually	Monthly assessment with HR of vacancies and recruitment	Each spring annually	First survey and focus groups in Fall of 2020 Biennial each year to follow	Annually with capital planning	July each year
Results expected	NBDE and WREB at national average organic changes in academic program	Fulfillment of the hiring plan	Retention of 80% of patients undergoing treatment plan. Redo rate of less than 5% Improved new disease rates on recall	Positive comparison to peer groups in health science education and clinical practice	Facilities that meet the needs of students, patients, faculty and staff	Revenue over expense each year
Results achieved	pending	pending	pending	pending	pending	pending
Assessment of results	pending	pending	pending	pending	pending	pending
Person responsible	Assoc Dean Academic Aff	Dean	Dean of Clinical Affairs	Dean of student affairs and admissions, Chair of Diversity Committee and Dean	Vice President, Operations Dean	Vice President, Chief Financial Officer Dean

Program improvement as a results of data analysis	pending	pending	pending	pending	pending	pending
Next date of completion	Spring 2021	June 2019	Fall 2020	Fall 2020	June 2019	June 2019

Exhibit D

Source of financial support	admitting students		D1 students		D1, D2 students		D1, D2, D3 students		D1, D2, D3, D4 students	
	FY 2019		FY 2020		FY2021		FY2022		FY2023	
	dollars	percent	dollars	percent	dollars	percent	dollars	percent	dollars	percent
State support										
Local support										
Federal grant										
State grant										
local grant										
private grant										
student tuition	\$ -		\$ 2,964,000	97%	\$ 9,069,840	68%	\$ 12,394,824	72%	\$ 15,911,064	73%
student										
fees	\$ -		\$ 102,000	3%	\$ 168,300	1%	\$ 234,600	1%	\$ 300,900	1%
clinic revenue	\$ -				\$ 4,200,000	31%	\$ 4,806,528	28%	\$ 5,724,096	26%
Other (specify)										
Scholarships/disc ount	\$ -		\$ (20,000)	-1%	\$ (40,000)	0%	\$ (126,000)	-1%	\$ (220,000)	-1%
Total Support	\$ -		\$ 3,046,000	100%	\$ 13,398,140	100%	\$ 17,309,952	100%	\$ 21,716,060	100%

Exhibit E

		Year prior to IA application	Current Year of IA application	Year following IA application
		2019/2020	2020/2021	2021/2022
I.	Capital Expenditures			
A	Construction	\$ -	\$ -	\$ -
B	Equipment	\$ 800,000	\$ -	\$ -
	1 Clinic (dental unit, chair etc)	\$ 1,100,000	\$ -	\$ -
	2 Radiography (including darkroom)	\$ 390,000	\$ -	\$ -
	3 Laboratory	\$ 1,080,000	\$ -	\$ -
	4 Locker Room	\$ 10,000	\$ -	\$ -
	5 Reception Room	\$ 20,000	\$ -	\$ -
	6 Faculty & Staff offices	\$ 250,000	\$ -	\$ -
	7 Instructional equipment	\$ 2,000,000	\$ -	\$ -
	Others (specify) IT Hardware, software, 8 and user license fees/Informatics License	\$ 150,000	\$ 50,000	\$ 50,000
	TOTAL	\$ 5,800,000	\$ 50,000	\$ 50,000
II	Non-capital Expenditures			
A	Instructional materials, e.g. technology	\$ -	\$ 30,000	\$ 30,900
B	Clinic supplies	\$ -	\$ 28,633	\$ 29,206
C	Laboratory supplies	\$ -	\$ 50,000	\$ 51,500
D	Office supplies	\$ 2,000	\$ 13,300	\$ 13,699
E	Program Library collections	\$ 35,433	\$ 92,000	\$ 94,760
	1 Institutional	\$ -	\$ -	\$ -
	2 Departmental		\$ 35,000	\$ 36,050
F	Equipment maintenance and replacement	\$ 5,000	\$ 51,000	\$ 52,530
	Other (specify) Accreditation/legal/ G Consultant fees	\$ 61,000	\$ 125,000	\$ 128,750
		\$ -	\$ -	\$ -
	TOTAL	\$ 103,433	\$ 424,933.00	\$ 437,395
III	Faculty			
A	Salaries	\$ 1,000,000	\$ 3,860,100	\$ 5,740,202
B	Benefits	\$ 110,000	\$ 424,050	\$ 630,850
C	Professional Development	\$ 17,500	\$ 40,000	\$ 75,000
D	Travel for Student Supervisor	\$ 4,200	\$ 4,700	\$ 4,841
E	Other (specify) Program	\$ 5,000	\$ 7,500	\$ 7,725
	TOTAL	\$ 1,136,700	#####	\$ 6,458,618

IV	Staff						
A	Secretarial Support	\$	322,968	\$	392,445	\$	811,534
B	Clinic Support Staff	\$	35,526	\$	43,169	\$	89,269
C	Other (specify) Staff Development	\$	3,500	\$	4,500	\$	9,000
TOTAL		\$	361,994	\$	440,114.00	\$	909,803

V	other Categories if any (specify)					
A	Deans Discreation expense			\$	21,500	\$ 21,500
B	Security/Janitorial	\$	-	\$	43,700	\$ 45,011
C	Dental Clincial Expenses	\$	-	\$	-	\$ 2,520,000
D	Student Events and Services			\$	56,800	\$ 60,350
E	Operating expenses			\$	90,800	\$ 96,098
F	Rent	\$	-	\$	2,288,000	\$ 2,356,640
G	Marketing/recruitment	\$	-	\$	40,000	\$ 40,000
	TOTAL	\$	-	\$	2,540,800	\$ 5,139,599

TOTAL \$ 1,602,127 \$ 7,742,197 \$ 12,945,415

Exhibit F

Year prior to IA
application
**Actual thru Mar
2019**

I. Capital Expenditures		
A	Construction	\$ -
B	Equipment	\$ -
	1 Clinic (dental unit, chair etc)	\$ -
	2 Radiography (including darkroom)	\$ -
	3 Laboratory	\$ -
	4 Locker Room	\$ -
	5 Reception Room	\$ -
	6 Faculty & Staff offices	\$ -
	7 Instructional equipment	\$ -
	8 Others (specify)	\$ -
TOTAL		\$ -

II Non-capital Expenditures		
A	Instructional materials, e.g. technology	\$ -
B	Clinic supplies	\$ -
C	Laboratory supplies	\$ -
D	Office supplies	\$ -
E	Program Library collections	
	1 Institutional	\$ -
	2 Departmental	\$ 1,932.00
F	Equipment maintenance and replacement	\$ -
	Other (specify) Accreditation/legal/ Consultant	
G	fees	\$ 67,923.92
TOTAL		\$ 69,855.92

III Faculty		
A	Salaries	\$ 101,578.46
B	Benefits	\$ 8,357.44
C	Professional Development	\$ 4,860.00
D	Travel for Student Supervisor	
E	Other (specify) Program review/development	\$ 2,099.35
TOTAL		\$ 116,895.25

IV	Staff		
A	Secretarial Support	\$	13,468.24
B	Clinic Support Staff	\$	-
C	Other (specify)	\$	-
	TOTAL	\$	13,468.24

V	other Categories if any (specify)		
A	Deans Discreation expense	\$	-
B	Security/Janitorial	\$	-
C	Dental Clincial Expenses	\$	-
D	Student Events and Services	\$	-
E	Operating expenses	\$	5,764
F	Rent	\$	-
G	Marketing/recruitment	\$	-
	TOTAL	\$	5,764

\$ 205,983.78



**EXHIBIT G
SCHEDULE OF COURSES**

YEAR: **1** _____

Course Title	Semester	Units	Clock Hours of Course*				Names of Faculty
			Lect.	Lab.	Clinic	Total	
Hematology	1	4	45	30	0	75	Nazila Hejazi MD
Integumentary and Musculoskeletal Systems	1	7	75	60	0	135	Ghaith Al-Eyd MD Nripendra Dhillon MBBS MS Guy diSibio MD PhD Nehad El-Sawi PhD Susan Ely PhD Alan Ernst PhD Darilyn Falck MD Rochelle Frank MD Valeri Gerriets PhD Nazila Hejazi MD Rudolph Holguin MD Michael Ibrahim MD PhD Kenny Jialal MBChB MD Sheryl Krig PhD ForShing Lui MD Joseph Puglisi PhD Rajendra Ramsamooj MD Leonard Ranasinghe MD PhD Joseph Rogers MD Joel Talsma MS

							Sailabala Vanguri MBBS MD Katherine Whitcome PhD Jason Wong MD Tracy Yarbrough MD PhD Jenny Boakes MD Jasdeep Sharma MD Dana Miller-Blair MD
Foundations of Odontology	1	6	45	60	60	165	Rosemary Wu DMD MS
Dental Anatomy	1	6	45	120	0	165	Wai Chan DDS Leon Assael DMD
Foundations of Dental Medicine	1	3	30	15	15	60	Leon Assael DMD
Managing Student Life	1	1	15	0	0	15	Richard Simonsen DDS
Neuroscience	2	9	105	60	0	165	Forshing Lui MD Rochelle Frank MD Ghaith Al-eyd MD Tracy Yarbrough MD PhD Susan Ely PhD Randall Enstrom MD Nehad El-Sawi PhD Jason Wong PharmD Nripendra Dhillon PhD Jose Puglisi PhD Sailabala Vanguri MD Michael Ibrahim MD PhD Sheryl Krig PhD Darilyn Falck MD Alan Ernst PhD Scott Braley MD Valerie Gerriets PhD Raj Ramsamooj MD Ishwarlal Jialal MD Guy DiSibio MD Nazila Hejazi MD Xiaodong Feng PharmD

							Leonard Ranasinghe MD PhD James Martel MD Arthur Dublin MD John Bissell MD Ursula Anders MD
Cardiovascular and Pulmonary Systems	2	9	105	60	0	165	Ghaith Al-Eyd MD PhD Scott Braley MD Nripendra Dhillon MBBS MS Guy diSibio MD PhD Nehad El-Sawi PhD Susan Ely PhD Randall Enstrom MD Darilyn Falck MD FACEP Xiaodong Feng PhD Pharm D Valerie Gerriets PhD Nazir Habib MD Nazila Hejazi MD Laura Hoffman MD Rudy Holguin MD Michael Ibrahim MD PhD Kenny Jialal MBChB MD Sheryl Krig PhD Malcom McHenry MD Jose Puglisi PhD Raj Ramsamooj MD Mark Sheffield MD PhD Joseph Silva MD Sailabala Vanguri MBBS MD Jean-Claude Veille MD Tracy Yarbrough PhD MD MAEd Peter Yip MD MPH

Cariology	2	3	45	0	0	45	Kevin Keating DDS
Oral Microbiology/Immunology	2	3	30	30	0	60	Pending
Surgical Anatomy of the Head and Neck	2	2	15	30	0	45	Leon Assael DMD
Ethics in Dental Medicine and Health Care	2	2	15	30	0	45	Richard Simonsen DDS
TOTAL CONTACT HOURS						1140	

*Lab includes small group case-based learning



EXHIBIT G SCHEDULE OF COURSES

YEAR: 2 _____

Course Title	Semester	Credits	Clock Hours of Course*				Names of Faculty
			Lect.	Lab.	Clinic	Total	
Renal System	1	5	60	30	0	90	Tracy Yarbrough MD PhD
Gastroenterology	1	5	60	30	0	90	Nehad El-Sawi PhD
Endocrine System	1	5	60	30	0	90	Mark Sheffield MD PhD
Clinical Pharmacology 1	1	3	30	30	0	60	Pending
Operative Dentistry	1	6	30	120	0	150	Wai Chan DDS
Periodontology (Fall and Spring)	1, 2	6	75	30	0	105	Rosemary Wu DMD
Dental Anesthesiology 1, Local Anesthesia	1	3	30	30	0	60	Michael Cadra DDS
Oral Radiology 1	1	3	30	30	0	60	Shikha Rathi BDS MS
Clinical Pharmacology 2/Oral Pharmacology	2	3	30	30	0	60	Jagdev Heir MD DMD FACS
Prosthodontics and Implant Dentistry: Removable Prosthodontics	2	6	45	90	0	135	Pending
Comprehensive Care Family Dentistry	2	3	0	0	90	90	Pending
Endodontology, Diseases of the Pulp and Pathways of Odontogenic Infection	2	3	30	30	0	60	Pending
Dental Anesthesiology 2: Pain and Anxiety Control, Analgesia, Medical Management of Local Anesthesia	2	3	30	30	30	90	Michael Cadra DDS
Oral Pathology/Oral Medicine 1	2	3	30	30	0	60	Pending
Orthodontics and Craniofacial Growth and Development	2	3	30	30	0	60	Pending
Behavioral Medicine	2	3	30	30	0	60	Pending
Dental Medicine at all Stages of Life	2	3	30	15	15	60	Pending
TOTAL CONTACT HOURS						1380	

*Lab includes small group case-based learning



EXHIBIT G SCHEDULE OF COURSES

YEAR: 3 _____

Course Title	Semester	Credits	Clock Hours of Course*				Names of Faculty
			Lect.	Lab.	Clinic	Total	
Junior Year Medicine Seminar (fall, spring)	1, 2	4	0	120	0	120	Pending
Prosthodontics and Implant Dentistry: Fixed Prosthodontics	1	6	45	90	0	135	Pending
Comprehensive Care Family Dentistry	1, 2	16	0	0	480	480	Pending
Oral Radiology 2	1	3	30	30	0	60	Pending
Principles of Oral Surgery	1	3	30	30	0	60	Pending
Pediatric Dentistry	1	3	30	30	0	60	Pending
Dental Public Health	1	2	15	30	0	45	Pending
Practice Management 1	1	2	30	0	0	30	Pending
Periodontology Seminar	2	2	0	60	0	60	Pending
Oral Pathology/Oral Medicine 2	2	3	30	30	0	60	Pending
Clinical Clerkship: Oral and Maxillofacial Surgery	2	8	0	0	240	240	Pending
Clinical Clerkship: Pediatric Dentistry	2	8	0	0	240	240	Pending
TOTAL CONTACT HOURS						1590	

*Lab includes small group case-based learning



**EXHIBIT G
SCHEDULE OF COURSES**

YEAR: **4** _____

Course Title	Semester	Credits	Clock Hours of Course*				Names of Faculty
			Lect.	Lab.	Clinic	Total	
Senior Year Medicine Seminar	1, 2	4	0	120	0	120	Pending
Periodontology Seminar	1	2	0	60	0	60	Pending
Prosthodontics and Implant Dentistry: Implant Surgery and Prosthodontic Reconstruction	1	3	30	30	0	60	Pending
Comprehensive Care Family Dentistry	1, 2	16	0	0	480	480	Pending
Oral Radiology Seminar	1	2	0	60	0	60	Pending
Clinical Clerkship: Community-Based Education	1, 2	16	0	0	240	240	Pending
Seminar in Dental Public Health	1	2	0	60	0	60	Pending
Oral Pathology/Oral Medicine Seminar	2	2	0	60	0	60	Pending
Clinical Clerkship: Orthodontics	2	2	0	0	60	60	Pending
Advanced Topics in Oral and Maxillofacial Surgery	2	2	15	30	0	45	Pending
Practice Management 2	2	2	15	30	0	45	Pending
Clinical Electives	2	6	0	0	180	180	Pending
TOTAL CONTACT HOURS						1470	

*Lab includes small group case-based learning



EXHIBIT H
DEPARTMENTAL COURSE OFFERINGS
 Biological and Physical Sciences

Department or Division: Dental Medicine

Course Title (not number)	Year Offered	Units	Total Clock Hours During Academic Year*					Names of Faculty
			Lect.	Lab.	Clinic	Hosp.	Other	
Hematology	1	4	45	30	0	0		Nazila Hejazi MD
Integumentary and Musculoskeletal Systems	1	7	75	60	0	0		Ghaith Al-Eyd MD Nripendra Dhillon MBBS MS Guy diSibio MD PhD Nehad El-Sawi PhD Susan Ely PhD Alan Ernst PhD Darilyn Falck MD Rochelle Frank MD Valeri Gerriets PhD Nazila Hejazi MD Rudolph Holguin MD Michael Ibrahim MD PhD Kenny Jialal MBChB MD Sheryl Krig PhD ForShing Lui MD

							Joseph Puglisi PhD Rajendra Ramsamooj MD Leonard Ranasinghe MD PhD Joseph Rogers MD Joel Talsma MS Sailabala Vanguri MBBS MD Katherine Whitcome PhD Jason Wong MD Tracy Yarbrough MD PhD Jenny Boakes MD Jasdeep Sharma MD Dana Miller-Blair MD
Neuroscience	1	9	105	60	0	0	Forshing Lui MD Rochelle Frank MD Ghaith Al-eyd MD Tracy Yarbrough MD PhD Susan Ely PhD Randall Enstrom MD Nehad El-Sawi PhD Jason Wong PharmD Nripendra Dhillohn PhD Jose Puglisi PhD Sailabala Vanguri MD Michael Ibrahim MD PhD Sheryl Krig PhD Darilyn Falck MD Alan Ernst PhD Scott Braley MD Valerie Gerriets PhD Raj Ramsamooj MD Ishwarlal Jialal MD

								Guy DiSibio MD Nazila Hejazi MD Xiaodong Feng PharmD Leonard Ranasinghe MD PhD James Martel MD Arthur Dublin MD John Bissell MD Ursula Anders MD
Cardiovascular and Pulmonary Systems	1	9	105	60	0	0		Ghaith Al-Eyd MD PhD Scott Braley MD Nripendra Dhillon MBBS MS Guy diSibio MD PhD Nehad El-Sawi PhD Susan Ely PhD Randall Enstrom MD Darilyn Falck MD FACEP Xiaodong Feng PhD Pharm D Valerie Gerriets PhD Nazir Habib MD Nazila Hejazi MD Laura Hoffman MD Rudy Holguin MD Michael Ibrahim MD PhD Kenny Jialal MBChB MD Sheryl Krig PhD Malcom McHenry MD Jose Puglisi PhD Raj Ramsamooj MD Mark Sheffield MD PhD

								Joseph Silva MD Sailabala Vanguri MBBS MD Jean-Claude Veille MD Tracy Yarbrough PhD MD MAEd Peter Yip MD MPH
Renal System	2	5	60	30	0	0		Tracy Yarbrough MD PhD
Gastroenterology	2	5	60	30	0	0		Nehad El-Sawi PhD
Endocrine System	2	5	60	30	0	0		Mark Sheffield MD PhD
Clinical Pharmacology 1	2	3	30	30	0	0		Pending
Clinical Pharmacology 2	2	3	30	30	0	0		Jagdev Heir DMD MD FACS
Junior Year Medicine Seminar (Fall and Spring)	3	4	0	120	0	0		Pending
Senior Year Medicine Seminar (Fall and Spring)	4	4	0	120	0	0		Pending

*Lab includes small group case-based learning



EXHIBIT I
DEPARTMENTAL COURSE OFFERINGS
Clinical Sciences

Department or Division: Dental Medicine

Course Title (not number)	Year Offered	Units	Total Clock Hours During Academic Year*					Names of Faculty
			Lect.	Lab.	Clinic	Hosp.	Other	
Foundations of Odontology	1	6	45	60	60			Rosemary Wu DMD MS
Foundations of Dental Medicine	1	3	30	15	15			Leon Assael DMD
Dental Anatomy	1	6	45	120	0			Joel Whiteman DDS Leon Assael DMD
Cariology	1	3	45	0	0			Kevin Keating DDS
Oral Microbiology/Immunology	1	3	30	30	0			Pending
Surgical Anatomy of the Head and Neck	1	2	15	30	0			Leon Assael DMD
Operative Dentistry	2	6	30	120	0			Wai Chan DDS
Dental Anesthesiology 1/Local Anesthesia	2	3	30	30	0			Michael Cadra DDS

Oral Radiology 1	2	3	30	30	0			Shikha Rathi BDS MS
Prosthodontics and Implant Dentistry: Removable Prosthodontics	2	6	45	90	0			Pending
Comprehensive Care Family Dentistry	2	3	0	0	90			Kevin Keating DDS
Endodontology: Diseases of the Pulp and Pathways of Odontogenic Infection	2	3	30	30	0			Kevin Keating DDS
Dental Anesthesiology 2: Pain and Anxiety Control, Analgesia, Medical Management of Local Anesthesia	2	3	30	30	30			Michael Cadra DDS
Periodontology (Fall and Spring)	2	6	75	30	0			Rosemary Wu DMD
Oral Pathology/Oral Medicine 1	2	3	30	30	0			Pending
Orthodontics and Craniofacial Growth and Development	2	3	30	30	0			Pending
Dental Medicine at all Stages of Life	2	3	30	15	15			Pending
Prosthodontics and Implant Dentistry: Fixed Prosthodontics	3	6	45	90	0			Pending
Comprehensive Care Family Dentistry (Fall and Spring)	3	16	0	0	480			Pending
Oral Radiology 2	3	3	30	30	0			Pending
Principles of Oral Surgery	3	3	30	30	0			Pending
Pediatric Dentistry	3	3	30	30	0			Pending
Periodontology Seminar	3	2	0	60	0			Pending
Oral Pathology/Oral Medicine 2	3	3	30	30	0			Pending

Clinical Clerkship: Oral and Maxillofacial Surgery	3	8	0	0	240			Pending
Clinical Clerkship: Pediatric Dentistry	3	8	0	0	240			Pending
Periodontology Seminar	4	2	0	60	0			Pending
Prosthodontics and Implant Dentistry: Implant Surgery and Prosthodontic Reconstruction	4	3	30	30	0			Pending
Comprehensive Care Family Dentistry (Fall and Spring)	4	16	0	0	480			Pending
Oral Pathology/Oral Medicine Seminar	4	2	0	60	0			Pending
Oral Radiology Seminar	4	2	0	60	0			Pending
Clinical Clerkship: Orthodontics	4	2	0	0	60			Pending
Advanced Topics in Oral and Maxillofacial Surgery	4	2	15	30	0			Pending
Clinical Electives	4	6	0	0	180			Pending

*Lab includes small group case-based learning



EXHIBIT J
DEPARTMENTAL COURSE OFFERINGS
Behavioral Sciences

Department or Division: Dental Medicine

Course Title (not number)	Year Offered	Units	Total Clock Hours During Academic Year*					Names of Faculty
			Lect.	Lab.	Clinic	Hosp.	Other	
Managing Student Life	1	1	15	0	0	0		Richard Simonsen DDS
Ethics in Dental Medicine and Health Care	1	2	15	30	0	0		Richard Simonsen DDS
Behavioral Medicine	2	3	30	30	0	0		Pending
Dental Public Health	3	2	15	30	0	0		Pending
Practice Management 1	3	2	30	0	0	0		Pending
Practice Management 2	4	2	15	30	0	0		Pending
Clinical Clerkship: Community-based Education (Fall and Spring)	4	16	0	0	240	0		Pending
Seminar in Dental Public Health	4	2	0	60	0	0		Pending

*Lab includes small group case-based learning

EXHIBIT K

DEPARTMENT CHAIR

List the departments or divisions within the purview of the dental school or dental college. Include the name of the department chair of each and the length of time the individual has served as chair. Indicate areas or sub-areas of instruction included in each department or division.

Department/Division	Chair/Director	Areas Included in Department/Division
Dental Medicine	Dr. Leon Assael	Human Systems, Odontology, Oral and Maxillofacial Studies, and Behavioral and Social Sciences



EXHIBIT L
ALPHABETICAL LISTING OF FULL-TIME FACULTY

Name of Faculty Member	Degree(s), Cert(s),	Acad Rank	Dept	Dental Specialty		
	Dates and Institution(s)			Educ. Qual.	Board Cert.	Board Elgb.
1) <u>Assael, L*</u>	B.A., 71, Columbia DMD, 75, Harvard OMS residency, 78, Vanderbilt CMM, 01, UOK Cert., 12OMFS/Anesthesia,	Full Prof	Dental Med		OMFS	
2) Keating, K*	DDS, 77, Loyola MS, 81, Marquette Cert., Advanced Training, 81, Marquette Cert., 86, Diplomate, American Board of Endodontics	Full Prof	Dental Med		Endo	
3) Simonsen, R*	BA, 69, Univ of MN BS, 69, Univ of MN DDS, 71 Univ of MN MS, 81, Univ of MN Cert. Cariology, 81, Univ of MN PhD (hc), University of the Western Cape, South Africa	Full Prof	Dental Med			
4) Wu, R	BA, 96, University of Pennsylvania,	Full Prof	Dental Med			

	DMD, 2003, University of Pennsylvania MS, 2006, UCSF					
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* List all faculty, but place an * to indicate faculty budgeted exclusively by dental school
Underline names of department chairs



EXHIBIT M
ALPHABETICAL LISTING OF PART-TIME FACULTY

Name of Faculty Member	F T E+	Degree(s), Cert(s), Dates and Institution(s)	Acad Rank	Dept	Dental Specialty		
					Educ. Qual.	Board Cert.	Board Elgb.
1) Alassad, S*	0.2	DDS, Marmara	Asst Prof	Dent al med			
2) Alpha, C*	0.2	DDS, 02, Iowa OMFS, 06, UOP	Asst Prof	Dent al med		OMFS	
3) Bains, A*	0.2	BDS, 09, Kings College DMD, 16, Tufts	Asst Prof	Dent al med			
4) Bal, A*	0.2	DDS, 97, Case Western Endodontics, 00, Einstein Medical	Asst Prof	Dent al med	Endo		
5) Bal, T*	0.2	DDS, 97, Case Western GPR, 98, Metro Health Medical Center	Asst Prof	Dent al med			
6) Bellamy, W. J.*	0.2	DMD, 89, BU	Asst Prof	Dent al med			
7) Bradshaw, P*	0.2	DMD, 89, BU	Asst Prof	Dent al med			
8) Braley, S	0.1	MD	Assoc Prof	Dent al med			
9) Cadra, M*	0.2	DMD, 82, Washington MD, 93, Alabama OMS/LAC 86, USC General Surgery, 94, Cottage Hospital Cert., ABOMS/National Board of Dental Anesthesia	Asst Prof	Dent al med		ABO MS	

10) Chow, C*	0.2	DDS, 81, UCSF Orofacial Pain/American Board of Orofacial Pain	Asst Prof	Dent al med		Orofac ial Pain	
11) Churchill, S*	0.2	DMD, 76, Oregon Hospital Residency, 77, Oregon Health Services	Asst Prof	Dent al med			
12) Clements, T*	0.2	DDS, 08, UOP	Asst Prof	Dent al med			
13) Comfort, M*	0.2	DDS, 97, UOP	Asst Prof	Dent al med			
14) Creasy, J*	0.2	DDS, 01, UOP	Asst Prof	Dent al med			
15) Delmore, M*	0.2	DDS MD	Asst Prof	Dent al med	OMF S		
16)Dhillon, N	0.1	MBBS MS	Assoc	Dent al Med			
17) Dial, C*	0.2	DRT, 1981, UC Berkeley	Instruc tor	Dent al med		Radiol ogy Techn ologist	
18)diSibio, G	0.1	MD PhD	Assoc Prof	Dent al med			
19)El-Sawi, N	0.1	PhD	Prof	Dent al med			
20)Ely, S	0.1	PhD	Prof	Dent al med			
21)Enstrom, R	0.1	MD	Assoc Prof	Dent al med			
22)Ernst, A	0.1	PhD	Asst Porf	Dent al med			
23)Falck, D	0.1	MD	Assoc Prof	Dent al med			

24)Feng, X	0.1	PhD PharmD	Full Prof	Dent al med			
25) Fong, R*	0.2	DDS, 85, UCSF	Asst Prof	Dent al med			
26)Frank, R	0.1	MD	Assoc Prof	Dent al med			
27) Frank, S*	0.2	DDS, Georgetown MS Orthodontics, Loma Linda	Asst Prof	Dent al med		Ortho	
28) Gannam, *C	0.2	DMD, 14, Harvard Pediatrics, 16, OSU Cert. Pediatrics	Asst Prof	Dent al med		Peds	
29)Gerriets, V	0.1	PhD	Asst Prof	Dent al med			
30)Glassman, P	0.7	BA, 64, UCLA DDS, 68, UCSF GPR, 75, Mount Zion Hospital MA, 94, UOP MBA, 99, UOP	Full Prof	Dent al med			
31)Habib, N	0.1	MD	Assoc Prof	Dent al med			
32) Hatcher, D*	0.2	DDS, 73, MSC Oral Radiology, 83 Canada (MRCD(C)	Asst Prof	Dent al med		Radiol ogy	
33) Hearn, G*	0.2	DDS, 12, UOP GPR, 2014, UVA Pediatrics, 2016, Washington	Asst Prof	Dent al med		Peds	
34) Heir, J*	0.2	DMD, 95, UMDNJ MD, 00, UMDNJ OMFS, 2003, UMDNJ Fellowship Cosmetic Surgery, 05, Oklahoma Cert: Cosmetic Surgery, Oral & Maxillofacial Surgery	Asst Prof	Dent al med		Medic al, OMFS	
35)Hejazi, N	0.1	MD	Asst Prof	Dent al med			

36) Henry, M*	0.2	DDS, 90, Howard	Asst Prof	Dental med			
37) Herman, T*	0.2	DDS, 88, UCSF	Asst Prof	Dental med			
38) Hillendahl, C*	0.2	DDS, 79, UCLA GPR, 80	Asst Prof	Dental med			
39) Hoffman, L	0.1	MD	Assoc Prof	Dental med			
40) Holguin, R	0.1	MD	Assoc Prof	Dental med			
41) Ibrahim, M	0.1	MD PhD	Assoc Prof	Dental med			
42) Jialal, K	0.1	MBChB MD	Full Prof	Dental med			
43) Johnson, P*	0.2	DDS, 08, UCSF Pediatrics, 11, UCSF Cert. Pediatrics	Asst Prof	Dental med		Peds	
44) Judd, B*	0.2	DDS, 84, UOP	Asst Prof	Dental med			
45) Kolber, G*	0.2	DDS, 08, UCSF Endodontics, 10, UCLA Cert. Endodontics	Asst Prof	Dental med		Endo	
46) Krig, S	0.1	PhD	Asst Prof	Dental med			
47) LaDow, L*	0.2	DDS, 87, USC	Asst Prof	Dental med			
48) Lai, M*	0.2	DDS, 91, UOP	Asst Prof	Dental med			
49) Lui, F	0.1	MD	Full Prof	Dental med			
50) Martel, J	0.1	MD	Full Prof	Dental med			

51)McHenry	0.1	MD	Assoc Prof	Dental med			
52) Mickiewicz, T*	0.2	DDS, 82, UOP Cert. American Academy of Pain Management; ACSDD	Asst Prof	Dental med		Pain Management	
53) Moore, K*	0.2	DDS, 82, UCSF OFP, 12, UCLA Cert. American Board of Orofacial Pain	Asst Prof	Dental med		Oral Facial Pain	
54) Nath, A*	0.2	DDS, 09, UCSF Periodontics, 13, OHSU Cert. Periodontics	Asst Prof	Dental med		Perio	
55) Newens, C*	0.2	DDS, 95, UOP	Asst Prof	Dental med			
56) Nougé, E*	0.2	DDS, 95, Cairo U MS DS in Oral Med and Orofacial Pain, 18, USC Cert. Diplomate American Board of Orofacial Pain	Asst Prof	Dental med		Oral Facial Pain	
57) Nordlander, J	0.2	DDS	Asst Prof	Dental med		Prosth	
58) Patel, V*	0.2	BDS, 91, University of London	Asst Prof	Dental med			
59) Prodhan-Ashraf, R*	0.2	DDS, 15, Stony Brook GPR, 16, Harlem Hospital Center	Asst Prof	Dental med			
60)Puglisi, J	0.1	PhD	Asst Prof	Dental med			
61) Raghuraman, K*	0.2	DDS, MPH, 2005, UCSF and VCU	Asst Prof	Dental med			
62)Ramsamooj, R	0.1	MD	Full Prof	Dental med			
63)Ranasinghe, L	0.1	MD PhD	Full Prof	Dental med			

64) Rashid, H*	0.2	DDS, 09, Fresno GPR, 10, Fresno	Asst Prof	Dent al med			
65) Reed, J*	0.2	DDS, 09, UOP	Asst Prof	Dent al med			
66) Robinson, L*	0.2	DDS, 90, UOP Ped Dentistry, 95, Univ of FL Cert. American Board of Pediatric Dentistry	Asst Prof	Dent al med		Peds	
67) Rogers, J	0.1	MD	Asst Prof	Dent al med			
68) Sandretti, S*	0.2	DDS, 2013, UCLA VCU, 15, Richmond VAMC	Asst Prof	Dent al med			
69) Sanghvi, R*	0.2	DDS, 05, UCLA GPR, 06, Weill Cornell NY Presbyterian Hosp Pediatric Dentistry, 10, St. Christopher's Hospital for Children, Philadelphia	Asst Prof	Dent al med		Peds	
70) Sarkari, C*	0.2	NDS/CODS, 94, India MDS (Prosthodontics)/COD S, 96, India DDS/DBS, 03, India College of Dental Surgery, 96, Manipal, India	Asst Prof	Dent al med			
71) Savani, G*	0.2	DMD, 2003, U of Pittsburgh GPR, 2004, Loyola Endo, 2013, OSHU	Asst Prof	Dent al med		Endo	
72) Shikha, R*	0.2	BDS, 04, DY Pahil, India OMF Radiology, 11, UT San Antonio Cert. American Association of OMF Radiology	Asst Prof	Dent al med		OMF Radiol ogy	
73) Silva, J	0.1	MD	Full Prof	Dent al med			

74) Soliman, W*	0.2	DDS, 94, Cairo University	Asst Prof	Dental med			
75) Stout, M*	0.2	DDS, 17, UOP AEGD, 18, UOP	Asst Prof	Dental med			
76) Tran, S*	0.2	DDS, 00, UOP	Asst Prof	Dental med			
77) Vacura, B*	0.2	DDS, 17, UCSF GPR, UNLV, 18	Asst Prof	Dental med			
78) Vanguri, S	0.1	MBBS MD	Asst Prof	Dental med			
79) Veille, J	0.1	MD	Full Prof	Dental med			
80) Wallace, K*	0.2	DDS, 72, UCSF	Asst Prof	Dental med			
81) Whitcome, K	0.1	PhD	Asst Prof	Dental med			
82) Whiteman, J*	0.2	DDS, 04, UCLA GPR, 05, UCLA	Asst Prof	Dental med			
83) Wong, E*	.02	DDS, 88, UOP ACE, 89, UOP	Asst Prof	Dental med			
84) Wong, J	0.1	MD	Asst Prof	Dental med			
85) Wu, J*	0.2	DDS, 99, UCLA GPR, 00, Palo Alto VA Ortho, 06, UOP	Asst Prof	Dental med	Ortho		
86) Wu, R*	0.2	DMD, 03, Penn Perio, 06, UCSF Cert. Diplomate, American Board of Periodontology	Asst Prof	Dental med		Perio	
87) Yarbrough, T	0.1	PhD MD MAEd	Assoc Prof	Dental med			

88)Yip, P	0.1	MD MPH	Assoc Prof	Dent al med			
89) Zablotsky, M*	.02	DDS, 85, OHSU Cert. 93, American Board of Periodontology	Asst. Prof	Dent al med		Perio	

* List all faculty, but place an * to indicate faculty budgeted exclusively by dental school

+ Determine FTE using formula on page 59

Underline names of department chairs



EXHIBIT N

ALPHABETICAL LISTING OF ALL FACULTY BY DEPARTMENT

Department of Dental Medicine

Name of Faculty Member	Rank	Teaching			Adm.	Res.	Int- Ext- Prac	Other
		Predoc prog	Forgn Grads	Advn Prog.				
1) Assael, L*	Prof	0.2			0.6	0.2		
2) Alassad, S*	Asst	0.2						
3) Alpha, C*	Asst	0.2						
4) Assael, L*	Prof	0.2			0.6	0.2		
5) Bains, A*	Asst	0.2						
6) Bal, A*	Asst	0.2						
7) Bal, T*	Asst	0.2						
8) Bellamy, W.J.*	Asst	0.2						
9) Bradshaw, P*	Asst	0.2						
10) Braley, S	Assoc	0.1						
11) Cadra, M*	Asst	0.2						
12) Chow, C*	Asst	0.2						
13) Churchill, S*	Asst	0.2						
14) Clements, T*	Asst	0.2						
15) Comfort, M*	Asst	0.2						
16) Creasy, J*	Asst	0.2						
17) Delmore, M*	Asst	0.2						
18) Dhillon, N	Assoc	0.1						
10) Dial, C*	Asst	0.2						
20) diSibio, G	Assoc	0.1						
21) El-Sawi, N	Prof	0.1						
22) Ely, S	Prof	0.1						
23) Enstrom, R	Assoc	0.1						
24) Ernst, A	Asst	0.1						
25) Falck, D	Assoc	0.1						
26) Feng, X	Prof	0.1						
27) Fong, R*	Asst	0.2						
28) Frank, R	Assoc	0.1						
29) Frank, S*	Asst	0.2						

30) Gannam, C*	Asst	0.2						
31) Gerriets, V	Asst	0.1						
32) Glassman, P	Prof	0.2			0.2	0.6		
33) Habib, N	Assoc	0.1						
34) Hatcher, D*	Asst	0.2						
35) Hearn, G*	Asst	0.2						
36) Hejazi, N	Asst	0.1						
37) Heir, J*	Asst	0.2						
38) Henry, M*	Asst	0.2						
39) Herman, T*	Asst	0.2						
40) Hillendahl, C*	Asst	0.2						
41) Hoffman, L	Assoc	0.1						
42) Holguin, R	Assoc	0.1						
43) Ibrahim, M	Assoc	0.1						
44) Jialal, K	Prof	0.1						
45) Johnson, P*	Asst	0.2						
46) Judd, P*	Asst	0.2						
47) Keating, K*	Prof	0.2			0.6	0.2		
48) Kolber, G*	Asst	0.2						
49) Krig, S	Asst	0.1						
50) LaDow, L*	Asst	0.2						
51) Lai, M*	Asst	0.2						
52) Lui, F	Prof	0.1						
53) Martel, J	Prof	0.1						
54) McHenry, M	Assoc							
55) Mickiewicz, T*	Asst	0.2						
56) Moore, K*	Asst	0.2						
57) Nath, A*	Asst	0.2						
58) Newens, C*	Asst	0.2						
59) Nougé, E*	Asst	0.2						
60) Nordlander, J	Asst.	0.2						
61) Patel, V*	Asst	0.2						
62) Prodhan-Ashraf, R*	Asst	0.2						
63) Puglisi, J	Asst	0.1						
64) Raghuraman, K*	Asst	0.2						
65) Ramsamooj, R	Prof	0.1						
66) Ranasinghe, L	Prof	0.1						
67) Rashid, H*	Asst	0.2						
68) Reed, J*	Asst	0.2						
69) Robinson, L*	Asst	0.2						
70) Rogers, J	Asst							
71) Sandretti, S*	Asst	0.2						
72) Sanghvi, R*	Asst	0.2						
73) Sarkari, C*	Asst	0.2						
74) Savani, G*	Asst	0.2						

75)Sheffield, M	Assoc	0.1						
76) Shikha, R*	Asst	0.2						
77)Silva, J	Prof	0.1						
78) Simonsen, R*	Prof	0.2			0.4	0.1		
79) Soliman, W*	Asst	0.2						
80) Stout, M*	Asst	0.2						
81) Tran, S*	0.2	0.2						
82) Vacura, B*	0.2	0.2						
83)Vanguri, S	Asst	0.1						
84)Veille, J	Prof	0.1						
85) Wallace, K*	Asst	0.2						
86)Whitcome, K	Asst	0.1						
87) Whiteman, J*	Asst	0.2						
88) Wong, E*	Asst	0.2						
89)Wong, J	Asst	0.1						
90) Wu, J*	Asst	0.2						
91) Wu, R*	Asst	0.2						
92)Yarbrough, T	Assoc	0.1						
93)Yip, P	Assoc	0.1						
94) Zablotsky, M*	Asst	0.2						

*Indicates faculty budgeted exclusively by dental school

List department chairperson first

(none) Indicates faculty position budgeted but unfilled

[illegible]

[illegible]

EXAMPLE EXHIBIT R

FACULTY HIRING PLAN

Faculty and administrator titles	FTE. Development al year 2019 to 2020	FTE. IA year #1 2020/ 2021 D1 students		FTE. IA year #2 2021/2022 D1, D2 students		FTE. IA year #3 2022/23 D1, D2, D3 students		FTE. IA year #4 2023/2024 D1, D2, D3, D4 students	
Dean	1.0	1.0		1.0		1.0		1.0	
Associate Dean, Academic Affair and Faculty Development	1.0	1.0		1.0		1.0		1.0	
Associate Dean, Curriculum and Clinical Education	1.0	1.0		1.0		1.0		1.0	
Assistant Dean, Clinical Affairs	1.0	1.0		1.0		1.0		1.0	
Assistant Dean, Student Affairs and Admissions	0.5	1.0		1.0		1.0		1.0	
Chair (Dean)									
Faculty, full time (incl. specialties)	15	30		45		60		60	
BMS	6	6		6		6		6	
Preclinical	5	5		8		8		8	
Clinical (Gen)	2	2		10		20		30	
Clinical (Specialty)	2	2		6		11		16	
Faculty, part time									
Subtotal									
Joint appointment faculty									
Cumulative faculty totals									
Faculty:student ratio		Preclin 6:1	Clin 6:1	Preclin 6:1	Clin 6:1	Preclin 6:1	Clin 6:1	Preclin 6:1	Clin 6:1

EXAMPLE EXHIBIT R

STAFF HIRING PLAN

Staff titles	FTE. Developmental year FY – 20__ to 20__	FTE. IA year #1 20__ / __ D1 students	FTE. IA year #2 20__ / __ D1, D2 students	FTE. IA year #3 20__ / __ D1, D2, D3 students	FTE. IA year #4 20__ / __ D1, D2, D3, D4 students
Administrative staff					
Exec. assistant	1.0	1.0	1.0	1.0	1.0
Admin Assistant			2.0	2.0	2.0
Student Services (includes IT and library support)		1.0	6.0	9.0	9.0
Director -					
Director-					
Chair -					
Chair -					
Other adm. staff					
Subtotal					
Joint appointment admin. staff					
Clinical staff					
Director -					
Dental hygienists					
Dental assistants					
Radiology					
Dental laboratory					
Central sterilization					
Dispensary					
Billing					
Patient care coord					
Manager -					
Subtotal					

Commission on Dental Accreditation BioSketch

Name: Gerald N. Glickman

Current Institution: Texas A&M University College of Dentistry

Address: 3302 Gaston Avenue Dallas, Texas 75246

Phone: 214-828-8361 **Fax:** 214-874-4507 **E-mail:** gglickman@tamhsc.edu

EDUCATIONAL BACKGROUND-Include advanced dental education (Begin with college level)

Name of School, City and State	Yr of Grad.	Certificate or Degree	Area of Study
Ohio State University, Columbus, Ohio	1972	B.S.	Microbiology
University of Kentucky, Lexington, Kentucky	1975	M.S.	Microbiology
Ohio State University College of Dentistry, Columbus, Ohio	1978	D.D.S.	Dentistry
Univ. of Florida College of Dentistry, Shands Teaching Hospital, Gainesville, Florida	1979	Certificate	GPR
Univ. of Michigan School of Dentistry, Ann Arbor, Michigan	1981	Certificate	Restorative Dentistry
Northwestern Univ. Dental School, Chicago, Illinois	1984	Certificate	Endodontics

LICENSURE

License (Do not include license number)	From (Year)	To (Year)
Texas	2017	2019
Florida		2020
Washington		2020

BOARD CERTIFICATION

Certifying Organization	Specialty	Date certified
American Board of Endodontics	Endodontics	April 1987

CE COURSES TAKEN (last 5 years)

Course Title	Course Content and Provider	Month and Year
Contemporary Perspectives in Endodontics	Endodontics	January 2014
Endodontics and Ethical/Legal Issues in Dentistry	Endodontics	February 2014
AAE Program Directors Workshop	CODA, assessment	August 2014
Contemporary Endodontics	New technology and research; Dentsply	July 2014
CCI Summer Liaison Meeting	Educational topics; ADEA	June 2014
AAE Annual Meeting	Multiple topics in endodontics; AAE	May 2014
ADEA Annual Meeting	Multiple topics in dental education	March 2014

Inter-professional Education	Inter-professional education; California Dental Association	February 2014
ADEA Deans Conference	Multiple topics; ADEA	November 2013
ADEA Fall Meetings	Multiple topics; ADEA	October 2013
Contemporary Endodontics	New technology and research; Dentsply	July 2013
AAE Chairs Workshop	CODA, Assessment, AAE	August 2013
Contemporary Endodontics	New Technology and Research; Dentsply	July 2013
CCI Summer Liaison Meeting	Educational topics; ADEA	June 2013
AAE Annual Meeting	Multiple topics in endodontics; AAE	May 2013
ADEA Annual Meeting	Multiple topics in dental education, ADEA	March 2013
AJDEA Deans Conference	Multiple topics; ADEA	November 2012
ADEA Fall Meetings	Multiple topics; ADEA	October 2012
Contemporary Endodontics	New technology and research; Dentsply	July 2012
AAE Program Directors Workshop	CODA, assessment, AAE	August 2012
Contemporary Endodontics	New technology and research; Dentsply	July 2012
CCI Summer Liaison Meeting	Educational topics; ADEA	June 2012
AAE Annual Meeting	Multiple topics in endodontics; AAE	May 2012
ADEA Annual Meeting	Multiple topics in dental education, ADEA	March 2012

TEACHING APPOINTMENTS (Begin with current)

Name of Institution, City and State	Rank	Subjects/Content Areas Taught/Administrative Responsibilities	From (Year)	To (Year)
Texas A&M University College Of Dentistry, Dallas, Texas	Professor & Chairman (Tenured)	<p>Director Graduate Program in Endodontics: major responsibilities as Chairman, administration of the department of endodontics; supervision of 4 full-time faculty and 8 part-time faculty; 5 full-time staff; responsible for curricular development at the pre-doctoral level; research; budgeting; CE programs, strategic planning, fundraising; faculty development: major responsibilities as director of the graduate program in endodontics; administration, teaching and curriculum development of the graduate program; research mentor for graduate students, coordinator of both the 27-month certificate program and the 3-year MS program in Oral</p>	2003	Present

		Biology		
University Of Washington School of Dentistry, Seattle, Washington	Professor and chairman (Tenured)	Major responsibilities as Chairman: administration organization of the department consisting of 2 administrative secretaries, 4 support staff, 4 full-time faculty and 23 part-time faculty; curriculum development , faculty and staff development, scholarly activity, budget control, fund- raising, alumni relations, CE programs, strategic planning: major responsibilities as director of the graduate program in endodontics; administration, teaching and curriculum development of the graduate program in endodontics; research mentor for graduate students	2001	2002
University Of Texas School of Dentistry, Houston, Texas	Associate Professor and Chair	Major responsibilities as Chair: administration of large n l ega department (radiology, oral pathology, periodontics, endodontics and urgent care); curriculum l development, faculty and staff development, scholarly activity, budget control, alumni relations, strategic planning, continuing education programs, faculty developn l ent: major responsibilities as Director of the advanced education program in endodontics; ad l l l inistration, teaching, and curriculum development of the graduate program in endodontics	1998	2001
Universidade do Grande Rio, Rio de Janeiro, Brazil, School of Dentistry	Visiting Professor		1995	2001
University of Michigan, School of Dentistry Ann Arbor, MI	Clinical Professor	Department of Cariology, Restorative Sciences and Endodontics; Director of Division of Endodontics: major responsibilities; administration of the endodontics program; Director and Coordinator of undergraduate endodontics; course director for Principles of Endodontics; Course Director for Principles of Pre-clinical Endodontics; Course Director for Principles of Endodontics II; Course Director for Advanced Endodontics; Course Director	1993	1998

		for Clinical Endodontics; Director of Graduate Endodontics; Course Director for Endodontic Surgery; Course Director for Case Presentation; Course Director for Clinical Endodontics; Course Director for Current Literature Review; Course Director for Pharmacology and Medicine in Endodontics; Course Director for seminar in Endodontics		
Baylor College of Dentistry, Dallas, Texas	Associate Professor (Tenured)	Director of Undergraduate Endodontics; Director of Sophomore Preclinical Endodontics; Co-author of Sophomore Endodontic Manual, Glickman GN and Gutmann JL. Principles of Preclinical Endodontics (1992); Senior Course Director: Principles of Advanced Clinical Endodontics 1986-1992); Junior Course Director: Principles of Clinical Endodontics (1991 -1992) Graduate Teaching: topical seminars, literature reviews, treatment planning, clinical instruction, research advisor; Consultant/lecturer in AEGD program; Revision of grading system and clinic forms; Director of Senior Selective in Endodontics (1985, 1986, 1989, 1990, 1991, 1992, 1993; Lecturer in Sophomore, Junior, and Senior Undergraduate Endodontics courses; Lecturer in Dental Hygiene Program; Author of Junior and Senior Endodontic Manuals Glickman, GN. Principles of Advanced Clinical Endodontics (1992) Glickman, GN. Principles of Clinical Endodontics (1992)	1984	1993
Baylor College of Dentistry, Dallas, Texas	Acting Chairman	Dept. of Endodontics	1991	1991
Veterans Administration Medical Center, Dallas, Texas	Consultant in Endodontics	Endodontics	1988	1993
Northwestern University School of Dentistry, Chicago, Illinois	Student Teaching	Dept. of Endodontics; clinic and lecture	1982	1984
University of Mississippi School of Dentistry,	Assistant Professor	Department of Community and Oral Health; Clinical Instruction in Oral Diagnosis. Treatment		

Jackson, MS		Planning and Dental Emergencies; Lecturer in Oral Microbiology; Instruction in Student-Patient Interviewing Techniques		

CURRENT TEACHING RESPONSIBILITIES

Name of Institution, City, State	Course Title	Discipline and Level of Students (Year)	Total Contact Hours Per Year	
			Didactic	Clinic/Laboratory
Texas A&M University College of Dentistry	Special Problems in Endodontics	Endodontics-Graduate residents (1st -3rd)	160	
Texas A&M University College of Dentistry	Treatment Planning in Endodontics	Endodontics- Graduate residents (1 st - 3rd)	80	
Texas A&M University College of Dentistry	Research	Endodontics - Mentor to Graduate residents (2 nd - 3 rd)	40	
Texas A&M University College of Dentistry	Clinical Endodontics	Endodontics- Graduate Residents (1 st - 3 rd)		160
Texas A&M University College of Dentistry	Principals of Pre- Clinical Endodontics	Endodontics- D-2 Students	10	40
Texas A&M University College of Dentistry	Principals of Clinical Endodontics	Endodontics -D-3 Students	1	
Texas A&M University College of Dentistry	Advanced Clinical Endodontics	Endodontics -D-4	5	
Texas A&M University College of Dentistry	Endodontic Surgery	Endodontics - 1 st yr. Graduate students	36	

HOSPITAL APPOINTMENTS (Begin with current)

Name of Hospital	City	State	From (Year)	To (Year)
Veterans Administration Medical Center, Dallas, Texas	Dallas	Texas	1988	1993

PRACTICE EXPERIENCE

Location (City and State)	Type of Practice	From (Year)	To (Year)
Dallas, Texas	Limited to Endodontics	2011	Present
Richardson, Texas	Limited to Endodontics	2008	2011

Dallas, Texas	Limited to Endodontics	2004	2008
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MEMBERSHIP, OFFICES OR APPOINTMENTS HELD IN LOCAL, STATE OR NATIONAL DENTAL OR ALLIED DENTAL ORGANIZATIONS, INCLUDING APPOINTMENTS TO STATE BOARDS OF DENTISTRY AND CODA

Name of Organization	Title	From (Year)	To (Year)
ADA Council on Dental Education and Licensure	Member	2014	2018
American Dental Education Association	President	2012	2013
Texas State Board of Dental Examiners	Member		present
Advisory Board, General Dentistry	Member	2013	present
CODA	Consultant in Endodontics	2013	present
ADA	Appointed Task Force on Developing an Advanced Dental Admission Test (ADAT)	2010	2011
American Association of Endodontists	President	2009	2010
ADEA	Chair, Administrative Board Council of Hospitals and Advanced Education Programs	2009	2010
Naval Postgraduate Dental School	Consultant		present
ADEA	Secretary, Administrative Board, Council of hospitals and Advanced Education Programs	2008	2009
American Association of Endodontists	Vice-President	2007	2008
American Association of Endodontists	Treasurer	2005	2007
Commission for Change and Innovation in Dental Education (CCI)	Member	2005	2017
ADEA	Leadership Institute Fellowship	2000	2001
Joint Commission on National Dental Examinations	Member, Test Construction Committee	2006	2003
Commission on Dental Accreditation	Member, Review Committee, Site Visitor Training Manual for Endodontic Site Visits (co-developer)	1997	2003
Commission on Dental Accreditation	Consultant in Endodontics	2006	present
Commission on Dental Accreditation	Consultant in Endodontics	1995	2003
American Board of Endodontics	Director	1997	2003
American Board of Endodontics	President	2003	
ADA ISO	Member, Standards Sub-committee, Endodontic filling materials	1997	present
ADA ISO	Member, Standards Sub-committee, Root canal instruments	1997	present
Michigan Association of Endodontists	Board of Directors	1994	1998
American Association of Endodontists	Chairman, Research and Scientific	1994	1997

	Affairs Committee		
American Association of Dental Schools	Councilor, Section on Endodontics	1994	2000
AADS	Member-at-Large, Council of Sections Administrative Board	1998	1999
ADEA	Secretary, Council of Sections Administrative Board	1999	2000
ADEA	Chair, Council of Sections Administrative Board	2001	2002
American College of Dentists	Fellow	1994	present
Joint Commission on National Dental Examiners	Member, Component A (Endodontics) Test Construction Committee	1991	1996
Academy of General Dentistry	Fellow	1989	1992

PUBLISHED WORKS (For the most recent five years, list articles in which you were the principal author that appeared in refereed journals or text books, by author(s), title, publication, and date)

Author(s)	Title	Publication	Date
Torabinejad, M, Sabeti M, Glickman GN.	Surgical Endodontics	In: Ingle J, Rotstein I., eds. <u>Endodontics 7TH ED. Bc Decker, Hamilton</u>	2017
Kerns D, Glickman GN.	Endodontic-periodontic interrelationships.	In: Hargreaves KM, Berman L., eds. <u>Pathways of the Pulp 11th ed.</u> St. Louis Elsevier	2015
G.N. Glickman	Return on Investment in Dental Education: Is It Worth it?	J Dent Education	2015
GN Glickman.	Endodontic Diagnosis. Colleagues for Excellence.	AAE Publication	2013
G.N. Glickman	Endodontic Diagnosis: Colleagues for Excellence	AAE Publication	2013
G.N. Glickman, M. Vogt	Preparation for treatment.	In: Cohen S, Hargreaves K.M, eds. <u>Pathways of the Pulp 10th ed.</u> St. Louis: Elsevier	2011
G.N. Glickman, R. Walton	Obturation	<u>Principles and Practice of Endodontics, 4th ed., St. Louis: Elsevier</u>	2009
G.N. Glickman, L.K. Bakland, A F. Fouad, IC.M. Hargreaves, S.A. Schwartz	Diagnostic Terminology: Report Of An Online Survey	Journal of Endodontics	2009
G.N. Glickman	AAE Consensus Conference on Diagnostic Terminology: Background And Perspectives	Journal of Endodontics	2009
G.N. Glickman	Treatment documentation and record- keeping. In: Arens DE, Gluskin AH, Peters CI, Peters OA, eds. <u>Practical Lessons on Conventional Endodontics Therapy</u>	Quintessence Publishing	2009

Commission on Dental Accreditation

BioSketch

Do not attach Curriculum Vitae
Type Only

Name: Michael E. Cadra, MD,
DMD, FACS

Current Institution: none

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Phone: 209-765-6822

Fax:

E-mail: mecadra@aol.com

EDUCATIONAL BACKGROUND-Include advanced dental education (Begin with college level)

Name of School, City and State	Yr of Grad.	Certificate or Degree	Area of Study
U. California, Irvine	1975	B. S.	Biologic Sciences
Washington University, St. Louis	1982	D.M.D	Dentistry
University of Alabama, School of Medicine	1993	M.D	Medicine

LICENSURE

License (Do not include license number)	From (Year)	To (Year)
California Dental/California Medical	1983/1994	Present/present

BOARD CERTIFICATION

Certifying Organization	Specialty/Discipline	Date certified
American Board of Oral and Maxillofacial Surgery	Oral and Maxillofacial Surgery	March 1988

CE COURSES TAKEN (last 5 years)

Course Title	Course Content and Provider	Month and Year
Assorted Medicine and Anesthesia topics (35 hours)	UpToDate Assorted Medicine and Anesthesia Topics	1/16-5/18
Leadership and Safety (59 hours)	Sutter Central Valley Region-Safety, leadership, risk management	3/14-3/15
GA/CS/MGA Evaluation	Dental Board of California/examination of permittees	5/15
Various topics in Implant Dentistry	Modesto Study Club	1/14-6/17
California Dental Law/Infection Control	California Dental Association	2/17

TEACHING APPOINTMENTS (Begin with current)

Name of Institution, City and State	Rank	Subjects/Content Areas Taught/ Administrative Responsibilities	From (Year)	To (Year)
Dugoni School of Dentistry, San Francisco, CA	Adjunct Asst Professor	Oral and Maxillofacial Surgery	2010	2017

Highland/Alameda County Medical Center	Adjunct Asst professor	Oral and Maxillofacial Surgery/pathology/implants	1994	2000
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CURRENT TEACHING RESPONSIBILITIES None

Name of Institution, City, State	Course Title	Discipline and Level of Students (Year)	Total Contact Hours Per Year	
			Didactic	Clinic/Laboratory

HOSPITAL APPOINTMENTS (Begin with current)

Name of Hospital	City	State	From (Year)	To (Year)
Sutter Memorial Medical Center	Modesto	CA	1994	2017
Doctors Medical Center	Modesto	CA	1994	2017
Stanilaus Surgical Hospital	Modesto	CA	1994	2017

PRACTICE EXPERIENCE

Location (City and State)	Type of Practice	From (Year)	To (Year)
Modesto, CA	Oral and Maxillofacial Surgery	1994	2017
Sacramento, CA	Oral and Maxillofacial Surgery	1994	1996
Sacramento, CA	Oral and Maxillofacial Surgery	1986	1991

MEMBERSHIP, OFFICES OR APPOINTMENTS HELD IN LOCAL, STATE OR NATIONAL DENTAL OR ALLIED DENTAL ORGANIZATIONS, INCLUDING APPOINTMENTS TO STATE BOARDS OF DENTISTRY AND CODA

Name of Organization	Title	From (Year)	To (Year)
American Association of Oral and Maxillofacial Surgery	Fellow, Committee on Continuing Education and Professional Development, Task Force on Scope	1986	Current
ADA/ASDA	Member	1986	current
CDA/Stanilaus Dental Society	Trustee CDA 2014=17/President SDS	1986	current

PUBLISHED WORKS (For the most recent five years, list articles in which you were the principal author that appeared in refereed journals or text books, by author(s), title, publication, and date)

Author(s)	Title	Publication	Date

Commission on Dental Accreditation
BioSketch
Do not attach Curriculum Vitae
Type Only

Name: Clifford Alan Chow
Current Institution: UCSF School
of Dentistry

Address: 7819 Bardswell Court

City, State, Zip: Elk Grove, CA 95758

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Fax:

E-mail: clifford.chow@ucsf.edu

EDUCATIONAL BACKGROUND-Include advanced dental education (Begin with college level)

Name of School, City and State	Yr of Grad.	Certificate or Degree	Area of Study
University of California Berkeley	1977	B.A.	Biochemistry
University of California San Francisco	1981	D.D.S.	Dentistry

LICENSURE

License (Do not include license number)	From (Year)	To (Year)
Dentistry	1981	present

BOARD CERTIFICATION

Certifying Organization	Specialty/Discipline	Date certified
American Board of Orofacial Pain	Orofacial Pain	2011

CE COURSES TAKEN (last 5 years)

Course Title	Course Content and Provider	Month and Year
International Conference on Orofacial Pain/TMDs	European Academy of Orofacial Pain	7/2018
American Academy of Orofacial Pain meetings	Orofacial Pain/AAOP	4/2007-4/2018
Orofacial Pain: Beyond TMD	Orofacial Pain/Rutgers University	9/2016-9/2017
International Symposium on Orofacial Pain	Quintessence	2/2015
UCSF Pain Research Group	UCSF	3/2013-1/2016

TEACHING APPOINTMENTS (Begin with current)

Name of Institution, City and State	Rank	Subjects/Content Areas Taught/ Administrative Responsibilities	From (Year)	To (Year)
UCSF School of Dentistry	Assist Prof	Orofacial Pain/TMD	2005	2019

CURRENT TEACHING RESPONSIBILITIES

Name of Institution, City, State	Course Title	Discipline and Level of Students (Year)	Total Contact Hours Per Year	
			Didactic	Clinic/Laboratory
UCSF School of Dentistry, San Francisco, CA	Orofacial Pain/TMD	Orofacial Pain/TMD D3/D4	20	240

HOSPITAL APPOINTMENTS (Begin with current)

Name of Hospital	City	State	From (Year)	To (Year)
NA				

PRACTICE EXPERIENCE

Location (City and State)	Type of Practice	From (Year)	To (Year)
Sacramento, CA	TMD/Orofacial Pain	2006	2019
Sacramento, CA	General Dentistry	1981	2005

MEMBERSHIP, OFFICES OR APPOINTMENTS HELD IN LOCAL, STATE OR NATIONAL DENTAL OR ALLIED DENTAL ORGANIZATIONS, INCLUDING APPOINTMENTS TO STATE BOARDS OF DENTISTRY AND CODA

Name of Organization	Title	From (Year)	To (Year)
American Board of Orofacial Pain	Diplomate	2011	2019
American Academy of Orofacial Pain	Fellow	2012	2019
Sacramento Academy of General Dentistry	Board of Directors, Fellow	2005	2008

PUBLISHED WORKS (For the most recent five years, list articles in which you were the principal author that appeared in refereed journals or text books, by author(s), title, publication, and date)

Author(s)	Title	Publication	Date
NA			

Commission on Dental Accreditation
BioSketch
Do not attach Curriculum Vitae
Type Only

Name: Huong N. Le

**Current Institution: California
Northstate University**

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E-mail: hle@ahschc.org

EDUCATIONAL BACKGROUND-Include advanced dental education (Begin with college level)

Name of School, City and State	Yr of Grad.	Certificate or Degree	Area of Study
Baylor University, Waco, TX	1981	BS	Chemistry
University of Texas Dental Branch, Houston, TX	1984	DDS	Dentistry
Jerry L. Pettis VA Hospital, Loma Linda, CA	1986	Certificate	Hospital Dentistry
University of Pacific	2012	MA	Education

LICENSURE

License (Do not include license number)	From (Year)	To (Year)
CA Dental	1986	2020

BOARD CERTIFICATION

Certifying Organization	Specialty/Discipline	Date certified
None		

CE COURSES TAKEN (last 5 years)

Course Title	Course Content and Provider	Month and Year
A National Community Dental Ed. Model /Maxillofacial Disease Mgt in the HIV+ Patient	HIV treatment, Dr David Reznik, NNOHA confenrece	November 2017
Nitrous Oxide-Oxygen Procedural Sedation: Just Breathe	Use of NO2, NNOHA conference	November 2017
Oral Health and Disease in HIV/AIDS	HIV treatment, NNOHA	November 2017
Oral pH: Understanding the Importance	New App-understand your saliva, NNOHA	November 2017
Time to Think (and Act) Differently: Why We Need a New Approach to Improve Oral Health	Why oral health is important to overall health, NNOHA	November 2017
The Plaque Monologues	Prevention, NNOHA	November 2017
The Endodontic Pyramid to Successful Diagnosis and Treatment	Endodontic diagnosis and new approach to treat	November 2017
Understanding the Science Behind Interim Therapeutic Restorations (ITR)	Technique on placing ITR, NNOHA	November 2017
Framing a Value-Based Program	How to achieve better efficiency, MSDA	June 2018

Applying Policy Levers	Advocacy, MSDA	June 2018
Clinical Perspectives-Evidence Update	Using evidence based dentistry in clinical practice, MSDA	June 2018
Are You Ready To Integrate CBCT Into Your Practice	Learn how to read cone beam radiology, UOP	October 2017
Intensive Learning Session: An Update on Bonding Agents and All-Ceramic Systems	Restorative techniques, NNOHA	November 2016
Endodontics Can Be Fun!	Endodontic updates, NNOHA	November 2016
Non-Surgical and Surgical Management of Periodontal Disease	Periodontal diagnosis and treatment plan, NNOHA	November 2016
Update on Oral Surgery Part I and II	Oral surgery techniques and hands-on workshop, NNOHA	November 2016

TEACHING APPOINTMENTS (Begin with current)

Name of Institution, City and State	Rank	Subjects/Content Areas Taught/ Administrative Responsibilities	From (Year)	To (Year)
UC San Francisco, School of Dentistry	Associate Clinical Professor	Clinic Dental Director, Guest Lecturer	2003	2019
Arizona School of Dentistry and Oral Health	Assistant Clinical Professor	Clinic Director	2007	2019
University of Pacific	Clinical Instructor	Clinic Director	2018	2019
Western University	Clinical Instructor	Clinic Director	2018	2019

CURRENT TEACHING RESPONSIBILITIES

Name of Institution, City, State	Course Title	Discipline and Level of Students (Year)	Total Contact Hours Per Year	
			Didactic	Clinic/Laboratory
University Of California, San Francisco	Public Health	Year 2-4	X	
Western University	Public Health	Year 1-3	X	

HOSPITAL APPOINTMENTS (Begin with current)

Name of Hospital	City	State	From (Year)	To (Year)
Rideout Memorial Hospital	Marysville	CA	1987	1991

PRACTICE EXPERIENCE

Location (City and State)	Type of Practice	From (Year)	To (Year)
Oakland, CA	Asian Health Services, Community Health	2003	Present

Madera, CA	Camerena Health, Community Health	2002	2003
Yuba City, CA	Del Norte Clinic, Community Health	1989	2002
Marysville, CA	Private Practice	1987	1989
Redondo Beach, CA	Private Practice	1986	1987

MEMBERSHIP, OFFICES OR APPOINTMENTS HELD IN LOCAL, STATE OR NATIONAL DENTAL OR ALLIED DENTAL ORGANIZATIONS, INCLUDING APPOINTMENTS TO STATE BOARDS OF DENTISTRY AND CODA

Name of Organization	Title	From (Year)	To (Year)
CDA	Delegate and Council Member	2003	2009
ADA	Delegate	2009	2009
ADA	Delegate	2018	2018
National Network for Oral Health Access (NNOHA)	Board member, President (2014-2015)	2003	2018
Dental Board of California	Board Member, President (2013)	2009	2019
Alameda County Dental Society	Board Member, President (2009)	2003	2018

PUBLISHED WORKS (For the most recent five years, list articles in which you were the principal author that appeared in refereed journals or text books, by author(s), title, publication, and date)

Author(s)	Title	Publication	Date
Chang, Le et al	Opening Access for Burmese and Karen Immigrant and Refugee Populations in California: A Blueprint for Integrated Health Service Expansion to Emerging Asian Communities	AAPI Nexus, UCLA	Fall 2014 Issue
Bailitt, Le, Taegen	Community-Based dental Education and Clinic Finance	ADEA Journal	September 2011
Le, Quach, et al	Oral Health Disparities and Inequities in Asian Americans and Pacific Islanders	American Journal of Public Health	Supplement 1, 2017, Vol 107, No. S1 AJPH
Hostettler, Le, Wanatabe, Tjahjono, C Le, Friedrichsen	Financial Considerations for Sustainability in School-Based Oral Health Centers	CDA Journal	March 2018
H Le, C Le	Patient Navigators in Community Health Center	Journal of American College of Dentists	January 2018

Commission on Dental Accreditation

BioSketch

Do not attach Curriculum Vitae
Type Only

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CNU College of Dental Medicine

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Fax:

E-mail: kevin.keating@cnsu.edu

EDUCATIONAL BACKGROUND-Include advanced dental education (Begin with college level)

Name of School, City and State	Yr of Grad.	Certificate or Degree	Area of Study
University of Southern California	N/A	None	Biology
Loyola Univ., School of Dentistry	1977	DDS	Dentistry
Marquette Univ., School of Dentistry	1981	MS	Biology- bone healing
Marquette Univ., School of Dentistry	1981	Certification of Advanced Training	Endodontics

LICENSURE

License (Do not include license number)	From (Year)	To (Year)
California	1977	Present

BOARD CERTIFICATION

Certifying Organization	Specialty/Discipline	Date certified
American Board of Endodontics	Endodontics	1986

CE COURSES TAKEN (last 5 years)

Course Title	Course Content and Provider	Month and Year

TEACHING APPOINTMENTS (Begin with current)

Name of Institution, City and State		Rank	Subjects/Content Areas Taught/ Administrative Responsibilities	From (Year)	To (Year)
CNU College of Dental Medicine		Assist Dean & Professor	Dean of Clinical Affairs, Endodontics	2019	Pres
UCSF School of Dentistry		Professor	Endodontics	1981	Pres

CURRENT TEACHING RESPONSIBILITIES

Name of Institution, City, State	Course Title	Discipline and Level of Students (Year)	Total Contact Hours Per Year	
U.C.S.F. School of Dentistry	Endodontics	Post Doc residents	Didactic	Clinic/Laboratory
UCSF School of Dentistry	Endodontics	D1 – D4	72	
Marquette School of Dentistry	Endodontics	D1- D4	15	100
Loyola School of Dentistry	Oral Diagnosis & treatment planning	D3, D4		400

HOSPITAL APPOINTMENTS (Begin with current)

Name of Hospital	City	State	From (Year)	To (Year)
N/A				

PRACTICE EXPERIENCE

Location (City and State)	Type of Practice	From (Year)	To (Year)
Sacramento, CA	Endodontics	1981	Present
Milwaukee, WI	General Dentistry	1879	1981
Chicago, IL	General Dentistry	1977	1980

MEMBERSHIP, OFFICES OR APPOINTMENTS HELD IN LOCAL, STATE OR NATIONAL DENTAL OR ALLIED DENTAL ORGANIZATIONS, INCLUDING APPOINTMENTS TO STATE BOARDS OF DENTISTRY AND CODA

Name of Organization	Title	From (Year)	To (Year)
California Dental Association	Member, Board of Trustees, Executive Committee	1981	present
American Assoc. of Endodontists	Member, Board of Directors, Foundation Board	1981	present
Dental Board of California	Endodontic consultant	1986	2006

PUBLISHED WORKS (For the most recent five years, list articles in which you were the principal author that appeared in refereed journals or text books, by author(s), title, publication, and date)

Author(s)	Title	Publication	Date

Commission on Dental Accreditation
BioSketch
Do not attach Curriculum Vitae.
Type Only

Name:	Maureen McAndrew, DDS, MSEd
Current Institution:	New York University College of Dentistry

EDUCATIONAL BACKGROUND (Begin with college level)

Name of School, City and State	Yr of Grad.	Certificate or Degree	Area of Study
New York University WSUC (Arts & Sciences), New York, NY	1979	BA	Biology/French
New York University College of Dentistry, New York, NY	1983	DDS	Dentistry
Baruch College of the City University of New York, New York, NY	2005	MSEd	Education

LICENSURE

License (Do not include license number)	From (Year)	To (Year)
New York	1983	2018

BOARD CERTIFICATION

Certifying Organization	Specialty	Date certified
None		

CE COURSES TAKEN (last 5 years)

Course Title	Course Content and Provider	Month and Year
Systematic Review Workshop – 14 hours	Cochrane Oral Health Group	December, 2016
Cultural Competency Program for Oral Health Providers – 6 hours	US Dept Minority Affairs	June, 2017

TEACHING APPOINTMENTS (Begin with current)

Name of Institution, City and State	Rank	Subjects/Content Areas Taught/ Administrative Responsibilities	From (Year)	To (Year)
New York University College of Dentistry, New York, NY	Creator / Facilitator	Excellent in Clinical Teaching Program	2005	Present
New York University College of Dentistry, New York, NY	Program Director / Senior Director	Teaching in Dental Education (TIDE) One year fellowship program, Professional Development	2013	2017
New York University College of Dentistry, New York, NY	Director	Clinical Faculty Education, Creator/Facilitator, Class ACTS (Advanced Clinical Teaching Scholars) Program	2009	2012
New York University College of Dentistry, New York, NY	Clinical Associate	Director - Administrative Services	2006	2009

	Professor			
New York University College of Dentistry, New York, NY	Clinical Assistant Professor/ Associate Director	General Dentistry Simulation	2001	2003

CURRENT TEACHING RESPONSIBILITIES

Name of Institution, City, State	Course Title	Discipline and Level of Students (Year)	Total Contact Hours Per Year	
			Didactic	Clinic/Laboratory
New York University College of Dentistry	Practicum in Clinical Teaching	Elective for D4 students	15	15
NYU	Complex Restorations I	D2 Students		240
NYU	Esthetics/Operative Dentistry	D2 Students		240

HOSPITAL APPOINTMENTS (Begin with current)

Name of Hospital	City	State	From (Year)	To (Year)
None				

PRACTICE EXPERIENCE

Location (City and State)	Type of Practice	From (Year)	To (Year)
New York, New York	General Dental Practice	1983	2008

MEMBERSHIP, OFFICES OR APPOINTMENTS HELD IN LOCAL, STATE OR NATIONAL DENTAL OR ALLIED DENTAL ORGANIZATIONS, INCLUDING APPOINTMENTS TO STATE BOARDS OF DENTISTRY AND CODA

Name of Organization	Title	From (Year)	To (Year)
Academy of General Dentistry	Fellow	1993	
Omicron Kappa Upsilon Honor Society	Member	2007	Present
NYU Academy of Distinguished Educators	Member	2009	Present
NYU Academy of Distinguished Educators	Fellow	2016	Present

PUBLISHED WORKS (For the most recent five years, list articles in which you were the principal author that appeared in refereed journals or text books, by author(s), title, publication, and date)

Author(s)	Title	Publication	Date
McAndrew M	"Use of an action learning model to create a dental faculty development	J Dent Educ. 74(5): 517-52	2010

	program. "		
McAndrew M	"Community based dental education and the importance of faculty development"	J Dent Educ.; 74(9): 980-985	2010
McAndrew M , Brunson WD, Kamboj K.	"A survey of US dental school programs that help students consider academic careers."	J Dent Educ.; 75(11): 1458-64	2011
McAndrew M , Marin MZ	"The role of the dental professional in the identification and referral of victims of domestic violence."	NY State Dent J; 78(1): 16-20 (Featured cover article)	2012
McAndrew M , Eidtson WH, Pierre GC, Gillespie C	. "Creating an objective structured teaching exam to evaluate a dental faculty development program."	J Dent Educ.; 76(4):461-71	2012
McAndrew M , Johnston EA	. "The role of social media in dental education."	J Dent Educ.; 76(11):1474-81	2012
McAndrew M , Pierre GC	"The use of multiple measures to assess a dental faculty development program."	Eur J Dent Educ.; 17(1): 1-9	2013
Jahangiri L, McAndrew M , Muzaffar A, Mucciolo TW	"Characteristics of effective clinical teachers as identified by dental students: a qualitative study."	Eur J Dent Educ.; 17(1): 10-18	2013
McAndrew M , Motwaly S, Kamens TE	"Long-term follow up of a dental faculty development program."	J Dent Educ.; 77(6): 716-722	2013
McAndrew M , Pierre GC, Kojanis LC	"Effectiveness of an online tutorial on intimate partner violence for dental professionals: a pilot study."	J Dent Educ.; 78(8): 1176-81	2014
McAndrew M , Kamboj RS, Pierre GC	"Do dental students use optimal study strategies?"	J Dent Educ.; 79(1): 33-7	2015
Alshehri AM, Algamaiah HA, Alasiri MM, Abdulati MA, Alturki WA, McAndrew M (Advisor)	Peer education: reviews of the literature (PERLs) on blended learning.	J Dent Educ.; 79(4): 448-50	2015
Spallek H, Turner SP, Chambers D, Donate-Bartfield E, McAndrew M , Zarkowski, P Karimbux N	"Social media in the dental school environment, Part B: Curricular considerations. "	J Dent Educ.; 79(10):1153-66	2015
Spallek H, Turner SP, Chambers D, Donate-Bartfield E, McAndrew M , Zarkowski P, Karimbux N	"Social media in the dental school environment, Part A: Issues to consider at the personal, interpersonal, professional and organizational levels."	J Dent Educ.; 79(10):1140-52	2015
McAndrew M , Motwaly SM, Kamens TE	"The role of context in the creation and sustainability of dental faculty development initiatives."	J Dent Educ.; 79(11): 1339-48	2015
McAndrew M , Morrow CS, Atiyeh L, Pierre GC	"Dental student study strategies: are self-testing and scheduling of study time related in academic performance?"	J Dent Educ.; 80(5): 542-52.	2016
McAndrew M.	"Faculty Calibration: Much ado about something"	J Dent Educ.; 80(11): 1271-2. (Invited Guest Editorial)	2016
McAndrew M , Mucciolo TW, Jahangiri L	Characteristics of effective pre-clinical (simulation) teachers as identified by dental students: a qualitative study.	J Dent Educ.; 80(11): 1282-93	2016
Andre AF, Pierre GC, McAndrew M	"Quality of life among dental students in one US dental school."	J Dent Educ. 81 (10) 1164-1170	2017
McAndrew M , Horvath Z, Atiyeh L	"A Survey of Faculty Development in US and Canadian Dental Schools:	J Dent Educ 82 (11) 1127-1139	2018

	Types of Activities and Institutional Entity with Responsibility"		
McAndrew M, Nad O	"A Long-Term Follow-Up Study of Former Dental School Teaching Assistants: Are They Teaching After Graduation?"	J Dent Educ82 (12): 1265-1272	2018

Commission on Dental Accreditation

BioSketch

Do not attach Curriculum Vitae
Type Only

Name: Shikha Rath

Current Institution: Diagnostic Digital Imaging (DDI)

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EDUCATIONAL BACKGROUND-Include advanced dental education (Begin with college level)

Name of School, City and State	Yr of Grad.	Certificate or Degree	Area of Study
University of Texas Health Science Center San Antonio	2011	Master of Science	Oral and Maxillofacial Radiology
University of Texas Health Science Center San Antonio	2010	Certificate of Specialization	Oral and Maxillofacial Radiology
University of Texas Health Science Center San Antonio	2007	Preceptorship	Oral and Maxillofacial Radiology
D. Y. Patil Dental University, Mumbai, India	2005	B.D. S., General Dentistry Internship	Dentistry

LICENSURE

License (Do not include license number)	From (Year)	To (Year)
California Dental License	2014	2019

BOARD CERTIFICATION

Certifying Organization	Specialty/Discipline	Date certified
American Board of Oral and Maxillofacial Radiology	Oral and Maxillofacial Radiology	2011

CE COURSES TAKEN (last 5 years)

Course Title	Course Content and Provider	Month and Year
Throwdown. Where's the Bite?	Occlusion, SDDS	09-2018
The Airway Always Wins	Airway, SDDS	10-2017
TMD-Orofacial Pain	TMJ, Louis Gallia	2017, several sessions
Oral and Maxillofacial Radiology	Several topics, American Academy of Oral and Maxillofacial Radiology	09-2016
TMD and Sleep Dentistry Correlations	TMJ, Airway, Big Sky Seminars	06-2016

TEACHING APPOINTMENTS (Begin with current)

Name of Institution, City and State	Rank	Subjects/Content Areas Taught/ Administrative Responsibilities	From (Year)	To (Year)
Univ. Of Pacific, San Francisco, CA	Assistant Professor	Radiology – Dept. of Orthodontics	2015	2019
University of Texas Health Science Center San Antonio	Teaching Assistant	Predoctoral Radiology classes, clinics	2008	2011

CURRENT TEACHING RESPONSIBILITIES

Name of Institution, City, State	Course Title	Discipline and Level of Students (Year)	Total Contact Hours Per Year	
Univ. Of Pacific, San Francisco, CA	Radiology	Orthodontics, graduate orthodontic students (yr 1-3)	Didactic 2 hrs/week	Clinic/Laboratory 8 hrs
UCSF, San Francisco, CA	Radiology	Orthodontics, graduate orthodontic students (yr 1)	4	

PRACTICE EXPERIENCE

Location (City and State)	Type of Practice	From (Year)	To (Year)
Diagnostic Digital Imaging, Roseville CA	Imaging Center	2014	2019
BeamReaders, Sacramento CA	OMFR Consultation	2011	2019
Mumbai, India	General Dental Practice	2005	2007

MEMBERSHIP, OFFICES OR APPOINTMENTS HELD IN LOCAL, STATE OR NATIONAL DENTAL OR ALLIED DENTAL ORGANIZATIONS, INCLUDING APPOINTMENTS TO STATE BOARDS OF DENTISTRY AND CODA

Name of Organization	Title	From (Year)	To (Year)
American Board of Oral and Maxillofacial Radiology	Member	2011	2019
American Dental Association, California Dental Association	Member	2014	2019
Sacramento District Dental Society	Member, Nugget Editorial Committee	2014	2019

PUBLISHED WORKS (For the most recent five years, list articles in which you were the principal author that appeared in refereed journals or text books, by author(s), title, publication, and date)

Author(s)	Title	Publication	Date
Shikha Rathi, David Hatcher	Considerations for Use of Cone Beam CT in Orthodontics	California Dental Journal	Feb 2019
Shikha Rathi	CBCT Applications in Dentistry	CBCT E-Zine	2017
Shikha Rathi, David Hatcher	Computer-Assisted Surgical Navigation for Implant Placement	AADMRT Currents	2016
Textbook – Contributor of 3 chapters	Specialty Imaging: TMJ	Amirsys/ Elsevier	2016
Textbook – Chapter contributor	Textbook – Alveolar Bone Augmentation in Implant Dentistry Chapter - Radiographic Evaluation of the Alveolar Ridge in Implant Dentistry	Wiley	2015
Textbook co-author	Specialty Imaging: Dental Implants	Amirsys/ Elsevier	2015

Commission on Dental Accreditation

BioSketch

Do not attach Curriculum Vitae
Type Only

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DMD, FACS

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Surgical Arts, PC

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EDUCATIONAL BACKGROUND-Include advanced dental education (Begin with college level)

Name of School, City and State	Yr of Grad.	Certificate or Degree	Area of Study
Rutgers Univ., New Brunswick, NJ	1991	BA	Biochemistry
NJ Dental School, UMDNJ, Newark, NJ	1995	DMD	Dentistry
University Hospital, UMDNJ, Newark, NJ	1996	Intern Oral & Maxillofacial Surgery	Oral & Max Surgery
Robert Wood Johnson Medical Center, Piscataway, NJ	1997	Fellow in Anesthesia	Anesthesia
NJ Medical School, UMDNJ, Newark, NJ	2000	MD	Medicine
Nuveen Cosmetic Surgery Center, Oklahoma City, OK	2005	Fellow in Cosmetic Surgery	General Body & Facial Cosmetic Surgery

LICENSURE

License (Do not include license number)	From (Year)	To (Year)
Doctorate in Medicine (MD)	2000	Current
Doctorate in Dentistry (DMD)	1995	Current

BOARD CERTIFICATION

Certifying Organization	Specialty/Discipline	Date certified
American Board of Oral & Maxillofacial Surgery	Oral & Maxillofacial Surgery	2006
American Board of Facial Cosmetic Surgery	Facial Cosmetic Surgery	2013
American Board of Cosmetic Surgery	Cosmetic Surgery	2015
Fellow American College of Surgeons	General Surgery	2016

CE COURSES TAKEN (last 5 years)

January 15-19, 2014 AACS 30th Annual Scientific Mtg. Ft. Lauderdale, FL; Shelia Buchanan. CE Hrs: 35.75 Category 1

February 20, 2014 SDDS Midwinter Conference – Dr. Erik Dierks
Oral Cancer – CE Hrs: 2

Implants In Rehabilitation of the Oro-Facial Defect Patients – CE Hrs: 2

March 15, 2014 ACLS Re-certification – Margaret Delmore, DDS, MD – CE Hrs: 3.5

March 27, 2014 GA Evaluation – Dental Board of CA – CE 2

March 27, 2014	A Pathway for the Healthy Professional. Bryan Wright - CE 1
September 9, 2014	TMD Throwdown. Clifford Chow; Timothy Mickiewicz; David Miller. - CE 3
October 24, 2014	CDA Ethics Seminar - Live Lecture Core - Sacramento, CA - CE 6
November 11, 2014	Practice & Team Fundamentals. Howard Farran, DDS, MBA - CE 3
November 27, 2014	CA Dental Practice Act (CDPA). CDA. - CE 2
November 28, 2014	Infection Control for License Renewal (IC). CDA - CE 2
Jan 14-17, 2015	Live Cadaver Workshop, New Orleans, LA - AACS - CE 8 AMA PRA Category 1
Jan 14-17, 2015	31rst Annual Scientific Meeting. New Orleans, LA - AACS - CE 29 AMA Category 1
January 30, 2015	Butte-Sierra District Dental Society - Specialty Day - CE 6
April 17, 2015	Pre PALS Coursework - Andrew Armitage - Self Study/Online - CE 2
April 19, 2015	Pediatric Advanced Life Support - Andrew Armitage - Cascade, Roseville - CE 7
April 25, 2015	State of the Art Implant Esthetics - Tony Sclar - Berkeley, CA - CE6
July 29, 2015	Management of Medical Emergencies in the Cosmetic Surgery Office Webinar - F. Ferneini, DDS, MD - Webinar - AMA Category 1 - CE 1
Sept 11-12, 2015	Breast Augmentation-Live Surgery Workshop. Mark Mandell-Brown-Cincinnati, OH. AMA PRA Category 1 credits - CE 17.
October 6, 2015	Large Group Practice & Your Dental Practice. Anders Bjork, CDA - CE 3
October 8, 2015	Impediments to Comprehensive Care and Treatment Planning Session. Jagdev Heir, MD, DMD - CE 3
Oct 16-17, 2015	Liposuction, Fat Grafting and Lipoabdominoplasty. Bayonne, NJ. CE - 17 AMA

PRA Category 1 Credits

November 10, 2015	Your Practice, Your Patients & Your Team; Kerry Straine -SDDS CE 3
January 13, 2016	Full Day Body Cadaver Workshop. 32 nd Annual Scientific Meeting. Miami, FL - AACS - CE 8 AMAPRA Category 1
Jan 13-16, 2016	32 nd Annual Scientific Meeting. Ft. Lauderdale, FL - AACS - CE 30 AMAPRA Category 1
February 25, 2016	CDSA 2016 Official Scientific Meeting. Course #: 08-3727-16002. San Jose, CA. - CE 8 AMA Category 1
March 12, 2016	ACLS ReCertification. CALAOMS. CE 3.5
April 12, 2016	Peer Review Process: Your Best Member Benefit. Henrik Hansen, DDS. - CE 3
May 10, 2016	Orthodontic Management of Cleft Lip and Palate - from A to Z. Snehlata Oberoi, BDS - CE 3
July 4, 2016	RMC 413 - Risk Management for the Oral and Maxillofacial Surgeon - CE 4
September 10, 2016	Peer Review Calibration. CDA-SF - CE 5.0
September 12, 2016	California Dental Practice Act. CDA - CE 2.0
September 12, 2016	Infection Control for License Renewal (IC). CDA - CE 2.0
September 13, 2016	Orthodontic Throwdown. B. Marin, D. Galante, P. Worth, M Miyasaki. Sacramento, CA. CE 3.0
January 14, 2017	Medicine & Anesthesia for the OMS Patient: A Case Based Discussion. CE 6.
February 16, 2017	Case Presentation. Northern California Study Club. CE 3
March 2, 2017	CDSA 2017 Annual Anesthesia Meeting. CE 8 - AMA Category 1
March 19, 2017	Pediatric Advanced Life Support (PALS) recertification - CE 9
March 27, 2017	Peer review Clinical Case Review (Dr. Swann vs Pt) - CE 1

Jan 20, 2017 - July 14, 2017 Dental Implant Mini-residency (7

Modules over 7 months). Debra Finney, M.S.,
D.D.S. - CE 36

October 5, 2017	Peer Review Clinical Case Review (Dr. Salmassy vs Patient) - CE1
October 11-12, 2017	American Association of Oral and Maxillofacial Surgeons, Beyond Basics Coding Workshops (2 Days) - CE 13
October 11-14, 2017	American Association of Oral and Maxillofacial Surgeons, 99 th Annual Meeting Sessions and Exhibition - CE 8
October 26, 2017	Facially Generated Dental Treatment Planning & Facial Bone Grafting (N. CA Study Club) - CE 3
November 2017	Dental Board of California GA/CS/MGA Evaluation - CE 4
November 16, 2017	Realities of Failure - More Than A Complication, (N. CA Study Club) - CE 3
December 6, 2017	Interdisciplinary Study Club; Dr. Iverson - Case Presentation - CE 2
December 16, 2017	If Disney Ran Your Practice, Dr. Frank Candy (N. CA Study Club) - CE 6
January 18, 2018	Managing The Terminal Dentition In The Digital Era (N. CA Study Club) - CE 3
February 15, 2018	Treatment Planning Strategies For The Restorative Compromised Dentition (N. CA Study Club) - CE 3
March 3, 2018	ACLS & BLS Provider - Recertification (05-3761-18005) - CE 5
March 6, 2018	Mindfulness: It Will Change Your Life...And Your Practice. Mark Abramson, DDS - CE 3
March 8, 2018	CDSA 2018 Annual Anesthesia Meeting. CDSA. Multiple Presenters CE 8
March 22, 2018	Orthodontic & Endodontic Treatment & Manipulation Before Implant Placement (N. CA Study Club) - CE 3
April 20, 2018	The Eradication of Heart Attack and Stroke - Jeffrey L. Boone, MD, MS - CE 6
September 13, 2018	Employment Law, Recruitment & Marketing -

Multiple - CE 3

October 19, 2018 Sexual Harassment Prevention Training & Training in the Prevention of Unlawful Discrimination and Retaliation. Shawn M. Joost, Esq. - CE 2

October 26, 2018 Active Diagnosis - Create Best in Class Restorative Outcomes with All-Ceramic Restoration for Teeth and Implants. Neil Starr, DDS - CE 6

November 8, 2018 Peri-Implantitis Disease - What We Know and the Reason Why We Have Failures - Dr. Lealand Lee - CE 3

November 9, 2018 Throwdown! Where's the Bite? - Brock Hinton, DDS, Timothy Mickiewicz, DDS, Viren Patel, DDS & Darce Slate, DDS - CE 3

January 19, 2019 Treatment of Patient with Implant & Dental Complications and Practical Approaches to the Esthetic Case - From A to Z. - CALAOMS - CE 6

January 20, 2019 Resident Presentations. - CALAOMS - CE 3

TEACHING APPOINTMENTS (Begin with current)

Name of Institution, City and State	Rank	Subjects/Content Areas Taught/ Administrative Responsibilities	From (Year)	To (Year)
Northern CA Study Club - Seattle Study Club	Director	Dentistry/Medicine/Cosmetic Surgery/Business	2014	Present

CURRENT TEACHING RESPONSIBILITIES

Name of Institution, City, State	Course Title	Discipline and Level of Students (Year)	Total Contact Hours Per Year	
Multiple Lectures to CDA, SDDS, Legal Conferences			Didactic	Clinic/Laboratory

HOSPITAL APPOINTMENTS (Begin with current)

Name of Hospital	City	State	From (Year)	To (Year)
Dignity Health/Mercy General	Sacramento	CA	2006	Current
Adventist/Ride Out Hospital	Marysville	CA	2011	Current

PRACTICE EXPERIENCE

Location (City and State)	Type of Practice	From (Year)	To (Year)
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Sacramento, CA	Oral & Maxillofacial Surgery	2006	Current
Sacramento, CA	General Body & Facial Cosmetic Surgery	2006	Current
Plainsboro, NJ	Oral & Maxillofacial Surgery	2005	2006

MEMBERSHIP, OFFICES OR APPOINTMENTS HELD IN LOCAL, STATE OR NATIONAL DENTAL OR ALLIED DENTAL ORGANIZATIONS, INCLUDING APPOINTMENTS TO STATE BOARDS OF DENTISTRY AND CODA

Name of Organization	Title	From (Year)	To (Year)
Dental Board of California	Subject Matter Expert	2011	Current
Dental Board of California	Anesthesia Examiner	2008	Current
Sacramento District Dental Society	Board Member	2016	Current
Sacramento District Dental Society	Chairman of Ethics Committee	2015	2016
California Dental Association	Delegate	2016	Current
Peer Review Committee	Member	2017	Current

PUBLISHED WORKS (For the most recent five years, list articles in which you were the principal author that appeared in refereed journals or text books, by author(s), title, publication, and date)

Author(s)	Title	Publication	Date
Jagdev S. Heir, MD, DMD, FACS	Post-Operative Cognitive Dysfunction	Perioperative Assessment of the Maxillofacial Patient	2017
Jagdev S. Heir, MD, DMD, FACS	Bone Augmentation for Dental Implants with CBCT	Nugget	Dec 2015
Jagdev S. Heir, MD, DMD; BS Sandhu, MD	Considerations for Esthetic Facial Surgery in the African American Patient	Atlas of Oral & Maxillofacial Surgery	Sept 2000
Jagdev S. Heir, MD, DMD; Vincent Ziccardi, MD, DDS	Transmission of Infectious Diseases in the Dental Practice	Mt. Sinai Journal of Medicine	Oct 1998

Commission on Dental Accreditation

BioSketch

**Do not attach Curriculum Vitae
Type Only**

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Digital Imaging**

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EDUCATIONAL BACKGROUND-Include advanced dental education (Begin with college level)

Name of School, City and State	Yr of Grad.	Certificate or Degree	Area of Study
Berkley- Principles of Dental Radiography	1981	Dental Radiographic Technologist	Dental Imaging

LICENSURE

License (Do not include license number)	From (Year)	To (Year)
Limited Permit in Dental Laboratory X-Ray Technologist	1981	Present

BOARD CERTIFICATION

Certifying Organization	Specialty/Discipline	Date certified
N/A		

CE COURSES TAKEN (last 5 years)

Course Title	Course Content and Provider	Month and Year
Teck Talks	Technology advances in dental imaging by: AADMRT	Sept. '17
3D Imaging	Advances in 3D dental imaging by: UNLV (Nevada)	Oct. '18
Dental Butter fly effect	Changing world of dental x-ray by: AADMRT	Nov. '15
Changing face of imaging	Advanced 3D imaging by: AADMRT	Sept '16
Implant and Prosthodontics	Implant planning by: Laguna Dental arts	Oct. '15

TEACHING APPOINTMENTS (Begin with current)

Name of Institution, City and State	Rank	Subjects/Content Areas Taught/ Administrative Responsibilities	From (Year)	To (Year)
Carrington College	Part time lecture			
Sacramento City College	Part time lecture	Periapical technique, 3D imaging	2015	2019

CURRENT TEACHING RESPONSIBILITIES

Name of Institution, City, State	Course Title	Discipline and Level of Students (Year)	Total Contact Hours Per Year	
			Didactic	Clinic/Laboratory

HOSPITAL APPOINTMENTS (Begin with current)

Name of Hospital	City	State	From (Year)	To (Year)

PRACTICE EXPERIENCE

Location (City and State)	Type of Practice	From (Year)	To (Year)

MEMBERSHIP, OFFICES OR APPOINTMENTS HELD IN LOCAL, STATE OR NATIONAL DENTAL OR ALLIED DENTAL ORGANIZATIONS, INCLUDING APPOINTMENTS TO STATE BOARDS OF DENTISTRY AND CODA

Name of Organization	Title	From (Year)	To (Year)

PUBLISHED WORKS (For the most recent five years, list articles in which you were the principal author that appeared in refereed journals or text books, by author(s), title, publication, and date)

Author(s)	Title	Publication	Date

Commission on Dental Accreditation

BioSketch

Do not attach Curriculum Vitae
Type Only

Name: Jean L Creasey DDS

Current Institution:

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School of Dentistry , Asst. Clinical
Professor, AEGD program

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Phone: 530-798-8858

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E-mail: jcreasey@sbcglobal.net

EDUCATIONAL BACKGROUND-Include advanced dental education (Begin with college level)

Name of School, City and State	Yr of Grad.	Certificate or Degree	Area of Study
Foothill College , Dental Hygiene	1993	AS Dental Hygiene	Dental Hygiene/ prevention
University California, San Francisco	1998	BS Dental Science	
University California, San Francisco	2001	DDS	General dentistry

LICENSURE

License (Do not include license number)	From (Year)	To (Year)
DDS	2001	current

BOARD CERTIFICATION

Certifying Organization	Specialty/Discipline	Date certified
NA		
NA		

CE COURSES TAKEN (last 5 years)

Course Title	Course Content and Provider	Month and Year

TEACHING APPOINTMENTS (Begin with current)

Name of Institution, City and State	Rank	Subjects/Content Areas Taught/ Administrative Responsibilities	From (Year)	To (Year)
University Pacific/ Dugoni School of Dentistry	Asst. Prof.	Clinical instructor	2018	current

CURRENT TEACHING RESPONSIBILITIES

Name of Institution, City, State	Course Title	Discipline and Level of Students (Year)	Total Contact Hours Per Year	
Chabot College, Dental Hygiene	General and Oral Pathology	DH1	Didactic 4/week	Clinic/Laboratory

HOSPITAL APPOINTMENTS (Begin with current)

Name of Hospital	City	State	From (Year)	To (Year)
NA				

PRACTICE EXPERIENCE

Location (City and State)	Type of Practice	From (Year)	To (Year)
Nevada City , CA	General Dentistry	2001-	current

MEMBERSHIP, OFFICES OR APPOINTMENTS HELD IN LOCAL, STATE OR NATIONAL DENTAL OR ALLIED DENTAL ORGANIZATIONS, INCLUDING APPOINTMENTS TO STATE BOARDS OF DENTISTRY AND CODA

Name of Organization	Title	From (Year)	To (Year)
California Dental Association	Chair of Government Affairs, Chair of the CDA Foundation , Trustee	2008-	2018
American Dental Association	Council on Dental Practice	2012-	2016
ACD,ICD , Pierre Fauchard Academy CAMBRA National Coalition Board	Fellow member	2012-	current

PUBLISHED WORKS (For the most recent five years, list articles in which you were the principal author that appeared in refereed journals or text books, by author(s), title, publication, and date)

Author(s)	Title	Publication	Date
CDA Journal, vol 43, No. 12 <u>International Volunteer Dentistry. A Basic Primer</u>			
CDA Journal, vol 25, No. 11, <u>"Implementing Cambra in the Dental Office"</u> CDA Journal, Oct 2011, <u>"CAMBRA in Private Practice"</u>			
PlosOne Journal, Fall, 2011 <u>"Salivary Microbiome</u>			

Diversity in the Batwa Pygmy

Population”

Commission on Dental Accreditation

BioSketch

**Do not attach Curriculum Vitae
Type Only**

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Current Institution: UCLA

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City, State, Zip: Sacramento, Ca, 95825

Phone: 408-603-9392

Fax:

E-mail: gregorykolber@gmail.com

EDUCATIONAL BACKGROUND-Include advanced dental education (Begin with college level)

Name of School, City and State	Yr of Grad.	Certificate or Degree	Area of Study
San Jose State University	2002	BS	Computer Engineering
UCSF	2008	DDS	Dentist
UCLA	2010	Residency	Endodontist

LICENSURE

License (Do not include license number)	From (Year)	To (Year)
Dental license in California	2008	2019 (current)

BOARD CERTIFICATION

Certifying Organization	Specialty/Discipline	Date certified
American Association of Endodontist	Endodontist	May 7, 2013

CE COURSES TAKEN (last 5 years)

Course Title	Course Content and Provider	Month and Year

TEACHING APPOINTMENTS (Begin with current)

Name of Institution, City and State	Rank	Subjects/Content Areas Taught/ Administrative Responsibilities	From (Year)	To (Year)
UCLA Los Angeles, California	Lecturer	Endodontic resident lectures/ Resident and Dental Student Clinic	2012	2019

CURRENT TEACHING RESPONSIBILITIES

Name of Institution, City, State	Course Title	Discipline and Level of Students (Year)	Total Contact Hours Per Year	
			Didactic	Clinic/Laboratory
UCLA, Los Angeles, CA	Resident Literature	Residents 1st and 2nd year	8	
UCLA, Los Angeles, CA	Resident Clinic	Residents 1st and 2nd year		16
UCLA, Los Angeles, CA	Dental Student Clinic	Dental Students 3rd and 4th year		16

HOSPITAL APPOINTMENTS (Begin with current)

Name of Hospital	City	State	From (Year)	To (Year)

PRACTICE EXPERIENCE

Location (City and State)	Type of Practice	From (Year)	To (Year)
Sacramento, CA	Endodontic Private Practice	2011	2019
Peoria, Arizona	Endodontic Private Practice	2010	2011

MEMBERSHIP, OFFICES OR APPOINTMENTS HELD IN LOCAL, STATE OR NATIONAL DENTAL OR ALLIED DENTAL ORGANIZATIONS, INCLUDING APPOINTMENTS TO STATE BOARDS OF DENTISTRY AND CODA

Name of Organization	Title	From (Year)	To (Year)
California Dental Board	Dental Board Expert	2017	2019

PUBLISHED WORKS (For the most recent five years, list articles in which you were the principal author that appeared in refereed journals or text books, by author(s), title, publication, and date)

Author(s)	Title	Publication	Date
Gregory J. Kolber, DDS	Satellite Specialty Practice	Journal of the California Dental Association	2015

Commission on Dental Accreditation
BioSketch
Do not attach Curriculum Vitae
Type Only

Name: Timothy J. Herman, DDS

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EDUCATIONAL BACKGROUND-Include advanced dental education (Begin with college level)

Name of School, City and State	Yr of Grad.	Certificate or Degree	Area of Study
CSU Sacramento, Sacramento, California	1984	BS	Human Biology
UCSF School of Dentistry	1988	BS	Dental Science
UCSF School of Dentistry	1988	DDS	Dentistry

LICENSURE

License (Do not include license number)	From (Year)	To (Year)
DDS	1988	2020

BOARD CERTIFICATION

Certifying Organization	Specialty/Discipline	Date certified

CE COURSES TAKEN (last 5 years)

Course Title	Course Content and Provider	Month and Year
Brasseler Endo sequence	Root canal therapy with endosequence/Anne Koch/Brasseler	01/2017
PHAST start Laser training	Dual wavelength laser training on our new Fotona Lightwalker lasers from soft tissue to Endo/Fotona	01/2015
Nightlase/smoothlase/liplase	Advanced procedures with dual wavelength lasers/Fotona/Dr. Harvey Shiffman	04/2015
Lasers in Dentistry	Latest techniques in using Lasers in dentistry from restorative/perio/endo/sleep apnea and snoring	09/2018
Itero Scanner techniques	Advanced scanning techniques/ Itero	01/2019

TEACHING APPOINTMENTS (Begin with current)

Name of Institution, City and State	Rank	Subjects/Content Areas Taught/ Administrative Responsibilities	From (Year)	To (Year)

CURRENT TEACHING RESPONSIBILITIES

Name of Institution, City, State	Course Title	Discipline and Level of Students (Year)	Total Contact Hours Per Year	
			Didactic	Clinic/Laboratory

HOSPITAL APPOINTMENTS (Begin with current)

Name of Hospital	City	State	From (Year)	To (Year)

PRACTICE EXPERIENCE

Location (City and State)	Type of Practice	From (Year)	To (Year)
Roseville, Ca, Lincoln, Ca, Rocklin, Ca, Folsom, CA, Sacramento, Ca	Multi location, multidisciplinary group practice,	1989	present

MEMBERSHIP, OFFICES OR APPOINTMENTS HELD IN LOCAL, STATE OR NATIONAL DENTAL OR ALLIED DENTAL ORGANIZATIONS, INCLUDING APPOINTMENTS TO STATE BOARDS OF DENTISTRY AND CODA

Name of Organization	Title	From (Year)	To (Year)
ADA, CDA, SDDS		1988	present

PUBLISHED WORKS (For the most recent five years, list articles in which you were the principal author that appeared in refereed journals or text books, by author(s), title, publication, and date)

Author(s)	Title	Publication	Date

Commission on Dental Accreditation

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**Do not attach Curriculum Vitae
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Name: Merlin Lee Lai, D.D.S.

Current Institution:

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E-mail: arenadental@gmail.com

EDUCATIONAL BACKGROUND-Include advanced dental education (Begin with college level)

Name of School, City and State	Yr of Grad.	Certificate or Degree	Area of Study
University of Pacific, School of Dentistry, San Francisco, CA	1991	Doctor of Dental Surgery	Dentistry
California State University Sacramento, CA	1987	Bachelor of Science	Biology

LICENSURE

License (Do not include license number)	From (Year)	To (Year)
Dentist	1991	Present

BOARD CERTIFICATION

Certifying Organization	Specialty/Discipline	Date certified

CE COURSES TAKEN (last 5 years)

Course Title	Course Content and Provider	Month and Year
RDAEF Examination & Proctoring	Dental Board of California	August 2018-Present
Infection Control & CA Dental Practice Act	UOP Dugoni School of Dentistry,	December 2018
Why All-On-4/ Begin with the End in Mind	Implant Restorations, Northern CA Study Club, nSequence, National Dentex & Jagdev Heir	December 2018
Drugs, Bugs, and Dental Products	Capitol Periodontal Group & Endodontic Associates	July 2018
Direct Restoratives & Cements with James Braun	3M ESPE	March 2018

TEACHING APPOINTMENTS (Begin with current)

Name of Institution, City and State	Rank	Subjects/Content Areas Taught/ Administrative Responsibilities	From (Year)	To (Year)
California Northstate University, College of Medicine, Elk Grove, CA	Guest Lecturer	Dental Emergencies	2017	2019
California Northstate University, College of Medicine, Elk Grove, CA	Guest Lecturer	Dentistry through the Ages	2018	

CURRENT TEACHING RESPONSIBILITIES

Name of Institution, City, State	Course Title	Discipline and Level of Students (Year)	Total Contact Hours Per Year	
California Northstate University, College of Medicine, Elk Grove, CA	Dental Emergencies	M1 & M2	Didactic 1 hour	Clinic/Laboratory
California Northstate University, College of Medicine, Elk Grove, CA	Dentistry Through the Ages	M1 & M2	1 hour	

HOSPITAL APPOINTMENTS (Begin with current)

Name of Hospital	City	State	From (Year)	To (Year)

PRACTICE EXPERIENCE

Location (City and State)	Type of Practice	From (Year)	To (Year)
Arena Family Dental Care	General	2005	Present
Northgate Dentists	General	1991	2004
Foundation Health	General	1995	1997

MEMBERSHIP, OFFICES OR APPOINTMENTS HELD IN LOCAL, STATE OR NATIONAL DENTAL OR ALLIED DENTAL ORGANIZATIONS, INCLUDING APPOINTMENTS TO STATE BOARDS OF DENTISTRY AND CODA

Name of Organization	Title	From (Year)	To (Year)
ADA, CDA, and SDDS	Dentist Member	1991	Present
Dental Board of California	RDAEF Dental Board Examiner	2018	Present
Dental Board of California	Complaint and Compliance Expert Consultant	2019	Present

PUBLISHED WORKS (For the most recent five years, list articles in which you were the principal author that appeared in refereed journals or text books, by author(s), title, publication, and date)

Author(s)	Title	Publication	Date

Commission on Dental Accreditation

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Do not attach Curriculum Vitae
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Name:

Timothy E. Mickiewicz., D.D.S.

Current Institution:

Mickiewicz Dental Corp

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Phone:

916 469-9178

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916-477-1080

E-mail: timmickiewicz @gmail.com

EDUCATIONAL BACKGROUND-Include advanced dental education (Begin with college level)

Name of School, City and State	Yr of Grad.	Certificate or Degree	Area of Study
St. Mary's College, Moraga	1979	BS	BioChemistry
Univ. Of Pacific, San Francisco, CA	1982	DDS	Dentistry

LICENSURE

License (Do not include license number)	From (Year)	To (Year)
Current California	1982	current

BOARD CERTIFICATION

Certifying Organization	Specialty/Discipline	Date certified
Academy of Clinical Sleep Disorders Disciplines (ACSDD)	Sleep Medicine	2016
Academy of Pain Management	Orofacial pain	2008

CE COURSES TAKEN (last 5 years)

Course Title	Course Content and Provider	Month and Year
Arnett Orthognathic Forum	Multi- disciplinary Surgical and Orthodontic approach to TMD and Sleep	2012-current
ACSDD	Multi disciplinary Sleep Medicine	2015-current
Orofacial Radiology	Hatcher and Tamimi	2017
Multiple TMD and sleep courses	Peter Chase, Spear et al Orofacial Pain	1982-current
Jameson Spencer	Spenser; Sleep and TMD	2018-current

TEACHING APPOINTMENTS (Begin with current)

Name of Institution, City and State	Rank	Administrative Responsibilities	From (Year)	To (Year)
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Univ. Of California Sleep Didactic Sacramento, Ca	adjunct	Training Sleep Physicians on Dental aspects of Sleep Medicine	2014	current

CURRENT TEACHING RESPONSIBILITIES

Name of Institution, City, State	Course Title	Discipline and Level of Students (Year)	Total Contact Hours Per Year	
			Didactic	Clinic/Laboratory
Univ of California Davis	Sleep Didactic	Sleep Medicine; board certified neurologists	36	30

HOSPITAL APPOINTMENTS (Begin with current)

Name of Hospital	City	State	From (Year)	To (Year)

PRACTICE EXPERIENCE

Location (City and State)	Type of Practice	From (Year)	To (Year)
USPH National Health Service Corps	Dentistry	1982	1985
Private practice Sacramento	TMD, Sleep , Orthodontics	1985	current

MEMBERSHIP, OFFICES OR APPOINTMENTS HELD IN LOCAL, STATE OR NATIONAL DENTAL OR ALLIED DENTAL ORGANIZATIONS, INCLUDING APPOINTMENTS TO STATE BOARDS OF DENTISTRY AND CODA

Name of Organization	Title	From (Year)	To (Year)

PUBLISHED WORKS (For the most recent five years, list articles in which you were the principal author that appeared in refereed journals or text books, by author(s), title, publication, and date)

Author(s)	Title	Publication	Date

Commission on Dental Accreditation

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Do not attach Curriculum Vitae
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Name: **Kenneth E Moore**

Current Institution: **UCLA School of Dentistry 714 Tiverton**

Los Angeles, CA 90095

Private Practice: **729 Sunrise Ave #400 Roseville,
CA 95661**

City, State, Zip:

Phone: **916-780-2022**

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E-mail: **kenmoore@ucla.edu**

EDUCATIONAL BACKGROUND-Include advanced dental education (Begin with college level)

Name of School, City and State	Yr of Grad.	Certificate or Degree	Area of Study
UC Davis, Davis, CA	1977	BS	Biology
UC San Francisco, San Francisco, CA	1982	DDS	
UCLA, Los Angeles, CA	2012	Orofacial Pain & Sleep Medicine	Orofacial Pain & Sleep Medicine

LICENSURE

License (Do not include license number)	From (Year)	To (Year)
California Dental License	1982	Current

BOARD CERTIFICATION

Certifying Organization	Specialty/Discipline	Date certified
American Board of Orofacial Pain	Orofacial Pain	2012

CE COURSES TAKEN (last 5 years)

Course Title	Course Content and Provider	Month and Year
Women's Issues in Headache	Headache Cooperative of the Pacific	January 2019
Uncommon Headache/Facial Pain Issues that are Common in Headache (speaker)	Headache Cooperative of the Pacific *Cranial Neuralgias: Diagnostic Challenges and Pitfalls	January 2019
American Academy of Orofacial Pain 42 nd Scientific Meeting	American Academy of Orofacial Pain	May 2018
TMD and Facial Pain for the Every Day Dentist (speaker)	California Dental Association	May 2018
American Headache Society Symposium	American Headache Society	November 2017

TEACHING APPOINTMENTS (Begin with current)

Name of Institution, City and State	Rank	Subjects/Content Areas Taught/ Administrative Responsibilities	From (Year)	To (Year)
UCLA School of Dentistry	Continuing Lecturer	Orofacial Pain and Sleep Medicine Associate Director	2012	Current

CURRENT TEACHING RESPONSIBILITIES

Name of Institution, City, State	Course Title	Discipline and Level of Students (Year)	Total Contact Hours Per Year	
			Didactic	Clinic/Laboratory
UCLA, Los Angeles, CA	DS300 TMD	Graduate Residents (ortho,perio,endo,prosth, agd, oral radiology)	10	
UCLA, Los Angeles CA	DS301 Orofacial Pain	Graduate Residents (ortho,perio,endo,prosth, agd, oral radiology)	10	
UCLA, Los Angeles CA	Orofacial Pain Residency	Graduate Residents and Advanced Clinical Trainee	30	300

HOSPITAL APPOINTMENTS (Begin with current)

Name of Hospital	City	State	From (Year)	To (Year)

PRACTICE EXPERIENCE

Location (City and State)	Type of Practice	From (Year)	To (Year)
Roseville, CA	General Dentistry and Orofacial Pain	1982	Current

MEMBERSHIP, OFFICES OR APPOINTMENTS HELD IN LOCAL, STATE OR NATIONAL DENTAL OR ALLIED DENTAL ORGANIZATIONS, INCLUDING APPOINTMENTS TO STATE BOARDS OF DENTISTRY AND CODA

Name of Organization	Title	From (Year)	To (Year)
Sacramento District Dental Society, California Dental Association, American Dental Association	Member	1982	Current
American Academy of Orofacial Pain	Member/Fellow	2011	Current
Sacramento District Dental Foundation	President	2001	

PUBLISHED WORKS (For the most recent five years, list articles in which you were the principal author that appeared in refereed journals or text books, by author(s), title, publication, and date)

Author(s)	Title	Publication	Date
Orsi, Moore, Smith, Garguri, Mathews, Merrill	The use of Topical Ketoprofen and Guaifenesin for Pain Relief in Patients Suffering from Temporomandibular Joint Capsulitis	Journal of Oral & Facial Pain and Headache	Submitted 2019 Pending
Shorey, Moore	Clinical Digital Photography: Integral to Efficient Dental Communications	Journal of the California Dental Association	March 2009
Shorey, Moore	Clinical Digital Photography: Implementation of Clinical Photography for Everyday Practice	Journal of the California Dental Association	March 2009

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Name: Chalise Morgan

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Current Institution:

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EDUCATIONAL BACKGROUND-Include advanced dental education (Begin with college level)

Name of School, City and State	Yr of Grad.	Certificate or Degree	Area of Study
AEGD Lutheran Medical Center, Maui HI	2008	AEGD	
UCLA School of Dentistry, Los Angeles CA	2007	DDS	
UC San Diego, San Diego CA	2003	BS	Biochemistry

LICENSURE

License (Do not include license number)	From (Year)	To (Year)
California Dental License	2008	Current

BOARD CERTIFICATION

Certifying Organization	Specialty/Discipline	Date certified

CE COURSES TAKEN (last 5 years)

Course Title	Course Content and Provider	Month and Year
H/S Conference	Multiple courses 30-39 CE Units annually since 2010	5/2010-5/2018

TEACHING APPOINTMENTS (Begin with current)

Name of Institution, City and State	Rank	Subjects/Content Areas Taught/ Administrative Responsibilities	From (Year)	To (Year)
AEGD Director NYU		Clinical Faculty	2015	Current

CURRENT TEACHING RESPONSIBILITIES

Name of Institution, City, State	Course Title	Discipline and Level of Students (Year)	Total Contact Hours Per Year	
			Didactic	Clinic/Laboratory

HOSPITAL APPOINTMENTS (Begin with current)

Name of Hospital	City	State	From (Year)	To (Year)

PRACTICE EXPERIENCE

Location (City and State)	Type of Practice	From (Year)	To (Year)
Placerville, CA – Shingle Springs Health and Wellness Center	Tribal Health Clinic	2010	Present
Santee, CA – Town Center Dental	Corporate dentistry	2009	2010
Santee, CA – Southcoast Family Dental	Private practice	2009	2010

MEMBERSHIP, OFFICES OR APPOINTMENTS HELD IN LOCAL, STATE OR NATIONAL DENTAL OR ALLIED DENTAL ORGANIZATIONS, INCLUDING APPOINTMENTS TO STATE BOARDS OF DENTISTRY AND CODA

Name of Organization	Title	From (Year)	To (Year)
SDDS, CDA, ADA	Member	2008	Current
Oral Health Advisory Committee	Dental Consultant	2018	Present
Dental Support Center	Central California Representative	2017	Present

PUBLISHED WORKS (For the most recent five years, list articles in which you were the principal author that appeared in refereed journals or text books, by author(s), title, publication, and date)

Author(s)	Title	Publication	Date

Commission on Dental Accreditation

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Name: Rosemary Wu
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Phone: (415) 505-0133 **Fax:** (916) 786-7542 **E-mail:** Rosemarywu@gmail.com

EDUCATIONAL BACKGROUND-Include advanced dental education (Begin with college level)

Name of School, City and State	Yr of Grad.	Certificate or Degree	Area of Study
University of Pennsylvania, Philadelphia, PA	1996	B.A.	Biomedical Anthropology and Health Care Management, Wharton School of Business
National Institutes of Health, Bethesda, MD	1997 1998 1999		Research Fellow
University of Pennsylvania, Philadelphia, PA	2003	D.M.D.	Dental Medicine
Univ. of California, San Francisco, Postgrad. Periodontology	2006	Masters of Science, Oral Biology Certificate in Periodontology Conscious Intravenous Sedation Certificate	Periodontology

LICENSURE

License (Do not include license number)	From (Year)	To (Year)
Dental Board of California	2004	Present
State of New York Dental License	2003	Present
Basic Life Support, Advanced Cardiac Life Support	2006	Present
Conscious Intravenous Sedation	2006	Present

BOARD CERTIFICATION

Certifying Organization	Specialty/Discipline	Date certified
American Board of Periodontology	Periodontology	2008

CE COURSES TAKEN (last 5 years)

Course Title	Course Content and Provider	Month and Year
Advanced Bone Regeneration Techniques in Implant Therapy	Vertical and horizontal ridge augmentation Urban Regeneration Institute with Dr. Istvan Urban, D.M.D, M.D, Ph.D	April 2018
Spears Masters Program	Reshaping the Future of Your Practice	October 2018
LANAP (Laser assisted new attachment protocol)	Laser with Millenium	February 2015-2016
Pinhole Surgical Technique	John Chao, D.D.S, J.D.	March 2015

Treating the Worn Dentition	Spear Education	March 2014
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TEACHING APPOINTMENTS (Begin with current)

Name of Institution, City and State	Rank	Subjects/Content Areas Taught/ Administrative Responsibilities	From (Year)	To (Year)
University of California, San Francisco, San Francisco, California	Assistant Clinical Professor	Oversee clinical work and treatment plan cases with postgraduate Periodontology residents	2018	Present

CURRENT TEACHING RESPONSIBILITIES

Name of Institution, City, State	Course Title	Discipline and Level of Students (Year)	Total Contact Hours Per Year	
University of California, San Francisco, San Francisco, California, Assistant Clinical Professor		Postgraduate Periodontology 1 st , 2 nd , 3 rd year residents	Didactic	Clinic/Laboratory 90

HOSPITAL APPOINTMENTS (Begin with current)

Name of Hospital	City	State	From (Year)	To (Year)
Not applicable				

PRACTICE EXPERIENCE

Location (City and State)	Type of Practice	From (Year)	To (Year)
Capitol Periodontal Group (Folsom, Roseville, Sacramento CA), Managing Partner	Private Practice (Group)	2008	Present

MEMBERSHIP, OFFICES OR APPOINTMENTS HELD IN LOCAL, STATE OR NATIONAL DENTAL OR ALLIED DENTAL ORGANIZATIONS, INCLUDING APPOINTMENTS TO STATE BOARDS OF DENTISTRY AND CODA

Name of Organization	Title	From (Year)	To (Year)
Dental Board of California	Conscious Sedation Examiner	2011	Present
Dental Board of California	Subject Matter Expert	2018	Present
Christian Medical and Dental Association	Sacramento Chapter Chairperson (2014-2016)	2008	Present

PUBLISHED WORKS (For the most recent five years, list articles in which you were the principal author that appeared in refereed journals or text books, by author(s), title, publication, and date)

Author(s)	Title	Publication	Date
Kolenbrander, Du, Aspiras, Li, Wu and Anderson	Spatial Organization and Contact – induced Gene Expression in Biofilms of <i>Streptococcus gordonii</i> Challis	Streptococci and Streptococcal Diseases-Entering the new Millennium	2000
Palmer, Wu, Gordon, Bloomquist, Liljemark, Kilian and Kolenbrander	Retrieval of Biofilms from the Oral Cavity	Methods in Enzymology	1999
Kolenbrander, Anderson, Kazmerzak, Wu and Palmer	Spatial Organization of Oral bacterial in Biofilms	Methods in Enzymology	1999

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EDUCATIONAL BACKGROUND-Include advanced dental education (Begin with college level)

Name of School, City and State	Yr of Grad.	Certificate or Degree	Area of Study
University of California, San Francisco - UCSF	2005	DDS	Dentistry
Virginia Commonwealth University - VCU	2003	MPH	Public Health

LICENSURE

License (Do not include license number)	From (Year)	To (Year)
Dentistry General	2005	current

BOARD CERTIFICATION

Certifying Organization	Specialty/Discipline	Date certified

CE COURSES TAKEN (last 5 years)

Course Title	Course Content and Provider	Month and Year
Spears education	Treatment planning, Occlusion, Restorative design, Worn dentition and Airway prosthodontics	2017 – current ongoing
Endodontic lectures	AAE, Endodontic speakers – Dr. Ko, Dr. Glassman, Dr. Louis Berman, Dr. Anil Kisen and Dr. Herbranson	2012 – current ongoing
General Dentistry	CDA presents. Indian Health service conferences and ADA and local dental society	08/2017, 05/2017, 11/2017, 05/2018

TEACHING APPOINTMENTS (Begin with current)

Name of Institution, City and State	Rank	Subjects/Content Areas Taught/ Administrative Responsibilities	From (Year)	To (Year)
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UCSF	Adjunct Faculty/ Part Time	General dentistry , restorative dentistry and public health dentistry/ Student evaluations	2017	current
Western University school of dentistry	Assistant professor	General dentistry, restorative dentistry, molar endo and public health dentistry	2017	current
Lutheran/ NYU – AEGD program	Full time faculty	General Dentistry, prosthodontics, pediatric dentistry and complex endodontic procedures	2013	2017
Arizona School of Dentistry and oral Health - ASDOH	External Site Faculty	General Dentistry, restorative dentistry, pediatric dentistry and molar endo	2012	2017

CURRENT TEACHING RESPONSIBILITIES

Name of Institution, City, State	Course Title	Discipline and Level of Students (Year)	Total Contact Hours Per Year	
			Didactic	Clinic/Laboratory
UCSF	External site faculty	D4		1440
Western University	Clinical Assistant Professor	D3 & D4		1440

HOSPITAL APPOINTMENTS (Begin with current)

Name of Hospital	City	State	From (Year)	To (Year)

PRACTICE EXPERIENCE

Location (City and State)	Type of Practice	From (Year)	To (Year)
Sacramento Native America Health center	Indian health/ Federally qualified health center	2017	current
Pristine Family Dentistry	Private Practice	2017	current
Family Health Care Network	Federally Qualified Health center	2005	2017

MEMBERSHIP, OFFICES OR APPOINTMENTS HELD IN LOCAL, STATE OR NATIONAL DENTAL OR ALLIED DENTAL ORGANIZATIONS, INCLUDING APPOINTMENTS TO STATE BOARDS OF DENTISTRY AND CODA

Name of Organization	Title	From (Year)	To (Year)
American Association of Endodontics	General Member	2012	current
American dental association / CDA	General member	2005	current

PUBLISHED WORKS (For the most recent five years, list articles in which you were the principal author that appeared in refereed journals or text books, by author(s), title, publication, and date)

Author(s)	Title	Publication	Date
Karthik Raghuraman & Takashi	Dental Education in India and Japan:	Journal of dental education	2005

Komabayashi	Implications for U.S. Dental Programs for Foreign-Trained Dentists		

Commission on Dental Accreditation

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**Do not attach Curriculum Vitae
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EDUCATIONAL BACKGROUND-Include advanced dental education (Begin with college level)

Name of School, City and State	Yr of Grad.	Certificate or Degree	Area of Study
UC DAVIS	2005	B.S.	Genetics
University of the Pacific, Arthur A Dugoni School of Dentistry	2009	DDS	Dentistry
Community Regional Medical Center, Fresno	2010	GPR completion	General Practice Residency

LICENSURE

License (Do not include license number)	From (Year)	To (Year)
DDS	2010	Current

BOARD CERTIFICATION

Certifying Organization	Specialty/Discipline	Date certified
NONE		

CE COURSES TAKEN (last 5 years)

Course Title	Course Content and Provider	Month and Year
Orthodontics	Progressive Orthodontic Seminars- 12 courses total to be completed Jan 2020	June 2018-present (complete in Jan 2020)
Spear Study Club	Spear Education	8 meetings/year (2016, 2017, 2018 and present)
Cerec Workshop	Cerec Doctors	Oct 2017
Worn Dentition	Spear Education	Sept 2017
Terminal Dentition	Spear Education	Aug 2017

TEACHING APPOINTMENTS (Begin with current)

Name of Institution, City and State	Rank	Subjects/Content Areas Taught/ Administrative Responsibilities	From (Year)	To (Year)
NONE				

CURRENT TEACHING RESPONSIBILITIES

Name of Institution, City, State	Course Title	Discipline and Level of Students (Year)	Total Contact Hours Per Year	
NONE			Didactic	Clinic/Laboratory

HOSPITAL APPOINTMENTS (Begin with current)

Name of Hospital	City	State	From (Year)	To (Year)
NONE				

PRACTICE EXPERIENCE

Location (City and State)	Type of Practice	From (Year)	To (Year)
Roseville, CA	Private Practice	2010	Present

MEMBERSHIP, OFFICES OR APPOINTMENTS HELD IN LOCAL, STATE OR NATIONAL DENTAL OR ALLIED DENTAL ORGANIZATIONS, INCLUDING APPOINTMENTS TO STATE BOARDS OF DENTISTRY AND CODA

Name of Organization	Title	From (Year)	To (Year)
SDDS	Board Member and CDA Delegate	2018	present

PUBLISHED WORKS (For the most recent five years, list articles in which you were the principal author that appeared in refereed journals or text books, by author(s), title, publication, and date)

Author(s)	Title	Publication	Date
None			

Commission on Dental Accreditation

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Do not attach Curriculum Vitae
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Current Institution: NA

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Fax:

E-mail: Lindseyr@sbcglobal.net

EDUCATIONAL BACKGROUND-Include advanced dental education (Begin with college level)

Name of School, City and State	Yr of Grad.	Certificate or Degree	Area of Study
Univ of FL College of Dentistry	1995	Certificate	Pediatric Dentistry
Univ of Southern CA College of Dentistry	1990	DDS	
Univ of CA Santa Barbara	1985	BA Liberal Studies	Biology, Psych, Art History

LICENSURE

License (Do not include license number)	From (Year)	To (Year)
CA Dental	1995	Current
FL Dental	1990	current

BOARD CERTIFICATION

Certifying Organization	Specialty/Discipline	Date certified
American Board of Pediatric Dentistry	Pediatric Dentistry	2012

CE COURSES TAKEN (last 5 years)

Course Title	Course Content and Provider	Month and Year

TEACHING APPOINTMENTS (Begin with current)

Name of Institution, City and State	Rank	Subjects/Content Areas Taught/ Administrative Responsibilities	From (Year)	To (Year)
NA				

CURRENT TEACHING RESPONSIBILITIES

Name of Institution, City, State	Course Title	Discipline and Level of Students (Year)	Total Contact Hours Per Year	
NA			Didactic	Clinic/Laboratory

HOSPITAL APPOINTMENTS (Begin with current)

Name of Hospital	City	State	From (Year)	To (Year)
NA				

PRACTICE EXPERIENCE

Location (City and State)	Type of Practice	From (Year)	To (Year)
Grass Valley, CA	Pediatric Dentistry	1996	current
Bakersfield, CA	General Practice	1990	1993

MEMBERSHIP, OFFICES OR APPOINTMENTS HELD IN LOCAL, STATE OR NATIONAL DENTAL OR ALLIED DENTAL ORGANIZATIONS, INCLUDING APPOINTMENTS TO STATE BOARDS OF DENTISTRY AND CODA

Name of Organization	Title	From (Year)	To (Year)
American Dental Association	13 th District (CA) trustee	2015	2018
	ADA Delegate	2009	Present
	Council on Access, Prevention, and Interprofessional Relations, two year chair	2004	2009
National Academy of Medicine	Member, Health Literacy Roundtable	2013	Present
California Dental Association	Immediate Past-president, President, Pres-elect, Vice Pres	2009	2014
	CDA Foundation, two year chair	2005	2011
California Society of Pediatric Dentistry	Board of Directors	2003	2008
	President, Pres-elect, Vice Pres	2008	2011

PUBLISHED WORKS (For the most recent five years, list articles in which you were the principal author that appeared in refereed journals or text books, by author(s), title, publication, and date)

Author(s)	Title	Publication	Date
Guest Editor	Dentistry in an Integrated Healthcare System	CDA Journal	March 2016

SAA	Three issues on Interprofessional Education and Practice	SAA	Jan, Sept, Oct 2014
SAA	Oral Health Literacy	SAA	April 2012
SAA	Perinatal Oral Health – Maggie Award for Excellence in publishing med/dental category	SAA	Sept 2010
Primosch RE, Robinson L	Pain elicited during intraoral infiltration with buffered lidocaine	American Journal of Dentistry	9(1): 5, 1996
Crystal, Creasey, Robinson, Ramos-Gomez	Successful Business Models for Implementation of CAMBRA in Private Practice	CDA Journal	2011

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Name:	WALEED SOLIMAN	
	GROUP	
Current Institution:	PRACTICE	
	4716 CROWN BENCH	
Address:	CIRCLE	City, State, Zip: ELK GROVE, CA 95757
Phone: 9165447740	Fax:	E-mail: DRWALEEDSOLIMAN@GMAIL.COM

EDUCATIONAL BACKGROUND-Include advanced dental education (Begin with college level)

Name of School, City and State	Yr of Grad.	Certificate or Degree	Area of Study
Division of Pediatric Dentistry and Orthodontics at Los Angeles Children's Hospital, University of Southern California, (USC) Los Angeles, California	July 2017	Fellowship	Cleft, Craniofacial and Special Care Orthodontics
School of Medicine, University of California, Davis (UC Davis)	Sept 2016	Master	Advanced Studies (MAS) in Clinical and Translational Research,
University of the Pacific (UOP), Arthur Dugoni School of Dentistry, San Francisco, California	Sept 2009	Master and Certificate	Orthodontics
Cairo University, Faculty of Dentistry, Egypt	July 1995	Bachelor Degree of Dental Surgery (DDS)	Dentistry

LICENSURE

License (Do not include license number)	From (Year)	To (Year)
California Dental License	1999	current

BOARD CERTIFICATION

Certifying Organization	Specialty/Discipline	Date certified
American Board of Orthodontics Certificate, Saint Louis, Missouri	Orthodontics	March 2011

CE COURSES TAKEN (last 5 years)

Course Title	Course Content and Provider	Month and Year
American Association of Orthodontics		

TEACHING APPOINTMENTS (Begin with current)

Name of Institution, City and State	Rank	Subjects/Content Areas Taught/ Administrative Responsibilities	From (Year)	To (Year)
UC Davis Health System, Sacramento, California	Clinical Instructor	Department of Otolaryngology, Cleft Lip and Palate Panel	November 2017	current

CURRENT TEACHING RESPONSIBILITIES

Name of Institution, City, State	Course Title	Discipline and Level of Students (Year)	Total Contact Hours Per Year	
None			Didactic	Clinic/Laboratory

HOSPITAL APPOINTMENTS (Begin with current)

Name of Hospital	City	State	From (Year)	To (Year)
Children's Hospital at Los Angeles,	Los Angeles	California	Aug 2016	July 2017

PRACTICE EXPERIENCE

Location (City and State)	Type of Practice	From (Year)	To (Year)
Sacramento, California	General Dentistry group practice	May 1999	May 2007
Sacramento, California	Orthodontics group practice	October 2009	current

MEMBERSHIP, OFFICES OR APPOINTMENTS HELD IN LOCAL, STATE OR NATIONAL DENTAL OR ALLIED DENTAL ORGANIZATIONS, INCLUDING APPOINTMENTS TO STATE BOARDS OF DENTISTRY AND CODA

Name of Organization	Title	From (Year)	To (Year)
American Dental Association (ADA), California Dental Association (CDA)	member		
American Association of Orthodontics. (AAO)	member		
American College of Diplomates of The American Board of Orthodontics (CDAAO)	member		

PUBLISHED WORKS (For the most recent five years, list articles in which you were the principal author that appeared in refereed journals or text books, by author(s), title, publication, and date)

Author(s)	Title	Publication	Date
Soliman W, Abu Al-Melh M, Mahood K, Bauter N, Tolar M	Effect of platelet-rich plasma on human adult MSC in vitro.	Journal of Dent Research	(2009) 88 (Spec Iss A): 2701

Commission on Dental Accreditation

BioSketch

Do not attach Curriculum Vitae
Type Only

Name: Sang Q. Tran

Current Institution: None

Address: 9329 Keefe Drive **City, State, Zip:** Elk Grove, CA 95758

Phone: 916-320-1354 **Fax:** **E-mail:** drtran@varsitydentistry.com

EDUCATIONAL BACKGROUND-Include advanced dental education (Begin with college level)

Name of School, City and State	Yr of Grad.	Certificate or Degree	Area of Study
University of the Pacific	1997	Bachelor of Science	Biology
Arthur A. Dugoni School of Dentsitry	2000	Doctor of Dental Surgery	Dentistry

LICENSURE

License (Do not include license number)	From (Year)	To (Year)
Dental Board of California - Dentist	2000	current

BOARD CERTIFICATION

Certifying Organization	Specialty/Discipline	Date certified
N/A		

CE COURSES TAKEN (last 5 years)

Course Title	Course Content and Provider	Month and Year
Effective Case Acceptance	Communication for Case Acceptance - MGE	January 2019
Resorption and Diagnostic Use of CBCT in Endo	Drs. A. Bal, D. Keating, G. Kolber, G. Salvani	November 2018
Silver is the New Black-Silver Diamine Fluoride	Silver Diamine Fluoride – Dr. Jeanette MacLean	July 2018
Smile Design, Bonding and Esthetic Materials Update	Bonding and Porcelain – Gerard Chiche, DDS	September 2018
Contemporary Ceramics	Ceramics – Edward McLaren, DDS	September 2018

TEACHING APPOINTMENTS (Begin with current)

Name of Institution, City and State	Rank	Subjects/Content Areas Taught/ Administrative Responsibilities	From (Year)	To (Year)
N/A				

CURRENT TEACHING RESPONSIBILITIES

Name of Institution, City, State	Course Title	Discipline and Level of Students (Year)	Total Contact Hours Per Year	
N/A			Didactic	Clinic/Laboratory

HOSPITAL APPOINTMENTS (Begin with current)

Name of Hospital	City	State	From (Year)	To (Year)
San Joaquin General Hospital	French Camp	CA	2000	2004

PRACTICE EXPERIENCE

Location (City and State)	Type of Practice	From (Year)	To (Year)
Davis, CA	General Practice	2004	Current
Stockton, CA	General Practice	2001	2004
French Camp, CA	General Practice	2000	2004

MEMBERSHIP, OFFICES OR APPOINTMENTS HELD IN LOCAL, STATE OR NATIONAL DENTAL OR ALLIED DENTAL ORGANIZATIONS, INCLUDING APPOINTMENTS TO STATE BOARDS OF DENTISTRY AND CODA

Name of Organization	Title	From (Year)	To (Year)
San Joaquin Dental Society	General Member	2000	2004
Sacramento District Dental Society	General Member	2004	Present
American and California Dental Associations	General Member	2000	Present

PUBLISHED WORKS (For the most recent five years, list articles in which you were the principal author that appeared in refereed journals or text books, by author(s), title, publication, and date)

Author(s)	Title	Publication	Date
N/A			

Commission on Dental Accreditation

BioSketch

Do not attach Curriculum Vitae
Type Only

Name: Richard J. Nagy, DDS

Current Institution: Private practice

Address: 122 S. Patterson Ave. #202

City, State, Zip: Santa Barbara, CA 93111

Phone: 805-964-8804.

Fax: 805-964-4006.

E-mail: Nagyperio@gmail.com

EDUCATIONAL BACKGROUND-Include advanced dental education (Begin with college level)

Name of School, City and State	Yr of Grad.	Certificate or Degree	Area of Study
Miami University, Oxford, Ohio.	1982.	BA.	Zoology
Ohio State University, Columbus, Ohio.	1986.	DDS.	Dentistry
University of Florida, Gainesville, Florida.	1987.	Certificate.	GPR
VAMC, Los Angeles, California.	1990.	Certificate.	Periodontology

LICENSURE

License (Do not include license number)	From (Year)	To (Year)
California DDS.	1990.	Current

BOARD CERTIFICATION

Certifying Organization	Specialty/Discipline	Date certified
American Board of Periodontology.	Periodontics.	1995

CE COURSES TAKEN (last 5 years)

Course Title	Course Content and Provider	Month and Year
Sedation and Medical Emergencies.	Sedation/Emergency issues- AAP.	11/2018
Predictable Vertical Ridge Augmentation.	Bone grafting and flap design- AAP.	11/2018
Something Old, new and avoid the Blue.	Periodontal CT grafting, esthetics- AAP.	11/2018
Perio-Hygiene Collaborative.	Tx periimplantitis, diagnosis, Airflow- CSP.	8/2018
Medical Emergencies in Dental.	Emergency protocols- NetCE.	4/2018

TEACHING APPOINTMENTS (Begin with current)

Name of Institution, City and State	Rank	Subjects/Content Areas Taught/ Administrative Responsibilities	From (Year)	To (Year)
Greater Los Angeles VAMC.	Director.	Perio/Medicine/Sedation/Implant.	1990.	1998
UCLA School of Dentistry.	Faculty.	Perio.	1990.	1998

CURRENT TEACHING RESPONSIBILITIES

Name of Institution, City, State	Course Title	Discipline and Level of Students (Year)	Total Contact Hours Per Year	
			Didactic	Clinic/Laboratory
No current teaching				

HOSPITAL APPOINTMENTS (Begin with current)

Name of Hospital	City	State	From (Year)	To (Year)
Greater Los Angeles VAMC.	Los Angeles.	CA.	1988.	2001

PRACTICE EXPERIENCE

Location (City and State)	Type of Practice	From (Year)	To (Year)
Santa Barbara, CA.	Periodontics.	1998.	Current
Bakersfield, CA.	Periodontics.	2011.	Current
West Covina, CA.	Periodontics.	1991.	1998

MEMBERSHIP, OFFICES OR APPOINTMENTS HELD IN LOCAL, STATE OR NATIONAL DENTAL OR ALLIED DENTAL ORGANIZATIONS, INCLUDING APPOINTMENTS TO STATE BOARDS OF DENTISTRY AND CODA

Name of Organization	Title	From (Year)	To (Year)
California Dental Association.	Current President-Elect/Officer/Trustee.	1990.	Current
California Society of Periodontists.	Past President.	1990.	Current
Western Society of Periodontology.	Past President.	1990.	Current

PUBLISHED WORKS (For the most recent five years, list articles in which you were the principal author that appeared in refereed journals or text books, by author(s), title, publication, and date)

Author(s)	Title	Publication	Date
Nagy- Guest Editor.	To Graft or Not to Graft.	J. CDA.	2018
Nagy.	Management of the Anxious Pt.	Hall's Decision Making in Period	2013

Commission on Dental Accreditation

BioSketch

Do not attach Curriculum Vitae

Type Only

Name: Eric Wong DDS, MAGD

Current Institution: State of California State Prison Solano

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Phone: (916) 215-2764

Fax:

E-mail: ericterriwong@comcast.net

EDUCATIONAL BACKGROUND-Include advanced dental education (Begin with college level)

Name of School, City and State	Yr of Grad.	Certificate or Degree	Area of Study
University of the Pacific	1982	BA	Biology
University of the Pacific School of Dentistry	1988	DDS	DDS
University of the Pacific School of Dentistry	1989	ACE residency progra	

LICENSURE

License (Do not include license number)	From (Year)	To (Year)
California Board of Consumer Affairs	1989	Present

BOARD CERTIFICATION

Certifying Organization	Specialty/Discipline	Date certified
None		

CE COURSES TAKEN (last 5 years)

Course Title	Course Content and Provider	Month and Year
Will scan and attach		

TEACHING APPOINTMENTS (Begin with current)

Name of Institution, City and State	Rank	Subjects/Content Areas Taught/ Administrative Responsibilities	From (Year)	To (Year)
University School of Denitry	Resident	General dentistry, mainly oral surgery	1988	1989

CURRENT TEACHING RESPONSIBILITIES

Name of Institution, City, State	Course Title	Discipline and Level of Students (Year)	Total Contact Hours Per Year	
			Didactic	Clinic/Laboratory

HOSPITAL APPOINTMENTS (Begin with current)

Name of Hospital	City	State	From (Year)	To (Year)

PRACTICE EXPERIENCE

Location (City and State)	Type of Practice	From (Year)	To (Year)
Sacramento, CA.	Private practice / General Dentistry	1989	2008
Vacaville, CA.	State of California, / General Dentistry	2007	present

MEMBERSHIP, OFFICES OR APPOINTMENTS HELD IN LOCAL, STATE OR NATIONAL DENTAL OR ALLIED DENTAL ORGANIZATIONS, INCLUDING APPOINTMENTS TO STATE BOARDS OF DENTISTRY AND CODA

Name of Organization	Title	From (Year)	To (Year)
Dental Board of California	Expert Examiner, Dental Consultant,	2000	2016
Academy of General Dentistry	President CA-2007, RACE Council Dental Expert, RDA Practical Lead.		
	Chair, Division Coordinator 2017-2019		

PUBLISHED WORKS (For the most recent five years, list articles in which you were the principal author that appeared in refereed journals or text books, by author(s), title, publication, and date)

Author(s)	Title	Publication	Date

Commission on Dental Accreditation

BioSketch

Do not attach Curriculum Vitae
Type Only

Name:	Paul Glassman		
Current Institution:	CA North State University		
Address:	9700 West Taron Drive	Elk Grove, CA 95757	City, State, Zip:
Phone: (916) 686-7300	Fax:	E-mail: paul.glassman@cnsu.edu	

EDUCATIONAL BACKGROUND-Include advanced dental education (Begin with college level)

Name of School, City and State	Yr of Grad.	Certificate or Degree	Area of Study
University of California at Los Angeles	1968	B.A.	Zoology
University of California San Francisco, School of Dentistry	1972	D.D.S.	Dentistry
Mount Zion Hospital and Medical Center, San Francisco, CA	1975	2 Yr GPR	Advanced General Dentistry
University of the Pacific, School of Education	1994	M.A.	Educational and Counseling Psychology
University of the Pacific, School of Business	1999	M.B.A.	Business Administration

LICENSURE

License (Do not include license number)	From (Year)	To (Year)
California: Dentistry	1972	Present

BOARD CERTIFICATION

Certifying Organization	Specialty/Discipline	Date certified
American Board of Special Care Dentistry	Diplomate	2004

CE COURSES TAKEN (last 5 years) --- NOTE: There are more than 35 courses. Only last 5 listed here

Course Title	Course Content and Provider	Month and Year
Creating a Dental Home for Low-Income Seniors	National;Network for Oral Health Access	11/2018
Disruptive Dental Innovation	National;Network for Oral Health Access	11/2018
The Power and Potential of Primary Care Associations	National;Network for Oral Health Access	11/2018
Transformative Payment Models/Value Based Health Care	National;Network for Oral Health Access	11/2018
Glass Ionomers and Silver Diamine Fluoride	University of the Pacific Continuing Education	2/2019

TEACHING APPOINTMENTS (Begin with current)

Name of Institution, City and State	Rank	Subjects/Content Areas Taught/ Administrative Responsibilities	From (Year)	To (Year)
University of the Pacific School of Dentistry	Professor	Public Health, Community Oral Health, Oral Health Care for People with Disabilities, Geriatrics, Hospital Dentistry,	1997	Present
University of the Pacific School of Dentistry	Associate Professor	Director Advanced Education in General Dentistry Residency, Public Health, Community Oral Health, Oral Health Care for People with Disabilities, Geriatrics, Hospital Dentistry,	1989	1997
Mount Zion Hospital and Medical Center, San Francisco, CA	Faculty and Director	General Practice Residency	1975	1989

CURRENT TEACHING RESPONSIBILITIES

Name of Institution, City, State	Course Title	Discipline and Level of Students (Year)	Total Contact Hours Per Year Didactic Clinic/Laboratory	
University of the Pacific School of Dentistry	Introduction to Clinical Sciences I	YR 1	1	
University of the Pacific School of Dentistry	Introduction to Clinical Sciences II	YR 2	5	
University of the Pacific School of Dentistry	Community Oral Health	YR 3	5	
University of the Pacific School of Dentistry	Complex Patients	YR 3	5	

HOSPITAL APPOINTMENTS (Begin with current)

Name of Hospital	City	State	From (Year)	To (Year)

PRACTICE EXPERIENCE

Location (City and State)	Type of Practice	From (Year)	To (Year)
Mount Zion Hospital and Medical Center, San Francisco, CA	General Practice – Hospital Dental Clinic	1975	1989
San Francisco, CA	Private Practice	1989	1995

MEMBERSHIP, OFFICES OR APPOINTMENTS HELD IN LOCAL, STATE OR NATIONAL DENTAL OR ALLIED DENTAL ORGANIZATIONS, INCLUDING APPOINTMENTS TO STATE BOARDS OF DENTISTRY AND CODA

Name of Organization	Title	From (Year)	To (Year)
American Dental Association	Member	1975	Present
California Dental Association	Member	1975	Present
American Dental Association, Commission on Dental Accreditation, AEGD Advisory Committee	Member	1998	2004
American Association of Hospital Dentists	Member	1975	
American Association of Hospital Dentists	President and Chairman of the Board	2000	2002
Special Care Dentistry Association	President	2002	2004
American Dental Association's National Elder Care Advisory Committee	Chair	2010	2018
National Research Council and the Institute of Medicine's Committee on Oral Health Access to Services	Member	2010	2011
DentaQuest Institute Board of Directors	Member	2011	2016

PUBLISHED WORKS (For the most recent five years, list articles in which you were the principal author that appeared in refereed journals or text books, by author(s), title, publication, and date)

Author(s)	Title	Publication	Date
Glassman P	Oral health of vulnerable older adults and persons with disabilities: a national coalition consensus conference	Special Care Dentist. 233(4): 155.	2013
Douglass C, Glassman P.	The oral health of vulnerable older adults and persons with disabilities.	Spec Care Dentist 33(4): 156-163	2013
Helgeson M. Glassman P.	Oral health delivery systems for older adults and people with disabilities	Spec Care Dentist 33(4): 177-189	2013
Glassman P, Subar P, Budenz A	Managing Caries in Virtual Dental Homes Using Interim Therapeutic Restorations	CDA:41(10):745-752	2013
Glassman P, Harrington M, Namakian M	Promoting Oral Health Through Community Engagement.	CDA: 42:(7):465-470	2014
Glassman P	Interprofessional Education in the Era of Accountability	CDA: 42:(9):645-651	2014
Glassman P, Harrington M, Namakian M, Harrison-Noonan J	The Potential for Telehealth Technologies to Facilitate Charity Care: Creating Virtual Dental Homes	JACD. 81(2):22-25	2014
Glassman P	Geriatric Dentistry in the 21st Century: Environment and Opportunity	CDA:43(9):389-393	2015
Glassman P, Harrington M, Namakian M, Subar P	Inter-professional Collaboration in Improving Oral Health for Special Populations	Dent Clin N Am. 2016: 60.843-855	2016
Bruen, BK, Steinmetz E, Bysshe T, Glassman P, Ku L.	Potentially preventable dental care in operating room for children enrolled in Medicaid.	JADA:147(9):702-708	2016
Glassman P	Disruptive Innovation and the Oral Health System	J. Am. College Dent. 2016:83(2):4-13	2016
Glassman P	Interventions Focusing on Children with Special Health Care Needs	Dent Clin N Am.:61:565-576.	2017

Commission on Dental Accreditation
BioSketch
Do not attach Curriculum Vitae
 Type Only

Name: Joel Whiteman, DDS

Current Institution:

Address: 3171 Riverside Blvd

City, State, Zip: Sacramento, CA 95818

Phone: 916-446-0203

Fax: 916-446-0822

E-mail: smileartdental@gmail.com

EDUCATIONAL BACKGROUND-Include advanced dental education (Begin with college level)

Name of School, City and State	Yr of Grad.	Certificate or Degree	Area of Study
UCLA; Los Angeles Ca	2002	BS	Molecular Biology
UCLA School of Dentistry; Los Angeles Ca	2004	DDS	Dentistry
VA Greater Los Angeles: Sepulveda; North Hills CA	2005	Certificate	Hospital Dentistry/GPR

LICENSURE

License (Do not include license number)	From (Year)	To (Year)
California	2017	2019

BOARD CERTIFICATION

Certifying Organization	Specialty/Discipline	Date certified

CE COURSES TAKEN (last 5 years)

Course Title	Course Content and Provider	Month and Year
Sacramento Implant Course	Implant placement and restoration: Dr. Finney	1/2015-6/2015
Occlusion in Clinical Practice	Occlusion: Frank Spear	8/2016
Facially Generated Treatment Planning	Treatment Planning: Frank Spear	8/2014
Smile Line Rehabilitation with Implants	Implant restorations in the Anterior: Dr. Priest	10/2018
Implants in the Aesthetic Zone	Challenges of restoring implants: Dr. Schoenbaum	2/2017

TEACHING APPOINTMENTS (Begin with current)

Name of Institution, City and State	Rank	Subjects/Content Areas Taught/ Administrative Responsibilities	From (Year)	To (Year)
Sacramento City College, Sacramento Ca	Adjunct	Clinical Hygiene	2010	2012

CURRENT TEACHING RESPONSIBILITIES

Name of Institution, City, State	Course Title	Discipline and Level of Students (Year)	Total Contact Hours Per Year	
			Didactic	Clinic/Laboratory

HOSPITAL APPOINTMENTS (Begin with current)

Name of Hospital	City	State	From (Year)	To (Year)

PRACTICE EXPERIENCE

Location (City and State)	Type of Practice	From (Year)	To (Year)
Sacramento, Ca	General Practice	2005	current

MEMBERSHIP, OFFICES OR APPOINTMENTS HELD IN LOCAL, STATE OR NATIONAL DENTAL OR ALLIED DENTAL ORGANIZATIONS, INCLUDING APPOINTMENTS TO STATE BOARDS OF DENTISTRY AND CODA

Name of Organization	Title	From (Year)	To (Year)
Sacramento District Dental Society	Member	2005	Present
CDA	Member	2004	Present
ADA	Member	2004	Present

PUBLISHED WORKS (For the most recent five years, list articles in which you were the principal author that appeared in refereed journals or text books, by author(s), title, publication, and date)

Author(s)	Title	Publication	Date

Commission on Dental Accreditation

BioSketch

**Do not attach Curriculum Vitae
Type Only**

Name: Paul A. Johnson

Current Institution: _____

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Fax: _____

E-mail: pjohnsondds@gmail.com

EDUCATIONAL BACKGROUND-Include advanced dental education (Begin with college level)

Name of School, City and State	Yr of Grad.	Certificate or Degree	Area of Study
University of California San Francisco	2011	M.S. Pediatric Specialty	Pediatric Dentistry
University of California San Francisco	2008	D.D.S.	Dentistry
University of California San Diego	2004	B.S. Psychology	BioPsych

LICENSURE

License (Do not include license number)	From (Year)	To (Year)
Dentist	2008	Current

BOARD CERTIFICATION

Certifying Organization	Specialty/Discipline	Date certified
American Board of Pediatric Dentistry	Pediatric Dentistry	9/2013

CE COURSES TAKEN (last 5 years)

Course Title	Course Content and Provider	Month and Year
SEE ATTACHED		

TEACHING APPOINTMENTS (Begin with current)

Name of Institution, City and State	Rank	Subjects/Content Areas Taught/ Administrative Responsibilities	From (Year)	To (Year)
N/A				

CURRENT TEACHING RESPONSIBILITIES

Name of Institution, City, State	Course Title	Discipline and Level of Students (Year)	Total Contact Hours Per Year	
N/A			Didactic	Clinic/Laboratory

HOSPITAL APPOINTMENTS (Begin with current)

Name of Hospital	City	State	From (Year)	To (Year)
Sutter Davis	Davis	CA	2012	Current
Fort Sutter Surgery Center	Sacramento	CA	2017	Current
Woodland Memorial Hospital	Woodland	CA	2012	Current

PRACTICE EXPERIENCE

Location (City and State)	Type of Practice	From (Year)	To (Year)
West Sacramento, CA	Pediatric – private practice	2015	Current
Davis, CA	Pediatric – private practice	2012	Current
Rocklin, CA	Pediatric – private practice	2011	2016

MEMBERSHIP, OFFICES OR APPOINTMENTS HELD IN LOCAL, STATE OR NATIONAL DENTAL OR ALLIED DENTAL ORGANIZATIONS, INCLUDING APPOINTMENTS TO STATE BOARDS OF

DENTISTRY AND CODA Name of Organization	Title	From (Year)	To (Year)
Sacramento District Dental Society	General member and held position on multiple committees: CPR, Peer Review, GA, Insurance Review	2016	Current
California Society of Pediatric Dentistry	Member	2011	Current

PUBLISHED WORKS (For the most recent five years, list articles in which you were the principal author that appeared in refereed journals or text books, by author(s), title, publication, and date)

Author(s)	Title	Publication	Date
TWO PUBLICATIONS NOT PRINCIPLE AUTHOR > 5 YRS			

Commission on Dental Accreditation

BioSketch

Do not attach Curriculum Vitae
Type Only

Name: Thomas Clements

Current Institution: Rio
Americano High School

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Fax:

E-mail: tclem80@yahoo.com

EDUCATIONAL BACKGROUND-Include advanced dental education (Begin with college level)

Name of School, City and State	Yr of Grad.	Certificate or Degree	Area of Study
University of the Pacific School of Dentistry	2008	DDS	Dentistry
Brigham Young University, Provo, Utah	2004	BS	Exercise Science

LICENSURE

License (Do not include license number)	From (Year)	To (Year)
DDS	2008	Present

BOARD CERTIFICATION

Certifying Organization	Specialty/Discipline	Date certified
N/A		

CE COURSES TAKEN (last 5 years)

Course Title	Course Content and Provider	Month and Year
TMD and Orofacial Pain Disorders	36 CE Hours: TMD-OFPP Assessment, Dx, Tx. Theory instruction in pharmacological and appliance-based therapies for TMD-OFPP conditions. Review of surgical indications and alternative therapies for TMD. Provider: Louis Gallia, DDS, MD	Jan-Dec 2016
Bicon Implants Hands-On Practical	8 CE Hours: Hands-on simulation course placing dental implants in models. Provider: Bicon Implants.	March 2016

Pediatric Advanced Life Support (PALS)	Theory instruction and hands-on simulation training in pediatric life support. Provider: American Heart Association Instructor.	July 2014 and 2016
Biomimetic Dentistry – Level I	14 CE Hours: Theory instruction and hands-on simulation training in advanced adhesion of direct and indirect resin and ceramic restorations. Provider: Biomimetic Dentistry CE.	April 2016
See below “Not a Full Mouth Rehabilitation Course”	5 CE Hours: Theory instruction in advanced adhesion of direct and indirect resin and ceramic restorations, with an emphasis on cases involving adjustment of vertical dimension of occlusion. Provider: Jose-Luis Ruiz, DDS, FAGD	September 2016
American Academy of Pediatric Dentistry Annual Session CE: -Management of Early Crowding. -MTA and Regeneration. -Miniclinics I -An Evidence-Based -Approach to Dental Traumatology.	12 CE Hours: Theory instruction in interceptive orthodontics, vital and non-vital pulp therapy, and best practices in treating dental trauma. Provider: American Academy of Pediatric Dentistry.	May 2015
Dental Imaging Excellence: Cone Beam CT Principles and Software Workshop	8 CE Hours: Theory instruction in 3-D imaging diagnosis, interpretation, and software platforms. Provider: DDI Imaging Center	April 2015
Comprehensive Review of Pediatric Dentistry	22 CE Hours: Theory instruction in current pediatric dentistry prevention, diagnosis, and treatment with emphasis on application of research-based protocols for optimal outcomes. Provider: American Academy of Pediatric Dentistry	January 2015
DOCS Education Pediatric Sedation Dentistry Course	25 CE Hours: Theory instruction and observation in pediatric oral conscious sedation case selection, pharmacology, airway management, and best practices. Provider: DOCS Education	February 2014

TEACHING APPOINTMENTS (Begin with current)

Name of Institution, City and State	Rank	Subjects/Content Areas Taught/ Administrative Responsibilities	From (Year)	To (Year)
Rio Americano High School, Sacramento, CA	Full-Time Instructor	Subjects: Medical Careers and Medical Assisting Content: Anatomy, Physiology, Medical Terminology, Patient Communication, Ethics, Law, Clinical Simulation, Project-Based Learning. Admin: Develop and implement curriculum for didactic instruction and clinical simulation. Manage administrative duties for off-campus externships of senior students.	Aug. 2018	Present
Sierra College, Rocklin, CA	Part-Time	Subjects: Anatomy	Aug. 2018	

	Adjunct Instructor	Content: Anatomy, Physiology, Cadaver Study. Admin: Enter grades into Canvas online platform.		Dec. 2018
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CURRENT TEACHING RESPONSIBILITIES

Name of Institution, City, State	Course Title	Discipline and Level of Students (Year)	Total Contact Hours Per Year	
Rio Americano High School	1. Introduction to Medical Careers 2. Medical Assisting: Career Technical Education	10th-11th grade 12 th grade	Didactic 180 hours for both courses	Clinic/Laboratory 300-360 hours off-campus externship for 12 th grade.

HOSPITAL APPOINTMENTS (Begin with current)

Name of Hospital	City	State	From (Year)	To (Year)
N/A				

PRACTICE EXPERIENCE

Location (City and State)	Type of Practice	From (Year)	To (Year)
1. Weideman Pediatric Dentistry: Citrus Heights, CA	Pediatric and general dentistry including populations of patients with special needs, dental fear, and those needing advanced behavior management. Emphasis included anxiolysis and sedation with N ₂ O/O ₂ inhalation.	2010	2018
2. Smile Quest Dental: Rocklin, CA	General dentistry with emphasis on CAD-CAM fabricated indirect restorations.	Apr. 2010	Jun. 2010
3. Farnsworth and Koire, DDS: Sacramento, CA	General dentistry including prevention, diagnosis, and treatment for restorative cases focusing on quadrant dentistry.	Jan. 2009	Sept. 2009
4. Ronald R. Hilder, DDS: Galt, CA	General dentistry including prevention, diagnosis, and treatment for restorative cases focusing on quadrant dentistry.	Mar. 2009	Sept. 2009

MEMBERSHIP, OFFICES OR APPOINTMENTS HELD IN LOCAL, STATE OR NATIONAL DENTAL OR ALLIED DENTAL ORGANIZATIONS, INCLUDING APPOINTMENTS TO STATE BOARDS OF DENTISTRY AND CODA

Name of Organization	Title	From (Year)	To (Year)
American Dental Association	Member	2005	Present
California Dental Association	Member	2005	Present
Sacramento District Dental Society	Member	2008	Present

PUBLISHED WORKS (For the most recent five years, list articles in which you were the principal author that appeared in refereed journals or text books, by author(s), title, publication, and date)

Author(s)	Title	Publication	Date
N/A			

Commission on Dental Accreditation

BioSketch

**Do not attach Curriculum Vitae
Type Only**

Name: Virendra R Patel

**Current Institution: Private
Practice**

**Address: 6610 Folsom Auburn
Road, #8**

City, State, Zip: Folsom CA 955630

Phone: 916 988 3402

Fax: 916 988 3001

E-mail: virendrapateldds@yahoo.com

EDUCATIONAL BACKGROUND-Include advanced dental education (Begin with college level)

Name of School, City and State	Yr of Grad.	Certificate or Degree	Area of Study
University of London, London UK	1991	BDS	
Royal College of Surgeons of England	1991	LDS,RCS	

LICENSURE

License (Do not include license number)	From (Year)	To (Year)
California	1994	Current

BOARD CERTIFICATION

Certifying Organization	Specialty/Discipline	Date certified

CE COURSES TAKEN (last 5 years)

Course Title	Course Content and Provider	Month and Year
Pankey Institute	Pankey Mann Schuyler Principles	Oct 2015
Big Sky Tanner Study Group	Advanced TMD Concepts	Mar 2016
Big Sky Tanner Study Group	Sleep Dentistry	Nov 2016
Northern Cal Seattle Study Club	Digital Dentistry	Feb 2017
SDDS Midwinter Convention	Multiple Subjects	Feb 2018

TEACHING APPOINTMENTS (Begin with current)

Name of Institution, City and State	Rank	Subjects/Content Areas Taught/	From	To
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		Administrative Responsibilities	(Year)	(Year)
University College Hospital Dental School	Clinical Faculty	Clinical instructor of predoctoral students in restorative dept.	1991	1992
San Joaquin Valley College	Clinical Faculty	Clinical and didactic instructor for Dental Assistant sealant placement module		

CURRENT TEACHING RESPONSIBILITIES

Name of Institution, City, State	Course Title	Discipline and Level of Students (Year)	Total Contact Hours Per Year	
			Didactic	Clinic/Laboratory

HOSPITAL APPOINTMENTS (Begin with current)

Name of Hospital	City	State	From (Year)	To (Year)

PRACTICE EXPERIENCE

Location (City and State)	Type of Practice	From (Year)	To (Year)
Folsom, CA	Private pay/Indemnity Practice	1996	present
Auburn, CA	DSO managing associate dentist	1995	1996
Pacoima, CA	Associate Dentist Dental Practice	1994	1995
Basildon, England	Associate Dentist – National Health Service	1991	1993

MEMBERSHIP, OFFICES OR APPOINTMENTS HELD IN LOCAL, STATE OR NATIONAL DENTAL OR ALLIED DENTAL ORGANIZATIONS, INCLUDING APPOINTMENTS TO STATE BOARDS OF DENTISTRY AND CODA

Name of Organization	Title	From (Year)	To (Year)
SDDS	President	2015	2015
CDA	House of Delegates	2008	Current
SDDF	President	2018	Current

PUBLISHED WORKS (For the most recent five years, list articles in which you were the principal author that appeared in refereed journals or text books, by author(s), title, publication, and date)

Author(s)	Title	Publication	Date

Commission on Dental Accreditation BioSketch

Do not attach Curriculum Vitae
Type Only

Name: Laurie LaDow

**Current Institution: General
Practice Dentistry**

Address: 9296 Vintage Park Dr., Suite 100

City, State, Zip: Sacramento, CA. 95829

Phone: 916-804-6465

Fax:

E-mail: ladowddsinc@gmail.com

EDUCATIONAL BACKGROUND-Include advanced dental education (Begin with college level)

Name of School, City and State	Yr of Grad.	Certificate or Degree	Area of Study
CSUS	1983	BA Biology	
USC	1987	DDS	

LICENSURE

License (Do not include license number)	From (Year)	To (Year)
General Dentistry	1987	Present

BOARD CERTIFICATION

Certifying Organization	Specialty/Discipline	Date certified
CA State Board	General Dentistry	1987

CE COURSES TAKEN (last 5 years)

Course Title	Course Content and Provider	Month and Year
Adhesion Dentistry	Conservative Crown Preps, Bonding / Ray Bertolloti	Nov 2018
Occlusion I workshop	Equilibration / Jose-Luis Ruiz	Nov 2018
Dental Forum -	Occlusion, Restoration, Anesthesia, Pt.Management / Barry Goldenberg, Hugh Flax, Mel Hawkins, Gary Zelesky	Feb 2019
TMD-OFD CDE	Anatomy of TMJ sign & symptions, treatments / Lou Gallia	Jan 2018 – Dec 2018
Adhesion Dentistry	Bonding, Desensitizing Materials, Composites / Ray Bertolloti	Nov 2017

TEACHING APPOINTMENTS (Begin with current)

Name of Institution, City and State	Rank	Subjects/Content Areas Taught/	From	To
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		Administrative Responsibilities	(Year)	(Year)

CURRENT TEACHING RESPONSIBILITIES

Name of Institution, City, State	Course Title	Discipline and Level of Students (Year)	Total Contact Hours Per Year	
			Didactic	Clinic/Laboratory

HOSPITAL APPOINTMENTS (Begin with current)

Name of Hospital	City	State	From (Year)	To (Year)

PRACTICE EXPERIENCE

Location (City and State)	Type of Practice	From (Year)	To (Year)
Sacramento, CA	General Dentistry	1987	Present

MEMBERSHIP, OFFICES OR APPOINTMENTS HELD IN LOCAL, STATE OR NATIONAL DENTAL OR ALLIED DENTAL ORGANIZATIONS, INCLUDING APPOINTMENTS TO STATE BOARDS OF DENTISTRY AND CODA

Name of Organization	Title	From (Year)	To (Year)
SDDS	Membership	1987	Present
CDA	Membership	1987	Present
ADA	Membership	1987	Present

PUBLISHED WORKS (For the most recent five years, list articles in which you were the principal author that appeared in refereed journals or text books, by author(s), title, publication, and date)

Author(s)	Title	Publication	Date
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EXHIBIT T

STANDING COMMITTEE MEMBERSHIP

Committee	Chair	Members	Charge to the Committee	When Comm. Meets
Curriculum	Assoc Dean of Curriculum and Clinical Education	Wai Chan, Richard Simonsen, Michal Cadra, Kevin Keating, Rosemary Wu, Assoc Dean of Academic Affairs, Leon Assael, Raj Ramsamooj (COM), 2 student reps	<p>Evaluate Course and Program Learning Objectives. examine format as well as content considering course learning outcomes, assessment rubrics, the mapping to program learning outcomes, a content outline based on the academic calendar, a schedule of all assignments, credit hours, necessary information about library resources, and all relevant university/departmental policies. The syllabi are also reviewed to ensure that content is appropriate to the level and goals of the DMD program. If significant changes are needed, the committee will provide guidance to the faculty and require resubmission of the syllabus before final approval.</p> <p>Course assessment committees are 3 person committee that reports course reviews to the curriculum committee</p>	

Clinic/ Quality Assurance	Dr. Kevin Keating, Dean of Clinical Affairs	Wai Chan, Asst. Dean of Curriculum, Associate Dean of Academic Affairs, 3 clinical heads (pending), Leon Assael,	Review the goals of the clinical program and assess their success through a quality review process. These will be linked to clinical education goals and goals for patient centered care.	
Admissions	Dr. Richard Simonsen, Dean of Student Affairs, Admissions and Diversity	Wai Chan, Cathy Levering (lay person), 2 community-based members, (pending), Jagdev Heir, Stephanie Sandretti, Eric Wong, multiple students	Screen, interview, and select qualified applicants for admission to the College.	
Student Performance	Dr. Richard Simonsen, Dean of Student Affairs, Admissions and Diversity	A member of the Curriculum Committee, two students, a staff member from the University Office of Institutional Research, Quality, and Assessment, three faculty members	<p>Develop and apply assessment methods to evaluate curricular outcomes.</p> <p>Propose recommendations to the Dean's Executive Committee concerning methods by which the quality of the program and its graduates may continually be evaluated.</p> <p>Review assessment methods as well as remediation policies currently employed and evaluate data obtained from the didactic curriculum, preclinical and clinical experiences. .</p> <p>Evaluate aggregate student progress in achieving the educational outcomes of the College.</p>	
Academic Review/ Promotion and Graduation	Associate Dean of Academic Affairs	All course directors, Assistant Dean of Student Affairs and Admissions	Review individual student performance in the curriculum and make recommendations to the Dean regarding promotion	

			to the subsequent class and graduation Provide individual composite remediation plans and/or accommodations for students having academic difficulties in more than one course	
Institutional Effectiveness	Dean	Executive Council, two faculty members, two students	Systematically review the program goals and assess the outcomes of the strategies employed to achieve those goals. Each year a report to the University of the IEC will incorporate the performance and action of the curriculum committee, the clinic committee and the research committee and make strategic recommendations regarding achieving or further advancing goals. Table 2 stands as the guidepost to the work of the IEC	
Rank and Promotion	Chaired by a professor without administrative appointment		Review the criteria, standards and guidelines that are considered when determining if a faculty member is eligible for promotion. Provide an annual workshop on promotion guidelines and procedures for the faculty. The Promotion Review Committee decision process will conform to the Promotion and Tenure Policy and the Faculty Handbook.	
Research	Dr. Paul Glassman, Dean for Research	Representative from the University Office of	Assess the progress of the research program towards achieving goals and objectives and make	

		Institutional Research, Quality, and Assessment, Representative from the College of Medicine and College of Pharmacy Research teams, 2 students, member of the Curriculum Committee and Course Assessment Sub Committee	recommendations toward applying resources and other pathways towards achieving goals in scholarship and research.	
Executive	Dean	Associate and Assistant Deans, three elected member of the Faculty Senate	<p>Advise the Dean about matters related to the College and delivery of the curriculum.</p> <p>Promote College success.</p> <p>Provide input on financial decisions.</p> <p>Develop and review policies.</p> <p>Establish short and long-term goals that align with the strategic plan of the College and University.</p> <p>Monitor and assess the College's level of performance in meeting its goals.</p>	
Dean's Advisory	Dean	Business, government, philanthropic and community leaders	Facilitate community support for the dental college, identify community and business partnerships in the interest of the educational program, provide guidance on the colleges strategic goals	
Diversity, Inclusion and Climate	Dean of Student Affairs, Admissions and Diversity	Faculty, staff and students	Monitor the efforts and progress being made towards recruiting and retaining a diverse student body, faculty, staff and administrators, and creating and evaluating	

			diversity and inclusion initiatives across campus. This committee will be responsible for providing on-going reports to the Office of the President of the progress being made on these important and compelling issues.	
Standards of Care	Dr. Kevin Keating, Dean for Clinical Affairs	Associate Dean of Curriculum and Clinical Education, Clinic manager, Dental Director of Clinic Operations, Dental Director of Quality Assurance and Infection Control, Discipline Experts for Radiology, Restorative Dentistry, Endodontics, Periodontics, Oral and Maxillofacial Surgery, Pedodontics, Orthodontics, and other committee members as needed.	<p>Develop Standards of Care for patient centered care that are evidence based, and consistent with the calibrated clinical activities of DMD students, and faculty.</p> <p>Evaluation of the various treatment options for patient care using an evidenced based model to develop the CNU methods of patient care to be taught at the CNU College of Dental Medicine.</p> <p>Selection of evidence based technology in patient care.</p>	
Student Wellness	Dean of Student Affairs, Admissions and Diversity			
Faculty Search Committee	Convened as needed, chair chosen by XX based on the faculty positions needed			



EXHIBIT U RESEARCH GRANTS

Indicate the name of the dental school's director of research or chairman of the research committee. Indicate the **total** amount in federal grants received by the dental school during the past four years and the current budget year. Indicate whether the data is for an academic or fiscal year.

Assistant Dean of Research: Paul Glassman DDS, MA, MBA

Note: The following grants are in the process of being transferred to CNU:

FEDERAL/STATE GRANTS

Type of Grant	2019 Budget	2020 Budget			
Specific research project Grants:					
CA Dental Transformation Initiative: Sacramento County	\$135,329	\$104,302			
CA Dental Transformation Initiative: Orange County	\$122,724	\$96,918			
CA Dental Transformation Initiative: San Bernardino/ Riverside Counties	\$239,229	\$197,778			
CA Dental Transformation Initiative: San Joaquin County	\$74,504	\$44,416			
CA Dental Transformation Initiative: San Luis Obispo County	\$65,785	\$50,702			
Valley Mountain Regional Center planning grant	\$25,000				

Estimate the total amount of funds appropriated from the dental school budget, exclusive of grants itemized above, for the conduct of research during the past four years and the current budget year.

This is a preliminary accreditation application. There have been no funds appropriated from the dental school budget for the conduct of research during the past four years and the current budget year



EXHIBIT V
FACULTY RESEARCH INFORMATION

Faculty Member	Research Project	FTE on Project	Funds Allocated	Funding Agency
Dr. Paul Glassman	CA Dental Transformation Initiative: Sacramento County	0.1	\$239,631	State of California
Dr. Paul Glassman	CA Dental Transformation Initiative: Orange County	0.1	\$219,642	State of California
Dr. Paul Glassman	CA Dental Transformation Initiative: San Bernardino/Riverside Counties	0.1	\$437,007	State of California
Dr. Paul Glassman	CA Dental Transformation Initiative: San Joaquin County	0.1	\$118,920	State of California
Dr. Paul Glassman	CA Dental Transformation Initiative: San Luis Obispo County	0.1	\$116,487	State of California
Dr. Paul Glassman	Valley Mountain Regional Center Planning Grant	0.1	\$25,000	Valley Mountain Regional Center



Notice of Request for Third Party Comments

California Northstate University College of Dental Medicine has submitted an Initial Application for accreditation with the Commission on Dental Accreditation (CODA). As part of the accreditation process, CODA welcomes third party comments from communities of interest regarding the accreditation standards as they apply to CNU College of Dental Medicine. These standards address Institutional Effectiveness, Educational Program, Faculty and Staff, Educational Support Services, Patient Care Services and Research.

A copy of the accreditation standards and/or CODA's policy on third-party comments can be obtained by contacting CODA at 211 East Chicago Avenue, Chicago, IL 60611, or by calling 1/800-621-8099, extension 4653. They can also be obtained on CODA's website:

<https://www.ada.org/en/coda>.

All comments must pertain only to the standards relative to the CNU College of Dental Medicine predoctoral program or policies and procedures used in the accreditation process. All comments must be in writing and submitted to the aforementioned address. Comments will be screened by CODA for relevance.

Comments must be submitted to CODA 60 days prior to the site visit. The site visit for CNU College of Dental Medicine is scheduled for xxxxxxxxxxxxxxxx. Attached is CODA's Policy on Third Party Comments.

COMMISSION ON DENTAL ACCREDITATION

POSTING FORM FOR THIRD PARTY COMMENTS

The Commission currently publishes, in its accredited lists of programs, the year of the next site visit for each program it accredits. In addition, the Commission posts its spring and fall announcements on the Accreditation News area of the Commission's website for those programs being site visited January through June or July through December. Special site visits and initial accreditation site visits for developing programs may be scheduled after the posting on the Commission's website; thus, the specific dates of these site visits will not be available for publication. Parties interested in these specific dates (should they be established) are welcomed/encouraged to contact the Commission office.

The United States Department of Education (USDE) procedures require accrediting agencies to provide an opportunity for third-party comment, either in writing or at a public hearing (at the accrediting agencies' discretion) with respect to institutions or programs scheduled for review. All comments must relate to accreditation standards for the discipline and required accreditation policies. In order to comply with the Department's requirement on the use of third-party comment regarding program's qualifications for accreditation or initial accreditation, the following procedures have been developed.

Programs with the status of initial accreditation, and programs seeking initial accreditation must solicit comment through appropriate notification of communities of interest and the public such as faculty, students, program administrators, specialty and dental-related organizations, patients, and consumers.

On occasion, programs may be scheduled for special focused site visits and because of the urgency of the visit, solicitation of third-party comments within the ninety (90) day time-frame may not be possible. However, third party comments must be solicited at the time the program is notified of the Commission's planned site visit. In this case, the timeframe for solicitation of third-party comments will be shortened.

The Commission will request written comments from interested parties on the CODA website. All comments relative to programs being visited will be due in the Commission office no later than sixty (60) days prior to each program's site visit to allow time for the program to respond. Therefore, programs being site-visited in January through June will be listed in the fall posting of the previous year and programs scheduled for a site visit from July through December will be listed in the spring posting of the current year. Any unresolved issues related to the program's compliance with the accreditation standards will be reviewed by the visiting committee while on-site.

Those programs scheduled for review must solicit third-party comments through appropriate notification of communities of interest and the public such as faculty, students, program administrators, specialty and dental-related organizations, patients, and consumers at least ninety (90) days prior to their site visit. The notice should indicate the deadline of sixty (60) days for receipt of third-party comments in the Commission office and should stipulate that signed or unsigned comments will be accepted, that names and/or signatures will be removed from comments prior to forwarding them to the program, and that comments must pertain only to the standards for the particular program or policies and procedures used in the Commission's accreditation process. The announcement may include language to indicate that a copy of the appropriate accreditation standards and/or the Commission's policy on third-party comments may be obtained by contacting the Commission at 211 East Chicago Avenue, Chicago, IL 60611, or by calling 1/800-621-8099, extension 4653.

All comments submitted must pertain only to the standards relative to the particular program being reviewed or policies and procedures used in the accreditation process. Comments will be screened by Commission staff for relevancy. Signed or unsigned comments will be considered. For comments not relevant to these issues, the individual will be notified that the comment is not related to accreditation and, where appropriate, referred to the appropriate agency. For those individuals who are interested in submitting comments, requests may be made to the Commission office.

All relevant comments will have names and/or signatures removed and will then be referred to the program at least fifty (50) days prior to the site visit for review and response. A written response from the program should be provided to the Commission office and the visiting committee fifteen (15) days prior to the site visit. Adjustments may be necessary in the site visit schedule to allow discussion of comments with proper personnel. Negative comments received after the established deadline of sixty (60) days prior to the site visit will be handled as a complaint.

Revised: 2/18; 2/16; 2/15; 8/13; 8/12, 8/11, 7/09, 8/02, 1/97; Reaffirmed: 8/13; 8/10, 1/03;
Adopted: 7/95

INSTITUTION: _____

PROGRAM(S) TO BE REVIEWED: _____

SITE VISIT DATE: _____

**60-DAY DEADLINE FOR RECEIPT OF COMMENTS IN THE COMMISSION
OFFICE:**

(Commission on Dental Accreditation, 211 E. Chicago Avenue, Chicago, IL 60611)



COMPLAINTS

NOTICE OF OPPORTUNITY TO FILE COMPLAINTS

In its Student Handbook, CNU College of Dental Medicine, will provide all students with a notice of their opportunity to file complaints, pursuant to Commission on Dental Accreditation requirements.

The Commission on Dental Accreditation (CODA) is required by the U.S. Secretary of Education to require its dental medicine programs to record and handle student complaints regarding a school's adherence to the CODA Standards. The college must demonstrate a link between its review of complaints and its evaluation of a program in the accreditation process self-study. Therefore, in order to demonstrate compliance with the U.S. Department of Education Criteria for Recognition, and with the prior review and advice of Department of Education personnel, CODA requires dental schools to provide an opportunity for dental students to provide comments and/or complaints about the school's adherence to CODA's Standards.

Additionally, students, faculty, staff, patients, or the public may file complaints regarding adherence to CODA standards directly to the Commission on Dental Accreditation. As stated in the CODA standards:

“The Commission on Dental Accreditation will review complaints that relate to a program's compliance with the accreditation standards. The Commission is interested in the sustained quality and continued improvement of dental and dental-related education programs but does not intervene on behalf of individuals or act as a court of appeal for treatment received by patients or individuals in matters of admission, appointment, promotion or dismissal of faculty, staff or students. A copy of the appropriate accreditation standards and/or the Commission's policy and procedure for submission of complaints may be obtained by contacting the Commission at 211 East Chicago Avenue, Chicago, IL 60611-2678 or by calling 1-800-621-8099 extension 4653.”

REQUIRED RECORD OF COMPLAINT

CNU College of Dental Medicine will maintain a record of student complaints in the Office of Student Affairs and Admissions. Those records are to be made available to CODA visiting committees during regularly scheduled on-site evaluations.



Student Grievance/Complaint Form

This form provides a written record of your complaint. You are also encouraged to discuss this in person with the Assistant Dean of Student Affairs before or after this form is submitted.

Date: _____

Student ID Number: _____

Student Classification D1 D2 D3 D4

Faculty Advisor: _____

BEST CONTACT INFORMATION

Street Address: _____

City/State/Zip: _____

Home Phone: _____

Cell Phone: _____ Work Phone: _____

E-mail address: _____

Complaint Against (names of individual(s))

_____	_____
_____	_____

In the space below, please describe the specific action(s) that have led to this complaint. Attach additional sheets, as necessary.

In the space below, please describe any actions previously sought, the outcome and reason for why the outcome was unsatisfactory.

Signature

Date

Upon completion, place the Student Grievance Form in an envelope, seal and mark the envelope "Confidential" and deliver to the Assistant Dean of Student Affairs and Admissions.



**Student Grievance/Complaint Form to the
Commission on Dental Accreditation
For Issues Related to Program Accreditation Standards**

Date _____

Student Name _____ Student ID Number _____

Student Classification D1 D2 D3 D4

Faculty Advisor _____ Did you discuss this issue with your faculty advisor? ___ Yes ___ No

BEST CONTACT INFORMATION

Street Address: _____

City/State/Zip: _____

Home Phone: _____ Cell Phone: _____

Email address _____ Email address: _____

List the specific Commission on Dental Accreditation (CODA) standard(s) you are commenting on from the CODA website: <https://www.ada.org/en/coda>. Please be specific.

Standard(s)# _____

Please describe the specific reason(s) why the standard(s) is/are unsatisfactory. You may attach additional pages or documents to support your grievance/complaint.

What days/time are you available to discuss this issue? _____

Signature

Date

Upon completion, place the Student Grievance Form in an envelope, seal and mark the envelop
"Confidential." Deliver to the Assistant Dean of Student Affairs and Admissions.



CNU College of Dental Medicine

Complaint Log

Date Received	Name of Complainant	Contact Info	Description of Complaint	Date(s) of Incident	Referred to	Remedy/Action	Date Resolved



California Northstate University
Dental School Task Force
ROSTER

Chair: Kevin Keating, DDS MS

Members:

Wai Chan, DDS

Alvin Cheung, Pharm D

Debra Finney, MS DDS

Jagdev Heir, DMD MD

Huong Le, DDS

Stephanie Sandretti, DDS

Eric Wong, DDS

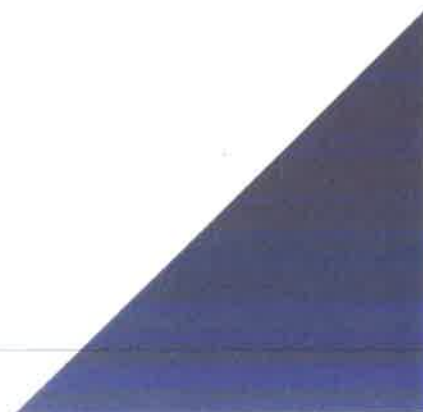
Rosemary Wu, DMD MS

Monitored Dental Programs in California - 2017

SCHOOLS	CODA	APPLIED	ENTERED
Loma Linda	Yes	1,632	102
UCLA	Yes	1,772	88
UCSF	Yes	2,022	86
UOP	Yes	2,364	142
USC	Yes	2,852	144
Western University	Yes	2,995	69
TOTALS	-	13,637	631



CALIFORNIA NORTHSTATE UNIVERSITY
COLLEGE OF HEALTH SCIENCES DENTAL
SCHOOL INTEREST SURVEY, 2019



ITEM RESULT GRAPHS

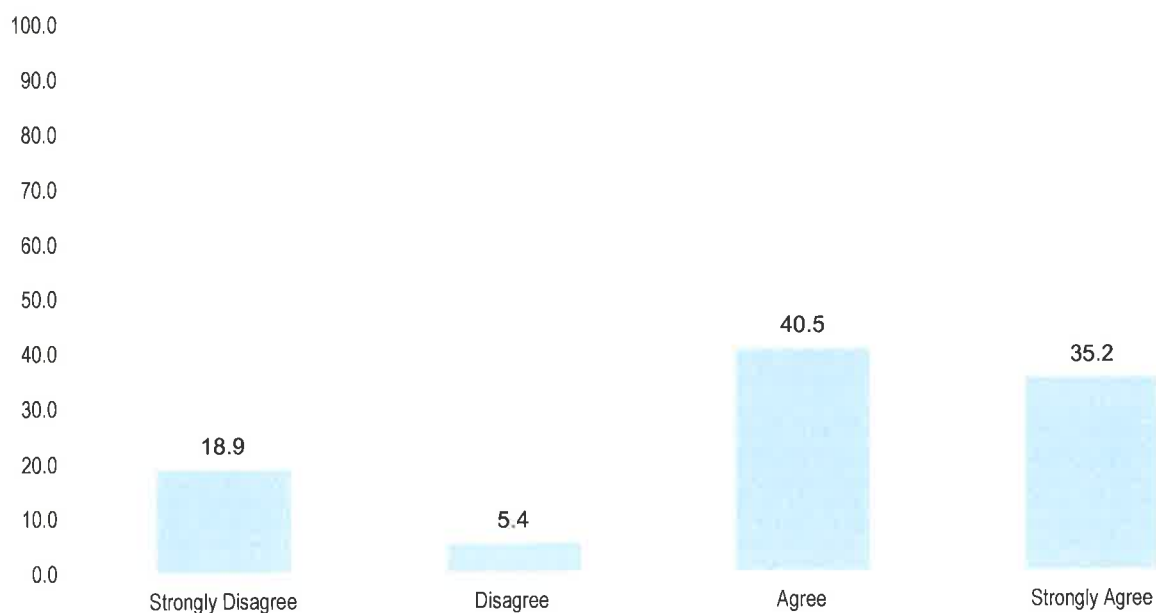
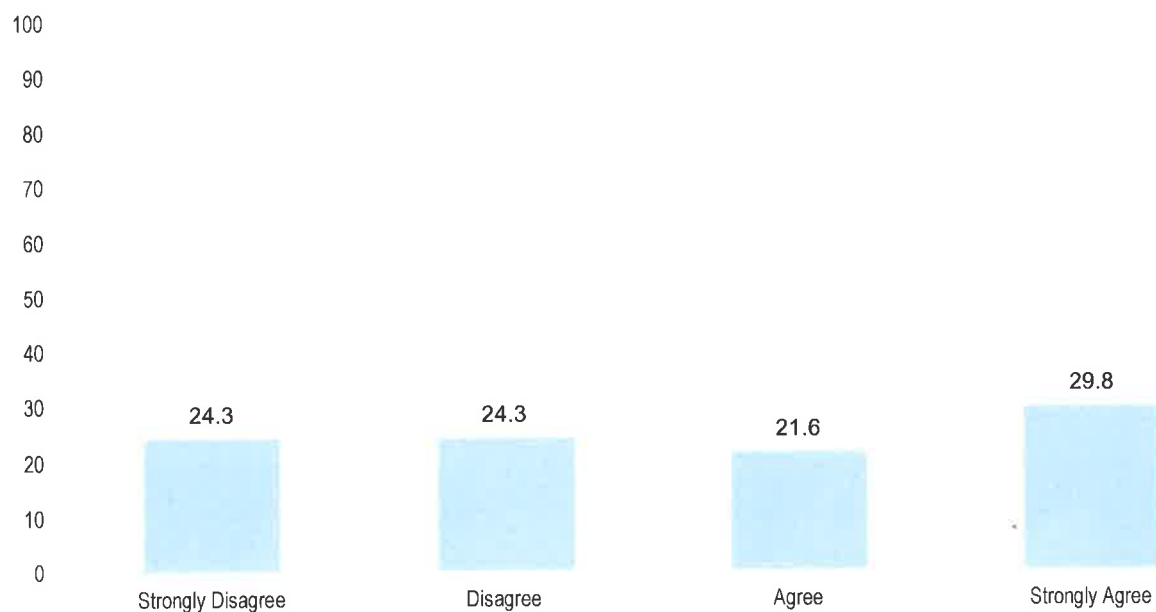
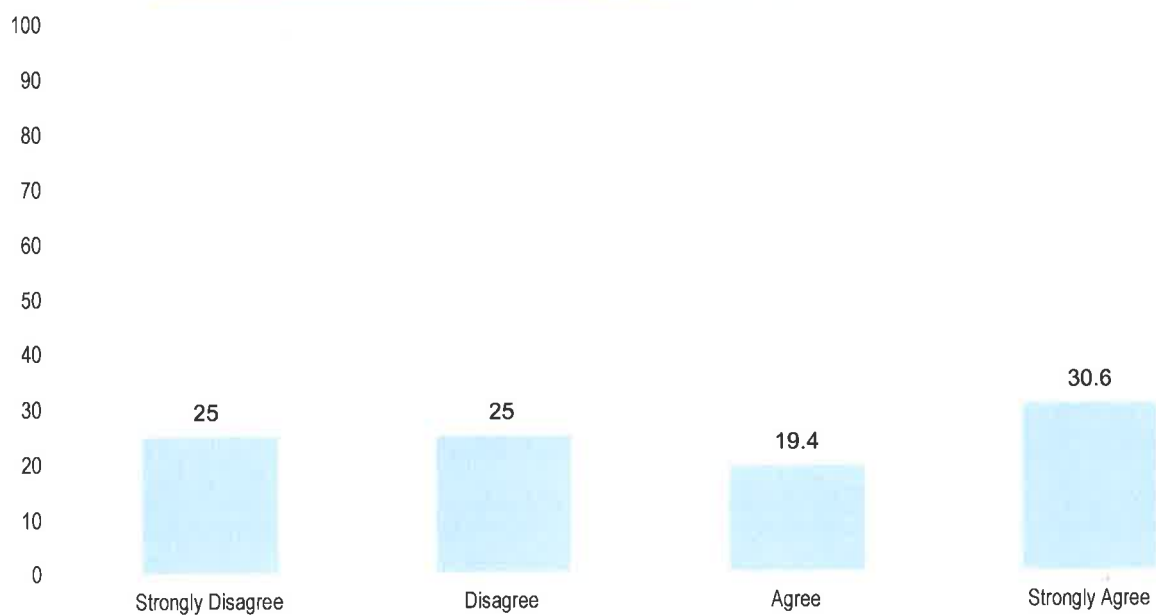
Figure 1. (Q1) I might be interested in more information regarding the dental program at CNU.**(n = 37)****Figure 2. (Q2) I might be interested in pursuing dentistry as a career option (n = 37)**

Figure 3. (Q3) I would apply to our starting dental program at CNU (n = 36)



Dental School Feasibility Work Group Meeting minutes**September 18, 2017**

California Northstate University

9700 West Taron Dr, Elk Grove, Ca 95757

Present: Drs. Alvin Cheung, Wai Chan (facilitator), Kevin Keating, Eric Wong, Debra Finney, Jagdev Heir, Rosemary Wu, Stephanie Sandretti

Meeting was called to order by Dr. Cheung at 7pm

All participants were emailed the most current ADA Health Policy Institute reports on Provider Adequacy in US, California Geographic Access to Dental Care, California Projected Supply of Dentists, and trends in Dental Schools before the meeting, so they all have a general understanding.

It is brought up that although HRSA has estimated there is a current shortage of 7300 dentists, when we talked with our California dental colleagues in dental education, the usual comment is there is no shortage in California, the issue is distribution of dentists. The geographic access report from HPI showed the limited access for rural and inner city population.

HPI reported that the per capita supply of dentists in US would increase through 2035. With respect to Projected supply of Dentists in California, it is projected that there will be a steady increase to year 2025, then go down a little.

Workforce issue and midlevel providers were mentioned.

The workgroup was also informed of the increase of 10 new dental schools since 2008. Total of dental schools as of 2017 is 66.

One dental school withdrew its CODA application due to lack of funding.

We touched the topic of cost. Cost of education, cost of tuition and loan burden, and cost to fund a new school, etc.

When our medical colleagues are paid for their residency training, dentists in residencies still have to pay tuition.

We also talked about the responsibility and accountability of an education institution and mission of CNU - Excellent Education at a reasonable cost.

It was mentioned at the discussion the idea of having residency programs in different specialties before building a new dental school.

We also talked about the demand of dental care in our community, the location of CNU, the cost of living and about partnership with community health centers and FQHCs.

Dr. Cheung suggested that the group meet again. Next meeting will be on **Saturday November 11** at 9 am at CNU.

Dr. Kevin Keating will chair the next meeting.

California NorthState University

Dental School Development Task Force

*Meeting Minutes***Feb 10, 2018**

Location: California NorthState University
Rancho Cordova campus
2910 Prospect Park Drive
Rancho Cordova

Present: Drs. Alvin Cheung (President, CNU), Kevin Keating (Chair), Huong Le, Jagdev Heir, Stephanie Sandretti, Wai Chan

Absent: Drs. Debra Finney, Eric Wong, Rosemary Wu

Meeting was called to order by Chair Dr. Keating at 9:15am.

1. The application/accreditation timeline

The application/accreditation timeline for the establishing the dental college was discussed. The Commission of Dental Accreditation meets twice a year, in January and in June. CNU is already a state and regional accredited higher education institution, but will undergo a substantive change for WSCUC in order to add the dental school. We will need regional accreditation approval to proceed with program accreditation; we will also need program accreditation to have a dental school.

The Task Force discussed and agreed that the Accreditation application will need to be submitted in March of 2018 for CODA. It may be approved in the June of 2019 or perhaps later. We will start our first class as soon as we have undergone regional and then professional accreditation (2019 fall or 2020 fall). Our goal is to have CODA approve all required documentations at its June 2019 meeting so that we can begin a class in 2019 if possible. A site visit will then be arranged. If everything is approved and CNU pass the site visit, then an initial accreditation will be granted. The applying institution will need to have a dental school dean for 6 months before the site visit, which we will have.

Criteria for granting accreditation was reviewed.

See attached CODA Accreditation Requirements.

2. The latest development in preventive oral health and the access and delivery of oral health care.

An open discussion on the latest development in preventive oral health and the access and delivery of oral health care - Kaiser Hospitals Group Long Beach Medical School will have an integrated program (medical, oral health, nursing); expect opening in 6 years. UC Davis has received a donation for a site for possible dental school. New dental school in east state of Washington.

Interprofessional education is the trend and it is important for the health care team to work together. **Wai Chan will check with Western University** to see what they do in their curriculum and the time they allocated in interprofessional education. The dental profession is evolving, and various factors would shape the oral health education, Dr. Cheung requested the task force to keep him informed of changes.

Dr. Cheung shared CNU's advantage –

- faculty,
- integrated curriculum,
- administration, with continuous evaluation on cost, peer and program.

Dr. Cheung also shared CNU's track record of quality education.

Dr. Cheung will email the Task Force the Mission Statement and Objectives of the Dental School so we can all speak with one voice.

3. Consultant considerations and planning

The Task Force agreed it will need a consultant to move the application process forward.

4. Budget planning for the College of Dentistry

The Task Force briefly discussed the annual operating budget of a dental school. Budget of UC Dental Schools is public information and is online. All schools' budgets are different due to class sizes, faculties, clinic income, facilities, researches, etc. The CNU CFO may have to do research on the budget.

5. Additional item

Dr. Cheung informed the Task Force of 3 possible sites for future indigent dental clinics - del Paso area, West Sacramento, Stockton Blvd/highway 99. The Task force will discuss timing and location in future meetings.

6. Future agenda items:

- 1) Program announcement document and new program approval process requirements
 - a. Outline for Program Development
 - b. Identify faculty and other program resources
 - c. Information about opportunities for graduates
 - d. Relationship of proposed program to existing program and to the University Plan
 - e. Need analysis of the Dental Program
 - f. Resources' requirements, implementation plan, proposed timeline.
- 2) Indigent oral health centers and revenue discussion

7. Next meeting date and location will be notified by D. Cheung's assistant.

Meeting adjourned at 11 am

California Northstate University

Dental School Development Task Force

Meeting Minutes**May 26, 2018**

Location: California Northstate University Rancho Cordova Campus
2910 Prospekt Park Dr,
Rancho Cordova, Ca

Present: Drs. Alvin Cheung (President, CNU), Kevin Keating (Chair), Huong Le, Eric Wong, Stephanie Sandretti, Wai Chan

Absent: Drs. Debra Finney, Jagdev Heir, Rosemary Wu

Meeting was called to order by Chair Dr. Keating at 9:18am.

1. Consultant considerations and planning

Dr. Cheung reported that CNU intended to move forward with dental school development, pending approval from Board of Trustees.

Dr. Keating also reported the dean of an East Coast dental school suggested that CNU have a clearly defined mission, vision, goal and objectives of the new dental school so the consultants can work within the requirements from CNU.

Dr. Le suggested Dr. Leon Assael - former dean of 2 dental schools, former site leads in CODA dental school site visits, current consultant on site visits, current Chair of Board of Directors of ADEA. Dr. Assael is currently in the SF Bay Area and will be easy for him to come to CNU. Dr. Le will link up Dr. Assael with Dr. Cheung. It was suggested that Drs. Keating and Chan also participate in the phone conference when Dr. Cheung talk with Dr. Assael.

Both Dean Chadwick of East Carolina University Dental School and Dean Nadershahi of UOP Dugoni School recommended Karl Haden of Academy of Academic Leadership(AAL). The Task Force has not made any decision to contact AAL at this time.

The same dean also stated that their dental school utilized 2 consultants for their curriculum development. The consultants then hired 40 dentists/speciaists from universities around the country to develop the curriculum submitted with the application..

There were discussion on having just one consultant or a team of consultants. There were also discussion on advantage of employing a dean first. It was brought up that nobody knows everything and it's important to utilize consultants helping the Dean.

Motion:

To Retain a consultant/consultants for California Northstate University College of Dentistry CODA application.

Motion passed

2. Report to the Board of Trustees and seeking formal approval to establish the dental college.

Motion:

The Dental School Development Task Force has gathered sufficient information and recommends the Board of Trustees to favorably consider moving forward with the California Northstate University College of Dentistry.

Motion passed

3. Curriculum design strategy

The following dental schools faculties are mentioned:

Dr. Connie Chu, former Assistant Dean of Clinical Education at Arizona School of Dentistry and Oral Health.

Dr. Sophia Saeed, Associate Professor at UCSF Dental School,

Dr. David Chambers, current Professor and former Academic Dean at Dugoni School of Dentistry.

CNU should take advantage of the presence of College of Pharmacy, College of Medicine to incorporate interprofessional education into its dental school curriculum. Having a university based hospital will help.

Dr. Cheung shared with the task force that when CNU Medical College developed its curriculum, CNU gathered 60 MDs from different specialties. The 60 MDs were asked:

- a) What is considered as adequate competency when medical students are assigned into rotations?
- b) What would you like to teach the students when they are in your rotations?
- c) How would you teach the required discipline in the Integrated Curriculum?

This preparation has helped CNU in developing its medical college curriculum.

Dr. Cheung asked if it is possible to invite a group of dentists to do the same and to develop a program and educational courses with outcome objectives that meet competency.

It is the task force's consensus that this can be done and the invitees should include faculty from dental schools.

It may be necessary to have three focus groups:

- i) clinicians
- ii) academics
- iii) budget

Current IT systems, Simulation systems in use are discussed. May get help from Western University College of Dental Medicine.

One of the California Dental Licensure Options is Licensure by Portfolio.

Dr. Huong suggested that all CNU dental students completed their Clinical Portfolio so they will be licensed to practice immediately after graduation from CNU Dental School. In this case, they do not have to wait for their examination results. This will make CNU Dental School different from current California dental schools

4. Budget for the planning committee

Motion:

The Dental School Development Task Force requests funding for consultants, CODA application and planning through summer 2019.

Motion passed.

5. Budget planning for the College of Dentistry

Number of students. Number of clinical dental chairs, Sim Lab, Clinical spaces are discussed. Suggested for 50 dental students, divide the class into morning clinic and afternoon clinic. The clinic will need 30 chairs with each operatory at a 10ftx12ft space. Vendors are known to be willing to work with dental schools. CNU should contact established vendors, The Dentists Service Company of CDA, and check with Dental College Deans to see who they use.

Extra mural clinics: Underserved area – Stockton Blvd, West Sacramento, Del Paso. To meet the need of rural areas, CNU has to recruit from rural and underserved area students who are willing to go back to the underserved area.

Dr. Cheung shared that CNU picked students who are determined to work hard and willing to serve the communities they come from.

Researches have showed that students admission GPA has nothing to do with their performances at licensure examinations. Their MCAT results and their school block performances do have a correlation to their licensure examinations result.

CNU College of Pharmacy and College of Medicine provide tutoring for students. Free tutoring for those requested by faculty and fee based tutoring for students who request on their own.

6. Application Timeline to CODA

Submit CODA application with the first year curriculum by December 2018.

7. Top academic job descriptions – CNU to post the positions after approval from Board of Trustees to move forward with the College of Dentistry.

- Dean
- Assistant or Associate Dean of Academic Affairs
- Assistant or Associate Dean of Curriculum
- Assistant Dean of Student Affairs

8, Program announcement document – Task Force will have to submit the Document, further discussion at next meeting.

- a. Outline for Program Development
 - b. Identify faculty and other program resources
 - c. Information about opportunities for graduates
 - d. Relationship of proposed program to existing program and to the University Plan.
 - e. Need analysis of the Dental Program.
 - f. Resource requirements, implementation plan, proposed timeline.
9. Indigent oral health centers and revenue discussion – will discuss at next meeting.

Natalie will send out schedule for next meeting.

Meeting adjourned at 11:45am

California North State University

Dental School Planning committee

Meeting

August 4, 2018

Location: California North State University
Rancho Cordova campus
2910 Prospect Park Drive
Rancho Cordova

Present: Drs. Alvin Cheung, Kevin Keating, Wai Chan, Jagdev Heir, Huong Le, Stephanie Sandretti, Eric Wong

Absent: Drs. Debra Finney, Rosemary Wu

Meeting was called to order by Chair Kevin Keating at 9:24 am

1. The application/accreditation timeline for the establishing the dental college; Accreditation application process and plan

Dr. Cheung shared with the committee his presentation to BOT.
Slides - on progress of the task force and information collected.
The BOT has approved for CNU to proceed on developing a dental college.
CNU is aware of students debt load and would take that into consideration when planning on tuition and fees.

Dr. Cheung updated the committee on timeline for College of Dentistry.

- Active seeking of future deans: search committee formed.
- Turn in application to CODA by March 2019 to give us time to fully develop curriculum and plan labs.
- Attempt to get approval by June 2019.
- The key for a successful dental education is the curriculum.
- It was suggested that the future dental college be known as the College of Oral Medicine.
- Stephanie Sandretti to email the dental caduceus logo to Dr. Cheung.

2. Consultant and dean start up team options and recommendation.

Deans positions have been posted at CNU website.
Members are asked to consider the available positions.

3. Curriculum design strategy

Ideas shared and suggestions made during committee meeting will be shared to the future dean of curriculum development.

It was consensus in the committee that dental students' technical skills required mentoring.

Basic sciences in the first year.

To make sense of the sciences, it was suggested that practicing dentists/faculties, in group discussions, share with students on how the science is applied to clinical practice. Case studies.

Subject matters in modules throughout the 4 years of education.

Specialty rotation for 6 weeks in the 4th year.

Dr. Cheung needs to present program announcement document (see item 6) at Board of Trustees meeting. It was suggested that we may need input from the future dean.

4. Budget for the planning committee

Members will receive copies of the proposed budget, Income and cost from Dr. Cheung.

Health Plan from CNU was suggested. Captive Insurance was mentioned.

5. Indigent oral health centers and revenue discussion

- Satellite Dental clinics for indigent population and also for student trainings. Students will rotate thru the sites.
- With respect to our social accountability and exposure of our students to dental ethics, we cannot limit the indigent population to the indigent clinics. On campus dental clinic should be opened to all. Service should be the same.
- Partnering with existing health centers was mentioned.
- CNU plans to start with 80 students per year. 2% drop out rate.
- Locations of the dental clinics to be accessible. Depends on the location, students may get to learn some basic foreign language.
- Plan big, consider 200 chairs, plumbed.
- In addition to school clinics in underserved area, senior students may get to rotate to FQHC in other Northern California cities and rural areas, also specialty training rotations.
- Wai Chan to contact Dr. Mort Rosenberg of Ca Department of Correction on donations of their used chairs and equipment.
- Huong Le will be having phone conference with Drs. Cheung and Keating next week. Dr. Cheung will email Dr. Le the topics of discussion.

6. Future agenda items:

- 1) Program announcement document
 - a. Outline for Program Development
 - b. Identify faculty and other program resources
 - c. Information about opportunities for graduates
 - d. Relationship of proposed program to existing program and to the University Plan
 - e. Need analysis of the Dental Program

- f. Resources' requirements, implementation plan, proposed timeline

7. Travel expenses

Dr. Cheung will provide form.

54 cents per mile for travel expenses.

Need to plan for site visits of dental schools.

The committee will consider attending ADEA MEETING 2019 March in Chicago

8. Planning Committee membership, attendance and commitment policy discussion

Members need to disclose conflict of interest, recuse from discussions on matters of conflict.

9. Next meeting date and location

Phone conference August 31 time to be determined, and September 21 at 3:30 pm

Adjourned at 11:40 pm

Respectfully submitted,

Wai M Chan

Key:

ISA-Independent Student
Analysis

EA- Enrollment Agreement

Board of Trustees Meeting Minutes**Council Meeting Minutes Day 1: 8/13/17 Start Time: 10:00 a.m.****Location: Napa Valley Lodge**

Present: *Chair-* Candace Fong, *Vice Chair-* Jim Walsh *Trustees:* Jody Stewart, Aung-Win Chiong, Shelton Duruisseau, Peter Tenerelli, Chiang Wang, Robert DeBruin, Barbara Livermore, Koon Siwabessy, *President-* Alvin Cheung, *Dean of COM-* Joseph Silva, *Dean of CHS-* Heather Brown, *General Counsel-* Paul Wagstaffe, *HR Manager-* Heidi Herman, *VP of Institutional Research-* Karen McClendon

Guest: *CFO/VP of Finance-* Shoua Xiong, *VP of Biotechnologies and Dean of Graduate Studies-* Catherine Yang

Absent: *Trustee-* Jeana Colabianchi, *Dean of COP-* Hieu Tran

I. Approval of Minutes

- a. Motion: Shelton Duruisseau
- b. Second: Jody Stewart
- c. Abstain: 0

II. Deans Report

- a. COM:
 - i. Accreditation update: continue preliminary accreditation with visit in June of 2019
 - ii. Curriculum Retreat: Full day course, reviewed all courses, converting to a mapping system with Med Hub, course committee review groups formed.
 - iii. Student Update: 1 student in remediation
 - iv. Update on Faculty: no new faculty hires, Skype interviews on anatomy currently happening.
 - v. Faculty/Staff resigned: 1 Clerkship Coordinator
 - vi. Staff new hires: 1 new anatomy lab tech, and 1 student wellness coordinator
 - vii. Student update: 94 enrolled, 13 students from CHS
 - viii. Faculty accomplishments: new elective courses, publications, student scholarly activities
 - ix. ISA: Updated this year with better survey questions that relate more to current updates that have been made. Will issue out in 3 cycles.
- b. CHS:

- i. Faculty and Staff: 1 new full time bio, 3 adjuncts in summer, 4 adjuncts for fall, 2 admin assist, 3 employees released, planning to hire 2 full time faculty
- ii. Student courses: 13 new courses developed for summer and all 2017 (positive results from new courses)
- iii. Admissions update: 69 incoming students for fall of 2017, reviewed demographics of incoming students
- iv. Strategic Recruitment Plan 2017-2020: building brand, generating applications (goal: 1000), selecting the class (goal 650 admitted), enrollment and yield (goal 240 EAs, and registration (goal 120 matriculated).
- v. Performance Metrics: reviewed GPA of matriculated students, reviewed progression of students going into COM/COP, no formal academic alerts because they are paired with faculty advisors and flagged prior to any major academic alerts (catch early on), 2 remediation's, and 5 withdrawals.
- vi. PMPB Success and Improvement: represents what students need to be successful (handout passed out)
- vii. Student Activities: MMI interview, new clubs, student government
- viii. Celebrations: 13 students accepted into COM, teaching excellence award, conference presentations.
- ix. Peter Tenerelli: pleased with growth. Do you feel you have the necessary resources to market and brand? Dean Brown-Will work as a team to see what will help us the most, creating an action plan. New recruiter plan is to have a stronger marketing background.

III. HR Report

- a. Conflict of Interest: no conflicts discovered, two new employees reviewing the form, binder in review
- b. Harassment Prevention Training: 99% complete
- c. Performance Update: completed just recently, can now review for annual merit increase based on data, changes for next year are updated forms, additional training and a streamlined process.
 - i. What will merit increase look like? Budget for 2% but a range of 0-5%
 - ii. Will there some be 0 increase? yes
- d. FERPA update: in compliance, 3 need to complete
- e. Fun Stuff: University strategic retreat, retirement celebration, CNU BBQ, and summer town hall. Employee of the Quarter was Gail Kubat.
- f. New Employees: 7 new faculty hires, and 4 part-time faculty, 8 new staff members
- g. Promotions and Changes: 3 promotions and 1 transfer from COP to COM
- h. Resignations: 6 resignations leaving and 6 others let go.

- i. Is salary an issue? Various reason why employees left
- i. Requisitions: wrapping up quite a few
- j. Benefits: open enrollment, same medical, dental and vision benefits, pet insurance, tickets at work.
- k. Paycom: first check date October 13, all employees have access to their files, will use a biometric clock.
 - i. Candace Fong: What will be considered tardy? Policies need to be reflected. Alvin Cheung: will give a range for punching in and out. ii. Chiang Wang: What if a faculty members have off campus meetings? How do you count the number of hours? Alvin Cheung: will have different codes.
 - iii. Candace Fong: As exempt employees, it will be a problem. iv. Heidi Herman: Main goal is for the hourly employees and per diem
 - v. Candace Fong: Why would the students clock in and out?
 - vi. Candace Fong: Are there any other universities that require the faculty/students clock in? Alvin Cheung: Not that he is aware of. Candace Fong: Are there other ways to make faculty accountable? Seems like a major red flag.
 - vii. Chiang Wang: Always make sure we have office hours, and make sure they are present. Design times where everyone needs to be present. Want to make sure we are not the only ones using this type of system otherwise there will be more retention problems. Needs flexibility. Need to tell faculty members and exempt employees how the information collected will be used.
 - viii. Candace Fong: Can it be rolled out to staff first and hold off on faculty?
 - We are already needing to address the turnover.
 - ix. Further discussion during Executive Session
- 1. Upcoming Events: Kings Games, Thanksgiving Potluck, Holiday Party

IV. Approval/ Review of Policy and Procedures

- a. Faculty & Staff Retention Policy: minor edits
- b. Non-Renewal of Faculty Appointments: Replaces previous policy
 - i. Motion: Peter Tenerelli
 - ii. Second: Shelton Duruisseau
 - iii. Action Item: Make edits with the other polices that change due to this policy. Motion: Chiang Wang, Second: Koon Siwabessy
- c. Administrative Appointments: New PEC approved.
 - i. Motion: Robert DeBruin
 - ii. Second: Jim Walsh
- d. Diversity and Inclusion Policy: adds gender identity and gender inclusion
 - i. Motion: Robert DeBruin
 - ii. Second: Shelton Duruisseau

- e. Crisis Management & Communication: provides procedure for crisis and emergency reaction and communication. Add Candace Fong to ENS system.
 - i. Motion: Chiang Wang
 - ii. Second: Barbara Livermore
- f. Legacy Admission: Tightens definition of immediate family
 - i. Motion: Koon Siwabessy
 - ii. Second: Jim Walsh
- g. Ask to board that medical leave of absence should not be counted toward the period of time while on leave for Leave of Absence. Candace Fong: Bring this back to next meeting. Motion: Livermore, Second: Wang

V. President's Report

- a. Vision: Growth of university over next ten years
- b. Core Values: reviewed
- c. Our Achievements: COP graduated 51 with honors, no tuition increase for fall 2017 for COP, COM successful clerkship training, WASC accredited for next 8 years.
- d. Continuing Education: Training of preceptors (live and on line) e. Facility Update: pharmacy practice simulation lab upgrade, new classrooms for psychology program, CHS buildout, event center complete, seven college rooms, NMR, ultra-quiet study room.
- f. Operations Technology: Paycom, Budget Maestro, Share Point, Med Hub
- g. Staff and Faculty Retention: tuition subsidy for employees, employee tuition discount, King's tickets
- h. Trustee Development: annual trustee conference
- i. Big Celebration: Reaccreditation Gala

VI. Committee Reports

- a. Academic and Assessment: Dr. McClendon
 - i. Part 1 of self-assessment passed out, once filled out place on table.
 - ii. COP/COM Student learning focus: inter-professional education with new events.
 - iii. PLO new outcome results presented. Class of 2018 COP all PLO results were developed. CHS and COM will be presented next year, still collecting data. Class of 2017 PLO results were Proficient
 - iv. COM mapping and alignment: aligned CLOs with PLOs and ILOs
 - v. Accreditation: 4 recommendations, 6 commendations
- b. Finance Update: Ms. Xiong
 - i. Financial Audit: cycle will start in September, physical inventory count (labs, IT, classrooms). Reviewed financial audit timeline.

- ii. Budget to Actual: Reviewed budget through July of COP, COM, CHS and West Taron Holdings
- iii. Reviewed key metrics for target enrollment to keep in balance for the budget.
- iv. Financial Aid Packages about 90% completed, expect to have all completed by orientation.
- v. Reviewed 2018 budget cycle
- vi. Upcoming Events: 401k audit, K-1 schedules for all members, and Cathy Bank audit
- c. Governance and Succession Planning: Drs. Wang and McClendon
 - i. Reviewed committee memberships, members are encouraged to fill out a preference sheet of what committee they prefer to be on.
 - ii. Reviewed what it takes to be an effective board member.
 - iii. A strengths and improvement discussion worksheet was discussed
 - iv. Improvements opportunities were described, such as having the Academic Committee present the Deans reports.
 - v. Succession Planning

VII. Adjournment

The meeting was adjourned 3:30pm and went in to executive session

Day 2: 8/14/17

Start Time: 8:30am

Present: *Chair-* Candace Fong, *Vice Chair-* Jim Walsh *Trustees:* Jody Stewart, Aung-Win Chiong, Shelton Duruisseau, Peter Tenerelli, Chiang Wang, Robert DeBruin, Barbara Livermore

President- Alvin Cheung, *Dean of COM-* Joseph Silva, *Dean of CHS-* Heather Brown, *Dean of COP-* Hieu Tran, *General Counsel-* Paul Wagstaffe, *HR Manager-* Heidi Herman, *VP of Institutional Research-* Karen McClendon

Guest: *CFO/VP of Finance-* Shoua Xiong, *VP of Biotechnologies and Dean of Graduate Studies-* Catherine Yang

Absent: *Trustee-* Jeana Colabianchi

I. Deans Report

a. COP

- i. Class of 2021- 140 confirmed students, reviewed demographics
- ii. Faculty Status: two people left COP, and about 69% of positions have been filled.
- iii. Accreditation: self-study report due October 15, 2017. Comprehensive review 2018-2019.

- iv. Academic Performance Review: 127 alerts generated, 2 dismissed from CO 2019, 1 appealed dismissal from CO2020.

II. New Program Update

- a. PsyD: Start Fall 2019, business case presented in May, in final interview process, curriculum under full scale development, will be a substantive change, will be updating the airport ads. Reviewed program curriculum.
- b. MPS: Dr. Yang presented on the Master of Pharmaceutical Sciences program. Start fall 2019, reviewed some biotech companies, 2-year program, with minimal requirement of 31 units, two tracks (thesis or capstone), developed PLOs, program size is 15-20 initial phase, reviewed a proposed budget.
- c. MPH: Deferred
- d. CON: Fall 2020, dean consultant interviewed, chief nursing executives meeting conducted.
- e. Pharm Research Manufacturing: Spring 2020, 7 patents from US patent office, potentially two more in the process of acquisition, and research organization firm acquisition is under discussion.
- f. COD: BOT endorses the new program
- g. Perinatal Ultrasound: Winter 2017, provide the service, faculty practice plan
- h. New proposed structure accepted, two new positions (chief academic officer and senior vice president)

III. Strategic Plan Update, Dr. Karen McClendon

- a. University retreat: representatives from each college, alignment of SPs, reviewed collected evidence, recommended new strategies and tactics. COM and COP are fully aligned. Reviewed some of new tactics that were suggested at the meeting.
- b. New Goal: Advocacy and Health Policy- develop health policy leaders and change makers
- c. Board approves the new goal. IV. BOT Candidate
- a. No report
- b. Collected all forms, will report to Dr. Fong then assign members to committees.
- c. Once members assigned to Nomination Committee those members will start recruiting.
- d. Will need to create a 3-5-year plan.

V. BOT Meetings and Holiday Party

- a. Holiday Party Friday December 15
- b. November 28th at Rancho Cordova at 2pm for the next BOT meeting

VI. Succession Planning

- a. Dr. Wang gave a brief discussion on the steps of succession planning

VII. Adjournment

The meeting was adjourned at 10:45am

VIII. Executive Session
Trustees only

Signature of Chair and Secretary:


Candace Fong, Chair

11/28/17
Date _____

Natalie Vachalek

Natalie Vachalek, Secretary

11/28/17
Date _____

**Board of Trustees Meeting Retreat Minutes
Day 1**

Council Meeting Minutes: 6/3/18

Start Time: 9:30 a.m.

Location: South Lake Tahoe, CA

Present: *Chair-* Candace Fong, *Vice Chair-* Jim Walsh *Trustees:* Jody Stewart, Aung-Win Chiong, Shelton Duruisseau, Chiang Wang, Robert DeBruin, Wai Chan, Koon Siwabessy, Jeana Colabianchi, *President-* Alvin Cheung, *General Counsel-* Paul Wagstaffe, *VP of Institutional Research-* Karen McClendon

Absent: *HR Manager-* Heidi Herman

Guest: *CFO/VP of Finance-* Shoua Xiong

I. Approval of 2/27/18

- a. Motion: Shelton Duruisseau
- b. Second: Robert DeBruin
- c. Abstain: 1

II. Committee Reports

- a. Academic Committee (Dr. Karen McClendon)
 - i. Presented on highlights of all Deans reports
 - ii. Full Deans reports given to trustees
 - iii. Would like status updates from the Deans
 - iv. Would like to have regular admissions updates
 - v. Reviewed COM report
 - 1. Academic learning
 - 2. Wellness program
 - 3. Accreditation
 - 4. Student publication noted on presentation that those are extra publications not related to curriculum. At the next meeting prepare more bullet points and where we are headed and where we want to be.
 - 5. Annotate when there are low class ratings why that may be
 - vi. Reviewed CHS Report
 - 1. More CHS Students have been admitted to COM and COP
 - 2. Recruitment numbers are increasing for the following year
 - 3. Working on building brand of CHS by running the Summer Science Camp

- 4. Once enrollment increases, CNU will look more into housing options
- 5. CHS Research Day was a great success and WSCUC visit was on the same day. The visiting team was really impressed by the presentations.
- vii. Reviewed COP Report
- viii. Reviewed CPsy Report
- b. Audit Committee (Dr. Aungwin Chiong)
 - i. Moss Adams completed audit in mid-March
 - ii. Moss Adams provided an unmodified opinion
 - iii. Audit results showed no changes in external audit.
 - iv. Consistent policies being followed
 - v. Total revenues have continued to grow throughout the years
 - vi. Debt to equity ratio is lower due to controlled budget
- c. Finance Committee (Dr. Koon Siwabessy)
 - i. Will now give monthly closing updates
 - ii. Reviewed Budget to Actual for April
 - iii. Positive net income for COP- approximately 3 students on LOA
 - iv. Positive net income for COM- approximately 5 students on LOA
 - 1. Suggest changing name of LOA to a different designation
 - v. Net loss for CPsy – no students currently – projection for enrollment is 30 students
 - vi. West Taron Holding currently has 5 properties.
 - vii. Combined P&L for all for schools of 1.4M
- d. Scholarship and Fund Committee (Dr. Jim Walsh)
 - i. Gave a breakdown of the scholarships offered for each program
 - ii. Reviewed the fund development and sources of scholarships
 - iii. Approximately \$569,209 was awarded in 2017

III. Presidents Report (Dr. Alvin Cheung)

- a. Student Success of COM, higher national exam results for Step 1
- b. Reviewed rates of residency match compared to the national average for Step 1
- c. Nursing Program Update: Department of Consumer Affairs voted to put a moratorium on nursing school approvals and expansions
- d. Dental Program Update: Reviewed the 6 main interest in starting a dental school which the board approved at the last meeting.
 - i. Reviewed the demand for the different specialties
 - ii. Reviewed the national debt average of dental school graduates
 - iii. Reviewed the phase of accreditation and timeline for dental school.
 - iv. Ask board to support the motion:
 - 1. To retain a consultant for CNU COD for the application.

2. Task force gathered sufficient information and recommends the board of trustees to favorably consider moving forward with the CNUCOD.

3. CODA task force requests funding for consultants. CODA application and planning through summer of 2019.

a. Motion: Robert Debruin

b. Second: Jeana Colabianchi

c. Abstain: 1

e. Master of Pharmaceutical Sciences: WSCUC conditionally approved the program with recommendations.

f. Research Update: Reviewed the research projects in each college.

g. National Trustee Conference: reviewed the forecast of the future of education.

i. Cyber security issues: multiple layers of defense ii. How to bring in the next generation of board members

IV. Human Resources (Dr. Alvin Cheung)

a. Total number of current employees: 173 – Where do we want to be with enrollment? – No fixed target, employment revolves around enrollment.

b. Conflict of Interest is up to date

c. Harassment Prevention will be done through Paycom

d. Performance Evaluations: Approximately 60% complete, goal to be completed by end of June

e. FERPA – up to date, annual training will be at summer town hall

f. Reviewed new faculty, staff and student hires

g. Reviewed promotions and changes within the University

h. Include: will the resignations affect attrition rate for WSCUC? Karen-will have to do an evaluation of employees who have left CNU and prepare if WSCUC inquires.

V. Strategic Planning and Accreditation Update (Dr. Karen McClendon)

a. Reviewed the updates to the strategies to the strategic plan

b. Ask board to endorse the new tactics presented. Rubrics will be created after board approval.

i. Motion: Jim Walsh

ii. Second: Robert DeBruin

c. Showed the progress from 2017 to current meeting in 2018.

d. Analytics and Dashboards

i. Created grade check and GPA dashboards for CHS

ii. Created dashboards for PLOs, CLOs, ILOs for COP

iii. COM currently working on gathering data to create dashboards

iv. Dashboard for the Registrar's Office

v. Dashboard for the Business Office

e. Accreditation

- i. CPsy Program (interim) approval by WSCUC, waiting for official letter
- ii. MPS Program – WSCUC team approved the change and the program, awaiting final approval from WSCUC Commission in June.

VI. Executive Session

- a. Trustees, President, and General Counsel.

VII. Adjournment

- a. The meeting was adjourned at 2:11pm

**Board of Trustees Meeting Retreat
Minutes
Day 2**

Council Meeting Minutes:

6/3/18

Start Time: 8:30
a.m.

Location: South Lake Tahoe,
CA

Present: *Chair-* Candace Fong, *Vice Chair-* Jim Walsh *Trustees:* Jody Stewart, Aung-Win Chiong, Shelton Duruisseau, Chiang Wang, Robert DeBruin, Wai Chan, Koon Siwabessy, Jeana Colabianchi, *President-* Alvin Cheung, *General Counsel-* Paul Wagstaffe, *VP of Institutional Research-* Karen McClendon

Absent: *HR Manager-* Heidi Herman

Guest: *CFO/VP of Finance-* Shoua Xiong

I. Investment Policy (Shoua Xiong and Paul Wagstaffe)

- a. Policy review and purpose
 - i. To provide a well thought out framework from which sound investment decisions can be made
- b. Reviewed the investment objectives and key terms
- c. Authorized decision makers are the board of directors for the final approval authority of the investment policy and any future modification. The BOD will manage the University's assets subject to the provision of the Investment Policy Statement (IPS). The Board of Trustees shall be the endorers for recommendation.
- d. Key Provisions
 - i. Assets of the portfolio must be diversified
 - ii. Copy from slides
- e. Risk tolerance: risk needs to be balanced with the need for returns to achieve the investment goals.
- f. Frequency of IPS Review: the advisor and the finance committee from the BOD will meet at least annually to review.
- g. IPS will also be reviewed by the Trustees as well.
- h. The BOT ask to see the full policy to review
- i. The BOT are asked to endorse to raise the 20M to 50M and will

bring back annually for a summary of IPS. The responsibility to remain with the BOD.

II. Enrollment Management (Dr. Cheung)

- a. Managing enrollment
 - i. Clear education mission, branding, building community good will and reputation, marketing, differentiation, intake efficiency and high touch personalized response, academic advantage, and communication with prospective students and parents when needed.
- b. Focus on activities that have direct effects
 - i. Web site shows snapshot of student life activities, early buy of SAT, ACT mail list based on scores, campus tours in spring, research days, community service days, health fair events, using PAL and credit card payment for supplemental applications.

III. PO Policy (Shoua Xiong)

- a. Reviewed the Purchase Order Policy
- b. Make sure all individuals understand that to use university funds prior approval is needed.
- c. Properly train employees how to do a PO
- d. Review what is needed to purchase for the curriculum
- e. Add a section of what happens when a PO is denied

IV. Executive Session

- a. Trustees, President, and General Counsel.

V. Adjournment

The meeting was adjourned at 12:00 pm

Signature of Chair and Secretary:

Jim Walsh

3/12/19

Jim Walsh, Chair

Natalie Vachalek

3/12/19

Natalie Vachalek, Secretary

Date _____

Board of Trustees Meeting Minutes

Council Meeting Minutes: 10/30/18

Start Time: 2:15 p.m.

Location: Room 108, College of Health Sciences

Present: *Chair-* Jim Walsh, *Vice Chair-* Robert DeBruin *Trustees:* Amy Tong, Margret Delmore, Andrey Mikhailitchenko, Aung-win Chiong, Wai Chan *President-* Alvin Cheung, *General Counsel-* Paul Wagstaffe, *HR Manager-* Heidi Herman, *VP of Institutional Research-* Karen McClendon

Absent: *Trustee-* Shelton Duruisseau

Guest: *CFO/VP of Finance-* Shoua Xiong, *Dean of Dental Medicine-* Leon Assael

I. Introduction of Trustees

II. Introduction of Dean of Dental Medicine

- a. Dean Leon Assael gave a brief description of his background
- b. Presented on the progress of the College of Dental Medicine
- c. Gave reasons on why the Dental College should begin and why it is a need in California.
- d. Gave a timeline of accreditation

III. Human Resources

- a. Ms. Herman gave updates current employee updates
- b. Reviewed new hires for all colleges
 - i. DeBruin: For new employees please indicate what position they were hired for.
- c. Reviewed promotions and changes
- d. Reviewed resignations and terminations
- e. Reviewed open positions for all colleges
- f. Wai Chan: How many IT people do we have on staff? -5 employees combined with full and contract employees.

IV. Accreditation Update

- a. Dr. McClendon reviewed the updates since the last meeting
- b. MPS (Master in Pharmaceutical Sciences) had final approval
- c. PsyD had final approval
- d. Dental Medicine College Update: Application was submitted on 10/30/18. Proposal to be submitted in February. Anticipating final approval in June of 2019.

Dean Assael was excused from the meeting

V. Committee Updates

- a. Audit Committee
 - i. Dr. Chiong noted that the Audit Committee meets once a year.

- ii. Presented the proposed 2018 audit timeline.
- iii. Ms. Xiong gave a more depth analysis of who is on the CNU Audit committee and the process.
- b. Finance Committee
 - i. Dr. Siwabessy presented the finance report for all colleges
 - 1. Finance Committee gave an overall approval.
- c. Academic Affairs Committee
 - i. Dr. McClendon presented on behalf of the Academic Affairs Committee for all the colleges
 - 1. COP:
 - a. Discussed accreditation visit and implementations from the last ACPE visit.
 - b. Reviewed new initiatives and data mining regarding previous courses, gpa's, pcoa's, and exams.
 - c. Data mining results helps recognizes students at risk.
 - d. Reviewed attrition rates: Will delve deeper into what "other" means.
 - 2. CHS:
 - a. Note how many applications are offered for each program?
 - b. Reviewed curriculum with currently 30 courses being offered.
 - c. Counseling services are being offered at both campuses.
 - d. Send results of students using counseling services: over 200 counseling sessions for Fall 2018 term.
 - 3. COM:
 - a. Reviewed some of the Summative Exams results.
 - b. Targeting more diversity groups in admissions and recruitment.
 - i. Are we targeting American Indian groups?
Fewer of those groups in the region.
 - c. Reviewed admissions data for Class of 2022
 - d. Average MCAT score is higher than UC Davis.
 - e. More active learning in courses
 - f. Full program review will begin after graduation of class of 2019.
 - 4. Psy:
 - a. 11 students began for fall semester to keep a small first cohort of 10-12
 - b. Reviewed total applications for fall of 2019
 - c. Reviewed partnership with the community
 - d. Practicums sites are growing.
 - 5. University Performance Dashboard
 - a. Currently developing a dashboard for university performance metrics

6. Scholarship Update

- a. Dr. Cheung presented on current major scholarship activities
- b. NCEF Gala raised \$78,000
- c. Plan on increasing scholarships for CHS for those being admitted.

VI. Presidents Report

- a. COP Conferral of Degree for STUDENT X (REDACTED NAME)
 - i. Motion: Robert DeBruin
 - ii. Second: Wai Chan
 - iii. Abstain: 0
 - iv. Approve: Approve
- b. Reviewed CNU and National Average for USMLE Step 1 examines for COM
- c. Program Updates
 - i. Reviewed timeline for next 10 years
 - ii. Reviewed real estate update
 - iii. Reviewed Ownership Descriptions for each entity
- d. Student Housing
 - i. Reviewed project descriptions
 - 1. CNU v CSUS comparison
 - ii. Reviewed cost of building dorms and floor plans
 - iii. Showed timeline of dormitory
- e. Biotech Innovation District
 - i. Need to find a good project, finding, talented workforce, and real estate
- f. Project
 - i. Dr. Cheung showed a model of the project and discussed the business plan.
 - ii. Reviewed financial strategies for financing the project

VII. Board of Trustee Bylaws

- a. Reviewed updated changes from July 23, 2018 meeting.
- b. Changes made to sections:
 - i. Article 4
 - ii. Article 6
 - iii. Article 10
- c. Created a new article, Article 11-Board Vacancies
- d. The motion to approve the update Board of Trustee Bylaws
 - i. Motion: Robert DeBruin
 - ii. Second: Jeana Colabianchi
 - iii. Abstain: 0
 - iv. Approve: Yes

VIII. Holiday Party

- a. Candace Fong offered her house to host the holiday party.
- b. Possible date is Friday December 14th or December 15th

IX. Executive Session

X. End Time

- a. The meeting was adjourned at 6:42pm

Signature of Chair and Secretary:

_____ Date

Jim Walsh, Chair

_____ Date

Natalie Vachalek, Secretary

President's Executive Council Minutes

Council Meeting Minutes: June 12th, 2017 Start Time:

2:07 p.m.

Present: *President- Alvin Cheung, Dean of CHS- Heather Brown, VP of Institutional Research & Assessment-Karen McClendon, VP of University Operations, Faculty Programs & Development- Grant Lackey, VP of Biotechnologies and Dean of Graduate Studies- Catherine Yang, HR Manager- Heidi Herman, CNU Faculty Senate Chair –Ruth Vinall, Dean of COP- Hieu Tran, VP of Research- Philip Mack, VP of Admissions and Student Services- Xiaodong Feng*

Absent: *VP of Finance/CFO- Shoua Xiong, General Counsel-Paul Wagstaffe, Dean of COM- Joseph Silva*

I. Approval of Minutes from 4/24/17

The motion to approve the 4/10/17 minutes as written was motioned by *VP of Biotechnologies and Dean of Graduate Studies- Catherine Yang* and seconded by *VP of Research- Philip Mack*. The motion to approve the minutes as amended was approved by a vote of:

Yes: 10 No: 0 Abstain: 1

Dr. Cheung would like to formally recognize Dr. Heather Brown as Dean of the College of Health Sciences.

II. Old Business

n/a

III. Deans Report

- a. COP: Planning on 3 year program, faculty have been briefed. There is a new pharmacy program starting in Long Beach, CA. Currently working on Joint Faculty Appointments. Class 2021 has 141 EA's signed with 20 offers still standing.
- b. COM: Dr. Lackey presented on behalf of Dean Silva. About 80 preceptors have been trained.
- c. CHS: Admissions update- 20 EA's for PMPB and 46 EA's for undergrad. Recruitment strategy will be a top focus for the upcoming College Strategic Planning Meeting. Hiring update- Biology onsite interviews are scheduled and Skype interviews are in the final process.

IV. Policy and Procedures

- a. New Program Approval Process (Review)
 - Minor updates made
 - This policy applies for academic programs
- b. Promoting a Positive Learning Environment and Avoiding Student Mistreatment
 - Policy statement and procedures updated
 - This policy will also go into CANVAS as a learning tool

The motion to approve Promoting a Positive Learning Environment and Avoiding Student Mistreatment as a University Policy was motioned by *Dean of COP- Hieu Tran*

and seconded by *VP of University Operations, Faculty Programs & Development*- Grant Lackey. The motion to approve the policy was approved by a vote of:

Yes: 11 No: 0 Abstain: 0

c. Deferred Admissions Policy

- Can only defer 1 year
- Define what can be granted for student deferral
- If granted deferral students must affirm their intent to enroll by a specified date

The motion to approve the Deferred Admission Policy for COP was motioned by *VP of University Operations, Faculty Programs & Development*- Grant Lackey and seconded by *VP of Biotechnologies and Dean of Graduate Studies*- Catherine Yang. The motion to approve the policy was approved by a vote of:

Yes: 11 No: 0 Abstain: 0

d. Complaint Grievance Form

- Decrease the number of days from 21 business days to 10 and 5 business days depending on what step of the process they are currently in.

The motion to approve the Complaint and Grievance Form for COP was motioned by *VP of University Operations, Faculty Programs & Development*- Grant Lackey and seconded by *VP of Biotechnologies and Dean of Graduate Studies*- Catherine Yang. The motion to approve the policy was approved by a vote of:

Yes: 11 No: 0 Abstain: 0

e. CNU Letter of Recommendation Request

- Dr. Lackey and the CE Department will hold a faculty training session on "How to write an effective LOR"

The motion to approve the Complaint and Grievance Form for COP was motioned by *VP of University Operations, Faculty Programs & Development*- Grant Lackey and seconded by *VP of Biotechnologies and Dean of Graduate Studies*- Catherine Yang. The motion to approve the policy was approved by a vote:

Yes: 11 No: 0 Abstain: 0

V. Student Satisfaction Survey

- a. Dr. McClendon noted that there was a low response rate among the students this year.
- b. Dr. McClendon noted that some of the positives for CHS were: study and lounge space, academic advising, understanding of requirements. Some of the areas of improvements: improvement of information on website and handbook not useful.
- c. Next year will send out more reminders to students and give a longer response time.

VI. HRIS

- a. Ms. Herman described the new HR system that will be rolling out within the next few months.
- b. It will include training modules, employee access to own file, vacation request forms, etc.
- c. This will help with auditing and tracking of schedules

VII. Summer Town Hall

- a. Dr. Cheung noted this is a mandatory meeting.
- b. The date was changed from August 18th to July 31st and will be held at the event center.

VIII. Strategic Retreat Update

- a. Dr. McClendon updated PEC members that the Strategic Planning Retreat went extremely well
- b. It was fully updated with evidence and new goals and strategies.
- c. Working in groups helped identify data points for future success of the institution
- d. Dr. Cheung noted that CNU will now be purchasing new analytic systems instead of creating our own.

IX. Bio/Chem Hazard Waste

- a. Dr. Cheung noted that every college should be mindful of the amount of bio/chem waste that they are producing this was prompted by a news article of another university in town.
- b. Proper waste disposal techniques need to be monitored and ordering of new chemicals

X. Dental School Discussion

- a. Discussion of dental program; Board endorses it unanimously.

XI. Adjournment

The Joint PEC meeting was adjourned at **5:45 p.m.**

Signature of President:



President

Date 6/26/17 **Alvin Cheung,**

Signature of Secretary:

Natalie Vachalek

Secretary

Date 6/26/17 **Natalie Vachalek,**

President's Executive Council Minutes

Council Meeting Minutes: July 23, 2018

Start Time: 1:38 p.m.

Present: *President-* Alvin Cheung, *HR Manager-* Heidi Herman, *VP of Research-* Philip Mack, *CNU Faculty Senate Chair-* Chris Wostenberg, *VP of University Operations, Faculty Programs & Development-* Grant Lackey, *VP of Academic Affairs-* Catherine Yang, *General Counsel-* Paul Wagstaffe, *Legal Counsel-* Anisha Basi, *Dean of COM-* Joseph Silva, *Dean of COP-* Hieu Tran

Absent: *VP of Institutional Research & Assessment-* Karen McClendon, *VP of Finance/CFO-* Shoua Xiong, *Dean of CHS-* Heather Brown, *VP of Admissions and Student Services-* Xiaodong Feng, *Dean of Psychology –* Bret McLaughlin

I. Approval of Minutes 7/09/18

- a. Motion: *Dean of COP-* Hieu Tran
- b. Second: *VP of University Operations, Faculty Programs & Development-* Grant Lackey
- c. Abstain: 1
- d. Approval: Yes

II. Old Business

- a. Enrollment Agreements: All are EA's are complete for fall 2018 except MPS. Working on fall 2019 EA's.
- b. Faculty Development Revision Policy: Dr. Mack reviewed the changes to the policy. More suggestions were made. Dr. Mack will come back with revisions at the next PEC meeting.
 - i. Make sure title lines up with accreditation standards
 - ii. Faculty needs to determine their needs by having discussions with their faculty chairs to set their goals, etc.
 - iii. Add a paragraph regarding career, learning, and professional areas of development
 - iv. Faculty are required to maintain licensing for position hired for

III. Review and Approve

- a. University Diversity & Inclusion Committee Bylaws
 - i. Ms. Herman reviewed the Bylaws with PEC Members
 - 1. Motion: *Dean of COM-* Joseph Silva
 - 2. Second: *Dean of COP-* Hieu Tran
 - 3. Abstain: 0
 - 4. Approval: Yes

IV. Faculty Senate

- a. Progressive Discipline Policy, what is the status of the policy? HR will look into current status.
- b. Faculty Handbook: Working with HR and Legal
- c. CHS Promotion Policy: Lecturer to Assistant professor clarifications

V. Standing Search Committee Selections

- a. Ms. Herman sent the suggestions to Dr. Cheung, who will review the selections and will approve after final review.

VI. IT Update

- a. Dr. Lackey gave a brief update to IT member's locations.
- b. After PEC Dr. Lackey sent out an email to PEC members with a full IT update. (see attached)

VII. Teaching Load Hours

- a. Make sure Deans are aware of the teaching hours and that they are enumerated in the appointment letter

VIII. Academic Calendar (Grade Submittal)

- a. Grades need to be submitted in a timely manner in order for conferral by Trustees to take place.

IX. Long-Term University Growth Plan: New Program research for viability and match with university mission and healthcare industry needs:

- a. CNU is seeking to research program viability as follows:
- b. Master of Public Health: PEC endorses pursuing research regarding program viability
- c. Sonography: PEC endorses pursuing research regarding program viability
- d. Psychology Master's program: PEC endorses pursuing research regarding program viability
- e. Master's in Health Sciences and Management : PEC endorses pursuing research regarding program viability
- f. PT/Rehabilitation (College of Rehabilitation): PEC endorses pursuing research regarding program viability
- g. BS program: PEC endorses pursuing research regarding program viability
- h. Nursing: PEC endorses pursuing research regarding program viability

X. Approval of DMD program:

- a. College of Dentistry program has received BOT approval, and Dean position will be posted (pending PEC approval)
- b. Motion to approve DMD program:
 - 1. Motion: *Dean of COM*- Joseph Silva
 - 2. Second: *Dean of COP*- Hieu Tran
 - 3. Abstain: 0
 - 4. Approval: Yes

XI. Construction Changes

- a. Thinking about creating a sun room over the outside patio off the café.
- b. Want to create larger space for breakroom area.


XII. CE for COM

- a. ACCME gave accreditation to CNU until 2020.

XIII. Adjournment

The Joint PEC meeting was adjourned at 2:45 pm

Signature of President:



Alvin Cheung, President

Date 8/27/18

Signature of Secretary:

Natalie Vachalek

Natalie Vachalek, Secretary

8/27/18
Date _____

IT Update

Q2 IT Summary and Report

June 22, 2018

Jan to March:	831 Tickets Handled
April to present, June 22:	692 Tickets Handled

Major Projects:

1. **CNU no longer paying for the lines going to the old Sac State building.**
The 3 fiber lines have been cancelled last month. This should yield a savings of more than \$3k per month.
2. **Telephone Services:** We are now off copper lines, PRI using Frontier and going digital with Net2Phone instead. This should save roughly \$300 per month but more importantly, gives a much more agility in scaling up or down when needed. We have gone from 20 simultaneous calls to currently 44. We also have roughly 100 more DID (4 digit numbers) to use at our disposal.
3. **MSPE:** Both Hoa and Charnil has been doing a great job at creating the templates Dr. Falck has been requesting. In the last couple weeks, they've been doing final color and format tweaks. Everything has been going smoothly.
4. **Switching over to CCI in Rancho instead of ATT.** This transition does not require any land work or easement contracts. Everything can be switched on their backend. This will not affect pricing, only updating our speeds and improving bandwidth since ATT was a consumer grade line.
5. **Contracts Renewed:**
 - **Fortinet:** Continues the use of our firewalls and threat definitions - **Cisco SmartNet:** Continues coverage on all our network switches
 - **Symantec:** Continues support and definition updates on virus protections on user PCs.
6. **Broken script in our SQL:** resolved by Hoa and Sharnil. They worked tirelessly for two weeks on it and finally have all the issues worked out.

President's Executive Council Minutes

Council Meeting Minutes: August 27, 2018

Start Time: 1:10 p.m.

Present: *President-* Alvin Cheung, *HR Manager-* Heidi Herman, *VP of Research-* Philip Mack, *VP of University Operations, Faculty Programs & Development-* Grant Lackey, *VP of Academic Affairs-* Catherine Yang, *General Counsel-* Paul Wagstaffe, *Legal Counsel-* Anisha Basi, *Dean of COM-* Joseph Silva, *Dean of COP-* Hieu Tran, *VP of Institutional Research & Assessment-* Karen McClendon, *Dean of CHS-* Heather Brown, *VP of Admissions and Student Services-* Xiaodong Feng, *Dean of Psychology –* Bret McLaughlin

Absent: *CNU Faculty Senate Chair-* Chris Wostenberg, *VP of Finance/CFO-* Shoua Xiong

Guest: Michael Ibrahim

I. Approval of Minutes 7/23/18

- a. Motion: *General Counsel-* Paul Wagstaffe
- b. Second: *VP of University Operations, Faculty Programs & Development-* Grant Lackey
- c. Abstain: 3
- d. Approval: Yes

II. Old Business

- a. Faculty Development Revision: Sent out for review to PEC members. Clarified career development and professional development. Will send out and have an electronic vote by Friday 8/31/18.

III. Deans Report

- a. COM: Over 2200 applications for fall 2019 class. Working on curriculum mapping and refining progress.
- b. COP: Beginning class of 2023 recruitment with PharmCAS. ACPE noted there is a 20% drop in pharmacy applications. Started the pharmacy primer program this summer, 55 students signed up, so far positive remarks. Will send ACPE document to President for review. ACPE site visit is in March.
- c. CHS: Classes started today! 84 undergrads started, with a few more starting and 24 post baccs. Student life and career services are up and running. Welcome BBQ coming up. Student Handbook is under review by legal. Currently hiring for Dean of Student Affairs and Admissions.
- d. Psy: Currently have 10 students, with the potential of 2-3 more adding. Students start September 4th. APA application will be turned in by the end of the week. All practicums are set for the current class. 6-Prong plan to increase enrollment.
- e. Faculty Senate: Updating Bylaws for Faculty Senate

IV. Review and Approval of Policy

- a. COP Academic Progression Policy (start coverage for class of 2023)
 - i. Updated Section III Scope and Coverage.
 - ii. This policy will be reviewed offline and more updates will need to be made.
- b. CNU Service Guidelines (Dr. Lackey)
 - i. Dr. Lackey presented on the Faculty "Service" component evaluation guideline. Looks for any suggestions from PEC members. This guideline pertains more to the qualitative factors rather than quantitative.

- ii. Forward this guideline to Faculty Senate for review
- iii. Add "Assessing and Evaluating the Service" section
- iv. Under Scope add Dean's will make judgement on weight of service for each college

V. Graduation

- a. COP will have about 63 students, COM will have 57, and CHS will have 12 students graduating.
- b. COP 8:30-11am, COM 6-8pm. 95 minutes max for each ceremony.
- c. University committee will formed for graduation.
- d. CHS is still pending.

VI. Academic Calendars

- a. COM is still in discussion
- b. Turn it in a single document

VII. Distance Learning

- a. University expects faculty to embrace and support that every college create a distance learning course.
- b. COP currently has 2 courses ready.
- c. Summer of 2019 look into hiring an Educational Technology expert.

VIII. Teaching and Learning Center

- a. Dr. Yang presented a proposal for the Academy for Teaching and Learning Excellence
- b. Dr. Lackey mentioned that he has some guest from UC Davis that are willing to come and give lectures on the topic.
- c. Formalize kick off of the Academy of Teaching and Learning Excellence with Faculty Development seminars.
- d. Enhance mission statement
- e. Bring back updated version after faculty senate reviews and gives suggestions

IX. Reporting Changes

- a. Dr. Cheung is in the process updating the Organizational Chart in anticipation of new colleges.

X. Psychology Services and Pharmacy Faculty Practice Plan

- a. Set aside some real estate at Stonelake for Psychology and Pharmacy Practice Plan

XI. Data Mining

- a. Dean Tran showed different results for PCOA and different areas of learning
- b. Reviewed the different correlations between PCOA and course grades
- c. Reviewed impact of TBL.
- d. Suggestion: Before any changes made there needs to be a reason for the change, it needs to be compelling. When change is being implemented needs to be directed by the purpose of the change.

XII. College Dentistry

- a. Dean interviews are complete

XIII. Innovation Policy and Procedures

- a. Working on creating the procedure

XIV. Administrative Training Schedule

- a. Start a new training schedule
- b. Announce dates all at once

XV. Adjournment

The Joint PEC meeting was adjourned at 3:46 pm

Signature of President:



Alvin Cheung, President

Date 9/10/18

Signature of Secretary:

Natalie Vachalek

Natalie Vachalek, Secretary

Date 9/10/18

President's Executive Council Minutes

Council Meeting Minutes: November 26, 2018

Start Time: 1:05

Present: *President-* Alvin Cheung, *HR Manager-* Heidi Herman, *VP of Academic Affairs-* Catherine Yang, *General Counsel-* Paul Wagstaffe, *Dean of COM-* Joseph Silva, *Dean of COP-* Hieu Tran, *Dean of CHS-* Heather Brown, *Dean of Psychology –* Bret McLaughlin, *VP of Finance/CFO-* Shoua Xiong, *VP of Research-* Philip Mack, *VP of Admissions and Student Services-* Xiaodong Feng, *CNU Faculty Senate Chair-* Chris Wostenberg, *VP of Institutional Research & Assessment-* Karen McClendon, *Dean of CDM-* Leon Assael

Absent: *Legal Counsel-* Anisha Basi

I. Approval of 11/12/18 Minutes

- a. Motion: *General Counsel-* Paul Wagstaffe
- b. Second: *Dean of COP-* Hieu Tran
- c. Abstain: 3
- d. Approve: Yes

II. Old Business

- a. Cell Phone & Reimbursement Policy: Will be brought back at the 12/17/18 meeting.

III. Deans Report

- a. COM: 4th interview day coming up this Friday with 39 acceptances for the next class. COM Research Day is December 14th. 60 publications with students have been completed.
- b. COP: 230 completed applicants. Interviewed 113 currently with 35 EA's signed. January and February are usually the busiest interview month. Strategies to enhance recruitment by visiting different states where CNU has higher number of applicants. COP Open House in January and June.
- c. CHS: 291 applications and 190 acceptances. Open House attendance was over 90. January 26 will be the next CHS Open House. Conducted a Student Town Hall which was very productive. New recruiter starting January. Ongoing search for Assistant Dean of Student Affairs and Admissions
- d. CPsy: 76 applicants for next year. Drs. Ettensohn, McLaughlin, and Nevis are presenting papers at an upcoming conference. Will be starting interview process soon for next class.
- e. CDM: Currently conducting interviews for the different Deans roles and looking for space at CNU for the Dental Medicine College. Working with Dr. McClendon for WASC proposal. Set-up a pre-Dental group meeting at the Rancho Cordova campus for students. Goal of 80 students for the first year.
- f. MPS: 3 faculty members which are part of COP. Building new courses and next curriculum stage. MPS faculty have been setting up booths at the Open Houses.

IV. Faculty Senate Bylaws

- a. Dr. Wostenberg presented on the changes made to the Faculty Senate Bylaws. Conditional approval with update on Section 5.3.
 - i. Motion: *Dean of COM-* Joseph Silva
 - ii. Second: *Dean of COP-* Hieu Tran
 - iii. Abstain: 1
 - iv. Approval: Yes

V. Enrollment Cycle Management

- a. Dr. Cheung would like admission/enrollment updates be sent to his and CFO's office biweekly.
- b. Would like the admissions team to be creative in reaching out to other states and locations in their recruitment strategies.

VI. Scholarship Communication

- a. Dr. Cheung like the Foundation to publish the recognition of the students more on their website along with CNU website.
- b. Need to announce deadlines for when applications are due to the scholarship committee and NCEF.
- c. Scholarship Award Ceremony will be held on April 5th at 6pm, Joint Scholarship with NCEF and CNU.
- d. Dr. Feng suggestion also doing a Faculty of the Year and Preceptor of the Year for both COM, CPsy, and CHS.

VII. Article/Press Release for COM

- a. Create a press release for the COM student success.

VIII. Distance Learning

- a. COP is ready to start a course.
- b. CHS has 5 ready to start. Screencast-o-matic will be a program that will help deliver the course.

IX. Adjournment

The Joint PEC meeting was adjourned at 3:15 pm

Signature of President:



Alvin Cheung, President

Signature of Secretary:

Natalie Vachalek

Natalie Vachalek, Secretary

12/17/18

Date _____

12/17/18

Date _____



Appendix D-5 New Program Approval Process

New Academic Program Approval Process

I. Policy Statement

California Northstate University (the "University") procedures provide mechanisms for ensuring that consistent and coordinated decisions are made concerning program development and resource allocation. The final responsibility for program approval within the University rests with the University Board of Trustees.

II. Purpose

To provide a rational and effective method of new program development, consideration, and approval.

III. Scope/Coverage

This policy applies to all new programs.

IV. Procedure

- A. The program approval process begins with the endorsement of PEC then a proposal to the Board of Trustees for approval to conduct further exploratory work necessary to determine a new program's viability and congruence with the University's mission and strategic plan.
- B. The proposed program that is submitted to the Board of Trustees should be described in a Program Announcement ("PA"), a document detailing the rationale for developing the program and the need for it, and the areas that need to be fully considered. The PA shall also:
 - i. Provide an outline for program development,
 - ii. Describe the curriculum and requirements for admission and graduation,
 - iii. Identify faculty and other program resources,
 - iv. Provide information about opportunities for graduates,
 - v. Outline the new program's alignment with institutional mission,
 - vi. Provide a need analysis of the new program (*i.e.* supply and demand issues),
 - vii. Outline resources requirements (including education facilities and financial resources), and include an implementation plan and proposed timeline.
- C. Prior to the submission of the PA to the Board of Trustees, preliminary research and investigation shall be performed by the proposing party with regards to (i) – (vii), *above*, and also academic quality, relevance and need and the adequacy and commitment of all resources necessary to support the program.



- D. Once the Board of Trustees has granted provisional approval for the University to investigate the viability of a new program, the next stage involves internal University review and approval of the PA by the relevant faculty group (e.g., department chairs, directors, deans, etc.) to assess planning and resource implications of the proposed program. The relevant dean will work with the campus leadership to initiate any necessary reviews and approvals by faculty governing bodies.
- E. Upon successful completion of these reviews and receipt of approvals, the PA will be formally presented to the Director of Assessment and Effectiveness for review and approval of the proposed program for quality and for congruence with the University's mission and strategic plan. After approval by the Director of Assessment and Effectiveness, the PA will be formally presented to the President's Executive Council ("PEC") for review and approval.
- F. The PEC will ensure that needed resources are available, including faculty, administrative, library, computer, laboratory and other resources. When all concerns are resolved, the PEC will approve the PA and forward the PA to the Board of Trustees for review and approval.

APPENDIX A: Sample New Academic Program Proposal (Doctor of Psychology)

Table of Contents

Section 1

INTRODUCTION

(1) Program Purpose and Objectives

(2) Historical Development of the Field and Development of Academic Programs in the Field



- (3) Timetable for Development of the Program, including Enrollment Projections
- (4) Relationship of Proposed Program to Existing Campus Programs and to University Strategic Plans
- (5) Campus Unit Administering the Program and organization structure
- (6) Evaluation of the Program

Section 2

PROJECTED NEED

- (1) Projected Need for the Psychology Doctorates
- (2) Student Demand for the Program
- (3) Opportunities for Placement of Graduates
- (4) Importance of the Proposed Program to the Discipline
- (5) Ways in Which the Proposed Program Will Meet the Needs of Society
- (6) Relationship of the Program to Research and Professional Interests of the Faculty
- (7) Program Differentiation



Section 3

PROGRAM

- (1) Admission Requirements
- (2) Student Recruitment Plan and Enrollment Projections
- (3) Program Curriculum and Pedagogies
- (3) Program Learning Outcomes
- (4) Plan for Practice Sites
- (5) Accreditation Requirements (WASC and APA)
- (6) Monitoring of Student Progress
- (7) Special Requirements

Section 4

Faculty Qualifications and Recruitment



Section 5

Course Descriptions

Section 6

Resources Requirements (e.g., classrooms, laboratories, faculty, support staff)

Section 7

Student Support

Section 8

Budget Assumptions and Projections

Appendices

(A) Letters of Community Support and Memoranda of Understanding with Partners

(B) Faculty Vitae

(C) Proposed New Courses

Tables



Table 1. Sample Assessment Matrix for Psychology Doctorate

Table 2. Sample Programs of Years 1, 2, 3, 4, and 5

Associated forms:

Approval record:

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REVIEW: every two years (or more often if required)



Program Announcement

College of Dental Medicine

Doctor of Dental Medicine (DMD) Program

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Outline for Program Development

The inauguration of the College of Dental Medicine affords the opportunity to advance health sciences education and practice through the inclusion of oral health education and practice into an emerging academic health center, community health system and hospitals.

The selection of the name of the College and the degree is designed to reflect the ethos and the culture of the program. It is first a College in that it focuses on inquiry, action capacity and education at the highest level. As a College we will exhibit traditional values of scholarly work, a learning community, and academic freedom. As a College of Dental Medicine, we recognize that oral health care is the practice of medicine and surgery and is integrated into all other aspects of health care. The degree D.M.D. reflects doctoral level of knowledge and skills and recognizes that oral health care is not surgical care alone but includes the behavioral, social, and medical management aspects of oral diseases.

The integration of oral health into human health requires dentists who are capable of performing at the highest level in an ever more complex and demanding environment of emerging technology, social change, human disease management, and evolving health systems. The CNUCDM is developing a curriculum with four basic themes into which all didactic and clinical content will be served. These four themes are: **Human Systems, Odontology, Oral and Maxillofacial Studies, and Behavioral and Social Sciences**. All four themes will be delivered in a diagonal curriculum. The CNUCDM will develop clinical delivery programs at the highest level on campus and across the region with health system partners that promote preventative health strategies, and value-based care in a health science educational model. These programs will be integrated to the greatest extent with other health resources within health systems and in the community beyond.

California Northstate University (CNU) is an institution of higher education dedicated to advancing the art and science of healthcare, and to educating, training, and developing individuals to provide competent, patient-centered care. The University consists of four colleges: the College of Health Sciences (CHS), the College of Medicine (COM), the College of Pharmacy (COP), and the College of Psychology (PsyD). The Colleges of Medicine and of Pharmacy offer an MD degree and a Pharm D degree, respectively; whereas the College of Health Sciences offers a B.S. degree in Health Sciences. The College of Psychology provides a doctorate in Psychology.

Curriculum, Admissions and Graduation Requirements

Curriculum

The dental program is a four year program and culminates in a clinical doctoral degree: the Doctor of Dental Medicine (DMD).

The Mission of the College of Dental Medicine is to advance the art and sciences of healthcare through excellence in oral health education, practice, research, service, and social accountability.

Education: Create skilled and knowledgeable clinicians who will constantly advance their capabilities throughout life

Practice: Produce clinical leaders in oral health who will serve in private practice, health systems practice, and in interprofessional settings

Research: Promulgate scientific inquiry throughout the curriculum and support student and faculty research that creates an environment of scientific curiosity and an evidence-based foundation for clinical practice

Service: Provide individual patient care services at all clinical sites under the auspices of CNUCDM that produces the very best oral health outcomes and clinical value

Social Accountability: Advocate for and help build stronger communities in California and globally through improved oral health care, disease prevention, health promotion and protection from oral diseases through community-based approaches

The Vision of the College of Dental Medicine is to provide constructive innovation in its education programs and leadership in integrating oral health care into human health care systems.

Values:

- Providing patient-centered didactic and clinical education that always puts improved health outcomes first
- Foster a humanistic and character-developing environment for dental students
- Building stronger communities and creating a better world through improved oral health
- Understanding the professional responsibility of the dentist as the head of the oral health care team
- Practicing health promotion and disease prevention and protection
- Advancing California Northstate University through excellence in all we do

The integration of oral health into overall human health requires dentists who are capable of performing at the highest level in an ever more complex and demanding environment of emerging technology, social change, human disease management, and evolving health systems.

In response, the California Northstate College of Dental Medicine (CNUCDM) has developed a curriculum with four basic themes: Human Systems, Odontology, Oral and Maxillofacial Studies, and Behavioral and Social Sciences. All four themes will be delivered in a diagonal curriculum¹ to provide both horizontal and vertical integration of clinical and basic sciences in order to build students' competency in both the art and science of dentistry. Patients' assessment and management decisions need to be made through consideration of individual patient's health status and selection of the most appropriate interventions. The curriculum therefore is reflective of the necessary integration of the biomedical, behavioral, and social sciences.

The DMD curriculum will include concurrent didactic, small group learning, simulation and clinical experiences at all phases of the curriculum with increasing clinical experiences and decreasing didactic experiences gradually through all four years. While basic clinical encounters begin in the fall of the first year, advanced clinical practice occurs in the fourth year.

While emphasis on didactic foundations is at a high level in the first year, some didactic components with seminars and case-based didactic experiences continue through the fourth year. Specific types of pedagogical methods during classroom learning include the following: presentation, demonstration, simulations, team-based learning, problem-based learning, and clinical case studies.

CNU's dental program will utilize a Common Pathway with the Colleges of Health Sciences, Medicine, Pharmacy, and Psychology to build a solid foundation in the medical sciences and to provide a rich interprofessional education for students who will be working in healthcare teams for the benefit of patients. The following principles will be employed throughout the DMD curriculum:

- Interprofessional education experiences
- Collaborative practice models in clinical education
- Strong basic medical sciences with systems-based block segments
- Immediate and continuous clinical correlation
- Patient-centered care with practitioner/faculty led care teams
- Education in health systems and community clinics integrated with CNU based clinical education
- A competency-based clinical practicum
- Eclectic curriculum with "selectives" (electives that students choose) to guide students towards areas of clinical, research and societal interests. Selectives are among an array of clinical experiential, research or didactic courses available as part of the academic calendar to be selected by students in the developed block time.

These principles and designated educational experiences are designed to provide a strong foundation for building competency in the practice of dentistry.

Each course provides a syllabus in CNU format that includes the following elements: the goals and requirements of each course, the nature of the course content and the method(s) of evaluation to be used

¹Definition: the diagonal curriculum includes concurrent didactic, small group learning, simulation and clinical experiences at all phases of the curriculum with increasing clinical experiences and decreasing didactics gradually through all four years. While basic clinical encounters begin in the fall of the first year, advanced clinical practice occurs in the fourth year. While emphasis on didactic foundations is at a high level in the first year, some didactic component with seminars and case-based didactics continues through the fourth year

and how grades and competency are determined.

Program Learning Outcomes (PLOs)

Patient-Centered Care: Demonstrate understanding of healthcare disparities and cultural awareness in patient counseling and patient advocacy

Evidence-Based Care: Apply current, evidence-based oral healthcare within the scope of general dentistry

Culturally competent, empathic communication: Demonstrate patient-centered, empathic, and culturally competent communication and interpersonal skills

Oral and Written Communication: Demonstrate sound oral and written communications in patient care

Critical Thinking: Utilize critical thinking, problem solving skills and systemic thinking in assessing and making reasoned, evidence-based decisions in patient care

Ethics and Professionalism: Demonstrate professionalism and ethical decision making

Biomedical Sciences Knowledge: Demonstrate an understanding of the fundamentals of biomedical sciences and apply them appropriately in oral healthcare

Practice Management: Apply legal, regulatory and business management concepts related to provision of oral healthcare services

The four themes will be presented utilizing interprofessional education in part utilizing a **Common Pathway** for some courses. The **Common Pathway** consists of aspects of courses especially in human systems and behavioral and social sciences that can be taught alongside students in medicine, pharmacy and clinical psychology. Course that will utilized in part or in whole a Common Pathway will be noted in the course list as **CP Courses**.

The 4 themes These are yearly courses all in each of the four years named HS 5, 6, 7, 8; Odont 5, 6, 7, 8; OMFS 5, 6, 7, 8; and, BSS 5, 6, 7, 8.

CREDIT HOURS

Analysis of credit hours. Credit hours are assigned consistent with CNU credit hour policy

CNU CREDIT HOUR POLICY

I. PURPOSE

The purpose of this policy is to define the credit hour policy of the California Northstate University.

II. SCOPE/COVERAGE

This policy governs the assignment of credit hours of lecture courses, practicum work, and internship assignments.

III. POLICY STATEMENT Credit Hour Policy

For each 15-week semester, one (1) hour of credit is assigned per hour each week of classroom or direct faculty didactic instruction (that is, per hour of lecture or student in-class time) and a minimum of two (2)

hours of out-of-class student work (homework). For practicum and internship time, one (1) hour of credit is assigned per three (3) hours each week of student time spent in this activity.

IV. PROCEDURE

Credit Hours in accord with this policy are assigned to courses at the time of course creation and syllabus approval by the Curriculum Committee.

Consistent with this policy, 1 credit is assigned for each 15 lecture hours in a course and its associated 30 preparation/ homework hours. 1 credit is assigned for every 25 small group learning hours and its associated 25 preparation/homework hours, and 1 credit for every 30 laboratory hours and 30 preparation/ labwork hours.

<u>Codes</u>	<u>Course Type</u>
LAL	LECTURE AND/OR ACTIVE LEARNING COURSE
SIM	CLINICAL SIMULATION COURSE
LAB	LABORATORY COURSE
SEM	SEMINAR
CLIN	CLINICAL EXPERIENTIAL LEARNING
HS	HUMAN SYSTEMS COURSE
Odont	ODONTOLOGY COURSE
OMFS	ORAL AND MAXILLOFACIAL STUDIES COURSE
BSS	BEHAVIORAL AND SOCIAL SCIENCES COURSE

GRADING

Utilizing a competency based grading system, all students must reach a threshold for clinical competency in knowledge and skill set at 75%. Structured remediation activities for each didactic course will ensure a higher level of knowledge for the cohort of students earning a Y, 65-75%. Students earning below 60% receive an F requiring repeat of the course or further academic action. Students earning 90%-95% will earn a grade of Honors and students earning 96-100% will earn Highest Honors.

Clinical courses will be graded Pass/Fail with the opportunity to earn EPR's (exceptional performance reviews) that can be offered to up to 1/3 of enrollees to each course director at the conclusion of each term. EPR's will be recorded numerically in each transcript according to the course in which they were earned. EPR's are based upon patient-centered care and patient outcomes as well as application of the program learning outcomes. Each clinical course will develop defined rubrics for the achievement of EPRs.

Class rank will be based upon the students' performance in LAL, SIM and LAB courses for 60% of the class rank value and by rank based upon clinics EPRs for 40% of class rank value.

LAL, SIM AND LAB GRADING

HH	PASS WITH HIGHEST HONORS (96-100%)
H	pass with honors (90-95%)
P	pass (75-90%)
Y	no pass, requires remediation (60-75%) to earn P (Y is temporary grade)
F	fail (less than 60%)
I	Incomplete, course work at satisfactory quality but assignments completion delayed by circumstance (temporary grade)
IP	In progress grade given for multiple semester courses where final grade given in subsequent semester
W	Official withdrawal

CLIN GRADING

P	Clinical care demonstrates knowledge and skills and values commensurate with achieving the defined competencies of the curriculum. Clinical course outcomes will be linked to both Program learning outcomes and CODA defined clinical competencies through Competency Evaluations (CEs). Passing of CEs integrated into a clinical course is required for a P in the course.
Y	No pass, requires remediation to earn a P (Y is temporary grade)
EPRs	Exceptional Performance Reviews based upon rubrics defined by the Program Learning Outcomes as accommodated in the clinical course

Year 1

Course Title	Semester	Units	Names of Faculty
Hematology	1	4	Nazila Hejazi MD
Integumentary and Musculoskeletal Systems	1	7	Nripendra Dhillon MBBS MS
Foundations of Odontology	1	6	Maureen McAndrew DDS
Dental Anatomy	1	6	Gerald Glickman DDS Leon Assael DMD
Foundations of Dental Medicine	1	3	Leon Assael DMD
Managing Student Life	1	1	Richard Simonsen DDS
Neuroscience	2	9	Forshing Lui MD
Cardiovascular and Pulmonary Systems	2	9	Darilyn Falck MD FACEP Tracy Yarbrough PhD MD MAEd
Cariology	2	3	Kevin Keating DDS
Oral Microbiology/Immunology	2	3	Pending
Surgical Anatomy of the Head and Neck	2	2	Leon Assael DMD
Ethics in Dental Medicine and Health Care	2	2	Richard Simonsen DDS
TOTAL CREDITS YEAR 1		55	

Year 2

Course Title	Semester	Credits	Names of Faculty
Renal System	1	5	Tracy Yarbrough MD PhD
Gastroenterology	1	5	Nehad El-Sawi PhD
Endocrine System	1	5	Mark Sheffield MD PhD
Clinical Pharmacology 1	1	3	Pending
Operative Dentistry	1	6	Wai Chan DDS
Periodontology (Fall and Spring)	1, 2	6	Rosemary Wu DMD
Dental Anesthesiology 1, Local Anesthesia	1	3	Michael Cadra DDS
Oral Radiology 1	1	3	Shikha Rathie BDS MS
Clinical Pharmacology 2/Oral Pharmacology	2	3	Jagdev Heir MD DMD FACS
Prosthodontics and Implant Dentistry: Removable Prosthodontics	2	6	Pending
Comprehensive Care Family Dentistry	2	3	Gerald Glickman DDS
Endodontology, Diseases of the Pulp and Pathways of Odontogenic Infection	2	3	Gerald Glickman DDS
Dental Anesthesiology 2: Pain and Anxiety Control, Analgesia, Medical Management of Local Anesthesia	2	3	Michael Cadra DDS
Oral Pathology/Oral Medicine 1	2	3	Pending
Orthodontics and Craniofacial Growth and Development	2	3	Pending
Behavioral Medicine	2	3	Pending
Dental Medicine at all Stages of Life	2	3	Pending
TOTAL CREDITS YEAR 2		66	

Year 3

Course Title	Semester	Credits	Names of Faculty
Junior Year Medicine Seminar (fall, spring)	1, 2	4	Pending
Prosthodontics and Implant Dentistry: Fixed Prosthodontics	1	6	Pending
Comprehensive Care Family Dentistry	1, 2	16	Pending
Oral Radiology 2	1	3	Pending
Principles of Oral Surgery	1	3	Pending
Pediatric Dentistry	1	3	Pending
Dental Public Health	1	2	Pending
Practice Management 1	1	2	Pending
Periodontology Seminar	2	2	Pending
Oral Pathology/Oral Medicine 2	2	3	Pending
Clinical Clerkship: Oral and Maxillofacial Surgery	2	8	Pending
Clinical Clerkship: Pediatric Dentistry	2	8	Pending
TOTAL CREDITS YEAR 3		60	

Year 4

Course Title	Semester	Credits	Names of Faculty
Senior Year Medicine Seminar	1, 2	4	Pending
Periodontology Seminar	1	2	Pending
Prosthodontics and Implant Dentistry: Implant Surgery and Prosthodontic Reconstruction	1	3	Pending
Comprehensive Care Family Dentistry	1, 2	16	Pending
Oral Radiology Seminar	1	2	Pending
Clinical Clerkship: Community-Based Education	1, 2	16	Pending
Seminar in Dental Public Health	1	2	Pending
Oral Pathology/Oral Medicine Seminar	2	2	Pending
Clinical Clerkship: Orthodontics	2	2	Pending
Advanced Topics in Oral and Maxillofacial Surgery	2	2	Pending
Practice Management 2	2	2	Pending
Clinical Electives	2	6	Pending
TOTAL CREDITS YEAR 4		59	

CNUCDM Course Descriptions

Human Systems

Case-based biomedical sciences: For the following Common Pathways courses (labeled CP Course) with the College of Medicine (COM), the clinical case presentations will include those oral cases presented by the CDM faculty, in addition to selected common cases with the COM. The supporting basic science with each courses will be Common Pathway anatomy, histology, embryology, biochemistry, immunology m microbiology nutrition, pathology pharmacology and physiology.

Course #	Course Title	Credits	Year	Term
HS 511	Hematology (CP Course)	4	DS 1	Fall

As described in COM curriculum with clinical case correlation by dental faculty. Correlated clinical cases related to oral health sciences will include: dental care in the hemophilia patient, acquired bleeding disorders in the dental patient, oral effects of anemia, and dental care for the hematology oncology patient.

Course #	Course Title	Credits	Year	Term
HS 521	Integumentary and Musculoskeletal Systems (CP Course)	7	DS 1	Fall

As described in COM curriculum with clinical case correlation by dental faculty. Correlated clinical cases related to oral health sciences will include vesiculobullous disease of the oral mucosa, oral manifestations of muscular dystrophy, oral cancer, myofascial pain dysfunction syndrome, arthritis in dental practice, osteoporosis and oral health.

Course #	Course Title	Credits	Year	Term
HS 512	Neuroscience (CP Course)	9	DS 1	Spring

As described in COM curriculum with clinical case correlation by dental faculty. Correlated clinical cases related to oral health sciences will include maxillofacial nerve injury, oral manifestations of Parkinson's disease, oral and maxillofacial movement disorders, trigeminal neuralgia, migraine and facial migraine, oral care of the stroke and spinal cord injured patient.

Course #	Course Title	Credits	Year	Term
HS 522	Cardiovascular and Pulmonary Systems (CP Course)	9	DS 1	Spring

As described in COM curriculum with clinical case correlation by dental faculty. Correlated clinical cases

related to oral health sciences include: prevention, diagnosis, and immediate treatment of acute myocardial ischemia in dental practice, oral health aspects of obstructive sleep apnea, managing asthma in dental practice, congestive heart failure implications in oral health care, valvular heart disease implications in dental practice, Marfan's syndrome.

Course #	Course Title	Credits	Year	Term
HS 611	Renal System (CP Course)	5	DS 2	Fall

As described in COM curriculum with clinical case correlation by dental faculty. Correlated clinical cases related to oral health sciences include oral manifestations of renal failure/renal osteodystrophy/HPTH, dehydration and oliguria in odontogenic infection, acid/base considerations in fever and dental infection.

Course #	Course Title	Credits	Year	Term
HS 621	Gastroenterology (CP Course)	5	DS 2	Fall

As described in COM curriculum with clinical case correlation by dental faculty. Correlated clinical cases related to oral health sciences include oral effects of chronic liver failure, oral surgical considerations in Vitamin K dependent factor depletion in chronic hepatitis, oral **manifestations of** bulimia, Salivary gland disorders, concomitant disorders of the GI and oral microbiome, effects of mastication/salivary health on GI health, oral manifestations of patients with colonic polyps.

Course #	Course Title	Credits	Year	Term
HS 631	Endocrine System (CP Course)	5	DS 2	Fall

As described in COM curriculum with clinical case correlation by dental faculty. Correlated clinical cases related to oral health sciences include , oral health considerations in obesity, oral health impact of type 1 and type 2 diabetes, oral findings in endocrine disorders e.g. multiple endocrine neoplasia, hyperthyroidism/hypothyroidism.

Course #	Course Title	Credits	Year	Term
HS 641	Clinical Pharmacology	3	DS 2	Fall

This course will review the basics of pharmacokinetics and drug development and review the important clinical characteristics of the major drug categories including cardiac, pulmonary, GI, GU, endocrine, musculoskeletal, psychotropic, neurologic, dermatologic drugs, antibiotics,

Course #	Course Title	Credits	Year	Term
HS 642	Clinical Pharmacology 2/Oral Pharmacology	3	DS 2	Spring

This course will review the major drugs used in dental practice. Emphasis on analgesics, pain and anxiety

control, antibiotics. Other drugs of oral diseases including oral mucosal diseases, diseases of the dental pulp and periodontium, paranasal sinuses, and those for musculoskeletal problems of the head and neck. Correlation of drugs in the general pharmacopeia with oral health impact for HS 631 will concentrate on side effects of the oral region including examples of xerostomia, superinfection with thrush, tardive dyskinesia, among others.

Course #	Course Title	Credits	Year	Term
HS 721	Junior Year Medicine Seminar	2	DS 3	Fall

Weekly case-based seminars presenting existing dental and comprehensive care patients and their medical comorbidities. Cases will be selected from existing active patients as well as from standardized patients, for the D3 class with evidence based review of relevant medical findings and their impact on oral health and clinical interventions. This will be done with a purpose to mitigate risk and improve patient care outcomes.

Course #	Course Title	Credits	Year	Term
HS 722	Junior Year Medicine Seminar	2	DS 3	Spring

Complex cases will be selected beyond the level of HS721 including those commonly requiring medical surgical intervention in concurrence with oral health care. Examples such as oncology patients, obstetric patients, and transplant patients will be examined. Weekly case-based seminars presenting existing dental and comprehensive care patients and their medical comorbidities will be continued in the seminar as well.

Course #	Course Title	Credits	Year	Term
HS 821	Senior Year Medicine Seminar	2	DS 4	Fall

Weekly case-based seminars presenting existing dental and comprehensive care patients and their medical comorbidities. Continued development of advanced based cases including those on hospitalized patients.

Course #	Course Title	Credits	Year	Term
HS 822	Senior Year Medicine Seminar	2	DS 4	Spring

Weekly case-based seminars presenting existing dental and comprehensive care patients and their medical comorbidities. Continued development of advanced based cases including those on hospitalized patients.

Odontology

Course #	Course Title	Credits	Year	Term
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Odont 511	Foundations of Odontology <i>LAL and CLIN</i>	6	DS 1	Fall
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This course will introduce students to infection control, the dental office and clinical care site, and provide initial skill in interaction with the patient and the patient's oral cavity. Students will enter the clinical setting with faculty and upper level students to provide limited aspects of oral care and join the oral health care team.

Course #	Course Title	Credits	Year	Term
Odont 521	Dental Anatomy <i>LAL and LAB</i>	6	DS 1	Fall

Anatomy of the teeth and associated structures is presented including the masticatory apparatus. Clinical correlations affecting function such as sleep disorders, temporomandibular disorders and growth and development anomalies are clinical correlates to explain function and structure in dental anatomy.

Course #	Course Title	Credits	Year	Term
Odont 522	Cariology	3	DS 1	Spring

The biology, phenotype, epidemiology, anatomical changes from caries is presented. The prevention of caries through CAMBRA is developed as well as strategies for management at all stages of the disease. The course introduces the pathways of caries as a regional and systemic disease.

Course #	Course Title	Credits	Year	Term
Odont 611	Operative Dentistry <i>LAL and LAB</i>	6	DS 2	Fall

The surgical treatment of caries and degenerative and congenital diseases of the enamel and dentin is presented through the development of technical skills to remove diseased portions of the teeth and to provide anatomical functional direct restorations of teeth. Prevention and minimally invasive procedures for caries management is emphasized. Laboratory session focus on the development of procedures and psychomotor skills using surgical armamentarium in a simulated clinical setting for the treatment of caries and other diseases of the enamel and dentin.

Course #	Course Title	Credits	Year	Term
Odont 621	Periodontology <i>LAL and LAB</i>	3	DS 2	Fall

The normal structure and function of the periodontium is presented. The pathology, microbiology, immunology, and pathophysiology of diseases of the periodontium is presented. Prevention, chronic disease management, and nonsurgical/minimally invasive procedures for periodontal diseases is emphasized. Laboratory session focus on the development of procedures and psychomotor skills using surgical armamentarium in a simulated clinical setting for the treatment of diseases of the periodontium.

Course #	Course Title	Credits	Year	Term
Odont 622	Periodontology LAL and LAB	3	DS 2	Spring

In-depth understanding of the etiology and progression of chronic periodontal diseases is developed in this course. The influence of systemic diseases such as HIV, diabetes mellitus, and obesity on the health of the periodontium is explored. Surgical interventions for the treatment of diseases of the periodontium is presented. The laboratory is focused on advanced techniques including flap surgery, guided tissue regeneration, socket preservation among others, as well as continued development of skills in curettage.

Course #	Course Title	Credits	Year	Term
Odont 632	Prosthodontics and Implant Dentistry: Removable Prosthodontics LAL and LAB	6	DS 2	Spring

The anatomic and pathophysiologic aspects of partial and full edentulism is presented. Development, construction, placement and maintenance of full and partial removable prosthodontic restorations is presented. The laboratory will include impressions, jaw occlusal registrations, gnathology, cast development and mounting, development of wax rims and occlusal scheme and teeth mounting.

Course #	Course Title	Credits	Year	Term
Odont 642	Endodontology: Diseases of the Pulp and Pathways of Odontogenic Infection, Endodontic Therapy and Technique LAL and LAB	3	DS 2	Spring

The diagnosis and treatment of the diseases of the dental pulp throughout life is presented. The biologic basis for treatment of diseases of the pulp is developed as well as the rationale for these methods. The laboratory will introduce students to the ortho-endodontic therapy methods including the use of magnification, access the pulp canals, instrumentation of the canals and obliteration of the pulpectomy site to clinical standards.

Course #	Course Title	Credits	Year	Term
Odont 662	Comprehensive Care Family Dentistry CLIN and LAB	3	DS 2	Spring

Treatment of caries and periodontal disease with discipline based faculty from operative dentistry, prosthodontics, endodontology and periodontology is carried out with the DS 2 as an active participant in the care team that includes a DS3 and DS 4. Students will participate in case presentations, medical record assessment and recording, and other aspects of the clinic activities. The laboratory will include a simulated clinic visit including OSCE record and electronic health record.

Course #	Course Title	Credits	Year	Term
Odont 741	Prosthodontics and Implant Dentistry: Fixed Prosthodontics <i>LAL and LAB</i>	6	DS 3	Fall

The indirect restoration of teeth and the indirect replacement of missing teeth with crowns and bridges is presented. Treatment planning for these restorations including occlusal, periodontal, caries assessment is presented. Other methods for indirect restoration including partial coverage indirect restoration is presented. The introduction of digital techniques for impression and CadCam restoration development is presented. The laboratory will provide practice with the surgical armamentarium for tooth preparation for fixed prosthetic restoration, for impressions with analog and digital methods and for the construction of fixed indirect restorations. The laboratory will also teach methods for provisional restoration of the fixed prosthodontic patient.

Course #	Course Title	Credits	Year	Term
Odont 761	Comprehensive Care Family Dentistry <i>CLIN</i>	8	DS 3	Fall

This daily clinic will focus on students developing their family of patients in conjunction with other members of their team headed by the faculty team leader. Emphasis on diagnosis and treatment planning and completion of initial urgent procedures will be carried out.

Course #	Course Title	Credits	Year	Term
Odont 752	Periodontology Seminar <i>SEM</i>	2	DS 3	Spring

Using a case-based format, the treatment planning, outcome assessment, management of medical and dental comorbidities among others of the patient with diseases of the periodontium is presented. Patient-centered, health systems informed, and culturally aware aspects of care are discussed through the case-based format.

Course #	Course Title	Credits	Year	Term
Odont 762	Comprehensive Care Family Dentistry <i>CLIN</i>	8	DS 3	Spring

This daily clinic will further develop the completion of Phase 1 therapy, disease control mitigation of risk and initiation of preventive care in the patient family. The student will develop this under the leadership of the team leader. The student will also begin aspects of Phase 2 therapy, reconstructive dentistry and address other comorbidities in patient care.

Course #	Course Title	Credits	Year	Term
Odont 841	Periodontology Seminar <i>SEM</i>	2	DS 4	Fall

Using case-based format, interdisciplinary problems especially with orthodontics, endodontics and prosthodontic consideration will be developed through patient presentations of patients of record or via the OSCE format. Further exploration of comorbidities in periodontal diseases will be developed.

Course #	Course Title	Credits	Year	Term
Odont 851	Prosthodontics and Implant Dentistry: Implant Surgery and Prosthodontic Reconstruction	3	DS 4	Fall

The replacement of missing teeth utilizing dental implants is presented. This course includes the biomechanics of implants, concepts of osseointegration, restoration options for implants, implant systems and the placement of implants. The laboratory will teach the placement of implants including appropriate assessment and osteotomies, and the restoration of implants using indirect and direct techniques.

Course #	Course Title	Credits	Year	Term
Odont 861	Comprehensive Care Family Dentistry <i>CLIN</i>	8	DS 4	Fall

This clinical practicum will focus on the daily clinical activities of a practicing dentist including all intake, comprehensive care, case management issue extant under the leadership of the team leader. The DS 4 will also demonstrate leadership of the oral healthcare team including DS2 and 3 students and the dental assisting and dental hygiene staff through cooperation and assessment of outcomes of care.

Course #	Course Title	Credits	Year	Term
Odont 862	Comprehensive Care Family Dentistry <i>CLIN</i>	8	DS 4	Spring

The final semester of comprehensive care family dentistry will focus on the completion of phase 2 care for patients of record, increasing facility in providing initial evaluation and care of the dental patient, and addressing complex issues in care including those associated to overall health, stages of life, cultural awareness among others.

Oral and Maxillofacial Studies

Course #	Course Title	Credits	Year	Term
OMFS 511	Foundations of Dental Medicine <i>LAL</i>	3	DS 1	Fall

This course will focus on introduction to the patient/doctor relationship, the role of dental medicine in health care, the scientific basis of the pathophysiology, diagnostic methods, and treatment modalities of major oral diseases. Examples will include congenital diseases such as cleft lip and palate, degenerative diseases such as rheumatoid arthritis, neoplastic disease such as oral squamous cancer, traumatic diseases such as facial fracture, and infectious disease such as HPV.

This course includes a review of biochemistry relevant to the medical school first and second year HS courses to match the coursework provided to the MD students in foundations of medicine.

Course #	Course Title	Credits	Year	Term
OMFS 512	Oral Microbiology/Immunology <i>LAL</i>	3	DS 1	Spring

The oral microbiome in health and disease is presented including the ecologic niches of the oral region: periodontium, teeth, mucosa, nasopharynx, and salivary glands. The virology of the upper airway mouth and pharynx is presented including HPV, HIV, and acute viral diseases. The presence of prions and their potential role in disease is presented. The host response resulting in homeostasis or the initiation of infection is reviewed

Course #	Course Title	Credits	Year	Term
OMFS 532	Surgical Anatomy of the Head and Neck <i>LAL and LAB</i>	2	DS 1	Spring

The structures of the viscerocranium are presented including osteology, myology, cranial nerve peripheral anatomy, salivary glands, lymphatics, arterial supply and venous drainage. In-depth understanding of fascial planes, infratemporal fossa, triangles of the neck, myology of the mandible and maxilla will be presented with clinical illustrations as to their utility in dental medicine practice.

Course #	Course Title	Credits	Year	Term
OMFS 621	Dental Medicine at All Stages of Life	3	DS 2	Fall

Growth, development, function and the human experience from birth to death will be presented including the impact of oral health and oral health interventions, prevention, disease promotion and treatment at all stages. This topic is developed from the biologic, social, economic and cultural aspects of the human experience.

Course #	Course Title	Credits	Year	Term
OMFS 631	Dental Anesthesiology 1: Local Anesthesia <i>LAL and LAB</i>	3	DS 2	Fall

The pharmacology of local anesthesia, armamentarium for administration and technique for administration is presented. Local and systemic complications of administration, contraindications and comorbidities are presented. The laboratory will demonstrate and practice technique of local anesthesia administration on analogy and haptic simulators.

Course #	Course Title	Credits	Year	Term
OMFS 641	Oral Radiology 1 <i>LAL and LAB</i>	3	DS 2	Fall

The physics of ionizing radiation and the development of Roentgen's methods are presented. The components of clinical equipment to emit radiation and sensors, both analog and digital are presented. The interpretation of oral radiographs, periapical and bite wing radiographs is developed. Intraoral radiographs using a simulator are performed in the laboratory.

Course #	Course Title	Credits	Year	Term
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OMFS 632	Dental Anesthesiology 2: Pain and Anxiety Control, Analgesia, Medical Management of Local Anesthesia Patients	3	DS 2	Spring
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The risks of local anesthesia detection and management are presented. Understanding pain and anxiety in dental practice through assessment methods is presented. The pharmacologic and nonpharmacological means of mitigating pain and anxiety in dental care is presented. This includes the use of nitrous oxide, oral anxiolysis, and parenteral drugs.

Course #	Course Title	Credits	Year	Term
OMFS 642	Oral Pathology/Oral Medicine 1 <i>LAL and LAB</i>	3	DS 2	Spring

The significant tumors, anomalies, oral manifestations of systemic disease and other pathologies of the oral and maxillofacial region are presented. The laboratory will focus on the gross pathology and microscopic pathology of the oral and maxillofacial region

Course #	Course Title	Credits	Year	Term
OMFS 652	Orthodontics and Craniofacial Growth and Development <i>LAL and LAB</i>	3	DS 2	Spring

Principles of craniofacial growth and development will be presented. Abnormalities leading to malocclusion and dentofacial deformities will be shown. Methods of diagnosing disorders of dental facial growth and development will be understood and utilized by students. Orthodontic interventions for these conditions including methods, and outcomes will be shown. The laboratory will concentrate on diagnosis and orthodontic treatment methods.

Course #	Course Title	Credits	Year	Term
OMFS 751	Oral Radiology 2	3	DS 3	Fall

The understanding of Panoramic, planar films, CT, MRI. Nuclear medicine, and non-ionizing methods of image acquisition is presented. Comparison of these methods and appropriate case selection for these studies is presented. The utility in treatment planning and integration with other digital treatment planning methods is shown. The diagnosis of pathology via these methods is developed.

Course #	Course Title	Credits	Year	Term
OMFS 761	Principles of Oral Surgery <i>LAL and LAB</i>	3	DS 3	Fall

The principles of aseptic technique, flap design, surgical access, surgical hemostasis, infection prevention, and wound healing are presented. Technique for the removal of erupted and non-erupted teeth, both surgically and via forceps and elevator is presented. Preprosthetic surgical technique and minor soft tissue surgery including biopsy is presented. The laboratory will focus on the surgical and nonsurgical removal of teeth and on soft tissue surgery and biopsy.

Course #	Course Title	Credits	Year	Term
OMFS 771	Pediatric Dentistry <i>LAL and LAB</i>	3	DS 3	Fall

Child development and child management in the clinical setting will be developed from a holistic and family based perspective. Major diseases in growth and development of the oral cavity will be elucidated. The development of the deciduous and mixed dentition along with craniofacial development is presented. Caries diagnosis, treatment and prevention in the deciduous dentition is shown. The laboratory will provide simulated clinical experiences in caries treatment, deciduous crowns, space maintenance, and care of the pediatric patient.

Course #	Course Title	Credits	Year	Term
OMFS 742	Oral Pathology/Oral Medicine 2	3	DS 3	Spring

Further development of the oral manifestations of systemic disease is presented with emphasis on diabetes, hematologic bleeding disorders, hematologic malignancies, lymphomas, myeloma, xerostomic diseases, autoimmune disease, maxillofacial movement disorders, other neurologic diseases such as Parkinson's, with oral manifestations.

Course #	Course Title	Credits	Year	Term
OMFS 752	Clinical Clerkship: Pediatric Dentistry <i>4 weeks, 30 hours per week plus call</i>	8	DS 3	Spring

The student will engage in clinical experiences in the pediatric dentistry clinic as a member of the care team, treating patients under the supervision of pediatric dentistry faculty. Consultation on pediatric patients referred for oral conditions via pediatric medicine will occur.

Course #	Course Title	Credits	Year	Term
OMFS 762	Advanced Topics in Oral and Maxillofacial Surgery	2	DS 3	Spring

Understanding of major conditions of the oral and maxillofacial region requiring surgical intervention is presented. This includes diagnostic features, techniques for corrective surgery and outcome assessment. Categories include the treatment of facial trauma, ablative tumor surgery of the head and neck, cleft lip and palate surgery, craniofacial surgery, orthognathic surgery, reconstructive surgery of the jaws and face, and surgical treatment of temporomandibular disorders.

Course #	Course Title	Credits	Year	Term
OMFS 772	Clinical Clerkship: Oral and Maxillofacial Surgery <i>4 weeks, 30 hours per week plus call</i>	8	DS 3	Spring

The students will enter the oral and maxillofacial surgery care team for this clerkship including the care of patients for dentoalveolar surgery, major maxillofacial surgery and complex conditions of the head and neck. Clinical experience in ambulatory oral surgery and anesthesia and assisting for maxillofacial surgery in the operating room including emergency and trauma care occurs. Participation in hospital rounds and conferences occurs.

Course #	Course Title	Credits	Year	Term
OMFS 851	Oral Radiology Seminar	2	DS 4	Fall

This case-based seminar will present findings using all methods in OMFS 651 and OMFS 751 to demonstrate through active learning the radiographic findings in key diseases of the oral and maxillofacial region.

Course #	Course Title	Credits	Year	Term
OMFS 862	Oral Pathology/Oral Medicine Seminar	2	DS 4	Spring

Concentration on oral medicine will include the risk assessment and management of complex systemic diseases related to dental medicine care in dental practice. Case-based discussion on the dental medicine patient with HIV, ongoing chemotherapy for malignancy, osteoporosis/osteopenia among others will be presented by students in seminar format.

Course #	Course Title	Credits	Year	Term
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OMFS 862	Clinical Clerkship: Orthodontics <i>4 hours per week for 8 weeks</i>	2	DS 4	Spring
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Students will enter the orthodontic care team providing diagnostic and treatment services for patients undergoing orthodontic care under the auspices of orthodontic faculty in College of Dental Medicine clinics.

Behavioral and Social Sciences

Course #	Course Title	Credits	Year	Term
BSS 501	Managing Student Life	1	DS 1	Fall

Resilience, sustainability as a student and future health professional will be presented. Managing student debt, stress management, effects of social media, interpersonal relationships, and ethics in student practice will be discussed. The problems of drug and alcohol abuse will be shown. Respect in the University including cultural, gender, and sexual conduct issues will be presented. Students will be made aware of resources to promote student wellbeing.

Course #	Course Title	Credits	Year	Term
BSS 522	Ethics in Dental Medicine and Health Care	2	DS 1	Spring

The fundamentals of dental and medical ethics are presented including beneficence and non-maleficence. The Helsinki statement and other aspects of human research guidelines are presented including the role of Human Studies committees. The care of animals in biomedical research is discussed as well as the ethical use of human tissue in clinical care, transplant medicine etc. Ethical financial relationships and the underlying law behind them in clinical practice is discussed. The role of the criminal, tort system, the Board of Dentistry of California, and the ADA in dental ethics is presented.

Course #	Course Title	Credits	Year	Term
BSS 662	Behavioral Medicine (CP Course)	3	DS 2	Spring

In this course aspects of clinical psychology of importance in dental practice is presented. Case-based learning will include: minor and major psychiatric illnesses impacting on oral health and the provision of oral health care; elder, spousal and child abuse; dental fear; and, dental phobias.

Course #	Course Title	Credits	Year	Term
BSS 701	Dental Public Health	2	DS 3	Fall

The fundamentals of public health are presented including health and public health measures for health protection, protection from disease and health promotion. The surgeon general's report, 2000, updated 2019, on the status of oral health in America is presented. WHO assessment of oral health globally is presented. Population based initiative to improve oral health are discussed with a focus on clean water and fluoride exposure.

Course #	Course Title	Credits	Year	Term
BSS 721	Practice Management 1	2	DS 3	Fall

Addressing issues of student debt, career path, and modes of practice will be presented. Operating a dental practice via solo or group practice model and in health systems based practice will be discussed. Issues including human resources management, the actions of the care team in practice and financial responsibility and accounting will be presented.

Course #	Course Title	Credits	Year	Term
BSS 861	Clinical Clerkship: Community-based Education <i>4 weeks, 30 hours per week plus call</i>	8	DS 4	Fall

Affiliated health systems based practices will accept CNU students into their care teams where senior students will provide clinical care under the supervision of Volunteer Community-Based Faculty in those sites. Suitable transportation and housing will be arranged for where needed. The purpose of the course is to provide community engagement with the constituencies served, to gain experience in community-based clinical care and to interact with the interprofessional and intraprofessional care team

Course #	Course Title	Credits	Year	Term
BSS 871	Seminar in Dental Public Health	2	DS 4	Fall

This weekly seminar develops through case based discussions led by student teams the public health issues in oral health in California and globally including access to care, social determinants of oral health, scope of practice issues, insurance and payment systems for oral health, access to fluoride, immunizations especially for HPV, and health protection for vulnerable populations such as children and elderly.

Course #	Course Title	Credits	Year	Term
BSS 822	Practice Management 2	2	DS 4	Spring

The simulation of dental practices in various models will be developed by students in groups including addressing issues of hiring, overhead, interaction with vendors, staff development, marketing, accounting and all operations in dental practice. The regulatory environment for pricing, dental insurance, health insurance will be reviewed as well as all aspects of the operation of dental practices.

Course #	Course Title	Credits	Year	Term
BSS 862	Clinical Clerkship: Community-based Education <i>4 weeks, 30 hours per week plus call</i>	8	DS 4	Spring

This course will be at a second community-based rotation site to elaborate on the activities of the first rotation and engage a new community and a new clinic. In addition to comprehensive care experience, the student will compare and contrast communities and clinical care entities and provide a reflective essay on their community care experience.

Course #	Course Title	Credits	Year	Term
BSS 872	Senior Elective Clinical Clerkship	6	DS 4	Spring

D4 students will select from additional clerkships available at clinical sites either discipline based or comprehensive care in odontology, oral and maxillofacial studies or human studies. Examples include comprehensive care at a remote clinic (odontology), dental specialty clerkship in oral maxillofacial surgery (OMFS), clerkship in internal medicine (Human Studies), or population health study abroad or in US (BSS).

Credit Hours and Student Contact Hours

Curriculum Theme	Credit Hours	Year	Credit Hours	Contact Hours
Human Systems	58	Year 1	55	1140
Odontology	84	Year 2	66	1380
OMFS	62	Year 3	60	1590
BSS	36	Year 4	59	1470
Total	240		240	5580

Appendix D-6 Program Announcement

DMD Program Learning Outcomes (PLOs)

PLO 1: Patient-Centered Care

Demonstrate understanding of healthcare disparities and cultural awareness and capability in patient counseling and providing appropriate patient advocacy

Indicators	Initial	Developing	Developed	Proficient
1.1. Education. Demonstrates ability to educate all audiences through effectively communicating information and assessing learning	<ul style="list-style-type: none"> Does not appropriately counsel patients Does not check for understanding, ask questions, and/or asks inappropriate questions. Does not demonstrate the ability to find and utilize appropriate resources and references necessary for providing accurate counseling, consultation and education 	<ul style="list-style-type: none"> Counsels patients but leaves out pertinent information needed by patient Communicates with basic level of clarity but does not always check for understanding or rephrase when confusion occurs. Demonstrates the ability to find a one or two resources, yet the resources are not the best or most appropriate for providing accurate counseling, consultation and education 	<ul style="list-style-type: none"> Generally demonstrates empathy, communicates accurate information clearly, checks for understanding Seeks to ensure understanding and generally asks questions. Frequently demonstrates the ability to find and utilize appropriate resources and references necessary for providing accurate counseling, consultation and education 	<ul style="list-style-type: none"> Consistently demonstrates empathy, communicates accurate information clearly, checks for understanding Ensures understanding and asks appropriate questions. Consistently demonstrates the ability to find and utilize appropriate resources and references for providing accurate patient counseling, consultation and education
1.2. Patient advocacy. Represents the patient's best interests	<ul style="list-style-type: none"> Does not demonstrate the ability represent a patient's best interest 	<ul style="list-style-type: none"> Demonstrates awareness of issues that impact a patient Demonstrates minimal ability to articulate these issues but does not demonstrate ability to sufficiently advocate on a patient's behalf 	<ul style="list-style-type: none"> Demonstrates sufficient awareness of issues that impact a patient Demonstrates ability to articulate these issues Demonstrates ability to sufficiently advocate on a patient's behalf 	<ul style="list-style-type: none"> Demonstrates full awareness of the most important issues that impact a patient Demonstrates ability to clearly and effectively articulate these issues Demonstrates ability to effectively advocate on a patient's behalf

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PLO 2: Evidence-Based Care.

Apply sound, current, and evidence-based oral healthcare within the scope of general dentistry

Indicators	Initial	Developing	Developed	Proficient
2.1. Patient-centered care. Demonstrates ability to provide patient-centered care as the medication expert (collect and interpret evidence, prioritize, formulate assessments and recommendations, implement, monitor and adjust plans, and document activities)	<ul style="list-style-type: none"> Does not demonstrate ability to provide patient-centered care at the medication expert level; e.g., demonstrates ability to collect but not sufficiently interpret evidence, does not prioritize, formulates basic assessments and recommendations, does not sufficiently monitor and adjust plans nor document activities. 	<ul style="list-style-type: none"> Demonstrates ability to provide patient-centered care as the medication expert in some, but not all, areas as follows: collect and interpret evidence, prioritize, formulate assessments and recommendations, implement, monitor and adjust plans, and document activities 	<ul style="list-style-type: none"> Demonstrates ability to provide patient-centered care as the medication expert (generally demonstrates ability to collect and interpret evidence, prioritize, formulate assessments and recommendations, implement, monitor and adjust plans, and document activities) 	<ul style="list-style-type: none"> Demonstrates ability to provide sufficient patient-centered care as the expert (collects and interprets evidence, prioritizes, formulates assessments and recommendations, implements, monitors and adjusts plans, and documents activities)
2.2. Systems management. Demonstrates ability to manage patient healthcare needs using human, financial, technological, and physical resources to optimize the safety and efficacy of medication use systems	<ul style="list-style-type: none"> Does not demonstrate understanding of oral healthcare delivery systems parts Does not demonstrate understanding of the forces that influence components of the oral healthcare delivery system, including their connection to patient care Does not demonstrate understanding of any challenges to systems that affect oral healthcare delivery Does not demonstrate understanding of how to work with different subsystems to deliver oral healthcare 	<ul style="list-style-type: none"> Demonstrates understanding of some parts of oral healthcare delivery systems but does not identify how they are related to each other Demonstrates understanding of some forces that influence the parts of healthcare delivery systems, but demonstrate minimal understanding of their connection to patient care Demonstrates understanding of some challenges that can affect delivery of oral healthcare Demonstrates some understanding of how to work with different subsystems and how they function to deliver oral healthcare, but demonstrate minimal awareness or understanding of one's own role within the oral healthcare delivery system 	<ul style="list-style-type: none"> Demonstrates understanding of most major components of oral healthcare systems and their respective relationships Demonstrates understanding of the forces that influence the components of healthcare delivery systems, and demonstrate some understanding of their influence on the quality of patient care Demonstrates understanding of most challenges that can affect delivery of oral healthcare, but does not demonstrate complete comprehension of the effects Demonstrates basic understanding of how to work with different subsystems and how they function to deliver oral healthcare and demonstrate some understanding of one's role within the oral healthcare delivery system, but does not necessarily demonstrate 	<ul style="list-style-type: none"> Demonstrates understanding of the major components of oral healthcare systems, their respective relationships, and their functions related to patient care Demonstrates thorough understanding of the forces that influence components of healthcare delivery systems and demonstrate full understanding of their influence and implications on the quality of patient care Demonstrates understanding of pertinent challenges to specific aspects of healthcare delivery by demonstrating abilities to thoroughly discuss the implications for the appropriate parts of oral health care delivery systems Demonstrates excellent understanding of how to work with different subsystems involved while also demonstrating understanding of one's role within the subsystems,

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				application of knowledge in a manner that maximizes the quality of oral healthcare	and demonstrate appropriate application of knowledge in a manner that maximizes the quality of oral healthcare
2.3. Health and wellness. Designs prevention, intervention, and educational strategies for individuals and communities to manage chronic disease and improve oral health and wellness	<ul style="list-style-type: none">Does not demonstrate understanding of how the arts can be utilized to optimize patients' well-being	<ul style="list-style-type: none">Demonstrates knowledge of some of the ways that the arts can be utilized to optimize patients' well-being	<ul style="list-style-type: none">Demonstrates sufficient knowledge of multiple ways that the arts can be utilized to optimize patients' well-being	<ul style="list-style-type: none">Demonstrates thorough knowledge of the ways that the arts can be utilized to optimize patients' well-being and creatively applies this knowledge to improve well-being and the practice and delivery of oral healthcare	
2.4. Population-based care. Demonstrates understanding of how population-based care influences patient-centered care and the development of practice guidelines and evidence-based best practices	<ul style="list-style-type: none">Does not demonstrate awareness of population-based care.	<ul style="list-style-type: none">Demonstrates minimal understanding of population-based care and how it influences patient-centered careDoes not demonstrate awareness of how these notions influence the development of practice guidelines	<ul style="list-style-type: none">Demonstrates sufficient understanding of population-based care and how it influences patient-centered careDemonstrates sufficient understanding of how population-based care influences the development of practice guidelines and best practices for patient care	<ul style="list-style-type: none">Demonstrates superb understanding of population-based care and how it influences patient-centered careDemonstrates superb understanding of how population-based care influences the development of practice guidelines and demonstrates knowledge of best practices for patient care	

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PLO 3: Culturally Competent, Empathic Communication.

Demonstrate patient centered, empathic and culturally competent communication and interpersonal skills

Indicators	Initial	Developing	Developed	Proficient
3.1. Empathy. Demonstrates the ability to communicate with the patient empathically.	<ul style="list-style-type: none"> Does not demonstrate the ability to communicate with the patient empathically. 	<ul style="list-style-type: none"> Demonstrates some ability, but experiences lapses in the ability to communicate empathically 	<ul style="list-style-type: none"> Demonstrates the ability to communicate empathically, with few lapses. 	<ul style="list-style-type: none"> Demonstrates an advanced ability, and never experiences lapses in communicating empathically.
3.2. Cultural competence. Demonstrates the ability to engage in communication with the patient that is culturally aware and accepting.	<ul style="list-style-type: none"> Does not demonstrate communication and interactions that convey respect or concern for patients and the community. Does not demonstrate an awareness of customs, beliefs, or perspectives in diverse patients Does not demonstrate awareness of cultural and linguistic needs of patients in order to communicate health information 	<ul style="list-style-type: none"> Demonstrates communication and interactions characteristic of a minimal level of respect, and little concern for patients and the community is apparent through use of some appropriate communication, but student does not employ follow-up questions for clarification, when necessary, and student provides inappropriate detail in responses Demonstrates a minimal level of awareness of customs, beliefs, or perspectives in diverse patients Demonstrates minimal awareness of cultural and linguistic needs of patients; either does not or only attempt to adapt behaviors, but does so ineffectively, to communicate health information 	<ul style="list-style-type: none"> Demonstrates appropriate communication and interactions that are characteristic of a basic level of respect, and concern for patients and the community is apparent through use of appropriate communication, where student uses some clear, but not necessarily relevant or detailed, follow-up questions and responses Demonstrates awareness of customs and beliefs, but may not clarify with patients about personal perspectives Demonstrates awareness of the cultural and linguistic needs of diverse patients, and adapt behaviors to communicate health information, but communication may not be effective 	<ul style="list-style-type: none"> Demonstrates professional communication and interactions by showing empathy, respect, and concern for patients and the community through use of appropriate communication where follow-up questions (as needed) and responses are clear, relevant, and detailed Demonstrates awareness of customs, beliefs, or perspectives in diverse patients; ask appropriate questions to clarify perspectives and perceptions in diverse patients Demonstrates full awareness of and responsiveness to cultural and linguistic needs of diverse patients by adapting behaviors appropriately in order to effectively communicate health information

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PLO 4: Oral and Written Communication.

Demonstrate sound oral and written communications in patient care

Indicators	Initial	Developing	Developed	Proficient
4.1. Oral communication. Demonstrate sound oral communication in patient care.	<ul style="list-style-type: none"> Does not demonstrate logical reasoning in oral communications in patient care. Does not demonstrate the ability to cite sound evidence that support ideas within presentations or discussions. 	<ul style="list-style-type: none"> Demonstrates some logical reasoning in oral communications in patient care but demonstrates some lapses. Demonstrates some ability to cite sound evidence that support ideas within presentations or discussions, but demonstrates some lapses. 	<ul style="list-style-type: none"> Generally demonstrates logical reasoning in oral communications in patient care. Generally demonstrates the ability to cite sound evidence that support ideas within presentations or discussions. 	<ul style="list-style-type: none"> Consistently demonstrates logical reasoning in oral communications in patient care. Consistently demonstrates the ability to cite sound evidence that support ideas within presentations or discussions.
4.2. Written communication. Demonstrate sound written communication in patient care.	<ul style="list-style-type: none"> Does not demonstrate logical reasoning in written communications in patient care. Does not demonstrate the written ability to cite sound evidence that support ideas. 	<ul style="list-style-type: none"> Demonstrates some logical reasoning in written communications in patient care but demonstrates some lapses. Demonstrates some written ability to cite sound evidence that support ideas, but demonstrates some lapses. 	<ul style="list-style-type: none"> Generally logical reasoning in written communications in patient care. Generally demonstrates the written ability to cite sound evidence that support ideas. 	<ul style="list-style-type: none"> Consistently demonstrates logical reasoning in written communications in patient care. Consistently demonstrates the written ability to cite sound evidence that support ideas.

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PLO 5: Critical Thinking.

Utilize critical thinking, problem solving skills and systemic thinking in assessing and making reasoned, evidence-based decisions in patient care

Indicators	Initial	Developing	Developed	Proficient
5.1. Problem solving. Identifies problems; explore and prioritize potential strategies; and designs, implements, and evaluates viable solutions	<ul style="list-style-type: none"> Is not able to correctly identify the problem or issue being considered. Does not identify appropriate resources. Includes extraneous information or inappropriate or insufficient resources. Does not demonstrate understanding of the content of materials reviewed. Makes inappropriate inferences. Does not evaluate possible alternatives or generates ideas that are illogical or extraneous to issue at hand. Does not propose a solution or does not articulate decision. Does not adequately provide rationale for selected alternative or decision 	<ul style="list-style-type: none"> Identifies the problem or issue but does not demonstrate awareness of all the factors associated with the problem or issues that impact decision making. Identifies a few, but not all, resources needed for decision making. Demonstrates ability to interpret some information and data but not all. Does not fully or effectively evaluate alternative solutions. Proposes a decision with many apparent weaknesses (i.e., not feasible, lack of regard for consequences, lack of supporting evidence, illogical, irrelevant to issue at hand, etc.). Provides rationale for selected alternative or decision but does not build a solid position with supporting evidence. Is unable to defend decision or course of action. 	<ul style="list-style-type: none"> Correctly identifies problem or issue being considered and demonstrates adequate awareness of the factors associated with this problem or issue that impact decision making. Identifies most of the resources needed. Demonstrates ability to interpret most information and data. Considers and evaluates possible solutions in a way that generally leads to a logical decision or course of action. Proposes a solution that does not contain apparent weaknesses that may or may not be the obvious clear choice. Solutions chosen demonstrate consideration of most of the strengths, weaknesses, feasibility, effects, consequences, relevance, etc.). Provides rationale for selected alternative or decision which includes some solid supporting evidence. Is able to defend decision or course of action at a basic level. 	<ul style="list-style-type: none"> Consistently correctly identifies the problem or issue being considered and all of the primary factors associated with this problem or issue that impact decision making. Articulates the importance of these factors. Identifies all appropriate resources. Demonstrates ability to correctly interpret information and data needed for appropriate decision making. Demonstrates awareness of importance of these data in decision-making process. Considers and evaluates possible solutions effectively and thoroughly. Evaluation leads to sound, logical, and "best" decision or course of action. Proposes a solution that is entirely appropriate to the situation at hand. Solutions chosen demonstrate consideration of all of the important and relevant strengths, weaknesses, feasibility, effects, consequences, etc.). Provides rationale for selected alternative or decision and builds a solid position with appropriate and relevant supporting evidence. Effectively defends decision or course of action.

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PLO 6: Ethics and Professionalism.

Demonstrating professionalism and ethical decision making

Indicators	Initial	Developing	Developed	Proficient
6.1. Professionalism. Demonstrates behaviors and values that are consistent with the trust given to the profession by patients, other healthcare providers, and society	<ul style="list-style-type: none"> Does not consistently demonstrate professional attitudes and behaviors (altruism, excellence, duty, accountability, honesty, and integrity) Demonstrates frequent lapses in accountability or quality of work 	<ul style="list-style-type: none"> Demonstrates some professional attitudes and behaviors yet there is inconsistency that may impede on the quality of work or treatment of patients and other healthcare team members (altruism, excellence, duty, accountability, honesty, and integrity) 	<ul style="list-style-type: none"> Generally demonstrates most of the professional attitudes and behaviors (altruism, excellence, duty, accountability, honesty, and integrity) that are required in the profession Demonstrates ability to use these behaviors and values to improve healthcare 	<ul style="list-style-type: none"> Consistently demonstrates the professional attitudes and behaviors that uphold the integrity and competence of the work and the treatment of patients and other healthcare team professionals (altruism, excellence, duty, accountability, honesty, and integrity) Consistently uses these behaviors and values to improve healthcare
6.2. Ethics. Demonstrates the ability to make decisions consistent with the values of practitioners and scholars of oral healthcare.	<ul style="list-style-type: none"> Does not make ethical decisions consistent with the values of practitioners and scholars of oral healthcare. 	<ul style="list-style-type: none"> Demonstrates the ability to exercise ethical decision making, and a rudimentary knowledge of ethics within oral healthcare. 	<ul style="list-style-type: none"> Demonstrates the ability to exercise clear and ethical decision making, and a sufficient knowledge of ethics within oral healthcare. 	Demonstrates the ability to exercise clear and ethical decision making, and an advanced knowledge of ethics within oral healthcare.

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PLO 7: Biomedical Sciences Knowledge.

Demonstrate an understanding of the fundamentals of biomedical sciences and apply them appropriately in oral healthcare

Indicators	Initial	Developing	Developed	Proficient
7.1. Diagnostic and pharmacologic. Demonstrates the ability to describe how to deliver patient assessments, knowledge of medicines, and delivering diagnoses.	<ul style="list-style-type: none"> Does not demonstrate the ability to describe diagnostic and pharmacologic knowledge related to oral health. 	<ul style="list-style-type: none"> Demonstrates a rudimentary ability to describe diagnostic and pharmacologic knowledge related to oral health. 	<ul style="list-style-type: none"> Demonstrates a sufficient ability to describe diagnostic and pharmacologic knowledge related to oral health. 	<ul style="list-style-type: none"> Demonstrates an advanced ability to describe diagnostic and pharmacologic knowledge related to oral health.
7.2. Orofacial pain/temporomandibular/ Sleep disorder. Demonstrates the ability to describe the anatomical, physiological, and neurological basis; classification, epidemiology, and etiology; and assessments and treatments of orofacial pain, temporomandibular joint disease, and sleep disorders.	<ul style="list-style-type: none"> Does not demonstrate the ability to describe scientific or assessment knowledge related to OFP/TMJ disease and sleep disorders. 	<ul style="list-style-type: none"> Demonstrates a rudimentary ability to describe scientific or assessment knowledge related to OFP/TMJ disease and sleep disorders. 	<ul style="list-style-type: none"> Demonstrates a sufficient ability to describe scientific or assessment knowledge related to OFP/TMJ disease and sleep disorders. 	<ul style="list-style-type: none"> Demonstrates an advanced ability to describe scientific or assessment knowledge related to OFP/TMJ disease and sleep disorders.
7.3. Maxillofacial pathology Demonstrates the ability to describe the scientific aspects of head and neck diseases, as well as knowledge of assessment and diagnosis.	<ul style="list-style-type: none"> Does not demonstrate the ability to describe the scientific or assessment knowledge related to head and neck diseases. 	<ul style="list-style-type: none"> Demonstrates a rudimentary ability to describe the scientific or assessment knowledge related to head and neck diseases. 	<ul style="list-style-type: none"> Demonstrates a sufficient ability to describe the scientific or assessment knowledge related to head and neck diseases. 	<ul style="list-style-type: none"> Demonstrates an advanced ability to describe the scientific or assessment knowledge related to head and neck diseases.

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PLO 8: Practice Management.

Apply legal, regulatory, and business management concepts related to the provision of oral healthcare services

Indicators	Initial	Developing	Developed	Proficient
8.1. Legal aspects Applies legal and regulatory concepts related to the provision of oral healthcare services.	<ul style="list-style-type: none"> Does not demonstrate an understanding or the ability to apply legal and regulatory concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates a rudimentary understanding and ability to apply legal and regulatory concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates a sound understanding and ability to apply legal and regulatory concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates an advanced understanding and ability to apply legal and regulatory concepts related to the provision of oral healthcare sciences.
8.2. Business management Applies business management concepts to the provision of oral healthcare services.	<ul style="list-style-type: none"> Does not demonstrate an understanding or the ability to apply business management concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates a rudimentary understanding and ability to apply business management concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates a sound understanding and ability to apply business management concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates an advanced understanding and ability to apply business management concepts related to the provision of oral healthcare sciences.

College of Dental Medicine Program
Course-to-Program Learning Objectives (PLO) Curricular Map

LEGEND	I - Introduce	P - Practice	M - Master
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COURSE	PLO 1 Patient- Centered Care	PLO 2 Evidence-based Care	PLO 3 Culturally Competent, Empathic Communication	PLO 4 Oral and Written Communication	PLO 5 Critical Thinking	PLO 6 Ethics and Professionalism	PLO 7 Biomedical Science Knowledge	PLO 8 Practice Management	C
Year 1: Fall									27
Hematology		I		I	I		I		4
Integumentary and Musculoskeletal Systems		I		I	I		I		7
Foundations of Odontology	I	I	I	I	I	I	I	I	6
Dental Anatomy		I		I	I		I		6
Foundations of Dental Medicine	I	I	I	I	I	I	I	I	3
Managing Student Life				I	I	I		I	1
Year 1: Spring				I					26
Neuroscience		I			I		I		9

Appendix D-6 Program Announcement

	PLO 1 Patient-Centered Care	PLO 2 Evidence-based Care	PLO 3 Culturally Competent, Empathic Communication	PLO 4 Oral and Written Communication	PLO 5 Critical Thinking	PLO 6 Ethics and Professionalism	PLO 7 Biomedical Science Knowledge	PLO 8 Practice Management	C
Cardiovascular and Pulmonary Systems		I		I	I		I		9
Cariology	I	I		I	I		I		3
Oral Microbiology/Immunology		I		I	I		I		3
Surgical Anatomy of the Head and Neck		I		I	I		I		2
Year 2: Fall									33
Renal System		I		I	I		I		5
Gastroenterology		I		I	I		I		5
Endocrine System		I		I	I		I		5
Clinical Pharmacology I	I	I	I	I	I		I		3
Operative Dentistry	I	I	I	I	I	I	I		6
Periodontology	I	I	I	I	I	I	I		3
Dental Anesthesiology 1, Local Anesthesia	I	I	I	I	I	I	I		3
Oral Radiology 1	I	I	I	I	I	I	I	I	3
Year 2: Spring									33
Clinical Pharmacology 2/Oral Pharmacology		P		P	P		P	P	3
Periodontology	P	P	P	P	P	P	P	P	3
Prosthodontics and Implant Dentistry: Removable Prosthodontics	I	I		I	I		I	I	6
Comprehensive Care Family Dentistry	P	P	P	P	P	P	P	P	3
Endontology, Diseases of the Pulp and Pathways of Odontogenic Infection	I	I		I	I		I		3
Dental Anesthesiology 2: Pain and Anxiety Control, Analgesia, Medical Management of Local Anesthesia	P	P	P	P	P	P	P	P	3
Oral Pathology/Oral Medicine 1	I	I		I	I		I	I	3

Appendix D-6 Program Announcement

	PLO 1 Patient-Centered Care	PLO 2 Evidence-based Care	PLO 3 Culturally Competent, Empathic Communication	PLO 4 Oral and Written Communication	PLO 5 Critical Thinking	PLO 6 Ethics and Professionalism	PLO 7 Biomedical Science Knowledge	PLO 8 Practice Management	C
Orthodontics and Craniofacial Growth and Development	I	I		I	I		I		3
Behavioral Medicine	P	P	P	P	P	P	P	P	3
Dental Medicine at all Stages of Life	P	P	P	P	P	P	P		3
Year 3: Fall									29
Junior Year Medicine Seminar			P	P	P		P		2
Prosthodontics and Implant Dentistry: Fixed Prosthodontics	I	I		I	I		I		6
Comprehensive Care Family Dentistry	P	P	P	P	P	P	P	P	8
Oral Radiology 2		P		P	P		P	P	3
Principles of Oral Surgery	I	I	I	I	I	I	I		3
Pediatric Dentistry	I	I	I	I	I	I	I	I	3
Dental Public Health	I	I	I	I	I	I	I	I	2
Practice Management 1	I	I	I	I	I	I	I	I	2
Year 3: Spring									31
Junior Year Medicine Seminar	P	P	P	P	P	P	P	P	2
Periodontology Seminar	P	P	P	P	P	P		P	2
Comprehensive Care Family Dentistry	M	M	M	M	M	M	P	M	8
Oral Pathology/Oral Medicine 2	P	P	P	P	P	P	P	P	3
Clinical Clerkship: Oral and Maxillofacial Surgery	M	M	M	M	M	M	M	M	8
Clinical Clerkship: Pediatric Dentistry	M	M	M	M	M	M	M	M	8
Year 4: Fall									27
Senior Year Medicine Seminar	M	M	M	M	M	M	M	M	2
Periodontology Seminar	M	M	M	M	M	M	M	M	2

Appendix D-6 Program Announcement

	PLO 1 Patient-Centered Care	PLO 2 Evidence-based Care	PLO 3 Culturally Competent, Empathic Communication	PLO 4 Oral and Written Communication	PLO 5 Critical Thinking	PLO 6 Ethics and Professionalism	PLO 7 Biomedical Science Knowledge	PLO 8 Practice Management	C
Prosthodontics and Implant Dentistry: Implant Surgery and Prosthodontic Reconstruction	M	M	M	M	M	M	M	M	3
Comprehensive Care Family Dentistry	M	M	M	M	M	M	M	M	8
Oral Radiology Seminar	M	M	M	M	M	M	M	M	2
Clinical Clerkship: Community Based Education		M	M	M	M	M	M	M	8
Seminar in Dental Public Health	M	M	M	M	M	M	M	M	2
Year 4: Spring									26
Senior Year Medicine Seminar	M	M	M	M	M	M	M	M	2
Comprehensive Care Family Dentistry	M	M	M	M	M	M	M	M	8
Oral Pathology/Oral Medicine Seminar	M	M	M	M	M	M	M	M	2
Clinical Clerkship: Orthodontics	M	M	M	M	M	M		M	2
Advanced Topics in Oral and Maxillofacial Surgery	M	M	M	M	M	M	M	M	2
Clinical Clerkship: Community Based Education	M	M	M	M	M	M	M	M	8
Practice Management 2	M	M	M	M	M	M	M	M	2

Appendix D-6 Program Announcement

College of Dental Medicine Program Institutional Learning Outcomes (ILO) Curricular Map

LEGEND	I - Introduce	D -Developing	D2 - Developed	P - Proficient
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COURSE	ILO 1 Critical Thinking	ILO 2 Written Communication	ILO 3 Oral Communication	ILO 4 Professionalism	ILO 5 Quantitative Reasoning	ILO 6 Information Literacy	CU
Year 1: Fall							27
Hematology	I	I	I	I	I	I	4
Integumentary and Musculoskeletal Systems	I	I	I	I	I	I	7
Foundations of Odontology	I	I	I	I	I	I	6
Dental Anatomy	I	I	I	I	I	I	6
Foundations of Dental Medicine	I	I	I	I	I	I	3
Managing Student Life	I	I	I	I	I	I	1
Year 1: Spring							26
Neuroscience	I	I	I	I	I	I	9

Appendix D-6 Program Announcement

	ILO 1 Critical Thinking	ILO 2 Written Communication	ILO 3 Oral Communication	ILO 4 Professionalism	ILO 5 Quantitative Reasoning	ILO 6 Information Literacy	CU
Cardiovascular and Pulmonary Systems							9
Cariology							3
Oral Microbiology/Immunology							3
Surgical Anatomy of the Head and Neck							2
Year 2: Fall							33
Renal System							5
Gastroenterology							5
Endocrine System							5
Clinical Pharmacology I							3
Operative Dentistry							6
Periodontology							3
Dental Anesthesiology 1, Local Anesthesia							3
Oral Radiology 1							3
Year 2: Spring							33
Clinical Pharmacology 2/Oral Pharmacology							3
Periodontology	D	D	D	D	D	D	3
Prosthodontics and Implant Dentistry: Removable Prosthodontics	D	D	D	D	D	D	6
Comprehensive Care Family Dentistry	D	D	D	D	D	D	3
Endontology, Diseases of the Pulp and Pathways of Odontogenic Infection	D	D		D	D	D	3
Dental Anesthesiology 2: Pain and Anxiety Control, Analgesia, Medical Management of Local Anesthesia	D	D	D	D	D	D	3
Oral Pathology/Oral Medicine 1	D	D	D	D	D	D	3

Appendix D-6 Program Announcement

	ILO 1 Critical Thinking	ILO 2 Written Communication	ILO 3 Oral Communication	ILO 4 Professionalism	ILO 5 Quantitative Reasoning	ILO 6 Information Literacy	CU
Orthodontics and Craniofacial Growth and Development	D	D	D	D	D	D	3
Behavioral Medicine	D	D	D	D	D	D	3
Dental Medicine at all Stages of Life	D	D	D	D	D	D	3
Year 3: Fall							29
Junior Year Medicine Seminar	D	D	D	D	D	D	2
Prosthodontics and Implant Dentistry: Fixed Prosthodontics	D	D	D	D	D	D	6
Comprehensive Care Family Dentistry	D	D	D	D	D	D	8
Oral Radiology 2	D	D	D	D	D	D	3
Principles of Oral Surgery	D	D	D	D	D	D	3
Pediatric Dentistry	D	D	D	D	D	D	3
Dental Public Health	D	D	D	D	D	D	2
Practice Management 1	D	D	D	D	D	D	2
Year 3: Spring							31
Junior Year Medicine Seminar	D	D	D	D	D	D	2
Periodontology Seminar	D	D	D	D	D	D	2
Comprehensive Care Family Dentistry	D2	D2	D2	D2	D2	D2	8
Oral Pathology/Oral Medicine 2	D	D	D	D	D	D	3
Clinical Clerkship: Oral and Maxillofacial Surgery	D	D	D	D	D	D	8
Clinical Clerkship: Pediatric Dentistry	D	D	D	D	D	D	8
Year 4: Fall							27
Senior Year Medicine Seminar	D2	D2	D2	D2	D2	D2	2
Periodontology Seminar	D2	D2	D2	D2	D2	D2	2

	ILO 1 Critical Thinking	ILO 2 Written Communication	ILO 3 Oral Communication	ILO 4 Professionalism	ILO 5 Quantitative Reasoning	ILO 6 Information Literacy	CU
Prosthodontics and Implant Dentistry: Implant Surgery and Prosthodontic Reconstruction	D2	D2	D2	D2	D2	D2	3
Comprehensive Care Family Dentistry	P	P	P	P	P	P	8
Oral Radiology Seminar	P	P	P	P		P	2
Clinical Clerkship: Community Based Education	P	P	P	P	P	P	8
Seminar in Dental Public Health	P	P	P	P	P	P	2
Year 4: Spring							26
Senior Year Medicine Seminar	P	P	P	P	P	P	2
Comprehensive Care Family Dentistry	P	P	P	P	P	P	8
Oral Pathology/Oral Medicine Seminar	P	P	P	P	P	P	2
Clinical Clerkship: Orthodontics	P	P	P	P	P	P	2
Advanced Topics in Oral and Maxillofacial Surgery	P	P	P	P	P	P	2
Clinical Clerkship: Community Based Education	P	P	P	P	P	P	8
Practice Management 2	P	P	P	P	P	P	2

DMD Co-Curricular Learning Outcomes (CoCuLOs)

CoCuLO	Initial	Developing	Developed	Proficient
1. Social Awareness and Cultural Sensitivity Students demonstrate awareness of and responsiveness to social and cultural differences by adapting behaviors appropriately and using effective interpersonal skills	<ul style="list-style-type: none"> Does not demonstrate awareness of others' feelings in relation to social or cultural differences Does not adapt behaviors to current social or cultural situations 	<ul style="list-style-type: none"> Demonstrates some demonstrate awareness of others' feelings in relation to social or cultural differences Demonstrates ability to adapt behaviors to current social or cultural situations 	<ul style="list-style-type: none"> Generally demonstrates awareness of others' feelings in relation to social or cultural differences Frequently demonstrates ability to adapt behaviors to current social or cultural situations 	<ul style="list-style-type: none"> Consistently demonstrates awareness of others' feelings in relation to social or cultural differences Consistently demonstrates ability to adapt behaviors to current social or cultural situations, as displayed by use of all of the following: appropriate language, use respectful tone, verification of understanding
2. Professionalism and Advocacy Students demonstrate professional behavior with other healthcare professionals and advocate for initiatives to improve patient care	<ul style="list-style-type: none"> Does not consistently demonstrate professional attitudes or behaviors Does not advocate for initiatives to improve patient care 	<ul style="list-style-type: none"> Demonstrates some professional attitudes and behaviors Occasionally advocates for initiatives to improve patient care 	<ul style="list-style-type: none"> Generally demonstrates professional attitudes and behaviors Often demonstrates ability to use these behaviors and values to improve healthcare 	<ul style="list-style-type: none"> Consistently demonstrates professional attitudes and behaviors Consistently demonstrates ability to use these behaviors and values to improve healthcare
3. Self-Awareness and Learning Students demonstrate self-awareness through reflection and appropriate planning of self-directed learning and career advancement	<ul style="list-style-type: none"> Does not demonstrate self-awareness of own biases impacting ability to work with others Does not show ability to reflect on own knowledge, skills, abilities, and experiences Does not seek opportunities for personal growth 	<ul style="list-style-type: none"> Demonstrates minimal self-awareness of own biases impacting ability to work with others Demonstrates rudimentary ability to reflect on own knowledge, skills, abilities, and experiences. Occasionally seeks opportunities for 	<ul style="list-style-type: none"> Often demonstrates self-awareness of own biases impacting ability to work with others Demonstrates some ability to reflect on own knowledge, skills, and experiences Often seeks opportunities for personal growth and self-directed learning 	<ul style="list-style-type: none"> Consistently demonstrates self-awareness of own biases impacting ability to work with others Demonstrates ability to reflect on own knowledge, skills, and experiences Regularly seeks opportunities for personal growth and self-directed learning

	and self-directed learning	personal growth and self-directed learning		
4. Innovation/ Entrepreneurship Students demonstrate innovation and creativity in accomplishing professional goals	<ul style="list-style-type: none"> Does not demonstrate innovation and creativity in accomplishing professional goals 	<ul style="list-style-type: none"> Demonstrates minimal innovation and creativity in accomplishing professional goals 	<ul style="list-style-type: none"> Demonstrates innovation and creativity but professional goals may not be feasible or appropriate 	<ul style="list-style-type: none"> Consistently demonstrates innovation and creativity in accomplishing professional goals
5. Public Health and Education Students apply learned skills to deliver public health initiatives and education to the community	<ul style="list-style-type: none"> Does not apply learned skills to deliver public health initiatives and education to the community 	<ul style="list-style-type: none"> Demonstrates difficulty applying learned skills to deliver public health initiatives and education to the community 	<ul style="list-style-type: none"> Demonstrates sufficient application of learned skills to deliver public health initiatives and education to the community 	<ul style="list-style-type: none"> Demonstrates appropriate and effective application of learned skills to deliver public health initiatives and education to the community
6. Service and Leadership Students demonstrate the ability to lead and work collaboratively with others to accomplish shared goals	<ul style="list-style-type: none"> Functions to satisfy personal needs rather than those of the healthcare team 	<ul style="list-style-type: none"> Demonstrates minimal ability to contribute toward shared goals 	<ul style="list-style-type: none"> Generally contributes toward shared goals 	<ul style="list-style-type: none"> Consistently contributes toward shared goals

Admissions

Students seeking admission to the DMD program will use the centralized application service for dental school admission called ADSAS, administered through WebAdmit and the American Dental Education Association. Minimum requirements for entrance to the program are: undergraduate minimum GPA of 2.8 (preferred 3.2), DAT score of 17 or greater with a preferred DAT of 19.

Minimum Requirements

California Northstate University College of Dental Medicine prefers a baccalaureate degree from a regionally accredited, four-year institution within the United States; or a non-U.S. equivalent institution. Required minimum coursework:

- 2 semesters, 3 quarters, or 1 year of college level English (*IB or AP credits may be considered if they are accepted by the undergraduate program*)

IB or AP credits not accepted for the following:

- 2 semesters, or 3 quarters, or 1 year of Biology with Laboratory
- 2 semesters, or 3 quarters, or 1 year of Inorganic (General) Chemistry with Laboratory
- 2 semesters, or 3 quarters, or 1 year of Organic Chemistry with Laboratory
- 2 semesters, or 3 quarters, or 1 year of Physics
- 2 semesters, or 3 quarters, or 1 year of college level Math (*Statistics and/or Calculus preferred*)
- 1 semester, 1 quarter, or 3 units of Biochemistry

Recommended Coursework, but not required:

- Social sciences
- Anatomy
- Microbiology
- Behavior Sciences
- Physiology
- Immunology
- Foreign languages

Standards in five areas must be met by all candidates: Observation, Communication, Motor Function, Cognitive, and Professional.

Each application will be thoroughly reviewed by the admissions committee and all areas of the application will be carefully considered. The ADSAS application has a required personal statement and a required section that asks whether the student is from a disadvantaged background. The personal statement prompt pertains to a student's community engagement and community service background.

It is important that the student body of the DMD program represents the best of future clinicians, and the admissions committee will pay particular attention to professional, research, education, and life experiences. Along with academic excellence, the committee will be looking for students with diverse cultural, socioeconomic, work, and educational backgrounds. CNU has a diverse faculty and student body and it is the admissions policy of the University that no applicant will be discriminated against on the basis of race, religious creed, color, national origin, ancestry, citizenship status, sex, gender, gender identity, sexual orientation, mental disability, medical condition, genetic information, age, military or veteran status, physical appearance, or any other consideration made unlawful by federal, state, or local laws.

In the interview, we are looking for demonstration of each of the following: 1) Demonstrated academic ability/capacity, 2) critical thinking skills, 3) interpersonal and social skills, 4) commitment to diversity, 5) commitment to community service, 6) a candidate's match in terms of the culture and expectations of CNUCDM (i.e., commitment to the profession and to becoming a healer).

Graduation Requirements

240 in resident Credit Hours

Faculty and Other Program Resources

Administration and Faculty

A planning group of 47 future faculty associated to the Sacramento District Dental Society has met several times to develop curriculum. The 12 original members of the planning group for the College of Dental Medicine will also serve in part-time faculty capacity. The hiring plan for 42.5 full-time salaried faculty provides a comprehensive mix to accommodate instructional, clinical, service and scholarly needs of the college.

Note that FTE from initial BMS and preclinical and clinical educators will be divided among more than one hire each of whom will consume .1 to .2 FTE

Administration

Position	Initial FTE	FTE w/ full enrollment
Dean	1.0	1.0
Associate Dean, Academic Affairs and Faculty Development	1.0	1.0
Assistant Dean, Curriculum and Clinical Education	1.0	1.0
Assistant Dean, Clinical Affairs	1.0	1.0
Assistant Dean, Student Affairs and Admissions	0.5	1.0
Assistant Dean, Research	0.67	0.67

Faculty

Position	Initial FTE	FTE w/ full enrollment
Basic Medical Sciences Faculty*	6	6
Preclinical Education Faculty	0.5	6.0
Clinical Education (general) Faculty	1.0	12.0
Clinical Education (specialty) Faculty	1.0	12.0
Part-time Clinical	0	6.0
Volunteer Clinical (general and specialty) Faculty	6.5	18.0
TOTALS	15	60

*These are primarily College of Medicine faculty teaching in Common Pathway courses

Faculty

Basic Medical Sciences educators (in addition to COM common pathway educators = 6 FTE

These faculty will be DMD, DDS, MD, D. Psych, DPharm, or PhD terminal degrees with engagement for case based education in the common pathway curriculum, and in the teaching of head and neck anatomy, dental anatomy, and behavioral sciences

Preclinical educators = 6 FTE

These faculty will hold DMD, BDS or DDS and have appropriate postdoctoral certificate or degree education in operative dentistry, prosthodontics, periodontology, pediatric dentistry or oral and maxillofacial surgery.

Clinical educators general dentistry = 12 FTE

These are general dentists holding the DMD or DDS or BDS who will serve as student preceptors, team leaders, in comprehensive care. Some will serve in discipline based faculty in special needs, emergency care, and oral diagnosis among others

Clinical educators dental specialties = 12 FTE

These are full time positions in dental specialties for board certified specialists holding the DMD, MD, or DDS including specialists in prosthodontics, periodontology, endodontology, pediatric dentistry, orthodontics, oral and maxillofacial pathology, oral and maxillofacial radiology, and oral and maxillofacial surgery

Part time clinical educators = 12 FTE

These are ½ to 1 day a week positions for general dentists and specialists holding the DMD or BDS or DDS degree for clinical or preclinical assignments as educators.

Volunteer Clinical Adjunct Faculty (no cost)

Faculty salaried by health entities with whom CNU has affiliation agreements for clinical education will be given faculty appointments to provide clinical education. These faculty will hold a terminal degree such as DMD, DDS, MD, PhD, DPharm

Hiring Plan for CDM Faculty: 2019-20 and 2020-21

Academic Year	Position	Course	Name	Hire Date
2019-20	*Assistant Professor of Pathology	Hematology	Nazila Hejazi	5-1-2019
	*Associate Professor of Anatomy	Integumentary and Musculoskeletal	Nripendra Dhillon	5-1-2019
	Professor	Odontology	Maureen McAndrew	6-1-2019
	Professor	Dental Anatomy	Gerald Glickman	6-1-2019
	Professor	Dental Anatomy Foundations of Dental Medicine Surgical Anatomy of the Head and Neck	Leon Assael	12-1-2018
	Professor	Managing Student Life Ethics in Dental Medicine and Health Care	Richard Simonsen	2-14-2019
	*Professor of Clinical Neurology	Neuroscience	Forshing Lui	5-1-2019
	*Associate Professor of Emergency Medicine	Cardiovascular and Pulmonary Systems	Darilyn Falck	10-1-2019
	*Associate Professor of Physiology	Cardiovascular and Pulmonary Systems	Tracy Yarbrough	10-1-2019
	Professor Assistant Professor	Cariology Oral Microbiology/Immunology	Kevin Keating Pending	3-1-2019 10-1-2019

Academic Year	Position	Course	Name	Hire Date
2020-21	*Associate Professor of Physiology	Renal System	Tracy Yarbrough	5-1-2020
	*Professor of Molecular Biology, Immunology and Microbiology	Gastroenterology	Nehad El-Sawi	5-1-2020
	*Associate Professor of Physiology, Endocrinology and Clinical Skills	Endocrine System	Mark Sheffield	5-1-2020
	Assistant Professor	Clinical Pharmacology 1	Pending	5-1-2020
	Assistant Professor	Operative Dentistry	Wai Chan	5-1-2020
	Assistant Professor	Periodontology	Rosemary Wu	5-1-2020
	Assistant Professor	Dental Anesthesiology 1: Local Anesthesia	Michael Cadra	5-1-2020
		Dental Anesthesiology 2: Pain and Anxiety Control, Analgesia, Medical Management of Local Anesthesia		
	Assistant Professor	Oral Radiology 1	Shikha Rathi	5-1-2020
	Assistant Professor	Clinical Pharmacology 2/Oral Pharmacology	Jagdev Heir	5-1-2020
	Associate/Assistant Professor	Prosthodontics and Implant Dentistry: Removable Prosthodontics	Pending	10-1-2020
	Professor	Comprehensive Care Family Dentistry Endodontology, Diseases of the Pulp and Pathways of Odontogenic Infection	Gerald Glickman	6-1-2019
	Associate/Assistant Professor	Oral Pathology/Oral Medicine 1	Pending	10-1-2020
	Associate/Assistant Professor	Orthodontics and Craniofacial Growth and Development	Pending	10-1-2020
	Associate/Assistant Professor	Behavioral Medicine	Pending	10-1-2020
	Associate/Assistant Professor	Dental Medicine at all Stages of Life	Pending	10-1-2020

* Faculty shared with College of Medicine

Facility, Labs and Equipment:

California Northstate University College Dental Medicine is located in Elk Grove, a city adjacent to the City of Sacramento. CNUCDM has a dedicated building of 15,000 square feet that will be used exclusively by the DMD program. The College will also share common space on the main campus a few blocks away.

All dental students will begin clinical training in their first year, utilizing the preclinical laboratory and clinical simulation labs that are planned to be built in the Elk Grove building dedicated to CNUCDM. First year students will also have clinical experiences as part of the care team in the clinic. The CNUCDM facilities will contain 40 dental simulation units where the students will be able to practice the skills taught within the classroom. The units will contain instruments and configurations, compartments to store instruments, a torso with adumbrated arms and shoulders, and height adjustment. The unit will be on wheels and have the ability to fit comfortably under workstations.

The main clinical practicum of the CNUCDM program will be in two clinics operated by the University. The first will be in the CNUCDM-dedicated facility. The second will be within the greater Sacramento area with a planned opening by the end of Year 2 of the program. Like other dental school-based clinics, CNU's clinics will feature faculty and students working side by side and providing the highest level of clinical care while completing competency evaluations and gaining clinical experience for the DMD students.

The initial capacity of the College of Dental Medicine will accommodate a class of 80 students. All Common Pathway courses are in plenary classrooms accommodating 180 students which will seat all medical and dental students. Small group learning facilities are adequate to accommodate all students into their "college" group of 20. Anatomy laboratory, learning center and library, general skills laboratories are all adequate to accommodate all students in a regular schedule.

Preclinical and simulation laboratory will have four types of facilities in the dedicated College of Dental Medicine building:

1. Type 1: Bench laboratory space with seating, audiovisual and instrumentation for 80 students (class example: dental anatomy)
2. Type 2: Operative dentistry/A-Dec simulator with scanning self-assessment optical scanner, work station, 40 units. Students will practice in this environment in two sections.
3. Type 3: Operative dentistry: A-Dec 40 dental chairs with simulator dental head: Students will work in this environment when rotated from type 2 simulation during the same hours. Students will either be assigned during preclinical laboratory hours to the Type 2 or 3 units. Of note is that this will be performed for the first 2 years as there will not be a 3rd and 4th year class. The second clinic and additional simulation space using emerging technology is anticipated for the 3rd -5th year of operations.
4. Type 4: Haptic simulators: these 4 MOOG Simodont units will be assigned on a rotating basis to students in groups of 4.

Computers/Offices

All CNUCDM faculty have their own offices, and also have access to computer hardware and software needed to conduct their research. All computers are connected to a local network via a shared server as well as having Internet access. The Information Services department at CNUCDM supports all hardware and software used.

Information about Opportunities for Graduates

Employment prospects for dentists are excellent. According to the U.S. Bureau of Labor Statistics, the growth in the profession is projected to increase by 19.4 percent between 2016 and 2026. This is a significant increase over other job sectors which are expected to grow by only 7 percent during that same time period. The demand for dentists is increasing so dramatically because the US population continues to exponentially grow and age. The aging US population is more likely to retain their teeth due to advancements in healthcare. Additionally, the increased risk of oral cancer increases the demand on the number of dental professionals in the country.² The 2019 U.S. News and World Report also indicates that dentists enjoy a profession in the top 5 of the 100 Best Jobs in the nation and is second most favorable in Health Care Jobs. It is also a lucrative profession, with the average salary of \$158,120.

Dentists have an array of career options. Their roles go far beyond private practices. Dentists can work in academia, public health, and hospitals. They can also choose to conduct research or pursue international humanitarian efforts to support oral health around the globe.

Alignment with Institutional Mission

Comparison of the University goals and those of the college indicate that the goals of both are inclusive of the other. As a component of the University, the college contributes through its goals to the University goals of student success, excellence in research and patient care, financial stability and workplace excellence. The goals of the University similarly to provide resources and sustenance to those of the college. These are mapped as follows indicating which college goals (columns) support those of the University (rows). Those that the college supports for the University are denoted as “D” and those that the University supports for the college are noted as “U.”

Dental/University	Student success	Research scholarship	Patient care	Workplace	Infrastructure	Financial Stability
Educate profess	UD		UD			UD
Develop people		U	UD	UD		UD
Lead healthcare	D	UD	UD	D		UD
Diversity	UD		UD	UD		U
Facilities	U	U	UD	U	U	U
Financial Stabil.	U	D	UD		U	U

²Bureau of Labor Statistics, U.S. Department of Labor, *Occupational Outlook Handbook*, Dentists. Retrieved from <https://www.bls.gov/ooh/healthcare/dentists.htm>

Needs analysis of The New Program

Dental disease is the greatest untreated and undertreated of all diseases in children, the elderly, disabled, special needs, the poor and medically compromised. Despite that, in 2016, there were only 1.8 dental school graduates for every 100,000 people in the United States. This is a significant decrease from 1977, when there were 2.4 dental school graduates for every 100,000 people.³ The need in California is particularly acute, with vast amounts of the population living in the central valley, mountains and rural areas. California currently has only 6 dental schools out of the 66 dental schools in the United States. Only two of those dental schools are in Northern California and none serve the central valley. Further, of the 30 largest metropolitan areas in the nation, Sacramento and San Diego are the only ones without a single dental school associated to their region. California residents seek dental education outside of their own state at the highest rate of any state.

Admission into dental school is extremely competitive. Only 50 percent of applicants are accepted, in spite of increasing performance in applicant GPAs and DAT test results. The DAT average for applicants in 2000 was 17.8 and had risen to 19.3 by 2017. Similarly, GPAs grew from 3.2 in 2000 to 3.4 by 2017.⁴ Therefore, there is a need for highly qualified candidates to be provided a dental school education who cannot be served by the current number of dental programs. There is also a shortage of both applicants and enrollees who are Latino and African American. This is of particular concern in California, a state whose population is roughly 40 percent Latino and 7 percent African American. Currently, dental college enrollment is 5 percent African American and 9.1 percent Latino.⁵

Employment prospects for dentists are excellent. According to the U.S. Bureau of Labor Statistics, the growth in the profession is projected to increase by 19.4 percent between 2016 and 2026. This is a significant increase over other job sectors which are expected to grow by only 7 percent during that same time period. The demand for dentists is increasing so dramatically because the US population continues to exponentially grow and age. The aging US population is more likely to retain their teeth due to advancements in healthcare. Additionally, the increased risk of oral cancer increases the demand on the number of dental professionals in the country.⁶ The 2019 U.S. News and World Report also indicates that dentists enjoy a profession in the top 5 of the 100 Best Jobs in the nation and is second most favorable in Health Care Jobs. It is also a lucrative profession, with the average salary of \$158,120.

³ American Dental Association

⁴ American Dental Education Association, U.S. Dental School Applicants and Enrollees

⁵ American Dental Education Association, U.S. Dental School Applicants and Enrollees

⁶ Bureau of Labor Statistics, U.S. Department of Labor, *Occupational Outlook Handbook*, Dentists. Retrieved from <https://www.bls.gov/ooh/healthcare/dentists.htm>

Resource Requirements, Implementation Plan, Proposed Timeline

ASSUMPTIONS	Year 1	Year 2	Year 3	NOTES
Tuition per year	76,000	78,280	80,628	
Student newly enrolled each year	80	80	80	
DS 2		78	78	
DS 3			78	
FTE Students	78	156	234	
Faculty FTE	22	32	34	Does not include Volunteer Clinical Faculty
Support Staff	2	9	12	

REVENUE				
Tuition	2,964,000	9,069,840	12,394,824	
Fees	102,000	168,300	234,600	
Other (scholarship)	(20,000)	(40,000)	(126,000)	
Dental Clinic Income		4,200,000	4,200,000	
Affiliated FQHC Income			606,528	
Sub Total	3,046,000	13,398,140	17,309,952	

EXPENSES				
FT Faculty	2,775,000	4,655,000	5,015,000	
Adjunct Faculty/Part-time Faculty	1,085,100	1,085,202	1,085,306	
Admin/Staff Support	116,400	530,160	717,360	
Services Support	20,500	21,115	21,749	
Benefits for above	467,219	720,119	780,918	
Marketing/Recruitment	40,000	40,000	40,000	
Faculty Development	40,000	75,000	75,000	
Staff Development	2,000	9,000	12,000	
Course Development	7,500	7,725	7,957	
Subtotal	7,782,197	12,945,415	13,653,830	
NET	(4,736,197)	452,725	3,656,122	

Implementation Plan and Timetable

Time Table	Tasks
Summer/Fall 2018	<ul style="list-style-type: none"> • Seek PEC approval • Seek Faculty Senate approval – before board meeting • PA ready for board approval in early August • WASC submission October 2018
Winter and Spring 2019	<ul style="list-style-type: none"> • Develop WASC and CODA Accreditation • Hire Deans, Identify Faculty • Secure Laboratory, Preclinical and Clinical Facility • Develop Website Page for the Program
Spring – Winter 2019	<ul style="list-style-type: none"> • Construction in CNUCDM Facility • Develop detailed admissions processes • Develop detailed syllabi for Year 1 and Year 2 Courses • Hire faculty to prepare for Year 1 courses
Winter 2019	<ul style="list-style-type: none"> • Upon CODA IA Accreditation, begin to advertise the program • Applications and interviews
Fall 2020	<ul style="list-style-type: none"> • Admitting the first cohort (Class of 2024) • Anticipated enrollment of 80 students • Open applications for the program to enroll students for Fall 2021

Appendix D-7 Faculty Senate Approval Letter



CALIFORNIA
NORTHSTATE
UNIVERSITY

November 12, 2018

Dear Dean Assael:

This certifies that on November 6, 2018, the Faculty Senate at California Northstate University did review and resolve as follows:

First, some information regarding the future needs for dentists over the coming years.

" Overall employment of dentists is projected to grow 19 percent from 2016 to 2026, much faster than the average for all occupations. Demand for dental services will increase as the population ages....Demand for dentists' services will increase as studies continue to link oral health to overall health."

Dentists - Bureau of Labor Statistics

<https://www.bls.gov/ooh/healthcare/dentists.htm>

Advantages of a Dental Medicine Program at CNU.

To the University:

The dental school is aligned with the University's vision and mission to advance the art of healthcare and its commitment to meet the future needs of the community. The Bureau of Labor Statistics projects " Overall employment of dentists is projected to grow 19 percent from 2016 to 2026, much faster than the average for all occupations."

To the Students:

In addition, the school of dentistry provides incoming students with an additional option and opportunity that best fits their individual desire on how to participate as a member of the Health Care Team.

To the Region:

And lastly, the school of dentistry will help the region to meet the expected growing demand for dentists as the population ages and as studies continue to support the correlation between oral health to overall health.

Christopher Wostenberg

Appendix D-7 Faculty Senate Approval Letter

Assistant Professor of Chemistry
College of Health Sciences
Chair, Faculty Senate
California Northstate University
(916)-686-7807



College of Dental Medicine Marketing and Recruitment Plan

Market Research

Dental disease is the greatest untreated and undertreated of all diseases in children, the elderly, disabled, special needs, the poor and medically compromised. Despite that, in 2016, there were only 1.8 dental school graduates for every 100,000 people in the United States. This is a significant decrease from 1977, when there were 2.4 dental school graduates for every 100,000 people.¹ The need in California is particularly acute, with vast amounts of the population living in the central valley, mountains and rural areas. California currently has only 6 dental schools out of the 66 dental schools in the United States. Only two of those dental schools are in Northern California and none serve the central valley. Further, of the 30 largest metropolitan areas in the nation, Sacramento and San Diego are the only ones without a single dental school associated to their region. California residents seek dental education outside of their own state at the highest rate of any state.

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Employment prospects for dentists are excellent. According to the U.S. Bureau of Labor Statistics, the growth in the profession is projected to increase by 19.4 percent between 2016 and 2026. This is a significant increase over other job sectors which are expected to grow by only 7 percent during that same time period. The demand for dentists is increasing so dramatically

¹ American Dental Association

² American Dental Education Association, U.S. Dental School Applicants and Enrollees

³ American Dental Education Association, U.S. Dental School Applicants and Enrollees

because the US population continues to exponentially grow and age. The aging US population is more likely to retain their teeth due to advancements in healthcare. Additionally, the increased risk of oral cancer increases the demand on the number of dental professionals in the country.⁴ The 2019 U.S. News and World Report also indicates that dentists enjoy a profession in the top 5 of the 100 Best Jobs in the nation and is second most favorable in Health Care Jobs. It is also a lucrative profession, with the average salary of \$158,120.

Marketing Strategy

This is a very strong market so filling a class would not require marketing. However, there is a desire to mold a school tied to its mission statement and its goals and objectives. In the case of CNU we are desiring students with a social consciousness, a diverse student body and one of high academic potential. Since the CDM is based upon a community service and primary care model, the marketing strategies would be influenced by that paradigm.

The elements are as follows:

1. Pipeline
 - a. Develop a program beginning in secondary school to stimulate interest in dentistry as a career. The CDM will work with local 9th -12th grade schools in the greater Sacramento area and the Delta that serve students with low socioeconomic status and reside in areas of need for health care resources.
 - b. A Dentist for a Day program will introduce students to dentistry. This is shown to schools via an onsite presentation by faculty, typically in Health classes
 - c. Girl Scout and Boy Scout badges can be earned related to oral health
 - d. Student projects in high school will be available that are directed to oral health in either science or social science courses
2. College level
 - a. Visit colleges, especially those with underrepresented minorities and social need to meet with pre-health societies and preprofessional counselors among others (The dental school pro forma provides a list of those regional baccalaureate institutions)
 - b. Summer research opportunities for baccalaureate and post baccalaureate students
3. Public
 - a. Participation in Health fairs and free health screenings, including those in inter-professional environments with medicine and pharmacy. While doing these events, volunteers from high school and college level will be recruited to help as volunteers. Among examples of this for CNU will be Celebracion de Salud (an inter-professional health fair program for migrant workers) and California Dental Association Mission of Mercy (CDA Cares), which would include CNU students and prospective students
 - b. Web site development will emphasize the features of the CDM
 - c. Interviews with the press and other communications resources

⁴Bureau of Labor Statistics, U.S. Department of Labor, *Occupational Outlook Handbook*, Dentists. Retrieved from <https://www.bls.gov/ooh/healthcare/dentists.htm>

- d. Social media presence on Facebook, Instagram
- e. Print media and visual media: CNU presence at the airport and via its presence on Interstate 5 will produce valuable marketing for prospective students, staff, faculty and patients.
- f. Patient care marketing will emphasize prevention and the value of oral health screening. When operational, the CDM clinics will be utilized for health screening and informational purposes

Marketing Plan Budget

The Admissions officer will be a full time position whose focus will be on class development and leading in this area. In-kind cost is based upon effort of existing faculty, staff and students. Travel and marketing budget for programs, IT, travel swag, etc. might be up to 50K per year.

Pipeline - \$20,000 - staff time to coordinate with pipeline programs, travel, provide presentations, distribution of promotional merchandise

College level - \$20,000 – travel and staff time to visit regional colleges with large numbers of underrepresented minority students, distribute promotional merchandise

Public - \$10,000 – brochures, staff time for development and maintenance of social media, staff time and travel for participation in health fairs

Marketing Goals

The marketing goal for the first four years of the CDM is to have 80 students in each Year 1, with a total of 320 students by the 4th year in operation. The patient care marketing goal is for 5000 new patients enrolled per year

California Northstate University
College of Dental Medicine

Volume 3
Appendices for Standard 1



CNU IA Application – Predoctoral Dental Education Program
Submitted to the Commission on Dental Accreditation
May 2019

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College of Dentistry Planning Update

Appendix 1.1 President Report On the Planning for Dental
College 2018

Dental College Exploratory and Feasibility Study Update

1. Review of the six principle of establishing new program.
2. Establishing an exploratory committee
3. Major areas of feasibility review
4. Seek approval to formalize the feasibility study
5. Budget for the feasibility and planning study: \$60,000

Appendix 1.1 President Report On the Planning for Dental
College 2018



Interests

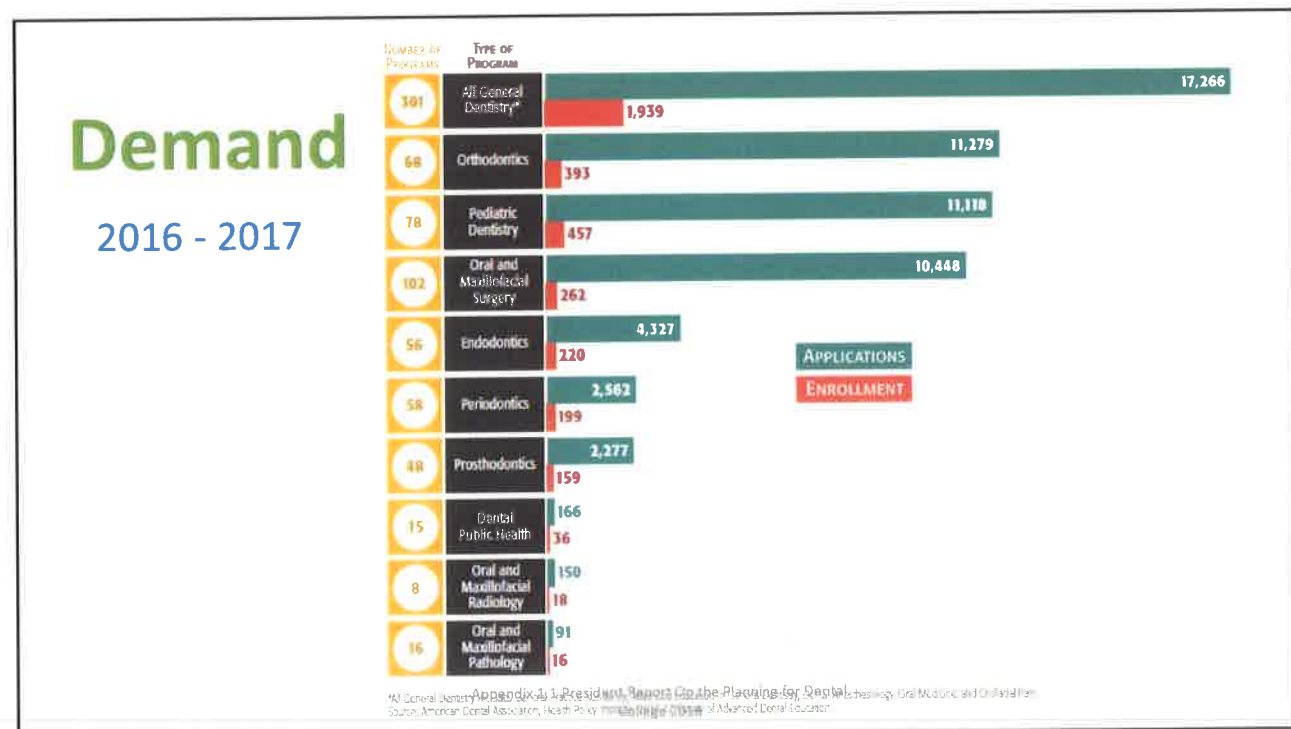
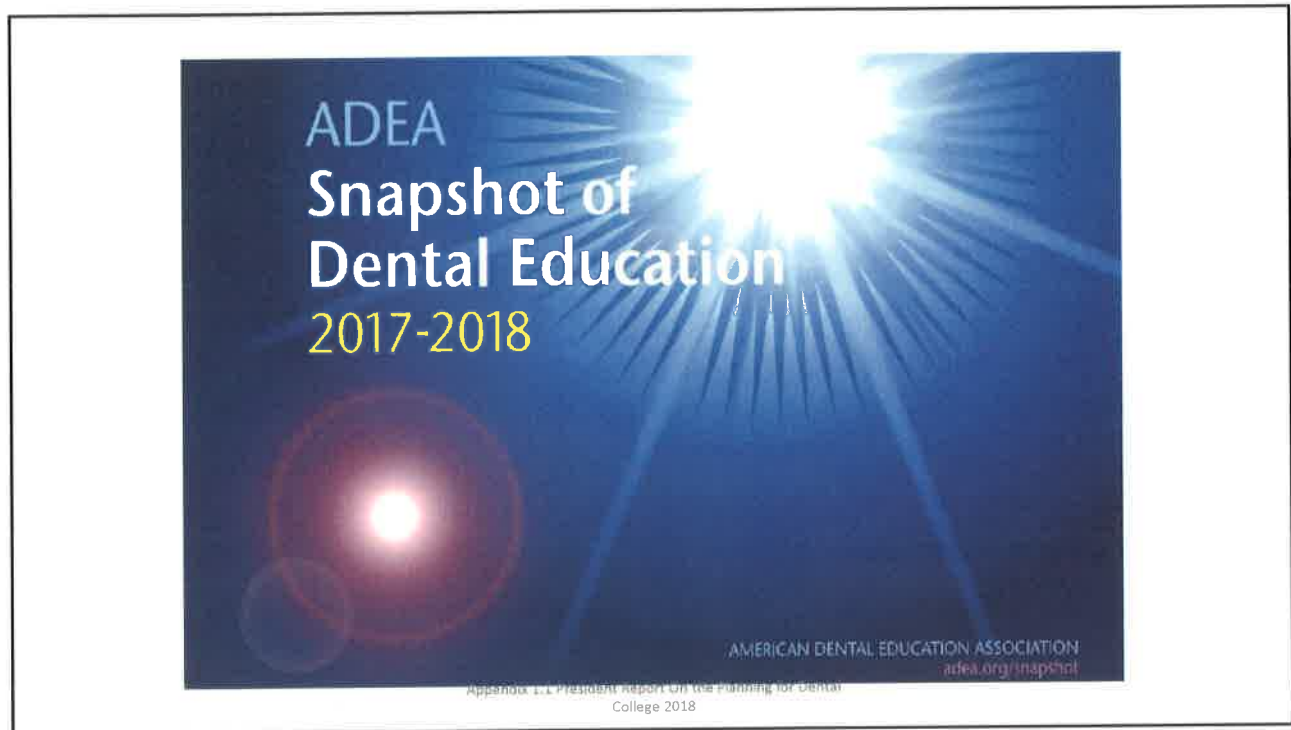
- | | |
|------------------------------------|---|
| <input type="button" value="Yes"/> | (1) The education program(s) must be of demand by the general public, |
| <input type="button" value="Yes"/> | (2) The program(s) must lead to gainful employment while serving humanity or society's needs, |
| <input type="button" value="Yes"/> | (3) The program must be affordable and compliant with regulations and accreditation, |
| <input type="button" value="Yes"/> | (4) The program(s) must be deliverable by multiple learning modalities /media and able to reach learners of the future, |
| <input type="button" value="Yes"/> | (5) CNU must continue to address diversity and access issues in education, |
| <input type="button" value="Yes"/> | (6) All colleges must operate in fiscally responsible manner to fulfill the education mission while maintaining long term sustainability and viability. |

Appendix 1.1 President Report On the Planning for Dental
College 2018

5.4.3 Areas of Feasibility Review

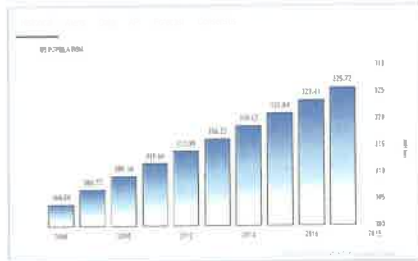
1. Demand of the program
2. Employment outlook
3. Earning potential to cost of degree ratio
4. Dentist per population ratio
5. Financial sustainability of the education program
6. Financial sustainability of CNU "oral health clinical operations."
7. Start-up costs

Appendix 1.1 President Report On the Planning for Dental
College 2018

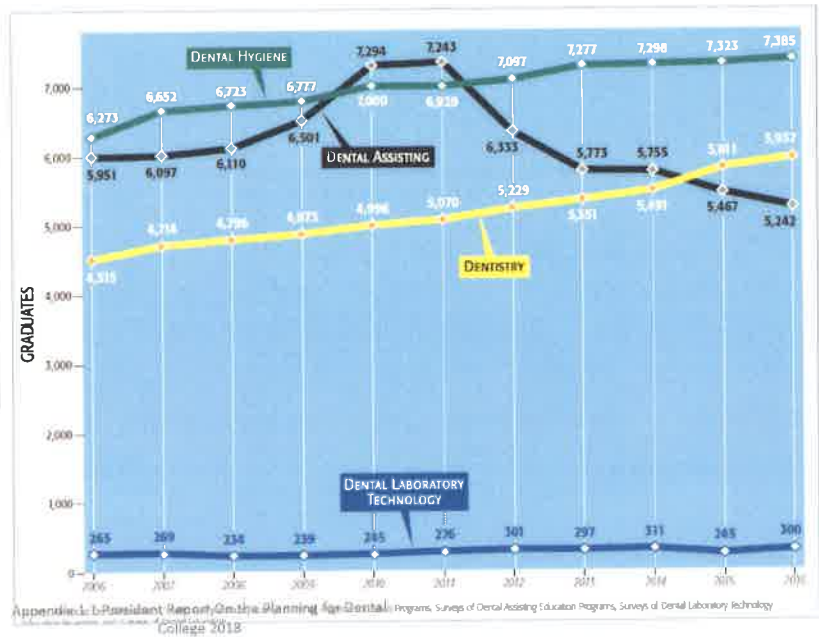


Supply

2006 - 2016



<https://tradingeconomics.com/united-states/population>



Supply Side of Dental Care Personnel

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Dental Lab Techn	265	269	234	239	245	276	301	297	311	245	300
Dental Assistant	5,951	6,097	6,110	6,501	7,294	7,243	6,333	5,773	5,755	5,467	5,242
Hygienist	6,273	6,652	6,723	6,777	7,000	6,929	7,097	7,277	7,298	7,323	7,385
Dentist	4,515	4,714	4,796	4,873	4,996	5,070	5,229	5,351	5,491	5,811	5,957
Population (100,000)	2985.9	3015.8	3040.9	3067.7	3096.4	3116.4	3139.9	3162.3	3186.2	3210.4	3234.1
# of Dentists / 100,000 Pop.	1.51	1.56	1.58	1.59	1.61	1.63	1.67	1.69	1.72	1.81	1.84
# of Dental Personnel / 100,000 Pop.	5.69	5.88	5.87	5.99	6.31	6.26	6.04	5.91	5.92	5.87	5.84

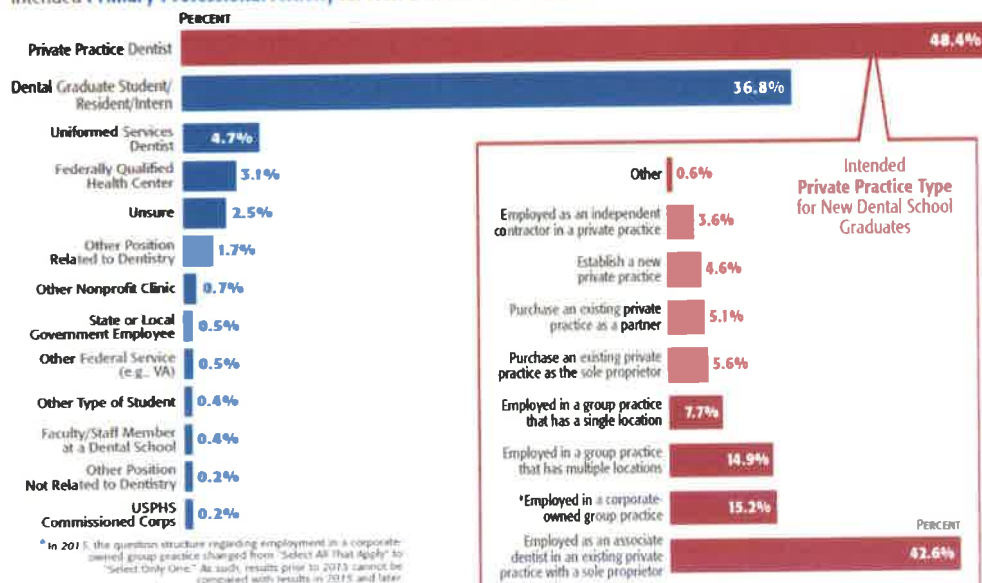
Appendix 1.1 President Report On the Planning for Dental College 2018

Supply

	1977	2016
Dental School Graduates	5,177	5,957
Pop (million)	220	323
Dental School Graduates / 100,000 Pop.	2.4	1.8

Appendix 1.1 President Report On the Planning for Dental College 2018

Intended Primary Professional Activity for New Dental School Graduates



Appendix 1.1 President Report On the Planning for Dental College 2018

5.5.2 Exploratory and Planning Committee

1. Kevin Keating, DDS, private practice and clinical faculty at UCSF;
2. Finney, Debra S, DDS, Folsom Periodonto (Former Chair of ADA)
3. Eric Wong, DDS, private practice
4. Stephanie Cappiello Sandretti, DDS, private practice, recent grad. (UCLA)
5. Rosemary Wu, DDS, Capitolperiodontal
6. Jag Heir, MD, DMD, DDS, maxillofacial surgeon, private practice
7. Huong Le, DDS, Chairperson Calf. Dental Board, FQHC clinic
8. Wai Chan, DDS, retired faculty at UCSF, UOP
9. CFO: Shoua Xiong, MBA
10. Alvin Cheung, PharmD, MHSA

Appendix 1.1 President Report On the Planning for Dental
College 2018

Dental Schools in California

Below is an overview of information and admissions requirements for the six dental schools in California. Please note that requirements are subject to change. Check all program websites before applying.

Name of Program	Location	Degree Offered	Focus	Public/ Private	Program Start Date	Program Length	Dental Related Work Experience	Class Size	Campus Setting
University of the Pacific, Arthur A. Dugoni School of Dentistry	San Francisco	DDS	Clinical	Private	July	36 months	40 hours required	141	Urban
UCSF School of Dentistry	San Francisco	DDS	Research	Public	September	42 months	Dental shadowing recommended	88	Urban
UCLA School of Dentistry	Los Angeles	DDS	Research	Public	September	45 months	Dental shadowing recommended	88	Urban
University of Southern California School of Dentistry	Los Angeles	DDS	Clinical	Private	August	45 months	Dental shadowing recommended	144	Urban
Loma Linda School of Dentistry	Loma Linda	DDS	Clinical	Private	August	45 months	50 hours required; 100 recommended	100	Suburban
Western Health University College of Dental Medicine	Pomona	DMD	Clinical	Private	August	45 months	Must have a minimum of 30 hours of experience as a dental assistant, dental hygienist, dental laboratory technician and/or observing dentists. 30 hours minimum, 100+ recommended	70	Suburban

Appendix 1.1 President Report On the Planning for Dental
College 2018

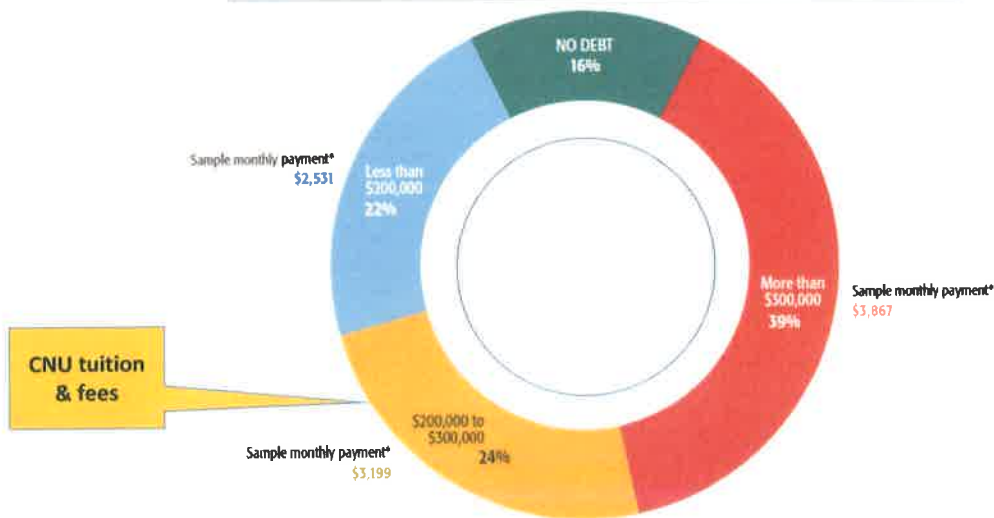
Last updated 6/22/17

Dental School Tuition Table: 2018

Name	Category	Yr 1	Yr 2	Yr 3	Yr 4	Total all Years
USC	Tuition & Fee	\$ 91,227	\$ 91,227	\$ 91,227	\$ 60,818	
	Kit and Equipment	\$ 13,819	\$ 7,142	\$ 4,424	\$ 2,816	
	Others	\$ 3,560	\$ 3,154	\$ 3,154	\$ 2,912	
	Direct Cost	\$ 108,606	\$ 108,606	\$ 98,605	\$ 66,491	\$ 382,308
	Indirect Cost	\$ 27,984	\$ 27,984	\$ 27,984	\$ 19,776	
	Total Cost of Attending	\$ 136,590	\$ 129,507	\$ 126,589	\$ 86,312	\$ 478,998
UCLA	Tuition & Fee	\$ 19,294	\$ 20,066	\$ 20,065	\$ 20,065	
	Kit and Equipment	\$ 20,614	\$ 13,942	\$ 18,303	\$ 18,303	
	Others	\$ 25,368	\$ 25,368	\$ 25,368	\$ 25,368	
	Direct Cost					
	Indirect Cost					
	Total Cost of Attending	\$ 83,743	\$ 88,143	\$ 78,171	\$ 78,506	\$ 328,563
UCSF	Tuition & Fee	\$ 48,040	\$ 48,040	\$ 53,090	\$ 53,090	
	Kit and Equipment	\$ 13,308	\$ 9,216	\$ 7,965	\$ 8,892	
	Others					
	Direct Cost	\$ 61,348	\$ 57,256	\$ 61,055	\$ 61,982	\$ 241,641
	Indirect Cost	\$ 26,520	\$ 26,520	\$ 35,220	\$ 35,220	
	Total Cost of Attending	\$ 89,190	\$ 84,922	\$ 97,892	\$ 100,196	\$ 372,200
Loma Linda	Tuition & Fee	\$ 67,845	\$ 81,305	\$ 81,305	\$ 81,305	
	Kit and Equipment					
	Others	\$ 13,799	\$ 8,443	\$ 1,816	\$ 1,565	
	Direct Cost	\$ 81,644	\$ 89,748	\$ 83,121	\$ 82,870	\$ 337,383
	Indirect Cost	\$ 16,350	\$ 19,620	\$ 19,620	\$ 19,620	
	Total Cost of Attending	\$ 89,135	\$ 95,548	\$ 87,555	\$ 87,150	\$ 359,388
Western U	Tuition & Fee	\$ 71,185	\$ 71,185	\$ 71,185	\$ 71,185	
	Kit and Equipment	\$ 6,111	\$ 6,111	\$ 6,111	\$ 6,111	
	Others	\$ 503	\$ 406	\$ 406	\$ 584	
	Direct Cost	\$ 77,799	\$ 77,702	\$ 77,702	\$ 77,800	\$ 311,003
	Indirect Cost	\$ 29,079	\$ 25,947	\$ 27,532	\$ 28,324	
	Total Cost of Attending	\$ 109,957	\$ 106,590	\$ 108,242	\$ 109,395	\$ 434,184
UOP	Tuition & Fee	\$ 107,930	\$ 107,930	\$ 107,930		
	Kit and Equipment	\$ 11,900	\$ 2,379			
	Others	\$ 10,731	\$ 9,761	\$ 10,921		
	Direct Cost	\$ 130,561	\$ 120,070	\$ 118,851		\$ 369,482
	Indirect Cost	\$ 30,324	\$ 30,324	\$ 30,324		
	Total Cost of Attending	\$ 100,885	\$ 150,394	\$ 149,175		\$ 460,454

Appendix 1.1 President Report On the Planning for Dental College 2018

THIRTY-EIGHT PERCENT OF DENTAL STUDENTS GRADUATE WITH LESS THAN \$200,000 IN EDUCATIONAL DEBT.
TOTAL EDUCATIONAL DEBT IS THE SUM OF EDUCATIONAL DEBT INCURRED BEFORE AND DURING DENTAL SCHOOL.



*Standard 10 year (120 level) payments

Appendix 1.1 President Report On the Planning for Dental College 2018

Table 1. Real and forecast annual income and interest rates: general dentists and bachelor's degree holders, 1999-2049

Year	General Dentists' Real Income	Bachelor's Degree Holders' Real Income	World Bank Real Interest Rate	CBO Real Interest Rate Forecast
1999	\$103,885	\$38,094	6.43	N/A
2004	\$129,491	\$40,605	1.49	N/A
2009	\$157,412	\$45,429	2.35	N/A
2014	\$172,684	\$48,228	N/A	2.70
2019	\$208,981	\$52,149	N/A	3.10
2024	\$252,907	\$56,389	N/A	3.00
2029	\$306,066	\$60,975	N/A	3.00
2034	\$370,399	\$65,933	N/A	3.00
2039	\$448,255	\$71,294	N/A	3.00
2044	\$542,475	\$77,091	N/A	3.00
2049	\$656,500	\$83,359	N/A	3.00

Data sources: Bureau of Labor Statistics, The World Bank, Congressional Budget Office (CBO).

Appendix 1.1 President Report On the Planning for Dental College 2018

Predoctoral Dental Education

The Economic Costs and Benefits of Dental Education: An Empirical Analysis

Gary L. Stafford, D.M.D.; Farrokh Nourzad, Ph.D.; William K. Lobb, D.D.S., M.S., M.P.H.; Jason R. Beall, B.A.

Submitted for publication 9/26/13; accepted 2/26/14.

spring 2011 (Class of 2011). Our estimates indicated that the return on investment in dental education increased from 27.32 percent to 31.56 percent for the first three cohorts (2003-05) but then trended downward for the next six cohorts (2006-11). Following the high of 2005, there was a sharp decline from 2005 to 2008, then a rebound from 2008 to 2011, albeit not to the high of 2005. From 2005 to 2011, there was a decline of almost two percentage points to 29.78 percent. Over the entire period, the average ROI was 29.4 percent, which compared favorably with the return on some alternative investments. For example, using the S&P 500 index over the period from 1999 to 2012, the average return for investing in the stock market, including dividends, was 14.3 percent,²⁸ which was slightly less than one-half the

Appendix 1.1 President Report On the Planning for Dental College 2018



CODA Accreditation

Phase 1: Now until January 2019, Accreditation process: Self study completed in 2018 with submission to the Commission on Dental Accreditation by **February 1, 2019**.

According to the following categories:

Standard 1: Institutional issues, self study on institutional accreditation, humanism, finances, methods of continuous improvement, diversity, engagement with health systems, affiliation agreements, alliances, physical plant

Standard 2: Curriculum: Curriculum structure including competency based education model, elements of syllabi, length of instruction, attention to biomedical sciences, clinical discipline based activities, community based education, teaching methods, assessment methods, critical thinking, integrated BMS, course evaluation, ensuring adequate patient pool, self assessment, multiculturalism, practice management, pathways to defined competencies, ethics, evidence based care, community care

Standard 3: Faculty affairs: sufficient faculty, ongoing faculty development plan, governance, faculty assessment, process for promotion

Standard 4: Student affairs: admissions, admitting students with advanced standing,, admitting diverse students, learning facilities and resources, site affiliation agreements, student services, cost and financial aid structure, student health...

Standard 5: clinical operations, policies for clinic function, and evidence based care, system for continuous patient care quality improvement, emergency training and care, ionizing radiation compliance, infection control compliance, patient records and confidentiality policies

Standard 6: research: faculty and student research opportunities and output

Appendix 1.1 President Report On the Planning for Dental College 2018

CODA Accreditation

Phase 1: Now until January 2019, Accreditation process: Self study completed in 2018 with submission to the Commission on Dental Accreditation by **February 1, 2019**.


Phase 2: Initial site visit April-May 2019, Site visit spring of 2019 with limited commission representatives and staff to direct inquiries regarding self study. Modifications as needed.

Phase 3: July 2019 CODA meeting: meetings of review committee and the Commission on Dental Accreditation resulting in vote of the commission on initial program approval IPA.

Positive vote results in immediate rollout of DMD program with recruitment of class via the ADEA PASS admissions process. **First class in summer of 2020**

Phase 4 If needed: Negative vote by commission results in corrective activity to address recommendations, bringing amended application to commission for its January 2020 meeting. Approval at that meeting means class can still be recruited for Summer of 2020 (Touro University in NY had this eventuality and was able to fill class with over 2000 applicants after the normal application cycle)

Appendix 1.1 President Report On the Planning for Dental College 2018



CAMPUS COUNCIL ON *Faculty Life*
Faculty Development Day
September 14, 2016

**Faculty Compensation
and Benefits**

Cynthia Lynch Leathers
Assistant Vice Provost, Academic Affairs

September 2016

UCSF UNIVERSITY OF CALIFORNIA, SAN FRANCISCO
Office of Academic Affairs and Faculty Development and Advancement

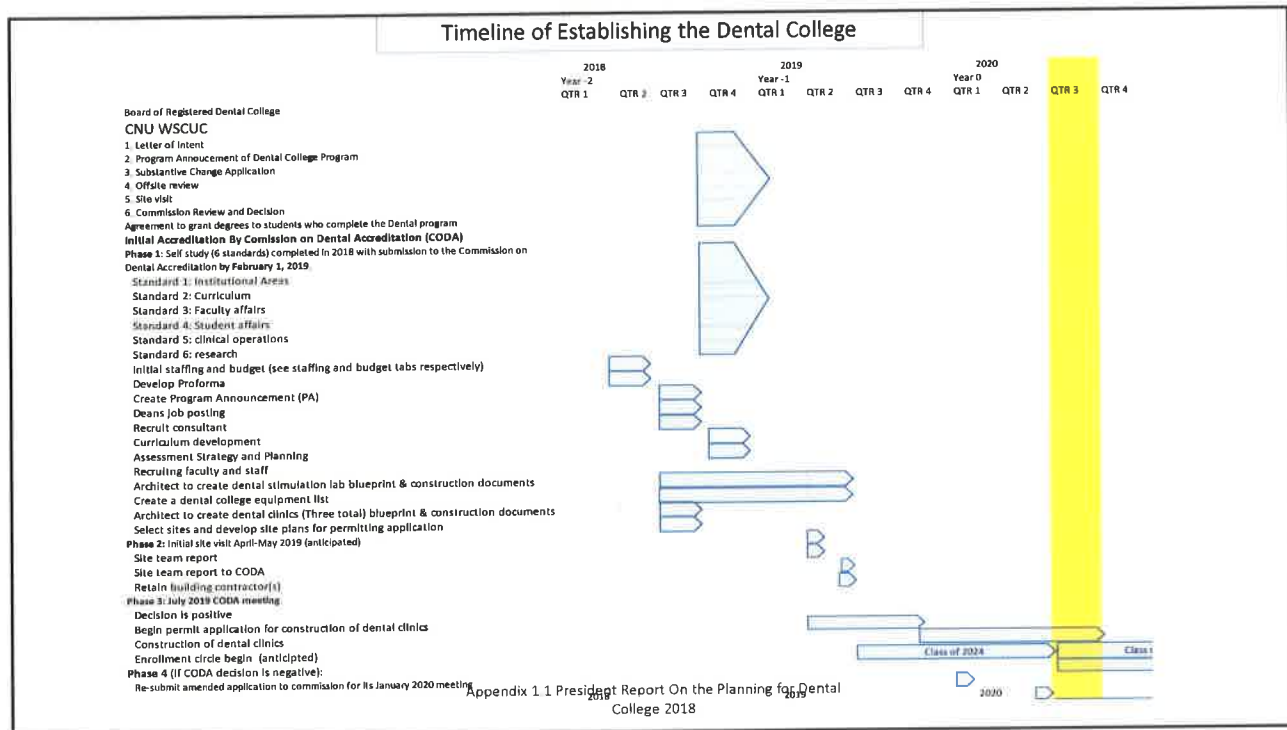
CAMPUS COUNCIL ON *Faculty Life*
Faculty Development Day

AMERICAN DENTAL EDUCATION ASSOCIATION

ADEA | THE VOICE OF DENTAL EDUCATION

ADEA U.S. Dental School
Faculty Salary Summary
Highlights and Tables:
Guaranteed Annual Salary
and Total Compensation:
2015-16

College 2018



High Level as Suggested*

Income (mature by beginning of third year of operations, or in 2020 with IDP students)

Tuition: \$70,000 per year X 216 students =	\$15,120,000
Clinical income: 35,000 X 216 =	\$7,560,000
Grants, affiliations, gifts etc	unknown
Total income \$22, 680,000 +	

Costs:

Faculty with benefits 35 faculty at mean of 200K =	\$7,000,000
Staff 60 staff at 70,000	\$4,200,000
Supplies	\$2,500,000
Physical plant maintenance lease etc.	\$2,000,000
Contribution to university for common services	\$2,000,000
Amortization, leases and reserve	\$1,000,000
Total expenses \$ 18,700,000	

Appendix 1.1 President Report On the Planning for Dental College 2018

*Leon Assael, DMD, DDS



CALIFORNIA NORTHSTATE UNIVERSITY



Strategic Plan 2015- 2020

(Updated with evaluations in 2017)

**MISSION**

To advance the art and science of healthcare

VISION

To provide innovative education and healthcare delivery systems

CORE VALUES (WE CARE):

- Working as a team
- Embracing diversity and workplace excellence
- Caring about our students, our staff, our faculty, and our profession
- Advancing our university, our goals, and our discipline
- Responding to challenges that may impede Mission
- Enhancing communication and partnership

STRATEGIC GOALS**Goal 1. Student Success and Educational Effectiveness**

Ensure student success and student learning outcomes.

Goal 2. Research & Other Scholarly Activities

Develop, support, and sustain innovative, collaborative approaches for research and scholarly activities in health and administrative sciences and education.

Goal 3. Patient Care and Service

Provide educational opportunities to enhance community health and patient care.

Goal 4. Workplace Excellence

Create and sustain an environment conducive to productivity, collegiality, professionalism, and respect that attracts and embraces diverse top-tier talent.

Goal 5. Infrastructure

Maintain an efficient infrastructure to support and sustain learning, teaching, communication, research and scholarship while keeping education affordable.

Goal 6. Financial Sustainability and Growth

Create a financially sustainable enterprise-wide growth model.

STRATEGIES AND TACTICS FOR OUR GOALS

Goal 1. Student Success and Educational Effectiveness

Ensure student success and student learning outcomes.

Strategy 1.1. Provide excellence in teaching.

Tactics:

- Develop a Center for Teaching and Learning that will endorse best practices in teaching
- Provide mentorship programs
- Provide faculty development opportunities

Indicator	Initial	Developing	Developed	Achieved	Evidence
Focused practice in teaching and learning has been developed	No plan for developing a practice approach for teaching and learning has been established.	A plan for developing a practice approach for teaching and learning is initiated, but it only somewhat addresses the need for endorsing best practices in teaching.	A practice approach for teaching and learning is in its final stages of development. Some programs have been incorporated to endorse best practices of teaching, but further development of these programs is needed.	A practice approach for teaching and learning has been fully developed. Programs have been incorporated within the center to endorse best practices in teaching.	<ol style="list-style-type: none"> 1. Practice approach has been assessed for linkage to student success outcome 2. Establish method and modality of teaching linkage to student success outcome 3. Student course evaluation 4. Faculty peer evaluation 5. Student outcome index collected at the college level and reported by semester and annually (COP, COM, CHS specific) 6. Engagement surveys
A mentorship program has been implemented	No plan for providing a mentorship program has been established.	A plan for providing a mentorship program has been established but has not yet been implemented.	A mentorship program has been initiated; however, the program may be lacking key areas that are critical for its effectiveness and adequacy.	A fully developed mentorship program has been implemented. Program is extensive and provides effective, adequate mentorship needed.	A full faculty mentorship program exists within each college. A student mentorship program exists at each college. Faculty mentorship in

					COM, COP and CHS has been implemented (directory of mentor/mentee) Peer evaluation Faculty survey of mentorship needs annually We will develop a university mentorship manual – to be added to employee handbook as appendix
Faculty development opportunities are provided	No plan for providing faculty development opportunities has been established.	A plan for providing faculty development opportunities has been established but has not yet been implemented.	Faculty development opportunities are provided; however, such opportunities may not be inclusive of all faculty and addition of other opportunities are welcome to enrich faculty development.	Faculty development opportunities are provided. Opportunities for development are available to all faculty in each college.	<ul style="list-style-type: none"> • A strong Office of Continuing Education exists that provides faculty development opportunities. • Faculty are provided with a budget to attend faculty development opportunities. • University weekly professional development seminars, email updates on pedagogy Monthly CE program • Faculty PD fund allocation

Strategy 1.2. Utilize the institution's Cycle of Improvement to continually improve student learning and ensure learning outcomes and student success.

Tactics:

- Assess student learning outcomes at all levels of learning and use results to make improvements in curriculum, teaching, and learning
- Evaluate program effectiveness through an institutional program review process

Indicator	Initial	Developing	Developed	Achieved	Evidence
Student learning outcomes at all levels of learning are assessed and results are used	Student learning outcomes are not being assessed to make educational improvements.	Student learning outcomes are assessed, but not necessarily at all levels. Results may	Student learning outcomes are assessed at all levels of learning, and results are provided to the	Student learning outcomes are assessed appropriately at all levels of learning.	In CHS, COP, and COM, assessment of learning outcomes at all levels is conducted



to make improvements in curriculum, teaching, and learning		or may not be provided, and no improvements in curriculum, teaching, and learning are made.	appropriate decision-making committees. Curricular, teaching, and learning improvements are taking place but not in a timely fashion.	and results are provided to the appropriate decision-making committees to make curricular, teaching, and learning improvements in a timely fashion.	<p>on a routine basis. All learning outcomes are mapped to specific courses so where they are delivered is identifiable and their level of mastery is measured. This is achieved by gathering evidence of student performance on assignments, presentations, exams, etc. The assessment data are analyzed and used to make changes and improvements in the curriculum to ensure that the desired outcomes are being achieved. In COP, for example, assessment of student learning outcomes lead to some resequencing of pharmacy law and ethics, so that first year students could be introduced to the topics.</p> <ol style="list-style-type: none"> 1. Assessment committee activities and minutes 2. Curriculum recommendation for changes based on assessment (e.g. lengthened the foundation of medicine in COM; COP implemented longitudinal practice lab to improve student readiness for IPPE; CHS created primer
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					courses for general and organic chemistry to facilitate subsequent stages of learning)
Program effectiveness is evaluated through an institutional program review process	No evaluation of program effectiveness has occurred through the institutional program review process.	Program effectiveness evaluation has been initiated through the institutional program review process, but overall evaluation lacks rigor and thoroughness to produce accurate results for decision making.	Program effectiveness has been evaluated through the institutional program review process, but the extent of the evaluation may be weak in a few areas. Results of the evaluation are generally useful for decision making.	Program effectiveness has been rigorously and thoroughly evaluated through the institutional program review process. Results of the evaluation are comprehensive and accurate for decision making.	COP completed its second program review in 2016-7. As a direct result of the program review faculty retention is being addressed through an institutional review of practices, while the admissions committee is acting upon suggestions made by the external reviewers to review its standards. All three colleges also engages in college and institutional retreats of faculty and staff enabling discussion and action planning on program effectiveness. 1. COP completed program review with external expert in pharmacy practice 2. COM Phase A improvements including resequencing of CVP, lengthening foundation of medicine and the GI course

Strategy 1.3. Provide opportunities for all CNU students to participate in Interprofessional Education (IPE).

Tactics:

- Create IPE experiences for students within and across the curricula
- Establish MOUs for IPE experiences

Indicator	Initial	Developing	Developed	Achieved	Evidence
IPE experiences are for students within and across the curricula	No plan for creating IPE experiences for students has been discussed.	Some discussion of creating IPE experiences for students has taken place. Specific IPE experiences may be identified for potential creation.	IPE experiences have been created, but they appear to be weak in building valuable and meaningful opportunities for students.	IPE experiences for students have been created. IPE experiences build valuable and meaningful opportunities for students.	- CNU had 9 IPE events with COM, COP & Sac State SON -Faculty Assessments were completed for each event -Expand IPE plan to include CHS students 1. IPE sessions conducted with students from all three colleges and nursing school at CSUS, (e.g. neurology case, OSCE cardiac pulmonary critical care simulation, patient communication and history taking IPE with COP and COM students); CHS PMPB standardized patient experience with COM students
MOUs for IPE experiences have been established	MOUs have not been established. No partners for establishing MOUs with have been identified.	Partners for establishing MOUs with have been identified.	Negotiation with partners for potential establishment of MOUs has been initiated.	MOUs have been established. MOUs have been signed.	MOU between CNU and CSUS signed.

Strategy 1.4. Promote and ensure development of the core competencies (ILOs).

Tactics:

- Embed core competencies (ILOs) in all courses
- Assess all core competencies using appropriate data points

Indicator	Initial	Developing	Developed	Achieved	Evidence
Core competencies are embedded in all courses	No core competencies are embedded within the courses.	Discussions of embedding the core competencies within some courses have occurred.	Some core competencies have been embedded in some courses. Further work is needed in embedding remaining	All core competencies are embedded in the appropriate courses.	Curriculum Maps (GELOs and ILOs to courses), Course Proposals, Syllabi - Prescriptive plans are designed to

		Competencies have not been formally embedded.	core competencies.		satisfy LOs achievement across all levels in all programs offered by CHS
Core competencies using appropriate data points are assessed	Core competencies are not assessed. No data points are identified for assessment.	Some core competencies are assessed while others have not been assessed. Data points used are weak or inappropriate for assessment.	Most core competencies are assessed. Data points used in the assessment are generally appropriate but can be further evaluated for reflectiveness of what students are able to demonstrate.	All core competencies are assessed with equal rigor. Data points used in the assessment are logical and reflective of what students are able to demonstrate.	Student performance measured by Summative Exam Questions, Signature Assignments, Rubrics – not all courses offered as CHS is entering its 3 rd of operation 1. core competencies assessed through a) summative exams at each course grade level at COP and COM. b) summative exams and signature assignments at CHS

Goal 2. Research and Other Scholarly Activities

Develop, support, and sustain innovative, collaborative approaches for research and scholarly activities in health and administrative sciences and education.

Strategy 2.1. Increase faculty productivity in discipline-related research and other scholarly activities.

Tactics:

- Implement a grant-writing program to support external grant applications
- Establish an infrastructure to support scholarly activity such as functional lab space, sustainable practice sites for clinical research, and research personnel such as students and technicians
- Establish a formal research mentoring program for new investigators

Indicator	Initial	Developing	Developed	Achieved	Evidence
A grant-writing program is in place to support external grant applications	No grant-writing program to support external grant applications has been established.	A grant-writing program has been developed but has not yet been implemented to support external grant applications.	A grant-writing program has been fully developed and is in its initial stages of implementation. Program provides adequate support for external grant applications.	A grant-writing program has been implemented and is fully functioning. Program provides effective support in grant writing for external grant applications.	<ul style="list-style-type: none"> • High-quality grants have been reviewed, written, and submitted. (see Office of Research spreadsheet)
Infrastructure exists to support scholarly activity such as functional lab space,	No infrastructure to support scholarly activity has been established.	Infrastructure to support scholarly activity is currently being established. Some resources for support of	Infrastructure to support scholarly activity has been mostly established. Most resources for the support of scholarly	Infrastructure to support scholarly activity has been fully established. Appropriate and sufficient resources	<ul style="list-style-type: none"> • Interlibrary loan requests by FT professional librarian • Lab space

sustainable practice sites for clinical research, and research personnel such as students and technicians		scholarly activity have been identified.	activity have been secured, but additional resources are needed.	for the continued support of scholarly activity are secured.	<ul style="list-style-type: none"> Sustainable clinical research sites available
A formal research mentoring program for new investigators is fully functioning	No formal research mentoring program is available for new investigators.	A formal research mentoring program is in the process of establishment. Resources in this program have been identified and are currently being acquired.	A formal research mentoring program is in its initial stages of implementation. Most resources needed in this program are available to new investigators, but additional resources are needed to develop a more robust program.	A formal research mentoring program has been fully implemented. Resources in this program are sufficient, and the program is appropriate for new investigators.	<ul style="list-style-type: none"> Office of Research trains and provides structural resources for new investigators

Strategy 2.2. Maintain a strong infrastructure to support faculty and student research and scholarship.

Tactics:

- Establish centers for research to support research activities
- Build capacity for the Office of Research
- Offer Summer Science Camp to provide financial support for research and scholarly activities
- Solicit grants from non-profit foundations
- Implement plans to support research opportunities

Indicator	Initial	Developing	Developed	Achieved	Evidence
Centers for research support research activities	No centers for research have been established.	Plans for establishing centers for research are being developed. Resources are being identified.	Centers for research are established; however, some necessary resources are still lacking.	Centers for research are established with adequate, appropriate resources available.	Plans for strategic recruits in research areas of emphasis. Infrastructure and resource identification is ongoing
The Office of Research is fully functioning to support research	The Office of Research is not established.	The Office of Research is currently being established ; resources are identified to support research.	The Office of Research has some resources to support research. Further resources are needed in order for the office to function optimally.	The Office of Research has adequate resources to support research. Office is fully functioning.	Office of Research has established functional IRB, IACUC, IBC committees, with requisite annual training fulfilled. Compliance with federal research integrity requirements met. All requirements met for federal grant submission. SAMS completed and compliant.
Offer Summer Science Camp to provide financial	Summer Science Camp has not been established.	Summer Science Camp is in the process of	Summer Science Camp is fully developed and is	Summer Science Camp is currently offered and is	

support for research and scholarly activities		development. Program has not been piloted.	awaiting implementation.	increasing university funding for research and scholarly activities	
Grants from non-profit foundations are solicited	No solicitation of grants from non-profit foundations has occurred.	Grants from non-profit foundations have been identified for solicitation, but no solicitation has occurred.	Solicitation of grants from non-profit foundations has occurred. Grant money has not yet been secured.	Solicitation of grants from non-profit foundations has occurred. Grant money has been secured.	Currently generating plans to establish methodology for foundation funding.
Plans to support research opportunities are implemented	No plans have been discussed to support research opportunities.	Discussion of plans to support research opportunities has been initiated.	Plans to support research opportunities have been fully developed and are awaiting implementation.	Plans to support research opportunities have been implemented.	Ongoing and established collaborations, contracts, and MOUs.

Goal 3. Patient Care and Service

Provide practice and service opportunities to enhance community health and patient care.

Strategy 3.1. Provide practice opportunities for students and faculty in professional programs.

Tactics:

- Procure and maintain clinical practice sites for students
- Procure and maintain clinical practice sites for faculty
- Cultivate cooperative relationships with healthcare organizations to enhance educational opportunities and patient care experiences
- Facilitate collaborative and interdisciplinary educational opportunities

Indicator	Initial	Developing	Developed	Achieved	Evidence
Clinical practice sites are procured and maintained	No clinical sites have been procured.	Few clinical practice sites have been procured and have been minimally maintained. Plans to procure additional sites do not account for attrition. Financial support for the maintenance of the sites is weak.	Clinical practice sites have been procured and are maintained as required. Plans to procure additional sites tenuously account for attrition. Financial support for the maintenance of the sites is present but not strong.	Clinical practice sites have been procured and have been maintained sufficiently. Plans to procure additional sites account for attrition. Financial support for the maintenance of the sites is secured.	We have procured several Ambulatory care sites for the PharmD faculty at this time. We are working with local hospitals to place PharmD faculty in internal medicine units.
Clinical sites are appropriate for faculty practice	No clinical sites for faculty practice have been identified.	Clinical sites for faculty practice have been identified.	Clinical sites are secured but are not fully appropriate for faculty practice	Clinical sites are secured and are regularly for appropriateness for faculty practice.	<ul style="list-style-type: none"> • The Clinic at Sutter General, Sacramento – Add Dr. Sam Rasty to Dr. Sukhvir Kaur • River Site Medical Group, Sacramento – Drs. Huyen Vu and Erika Titus • White Memorial

					Hospital, Los Angeles – Dr. Kristine Kim • Lodi hospital with Adventist Health System – Dr. Justin Lenhard • Dignity (in progress)
Cooperative relationships with healthcare organizations are enhancing educational opportunities and patient care experiences	Relationships with healthcare organizations have not been established through MOUs.	Relationships with healthcare organizations are currently being developed. No MOUs have yet been signed.	Relationships with healthcare organizations are strong and discussion of signing MOUs has taken place.	Relationships with healthcare organizations are cooperative, effective, and diplomatic. MOUs have been signed.	Currently our CNU affiliation agreement allow faculty and students to be at practice sites. If an MOU is needed we will sign one specific to the site.
Collaborative and interdisciplinary educational opportunities are regularly occurring	Collaborative and interdisciplinary educational opportunities have not been identified.	Collaborative and interdisciplinary educational opportunities have been identified, and plans for their facilitation have been drafted.	Collaborative and interdisciplinary educational opportunities have been established. Facilitation of these are tenuous.	Collaborative and interdisciplinary educational opportunities are currently being facilitated effectively.	We do have a interdisciplinary educational opportunity with Sacramento State Univ for our eMBA program. As well as IPE activities with Sacramento State Univ School of Nursing. In planning stages to have M1 students rotate with PharmD faculty at Ambulatory Care Practice sites.

Strategy 3.2. Provide service opportunities to enhance community health (and patient care).

Tactics:

- Collaborate with local recognized healthcare practitioners and the local community on educational opportunities and health enhancement
- Foster collaboration with local universities, high schools, and professional communities to initiate services within the community
- Develop a CNU-owned practice facility/ organization that provides community health services

Indicator	Initial	Developing	Developed	Achieved	Evidence
Collaborations exist between CNU and local recognized healthcare practitioners and the local community to provide educational	No collaboration with local recognized healthcare practitioners and the local community has taken place.	Relationships with local recognized healthcare practitioners and the local community are being developed.	Relationships with local recognized healthcare practitioners and the local community are established, but not necessarily collaborative, in offering educational opportunities and	Relationships with local recognized healthcare practitioners and the local community are collaborative, strong, and effective in offering educational opportunities and	1. The Clinic at Sutter General, Sacramento – Dr. Sam Rasty to Dr. Sukhvair Kaur 2. River Site Medical Group, Sacramento – Drs. Huyen Vu and Erika Titus



opportunities and health enhancement			health enhancement.	health enhancement.	3. White Memorial Hospital, Los Angeles – Dr. Kristine Kim 4. Lodi Hospital with Adventist Health System – Dr. Justin Lenhard 5. Dignity (in progress)
Collaboration with local universities, high schools, and professional communities facilitates services within the community	No collaboration with local universities, high schools, and professional communities has taken place.	Plans for collaborating with local universities, high schools, and professional communities are being drafted, and some outreach to these entities has occurred.	Collaborative efforts with local universities, high schools, and professional communities are in their initial stages of establishment.	University is collaborating effectively with local universities, high schools, and professional communities.	1. Provides HS Summer Science Program (Biotechnology and Forensics) 2. Provides HS Teacher Molecular Biology Lab Techniques Professional Development Workshop 3. Provides Equipment and Supply Loan Program for Molecular Lab Activities to HS 4. Provides Undergraduate College Student mentors for HS science courses 5. Collaborates w/ CSUS for HS summer science academies 6. Provides outreach workshops to middle school girls and underserved populations (biotechnology lab) 7. Faculty as e-mentors for Sheldon High Biotech Academy 8. Service Learning Internships for CHS Students
A CNU-owned practice facility/ organization provides community	No CNU-owned practice facility/ organization has been established.	A CNU-owned practice facility/ organization is in the process of development. Plans	A CNU-owned practice facility/ organization has been developed. The facility/ organization	A CNU-owned practice facility/ organization has been developed and is fully functioning	1. River City Medical Group



health services		for implementing the facility/ organization have being drafted.	has both faculty-run and student-run clinics but are not well coordinated.	with both faculty-run and student-run clinics. Clinics are run efficiently.	
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Goal 4. Workplace Excellence

Create and sustain an environment conducive to productivity, collegiality, professionalism, and respect that attracts and embraces diverse top-tier talent.

Strategy 4.1. Foster faculty and staff recognition.

Tactics:

- Develop and implement an employee reward and recognition program to recognize outstanding contributions
- Acknowledge faculty and staff research and work accomplishments in university or college magazine

Indicator	Initial	Developing	Developed	Achieved	Evidence
An employee reward and recognition program is functioning to recognize outstanding contributions	An employee reward and recognition program has not been developed.	An employee reward and recognition program is being developed.	An employee reward and recognition program has been developed but is awaiting implementation.	An employee reward and recognition program has been developed and is implemented. Employees are recognized consistently.	Employee of the Quarter; regular commendations given at employee events throughout the year; recognition of employees in magazine; regular employee events are put on: annual BBQ, holiday party; Faculty of the year award
Faculty and staff research and work accomplishments is recognized in university or college magazine	No acknowledgement of faculty and staff research and work accomplishments is included in the university or college magazine.	Acknowledgement of faculty and staff research and work accomplishments is included in the university or college magazine but not regularly.	Acknowledgement of faculty and staff research and work accomplishments is regularly included in the university or college magazine; however, recognition between faculty and staff is imbalanced (e.g., significantly more articles are dedicated to faculty accomplishments than to staff accomplishments or vice versa).	Acknowledgement of faculty and staff research and work accomplishments is regularly included in the university or college magazine. Recognition between faculty and staff is balanced.	Recognition of faculty and staff in University magazine; accomplishments also recognized at quarterly BOT meetings

Strategy 4.2. Create a work environment that values collegiality, professionalism, and respect for faculty and staff.

Tactics:

- Provide opportunities for development programs to promote diversity, collegiality, and professionalism of faculty and staff
- Utilize employee input in planning processes to continually make improvements in workplace
- Assess for employee satisfaction with work climate and use assessment results to make improvements

Indicator	Initial	Developing	Developed	Achieved	Evidence
Development programs are provided to promote diversity, collegiality, and professionalism of faculty and staff	No development programs to promote diversity, collegiality, and professionalism of faculty and staff have been established.	Development programs to promote diversity, collegiality, and professionalism of faculty and staff are being established but are not yet complete.	Development programs to promote diversity, collegiality, and professionalism of faculty and staff are established, but programs are limited in variety and types.	Development programs to promote diversity, collegiality, and professionalism of faculty and staff are established. Programs range in variety and types.	Fun and spirit events-happy hours, holiday party, BBQ's; Faculty development programs-CE's, training on civil treatment and professionalism; mentoring program
Employee input in planning processes is utilized to continually make improvements in workplace	No employee input is utilized in planning processes.	Minimal employee input is utilized in planning processes, contributing to little improvements in the workplace.	Some employee input is utilized in planning processes to continually make improvements in the workplace.	Employee input is utilized extensively in planning processes to continually make improvements in the workplace.	Committee input is always valued; University faculty senate; 360 evaluations of leadership; participation in accreditation; climate surveys
Employee satisfaction with work climate is assessed and assessment results are used to make improvements	No assessment of employee satisfaction with work climate has been conducted.	Assessment of employee satisfaction with work climate is conducted, but not regularly, and results are not used to make improvements.	Assessment of employee satisfaction with work climate is conducted regularly, and results are considered for making improvements, but improvements do not necessarily result.	Assessment of employee satisfaction with work climate is conducted regularly, and results are used appropriately to make improvements.	360 evaluations of management and leadership; employee surveys always reviewed; creation of focus groups for specific items

Goal 5. Infrastructure

Maintain an efficient infrastructure to support and sustain learning, teaching, communication, research and scholarship while keeping education affordable.

Strategy 5.1. Promote employee productivity while reducing waste.

Tactics:

- Develop service goals and use performance matrices for assessing service areas
- Conduct workload analyses to determine productivity and allocation of employee time

Indicator	Initial	Developing	Developed	Achieved	Evidence
Service goals have been developed and performance matrices are used for assessing service areas	Service goals and performance matrices for service areas have not been developed.	Service goals have been developed, but few performance matrices have been created. Use of matrices for assessing service areas is inconsistent and	Service goals have been developed, and performance matrices have been created. Matrices are currently being used, but not regularly, to assess service areas.	Service goals and performance matrices have been developed. Matrices are currently being used regularly to assess service areas.	Workload analysis for various departments; goals create by department and assessed; performance evaluations system; peer evaluations, student evaluations 1. Financial aid - % of student loan packaging rate (loan

					approved and certified) 10 days prior to start of semester 2. Financial literacy presentation scheduled and delivered
Workload analyses are conducted to determine productivity and allocation of employee time	No workload analyses are conducted to determine productivity and allocation of employee time.	Workload analyses are conducted to determine productivity and allocation of employee time, and results are not utilized to make improvements	Workload analyses are conducted regularly to determine productivity and allocation of employee time, but results of analyses do not inform decision making.	Workload analyses are conducted regularly and accurately to determine productivity and allocation of employee time.	Workload analysis policy in place, Faculty regularly having workload reviewed, HR conducting workload analysis for staff departments 1. teaching load index, credit hour per FTE 2. research load index per FTE (grants, articles published, awards, 3. service load index per FTE (committee, advising) 4. Practice load index per FTE for clinical practice faculty

Strategy 5.2. Provide resources that directly support teaching and learning opportunities for students.

Tactics:

- Provide support for Simulation and Training Laboratory
- Invest in and support distance learning
- Perform comparative analyses of internal cost of education

Indicator	Initial	Developing	Developed	Achieved	Evidence
Simulation and Training Laboratory are supported and maintained	No support for the Simulation and Training Laboratory has been provided.	Little support for the Simulation and Training Laboratory has been provided, but further support is needed to ensure the lab's efficient operation.	Support for operation of the Simulation and Training Laboratory has been provided; however, further support is needed to ensure its efficient operation.	Adequate support for continued and efficient operation of the Simulation and Training Laboratory has been provided.	1. budgeted resource per simulation session and laboratory training (purchase, maintenance and update)
Distance learning programs are utilized	Distance learning programs are not being utilized.	A plan to utilize distance learning programs is currently being discussed.	Distance learning programs are fully planned and ready for implementation.	Distance learning programs are fully implemented and are being utilized.	1. CHS – medical terminology course implemented 2. COM students provided with UWORLD practice

					question bank and STEP 1 RX practice question bank with performance metrics feedback to students 3. COP – LPPK exam 4 th year per rotation; online law review; hub coordinator faculty teaching pharmacy practice 607 online
Comparative analyses of internal cost of education are conducted	No comparative analysis of internal cost of education has been conducted.	Components for a comparative analysis of internal cost of education have been gathered, but analysis has not been conducted.	A comparative analysis of internal cost of education has been conducted, but results appear to be inaccurate for decision making.	A comparative analysis of internal cost of education has been conducted and is accurate for decision making.	1. Annual comparative analysis of cost to degree at COP, COM,

Strategy 5.3. Provide and allocate appropriate resources across the university.

Tactics:

- Expand and upgrade IT services and technology to enhance efficiency and security
- Procure enterprise IT system encompassing and providing infrastructure
- Assess use of internal and external resources
- Manage a budget to monitor university-related expenses
- Increase scholarship opportunities for students

Indicator	Initial	Developing	Developed	Achieved	Evidence
IT services and technology are appropriately utilized to enhance efficiency and security	No expansion and upgrading of IT services and technology have been completed.	A plan for expanding and upgrading IT services and technology has been established, but implementation has not yet occurred.	IT services and technology are in the process of being expanded and upgraded to enhance efficiency and security but is not yet complete.	IT services and technology has been expanded and upgraded to enhance efficiency and security.	IT has expanded efficiency and security in IT services. 1.) Implemented a more robust and timely protocol for server side security updates and patching. This is in response to the global ransomware threats seen by other educational institutions and health care facilities. 2.) Improved mechanisms for access to specific files for faculty

					<p>and staff while preserving the need for intuitional data preservation and integrity to enhance efficiency in systems such as a new Microsoft SharePoint integration.</p> <p>3.) Improved backup mechanisms has been implemented to reduce potential lost periods (between backup windows) and also in response to the global ransomware instances.</p> <p>1. IT implemented share-point to enhance remote access security</p> <p>2. IT procured Simplivity for efficient use of server and storage space</p> <p>3. CNU implemented Great Plane for financial reporting</p>
Enterprise IT system provides infrastructure necessary to suit the needs of the institution and its users	No discussion for procuring an enterprise IT system has occurred.	Some plan for procuring an enterprise IT system is in place, but procurement of system has not taken place.	Enterprise IT system has been procured and is currently providing the infrastructure necessary to suit the needs of the institution and its users, but the system needs refinement for optimal usability.	Enterprise IT system has been procured and is currently providing the infrastructure necessary to suit the needs of the institution and its users. System is used to its fullest extent to support infrastructure.	<p>Evidence: IT has procured and/or refined usage of existing systems to provide improved Enterprise IT system infrastructure for the needs of the institution and its users.</p> <p>1.) Integration of systems/applications to systems allows improved experiences for out leaning</p>



					<p>management system Canvas. IT has completed integrations with Mediasite (lecture capture videos) into Canvas so that students and faculty can have a one stop shop to access course materials as well as video content. The integration with Turning Technologies and Canvas has just been completed to allow faculty real time access to student / clicker (mapping) as well integration of results directly into the gradebook.</p> <p>2.) IT has started to fully utilize this past year the deduplication functionality as well as the fault tolerance features of our hyper-converged SAN</p> <p>1. Electronic dashboard for finance department for internal control and management of budget</p> <p>2. HRIS (potentially Paycom for HR management, payroll, talent acquisition, performance evaluations, and learning management)</p> <p>3. Microsoft IB for academic performance dashboard for student learning</p>
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					<p>assessment and predictive analytics</p> <p>4. MEDU for tracking and providing must see cases in clerkships</p> <p>5. Online course proposal for Pharmaco-economics</p>
Internal and external resources are regularly assessed for appropriate decision making	No identification of use of internal and external resources has been completed.	Identification of use of internal and external resources is conducted, but no assessments have occurred for decision making.	Some assessment of use of internal and external resources has been conducted; however, further assessment is needed for decision making.	Assessment of use of internal and external resources has occurred; assessment results are complete for decision making.	CNU policy requires that at all levels of the organization we assess and consider internal and external resources prior to making decisions. Administration currently assesses the use of internal and external resources has occurred for decision making for financial commitments, purchasing, hiring, construction, expansion, and program development, just to name a few. This process is expected from all employees and is currently achieved.
A budget is developed, maintained, and managed to monitor university-related expenses	No budget to monitor university-related expenses has been developed.	A budget to monitor university-related expenses has been developed, but it has not been maintained and managed appropriately. Budget is not accurate and sufficient for decision making.	A budget to monitor university-related expenses has been developed. Budget is generally updated in a timely fashion and contains only minimal inaccuracies for decision making.	A budget to monitor university-related expenses has been developed to adequately manage expenses. Budget is continuously updated in a timely fashion and reflects information accurately for decision making.	CNU has a budgeting process that includes all departments. The budget is updated, approved by the department managers, Deans, CFO, and finally by the president. The CFO closely monitors and updates the budget on a regular basis to assure that the organization has accurate

					information for decision making. See current 2016-2017 budget. 1. Budget Great Plane report developed 2. Monthly budget vs. actual financial report 3. Annual budget cycle published and procedure fully developed and implemented
Scholarship opportunities are available for students	No scholarship opportunities for students have been identified.	Few scholarship opportunities have been made available, and scholarships lack variety (e.g., most scholarships are awarded based on financial need and few are for academic achievement and service).	A number of scholarship opportunities have been made available to students, but these scholarships lack in variety (e.g., most scholarships offered are based on academic achievement, most scholarships offered are based on financial need).	A variety of types of scholarship opportunities have been made available to students (e.g., those based on academic achievement, financial need, interests in specific study areas).	1. Five categories of CNU scholarship opportunity implemented (academic, leadership, research, WE CARE financial need, President Scholarship) 2. CNU Scholarship committee implemented 3. Annual award ceremony to promote endowment and giving 4. Donor board to recognize contribution at University lobby 5. Mini-grants 6. Northern California Scholarship Foundation

Goal 6. Financial Sustainability and Growth

Create a financially sustainable enterprise-wide growth model.

Strategy 6.1. Develop revenue programs.

Tactics:

- Create and implement an alumni investment program
- Create short-term educational programs, courses, and certifications
- Provide pipeline programs

Indicator	Initial	Developing	Developed	Achieved	Evidence
An alumni investment	No discussion or plan for an alumni	An alumni investment	An alumni investment program has been	An alumni investment	<ul style="list-style-type: none"> • We have developed a

program has been implemented and is providing support for the university	investment program has taken place.	program is being developed-- key areas of the program have been articulated.	developed, but little development has occurred.	program has been developed and is providing support for the university	workable plan for an Alumni Investment Program <ul style="list-style-type: none"> • We have formed an Alumni Team to hold positions as officers. • We have hired a LLC Lawyer form a Non Profit LLC • We have interviewed Investment Bankers for financial assistance.
Short-term educational programs, courses, and certifications are offered	Short-term education courses, programs, and certifications are not offered.	Short-term education courses, programs, and certifications are in the process of development.	Short-term education courses, programs, and certifications are developed and are awaiting implementation.	Short-term education courses, programs, and certifications are offered regularly.	For students, A few short term education courses are offered such as the summer anatomy course others are in the planning stages. For faculty and staff, many 1-2 hour short courses are offered regularly on research, clinical, administrative, wellness, and self-improvement topics. If needed, a list of topics can be provided.
Pipeline programs are being implemented	No discussion of building pipeline programs has occurred.	Some discussion of building pipeline programs has occurred. Initial research about building these programs are being done.	Pipeline programs are currently being established. Resources for offering programs have been secured. Programs are awaiting implementation.	Pipeline programs are currently being offered. Resources for offering these programs are sustainable for their continued maintenance.	CHS provides a pipeline program offering students the ability to progress into the COM and COP programs. This program is in place and is well documented.

Strategy 6.2. Develop and maintain effective plans to support institutional operations.

Tactics:

- Develop an effective admissions strategy to ensure the admittance of high quality candidates
- Develop an effective marketing strategy to recruit qualified faculty and staff
- Maintain strong faculty and staff retention rates within the institution

Indicator	Initial	Developing	Developed	Achieved	Evidence
An effective admissions strategy to ensure the admittance of high quality candidates is in place	No admissions strategy has been developed to ensure the admittance of high quality candidates.	An admissions strategy is in the process of development. Strategy may appear to be unfeasible or incomplete and requires revision.	An admissions strategy is developed. Strategy may not include some, but not all, of the most appropriate criteria for ensuring the admittance of high quality candidates.	An effective admissions strategy has been developed to account for all criteria most appropriate in ensuring the admittance of high quality candidates.	MMI Interviews, involvement of administration, community members, alumni in those interviews; Admissions committee process and review; multiple layers of review and oversight guided by policy; test scores, GPAs-data in AMcas
An effective marketing strategy to recruit qualified faculty and staff has been developed	No marketing strategy is in place to recruit qualified faculty and staff.	A marketing strategy in the process of development and is not yet complete. Strategy includes insufficient details or may lack critical areas necessary in a marketing plan.	A marketing strategy has been developed to recruit qualified faculty and staff. However, lapses in the plan are apparent and need revision.	A sound marketing strategy has been designed to recruit qualified faculty and staff. Strategy accounts for all necessary components needed in a marketing plan.	Hiring policy and procedure in place; constant review and update of job descriptions; contracts with top job sites for recruiting candidates; search committee training on recruiting, references checked for all candidates; background checks
The institution retains faculty and staff	Faculty and staff retention rates are below 65%.	Faculty and staff retention rates are 65-74%.	Faculty and staff retention rates are 75-84%.	Faculty and staff retention rates are 85 % or higher.	Rates improved since last time based on payroll and HR data and reports; exit interviews

Strategy 6.3. Research viability of new programs that are consistent with the Mission for implementation.

Tactics:

- Conduct appropriate research to explore plans for potential growth
- Create plans for new program development
- Develop substantive change proposals for new programs
- Implement new programs

Indicator	Initial	Developing	Developed	Achieved	Evidence
Appropriate research is conducted to explore plans for potential growth	No research has been conducted to explore plans for potential growth.	Minimal research has been conducted to explore plans for potential growth, but research information is too scanty for decision making.	Research has been conducted to explore plans for potential growth, and results are sufficient. Additional research is beneficial for decision making.	Research to explore plans for potential growth has been conducted. Information gathered is detailed, extensive, and appropriate for	Research conducted by M.S. programs and psychology program (PsyD program)

				decision making.	
Plans for new program development are implemented	No creation of plans for new program development has been initiated.	Discussion of creating a plan for new program development is occurring.	Plans for new program development are currently being developed but are not yet complete.	Plans for new program development have been created.	Presentation to the BOT for initial approval to continue research and proposal development
Substantive change approvals are obtained for new programs	No substantive change proposals for new programs have been developed.	A substantive change proposal is in the process of being drafted.	A substantive change proposal has been submitted for review by the accreditor.	Substantive change proposal has been approved.	N/A
New programs are implemented	No implementation of new programs has occurred.	Initial stages of the implementation of new programs have occurred.	New program is in process of being implemented.	New program has implemented.	N/A

The Future of Dental Education: Vision 2030

A Relevant, Sustainable Construct

Leon A. Assael DMD CMM
Professor and Director,
Community Based Education and Practice
University of California San Francisco

March, 2018 ADEA Annual Meeting

Disclosures

- I am a paid consultant for
 - Delta Dental of Minnesota
 - OMSNIC
- I am an unpaid consultant on access to care in California and the US to
 - West Health Foundation
 - Kellogg Foundation
 - PEW
 - Waxman foundation
 - Oregon Health Authority
- I am paid editor in chief of Oral and Maxillofacial surgery
- I am not speaking on behalf of any organization

Future focus

- **“the future is here, it just isn’t evenly distributed”**
- **“If you are the same educator or oral health professional you were 10 years ago, then you have wasted 10 years”**



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Oral health today



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MARCH 17-20 | ORLANDO

Dental education exists to gain the benefits of good oral health for all

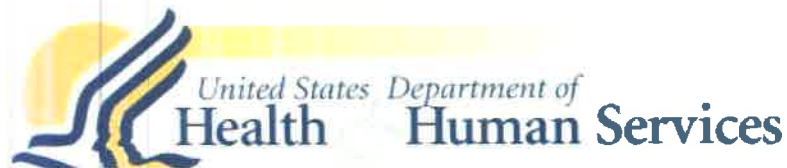
- Oral health is the optimal contribution of the structure and function of the oral cavity to the well being of the patient



What is the status of oral health in America?

David Satcher MD

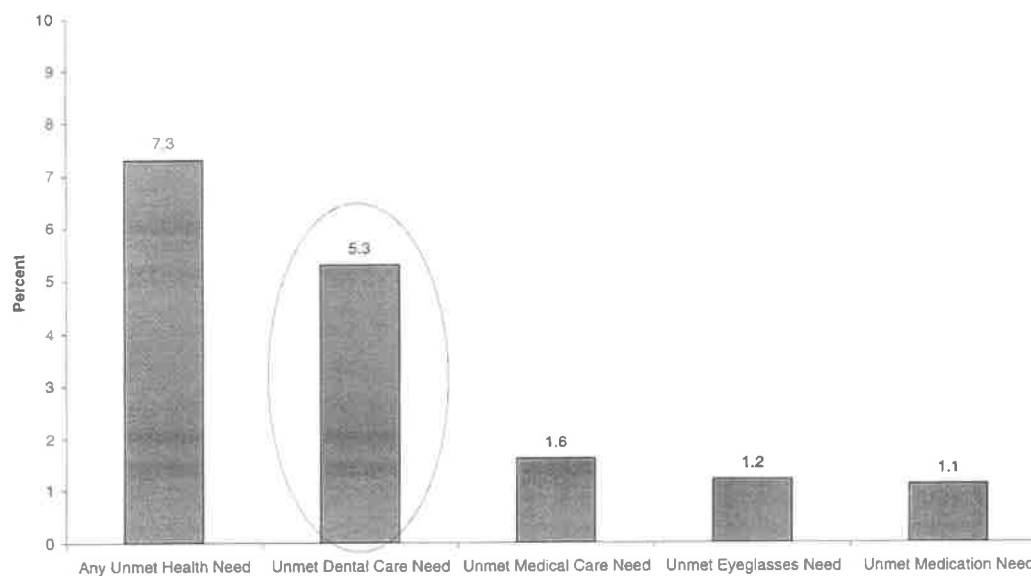
- a “silent epidemic” of dental and oral diseases is affecting some population groups. This burden of disease restricts activities in school, work, and home, and often significantly diminishes the quality of life. Those who suffer the worst oral health are found among the poor of all ages, with poor children and poor older Americans particularly vulnerable. Members of racial and ethnic minority groups also experience a disproportionate level of oral health problems. Individuals who are medically compromised or who have disabilities are at greater risk for oral diseases, and, in turn, oral diseases further jeopardize their health.



The real status of oral health today

- The hidden epidemic is no longer hidden
- Societal changes in body image and ability to tolerate destructive disease
- Health disparities heightening
- The oral systemic link is real
- Persistent disease and declining demand for oral health services
- The now visible burden of untreated oral diseases

Dental Health: The most frequent unmet health need in children



Newacheck, P. W. et al. Pediatrics 2000;105:989-997

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PEDIATRICS®

Changing face of caries

- Findings of a systematic review of 9 studies on root caries in older adults:
 - Overall root caries incidence = 23.7% per year
 - Overall root caries increment = 0.47 surfaces/year
 - Root + coronal increment = 1.31 surfaces/year
 - Caries rates in dentate elderly now exceed that in commercially insured children
- , “In Nursing Homes, an Epidemic of Poor Dental Hygiene,”
- In Wisconsin, 31 percent of residents of 24 facilities had teeth broken down to the gums, with visible roots



Catherine St. Louis, New York Times

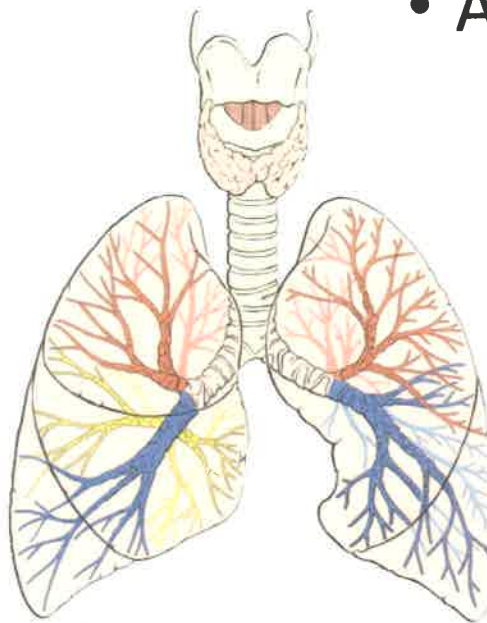
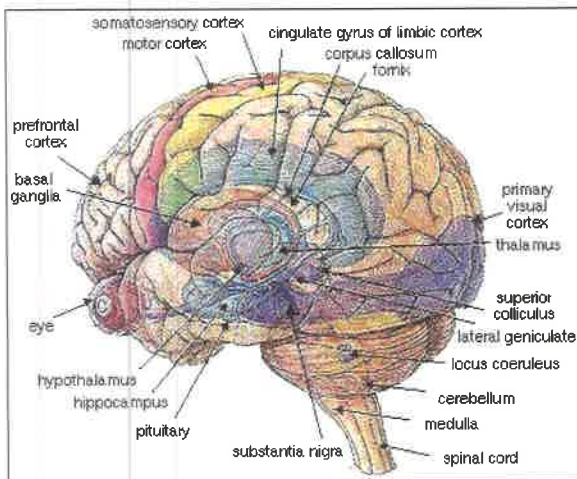


Provided by
Steve Shuman DDS

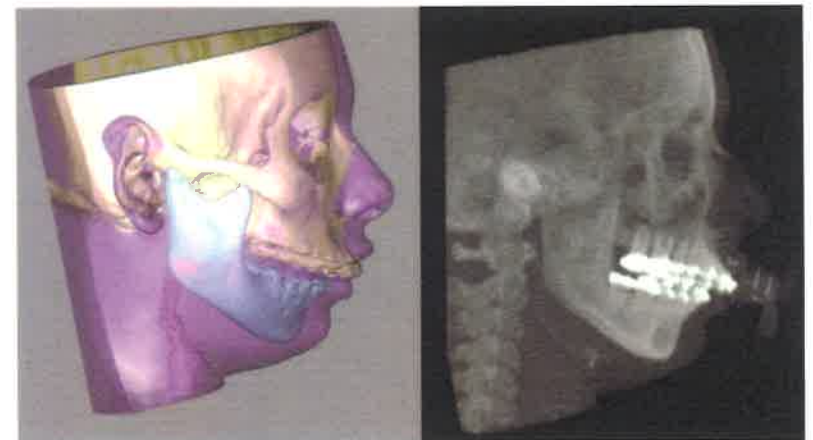
Oral cavity as an essential organ system

- CNS

- Airway



Oral cavity:
entry to lungs, brain and GI

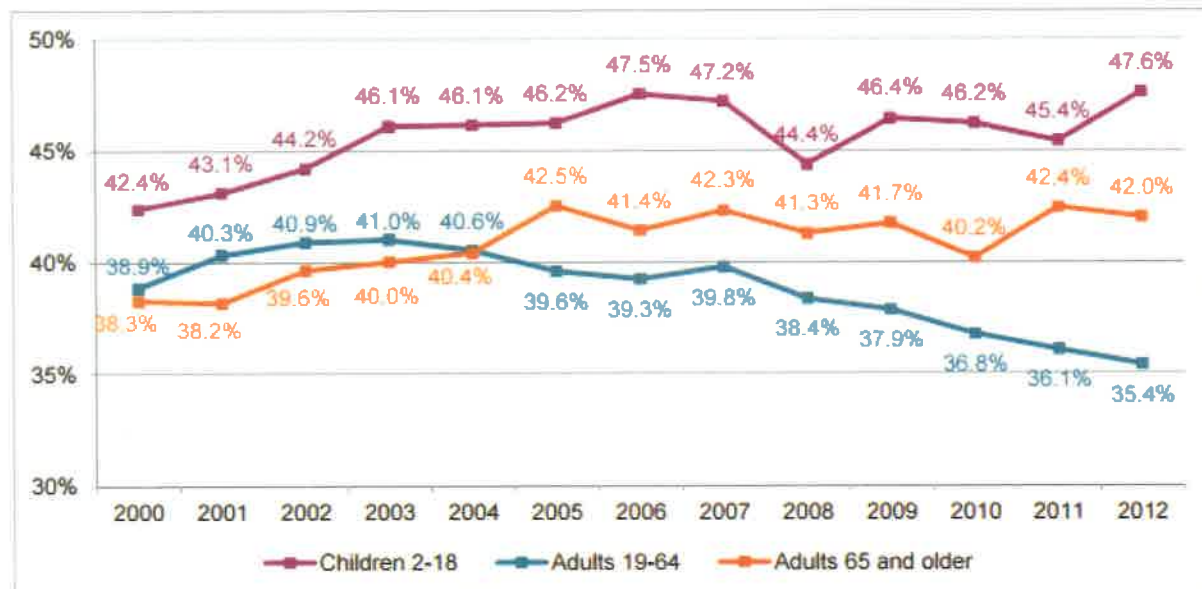


DENTAL PRACTICE TODAY



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Figure 1: Percentage of the Population with a Dental Visit in the Year, 2000-2012



Source: Medical Expenditure Panel Survey, AHRQ. **Notes:** For children ages 2-18, changes were statistically significant at the 1% level (2000-2012) and at the 10% level (2011-2012). Among adults ages 19-64, changes were statistically significant at the 1% level (2003-2011). For adults 65 and older, changes were significant at the 5% level (2000-2012). Changes from 2011 to 2012 among adults 19-64 and the elderly 65 and above were not statistically significant.

Dental spending is an outlier on the down side

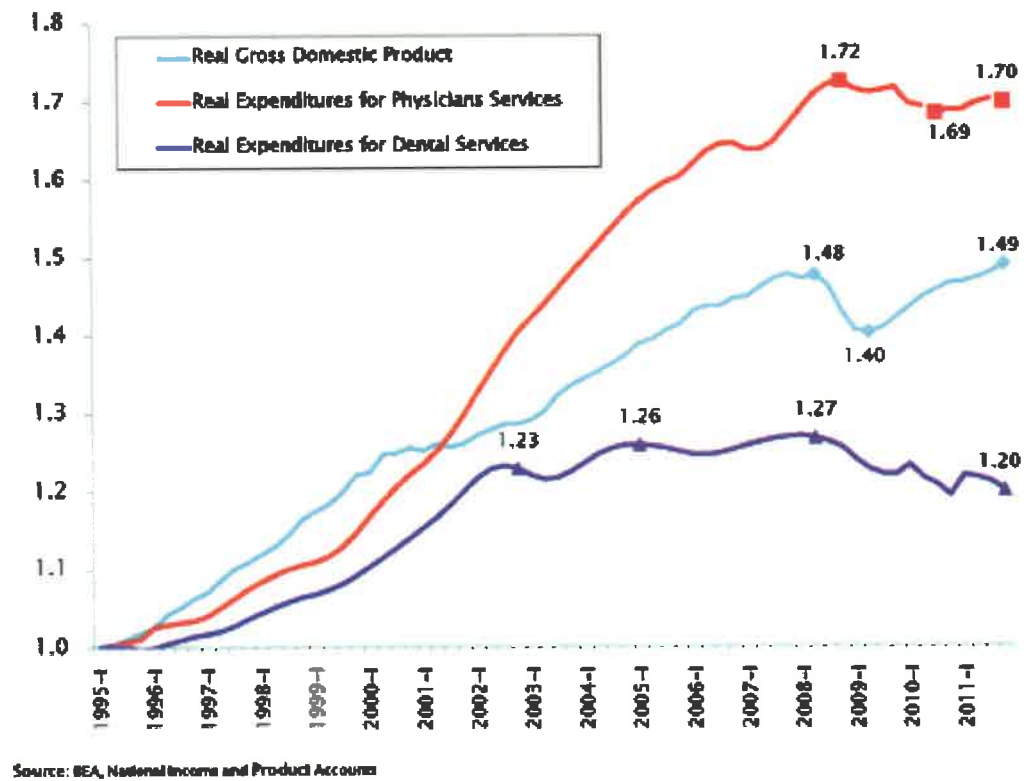
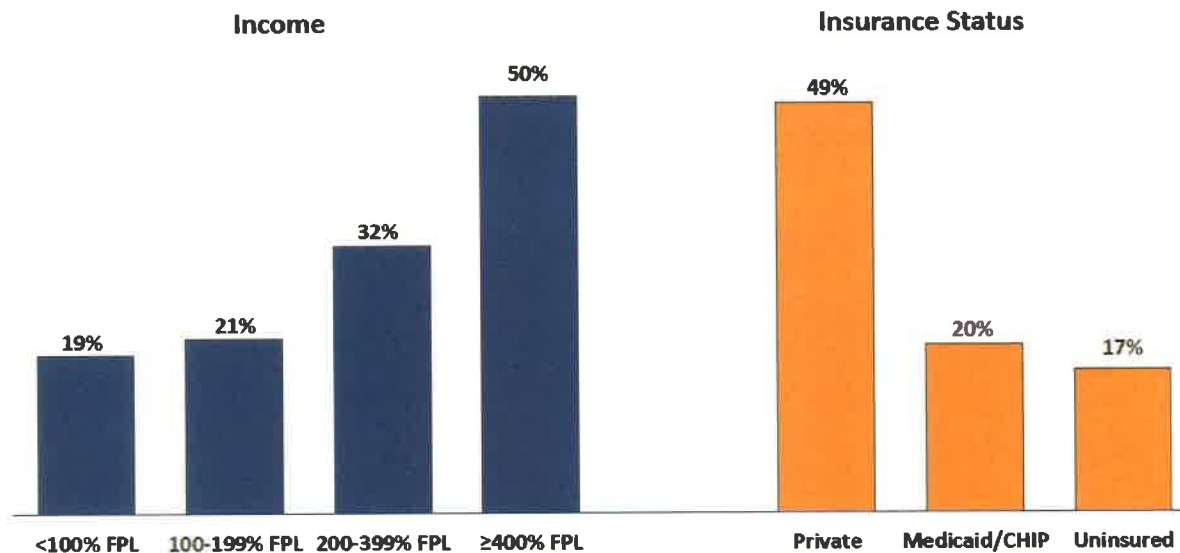


Figure 3

Percentage of Nonelderly Adults with a Dental Visit in the Past Year, by Income and Insurance Status, 2013

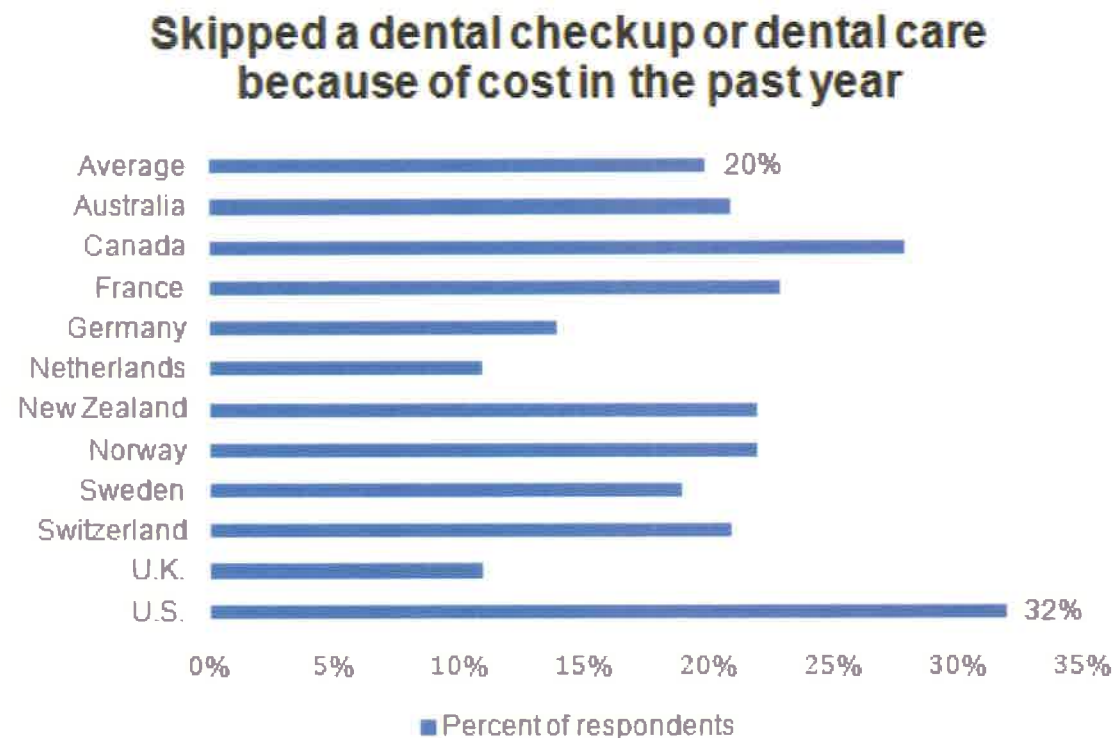


NOTES: Adults age 19-64. "Private" includes those with private dental benefits. Some state Medicaid programs provide limited or no dental benefits for adults. "Uninsured" includes those without private dental benefits or Medicaid coverage. Uninsured also includes people who have only Medicare, which provides no dental benefits.
SOURCE: ADA Health Policy Institute analysis of Medical Expenditure Panel Survey, Nasseh and Vujicic, *Dental Care Utilization Rate Continues to Increase among Children, Holds Steady among Working-Age Adults and the Elderly*, HPI, October 2015.



The Commonwealth Fund Survey

<http://www.commonwealthfund.org/interactives-and-data/surveys/2016/2016-international-survey>



Dentistry has become a profession that serves the healthy and the wealthy

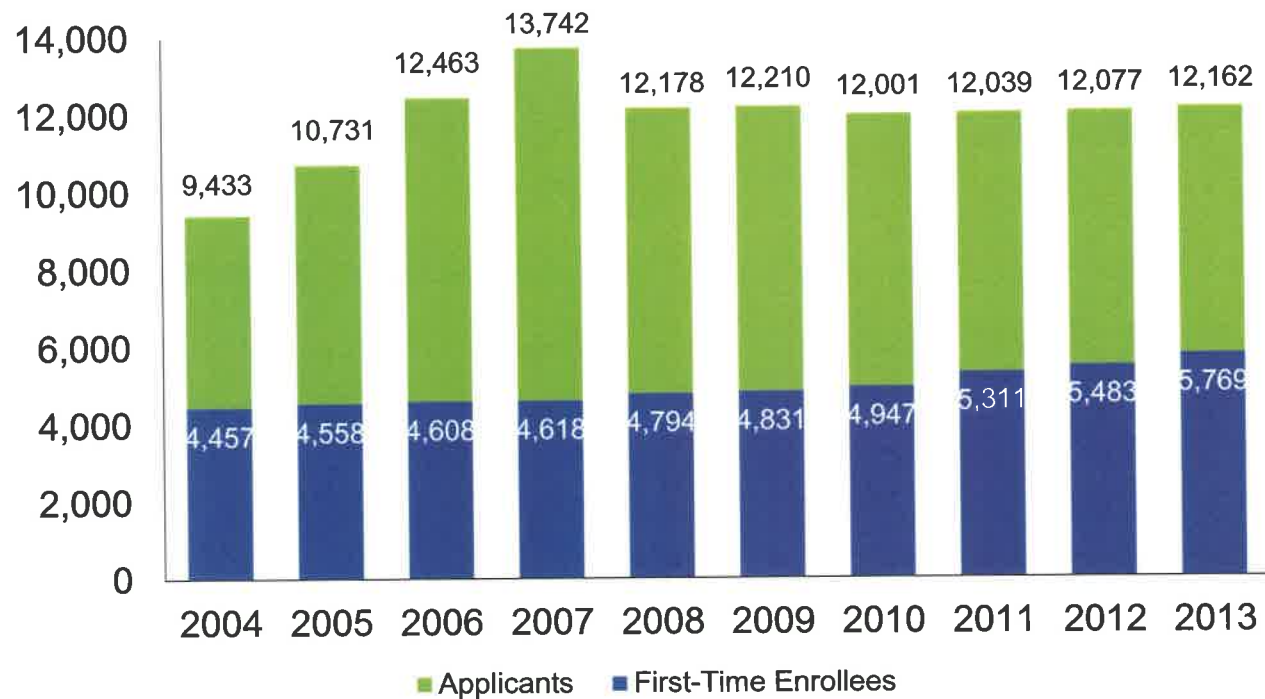


DENTAL EDUCATION TODAY



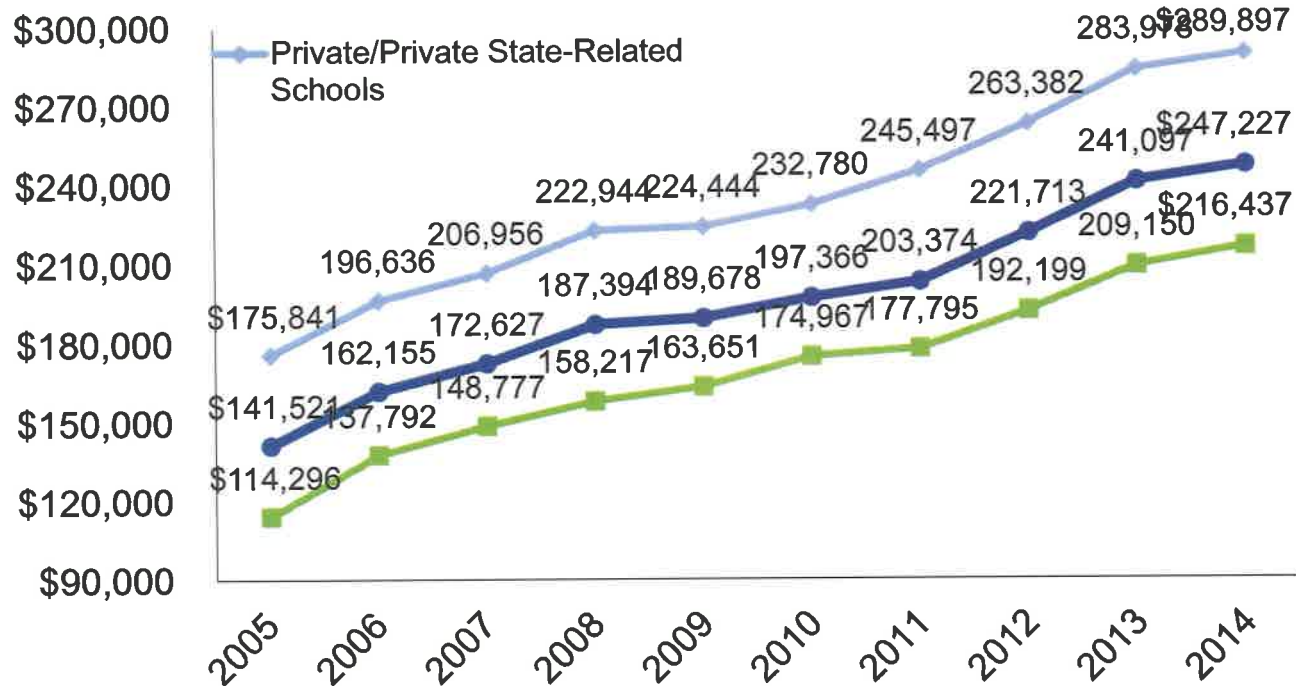
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Dental School Applicants and First-Time Enrollees, 2004-2013



Source: American Dental Education Association, U.S. Dental School Applicants and Enrollees, 2004-2013

Average Educational Debt Among Graduating Students with Debt by Type of School, 2005-2014 (Current Dollars)



Source: American Dental Education Association, Survey of Dental School Seniors, 2013 Graduating Class

Note: Educational debt is the sum of undergraduate and dental school debt of only those respondents who have debt.

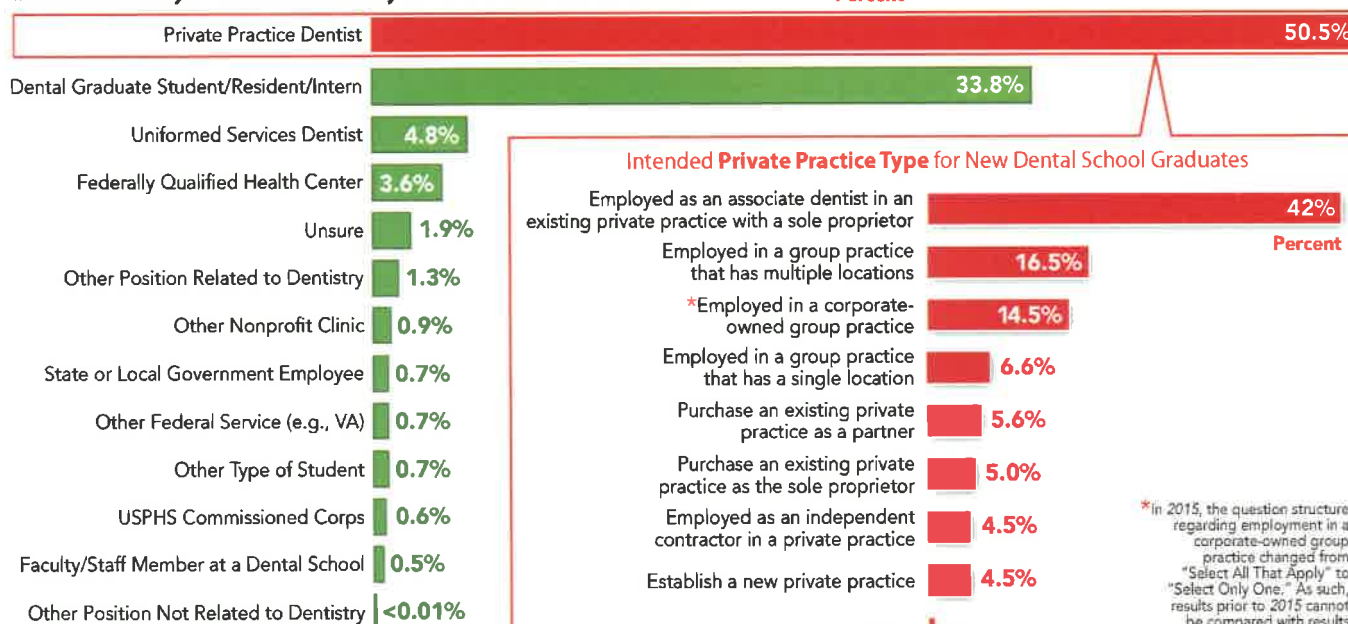
Where Do They Go From Here?

Intended professional activities and practice options, 2016 dental school graduating class

ADEA
Snapshot
of Dental
Education
2016-2017

Intended **Primary Professional Activity** for New Dental School Graduates

Percent

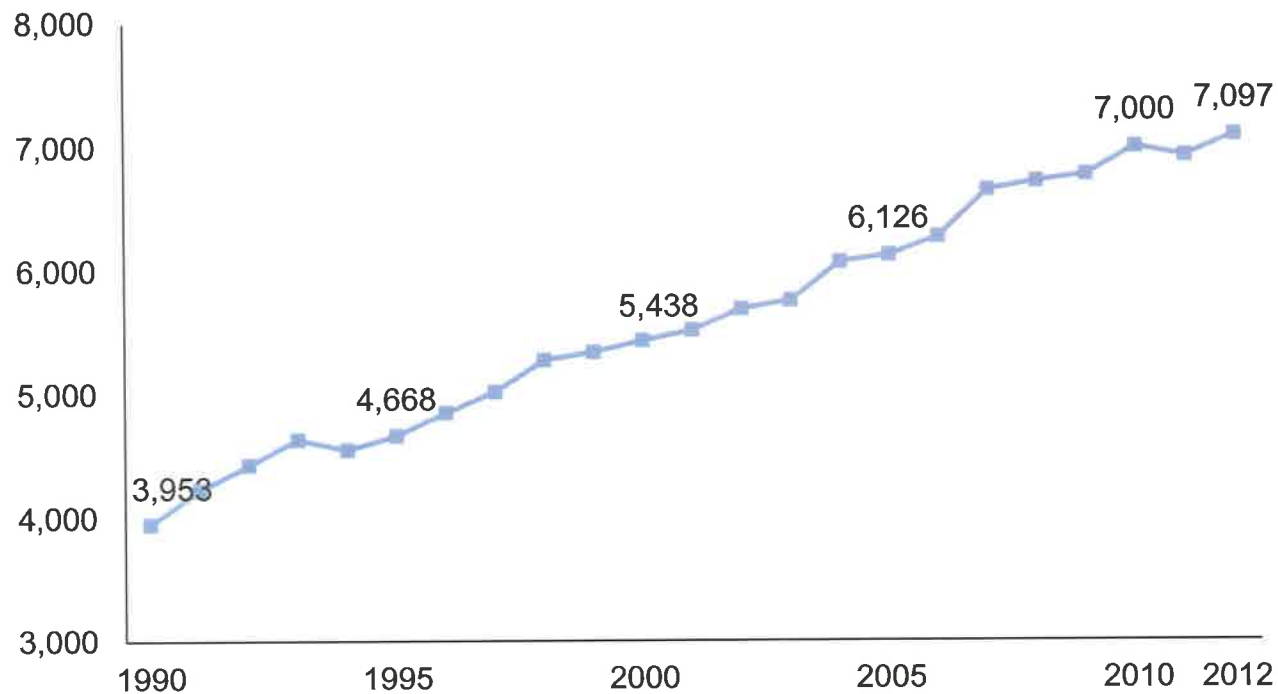


*In 2015, the question structure regarding employment in a corporate-owned group practice changed from "Select All That Apply" to "Select Only One." As such, results prior to 2015 cannot be compared with results in 2015 and later.

Note: Percentages may not add up to 100% due to rounding.

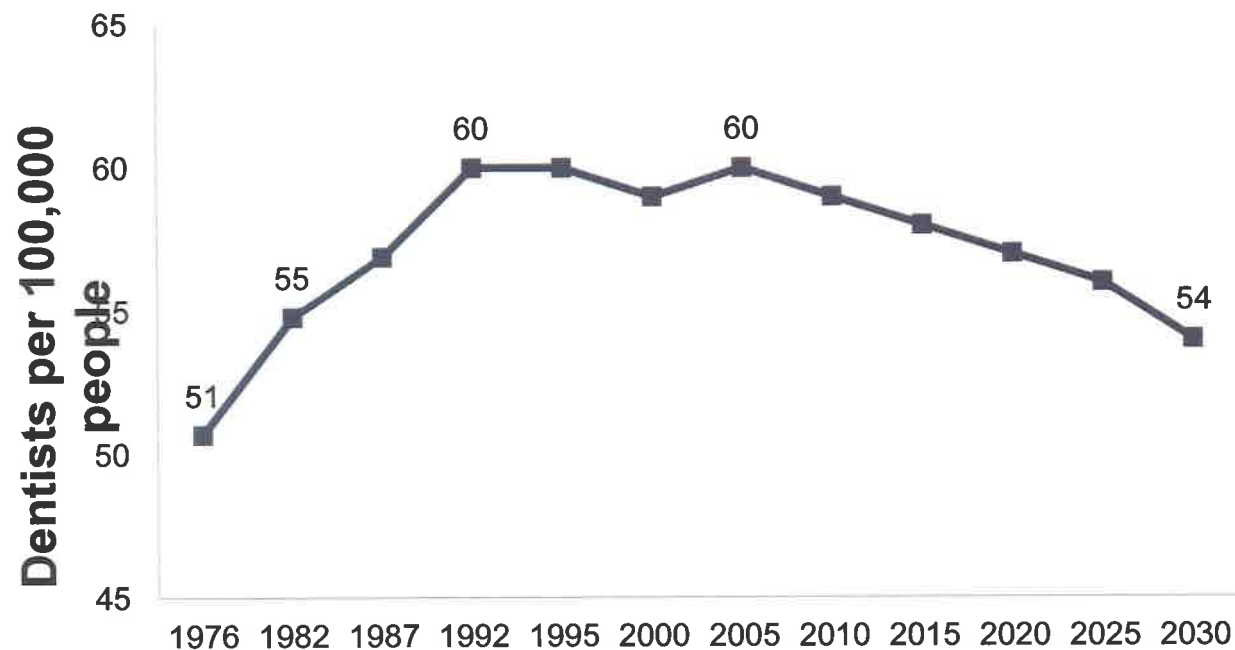
Source: American Dental Education Association, Survey of Dental School Seniors, 2016 Graduating Class

Dental Hygiene Graduates, 1990-2012



Source: American Dental Association, Health Policy Resources Center, Surveys of Dental Hygiene Education Programs.

Professionally Active Dentists per 100,000 U.S. Population, 1976–2030



Source: American Dental Association, Survey Center, Dental Workforce Model 2008–2030

Note: Numbers from 2010 to 2030 are projected.

Dental Education Today

- Dental students are not taught how to care for sick people. Dental students are not educated as part of health systems. This is unique in health science education.
- Biomedical education in dental schools is a diminishing component of education for dental students.
- Basic medical sciences once an average of 1600 hours of a 4000 hour curriculum is now about 600 hours on average
- Dental education is focused on performance of procedures sometimes at the expense of knowledge
- Exploration of new workforce models is occurring

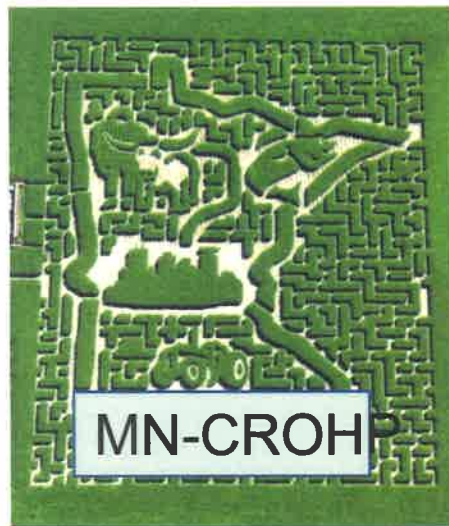
University of Minnesota School of Dentistry

Dental Therapy

Class of 2016



WHITE COAT CEREMONY
September 2014



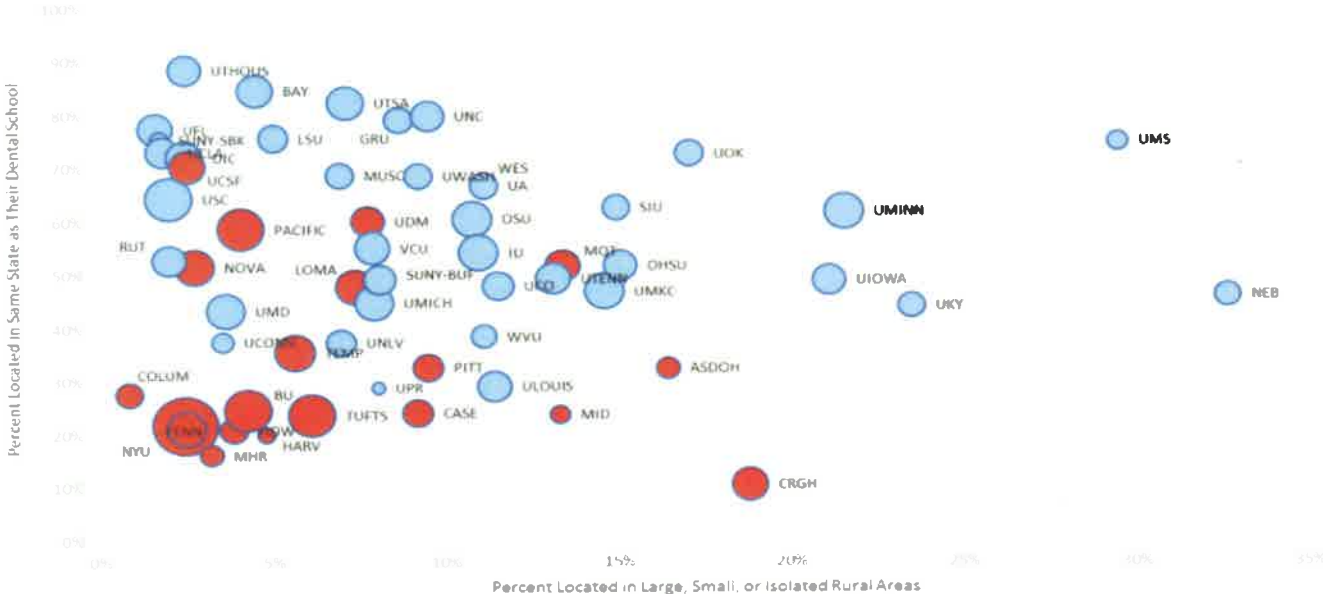
MN Collaborative Rural Oral Health Project

This project is supported by the Health Resources and
Services Administration (HRSA) of the U.S.
Department of Health (HHS) Grant no. D85HP28496

Factors and Issues that Led to Formation of Taskforce

- Many new grads/new dentists end up practicing in different state/region than their dental school

Location of Practicing Dentists from the Classes of 2005-14, by Dental School They Graduated From

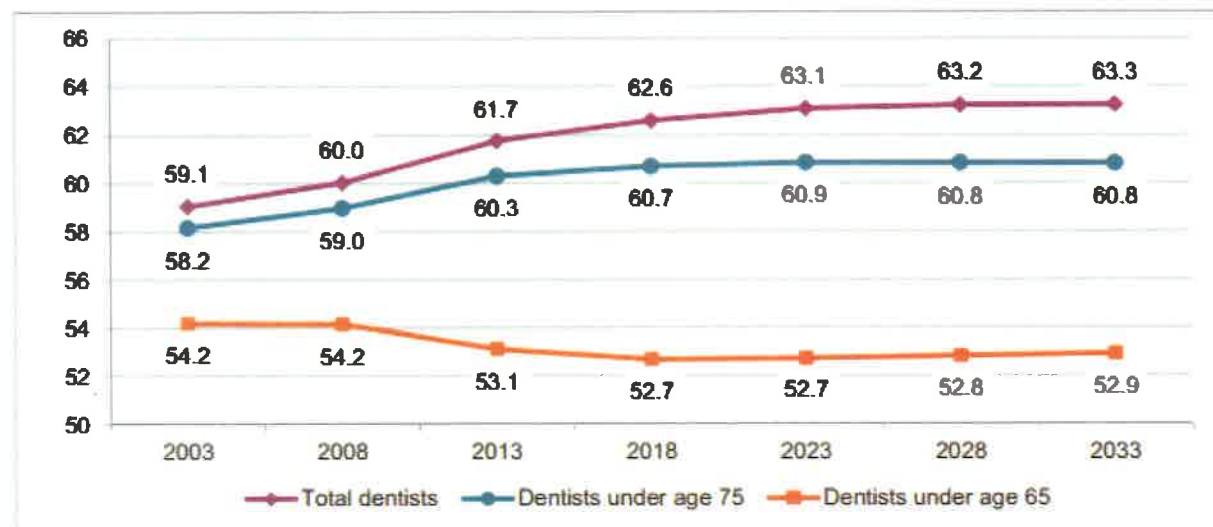


Oral health care delivery and dental
education tomorrow



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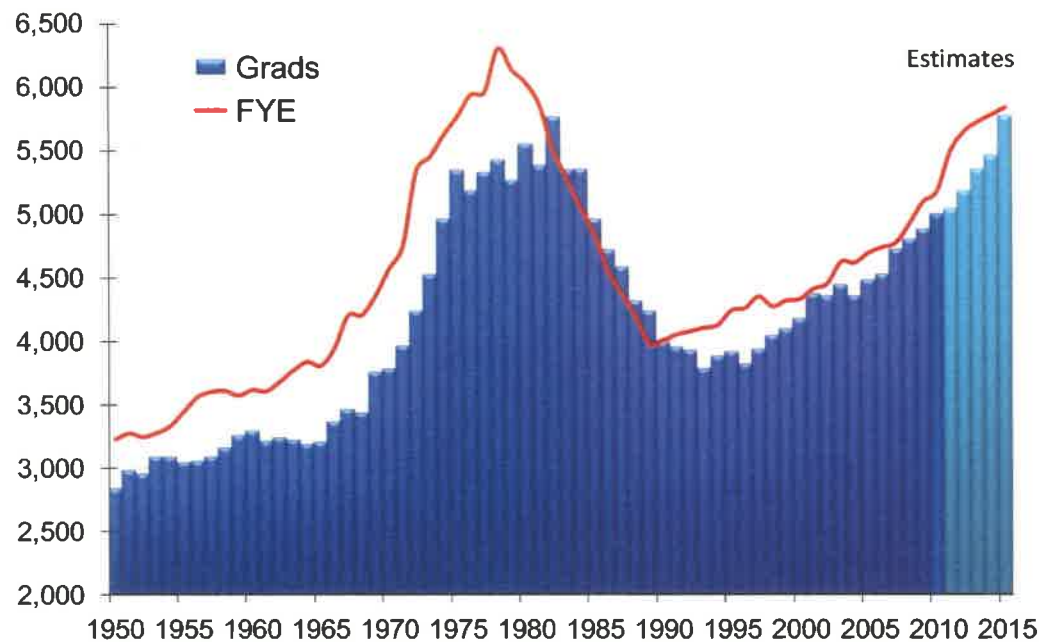
Figure 4: Historical and Projected U.S. Dentists per 100,000 Population, by Age Group, Baseline Scenario



Source: ADA Health Policy Institute analysis of ADA masterfile; U.S. Census Bureau, Intercensal Estimates and National Population Projections. Notes: Data for 2003, 2008, and 2013 are based on the ADA masterfile. Results after 2013 are projected. Assumes (a.) U.S. total annual dental school graduates will increase linearly to 2018 and then remain flat (b.) future outflow rates are same as 2008-2013 historical percentages.

HRSA reports moderate to severe shortage of DDS in 2050

Dental First Year Enrollment and Graduates



Source: American Dental Association, Survey of Dental Education, projection by E Solomon

Solomon, Dental Economics

- The U.S. Centers for Medicare and Medicaid Services predicts insurance as a source of dental expenditures will remain relatively stable at 51.0% up to 2023. They also estimate out-of pocket expenditures will decline to 35.1% and government sources will increase to 13.9% of all dental expenditures by 2023. This projection estimates government expenditures for dental services more than doubling by 2023 to \$26.7 billion. Historically, government expenditures for dental services have not increased at this rate.

<http://www.dentaleconomics.com/articles/print/volume-105/issue-3/macroeconomics/the-future-of-dentistry-dental-economics.html>

What are the needs and opportunities to improve oral health through dental education ?

- Access to care
 - Geographic and financial
- Integrated medical, dental health care delivery.
- Common education of health professionals
- Health systems based education
- Intraprofessional education with hygiene, DT, DA
- IPE
- Basic skill in primary medical/nursing/pharmacy
 - Exam
 - Fluoride therapy
 - Nutrition and hygiene instruction

Appendix 1-2 ADEA Vision 2030 PowerPoint

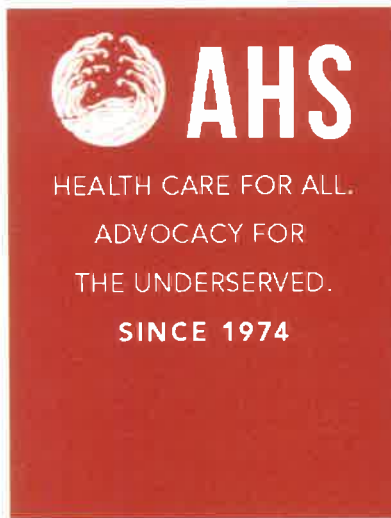


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Community Based Education at UCSF Asian Health Services among 14 sites



University of California
San Francisco



Health systems based practice

- ***Systems-Based Practice*** requires residents/fellows to demonstrate an awareness of and responsiveness to the larger context and system of health care, as well as the ability to call effectively on other resources in the system to provide optimal health care.

Emphasis on Value

“Providers should be required to measure...improvements in quality of life, functioning and longevity.

After a patient has a knee replaced, can she walk normally? When a child has asthma can he play school sports? Unfortunately, the measurements we use today leaves us unable to make many of these vital judgments about the quality of doctors, hospitals or health care organizations.”

David Lansky, CEO, Pacific Business Group on Health, speaking on behalf of Boeing, Target, Disney, Wal-Mart, Intel, GE, Wells Fargo and the California Public Employees Retirement System.

Curriculum needs for system based/value based practice

- **Core biomedical science for DDS consistent with health team leaders**
- **More robust dental team members in DH, DT and DA educated in intraprofessional health system environment**
- **Dental team integrated into interprofessional team through IPE and collaborative practice models**
- **All clinical practicum carried out in operating health systems**

The key elements of change

- **Collaborative interprofessional practices**
- **Integrated payment system**
- **Value based payment system**
- **Reduce the unit cost of dental care with**
 - **Workforce development: team care intraprofessional education**
 - **Practice models**
 - **Technology**

Key elements of change II

- **Oral health integrated into primary care**
- **Evidence based integration into key health focus areas e.g.**
 - **Diabetes**
 - **Obesity**
 - **Atherosclerotic diseases**
 - **Oncology**
 - **Child development**
 - **Pregnancy**

Key elements of change III



THE 2018 ADEA ANNUAL SESSION & EXHIBITION
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- **Holistic admissions to dental school**
- **True commitment to diversity in dental education environment**
- **Community based education**
- **Clinical education of dental workforce entirely in health systems**
- **Collaboration with schools of health sciences and health systems**
- **Adoption of ACGME core competencies**
- **Presence of oral health in every AAAHC member**
- **Advance degrees in Health Systems**

Appendix 1-2 CDM Strategic Plan



**CALIFORNIA NORTHSTATE
UNIVERSITY**
College of Dental Medicine
Strategic Plan



Strategic Plan
2019- 2024

(Completed February 2019)

History

As a new College of Dental Medicine, this strategic plan is embarked upon at California Northstate University to create a vigorous, effective and sustainable college. The strategic plan will guide us towards the completion of the first five years of the college, the recruitment of faculty, staff and students and the matriculation and graduation of our first class. At the completion of this five-year plan, we will have demonstrated the presence of California Northstate as an emerging critical and valuable component of American dental education.

Upon the selection of the Dean of the College of Dental Medicine, the planning committee, the Board of Trustees, the advisory committee of the Sacramento District Dental Society, among others had presentations and discussion with Dean regarding the Mission, Vision and Values of the College of Dental Medicine, and additional elements of the proposed strategic plan. The initial draft was sent out for review internally and externally to dental education leaders and to the CNU academic leadership for their feedback and amendments. The preliminary draft was presented to the December 2018 meeting of the Board of Trustees. The advisory committee was reconvened on February 4 and unanimously approved the master plan. The planning committee convened on February 15, 2019 to review the plan, focused on the curriculum and professional identity model of the College. After further feedback, the plan will be incorporated as approved by the President's Executive Council at its April 1st meeting.

**CNU College of Dental Medicine Advisory Committee
Sacramento District Dental Society**

Kevin M. Keating, DDS, MS
Liaison

Nima Aflatooni, DDS
Samer S. Alassaad, DDS
Craig Alpha, DDS
Jenny Apekian, DDS
Leon Assael, DMD
Amardeep Bains, DMD, BDS
Junie Dave L. Baldonado, DDS
Wallace J. Bellamy, DMD
N. Michelle Borg, DDS
Prescilla Bradshaw, DMD
Matthew J. Campbell, Jr., DDS
Arben Celaj, DDS
Wai M. Chan, DDS
Alvin Cheung, PharmD
Clifford A. Chow, DDS
Scott P. Churchill, DMD
Matthew Comfort, DDS
Jean Creasey, DDS
Margaret M. Delmore, MD, DDS
Craig Dial, DDI
Simiade Fabiyi, DDS
Volkmar I. Felahy, DDS
Debra S. Finney, MS, DDS
Robert Fong, DDS
David C. Hatcher, DDS
Graham L. Hearn, DDS
Jagdev S. Heir, DMD, MD
Timothy J. Herman, DDS
William A. Jacobson, DDS, MPH
Nidhi Jain, BDS, DMD, MS
Jeffrey H. Janian, DDS

Paul A. Johnson, DDS
Daniel P. Jones, DDS
Bryan G. Judd, DDS
David M. Keating, DDS
Laurie D. LaDow, DDS
Merlin L. Lai, DDS
Lisa N. Laptalo, DMD
E. Mickiewicz, DDS
Kenneth E. Moore, DDS
Charles N. Newens, DDS
Virendra R. Patel, DDS
Pat Penney, DDS
Dmitriy Pivnik, DDS
Rika Proddhan-Ashraf, DDS
Karthik B. Raghuraman, DDS
Bryan C. Randolph, DDS
Hana R. Rashid, DDS
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Abhishek R. Raythatha, DDS
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Cherag D. Sarkari, DDS
Annie Shih, DDS, MPH
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Michael Stout, DDS
Ramesh Thondapu, DMD
Pedram P. Towfighi, DDS, MS
Sang Tran, DDS
Brittany N. Vacura, DDS
Joel K. Whiteman, DDS
Eric Wong, DDS
Rosemary Wu, DMD, MS
Cathy Levering, Executive Director, SDDS

CNU College of Dental Medicine Planning Task Force

Dr. Kevin Keating, Task Force Chair
Dr. Wai Chan
Dr. Rosemary Wu
Dr. Huong Le
Dr. Jag Heir
Dr. Deb Finney
Dr. Eric Wong
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MISSION

The Mission of the College of Dental Medicine is to advance the art and science of health care through excellence in oral health education, practice, research, service, and social accountability.

Education: Create caring, skilled and knowledgeable clinicians who will constantly advance their capabilities throughout life

Practice: Produce clinical leaders in oral health who will serve in private practice, health systems practice, in interprofessional settings, academia and industry

Research: Promulgate scientific inquiry throughout the curriculum and support student and faculty research that creates an environment of scientific curiosity and an evidence-based foundation for clinical practice.

Service: Provide individual patient care services at all clinical sites under the auspices of CNUCDM that produces the very best oral health outcomes and clinical value.

Social Accountability: Advocate for and help build stronger communities in California and globally through improved oral health care, disease prevention, health promotion and protection from oral diseases through community-based approaches.

VISION

The Vision of the College of Dental Medicine is to provide constructive innovation in its education programs, and leadership in integrating oral health care into human health care systems.

The College of Dental Medicine Embraces the California Northstate University WECARE Values of:

- Working as a team
- Embracing diversity and workplace excellence
- Caring about our students, our staff, our faculty, and our profession
- Advancing our university, our goals, and our discipline
- Responding to challenges that may impede Mission
- Enhancing communication and partnership

College of Dental Medicine Values:

- Patient-centered didactic and clinical education that always puts improved health outcomes first
- Foster a humanistic and character-developing environment for dental students
- Making better communities and a better world through improved oral health
- Understanding the professional responsibility of the dentist as the head of the oral health care team
- Practicing health promotion and disease prevention and protection
- Advancing California Northstate University through excellence in all we do

SUPPORTING NARRATIVE FOR THE STRATEGIC PLAN'S STRATEGIC GOALS

The inauguration of the College of Dental Medicine affords the opportunity to advance health sciences education and practice through the inclusion of oral health education and practice into an emerging academic health center, community health system and hospitals/including the planned California Northstate Medical Center.

The selection of the name of the College and the degree is designed to reflect the ethos and the culture of the program. It is first a College in that it focuses on inquiry, action capacity and education at the highest level. As a College we will exhibit traditional values of scholarly work, a learning community, and academic freedom. As a College of Dental Medicine, we recognize that oral health care is the practice of medicine and surgery and is integrated into all other aspects of health care. The degree D.M.D. reflects doctoral level of knowledge and skills and recognizes that oral health care is not surgical care alone but includes the behavioral, social, and medical management aspects of oral diseases.

The integration of oral health into human health requires dentists who are capable of performing at the highest level in an ever more complex and demanding environment of emerging technology, social change, human disease management, and evolving health systems. The CNUCDM is developing a curriculum with four basic themes into which all didactic and clinical content will be served. These four themes are: **Human Systems, Odontology, Oral and Maxillofacial Studies, and Behavioral and Social Sciences**. All four themes will be delivered in a diagonal curriculum. The CNUCDM will develop clinical delivery programs at the highest level on campus and across the region with health system partners that promote preventative health strategies, and value-based care in a health science educational model. These programs will be integrated to the greatest extent with other health resources within health systems and in the community beyond.

PROGRAM LEARNING OUTCOMES

1. Patient-Centered Care: Demonstrate understanding of healthcare disparities and cultural awareness in patient counseling and patient advocacy
2. Evidence-Based Care: Apply current, evidence-based oral healthcare within the scope of general dentistry
3. Culturally competent, empathic communication: Demonstrate patient centered, empathic, and culturally competent communication and interpersonal skills
4. Oral and Written Communication: Demonstrate sound oral and written communications in patient care
5. Critical Thinking: Utilize critical thinking, problem solving skills and systemic thinking in assessing and making reasoned, evidence-based decisions in patient care
6. Ethics and Professionalism: Demonstrate professionalism and ethical decision making
7. Biomedical Sciences Knowledge: Demonstrate an understanding of the fundamentals of biomedical sciences and apply them appropriately in oral healthcare
8. Practice Management: Apply legal, regulatory and business management concepts related to provision of oral healthcare services

PROGRAM CLINICAL CARE OUTCOMES

Patients experience:

1. Patient-centered highest quality diagnostic, preventive and treatment services at the most reasonable cost with the best patient experience and treatment outcomes
2. Comprehensive oral health care in a dental medicine model integrated with overall health
3. Minimally invasive care utilizing the latest technology

STRATEGIC GOALS

Tactics, development plan, critical success factors, and evidence of achievement

Goal 1. Educate effective practitioners of dental medicine

Recruit, retain, educate, and train the highest quality of DMD students

Goal 2. Develop a high quality faculty and staff

Develop and distribute resources to recruit, retain and promote the effective activities of faculty and staff. Promote research and scholarship in the college.

Goal 3. Achieve effective leadership in oral health care delivery

Provide patient care that becomes recognized as some of the best oral health care available anywhere. Gain the benefits of good oral health for the patients served and in our communities beyond.

Goal 4. Promote a diverse and inclusive environment in dental medicine and in the communities we serve

Create and sustain an environment that respects all its students, staff and faculty and the patients we serve. Promote multiculturalism and American values of equality and inclusiveness in the college and for community oral health.

Goal 5. Create exceptional facilities and infrastructure

Build an efficient infrastructure to support and sustain learning, teaching, communication, research and scholarship while keeping education affordable.

Goal 6. Ensure financial sustainability and growth

Build a financially sustainable budget that will provide effective support of existing programs while being poised for expansion through strategic growth of programs

CODA TABLE 2: The cycle of continuous improvement based upon the strategic plan

STRATEGIES AND TACTICS FOR OUR GOALS

Goal 1. Educate effective practitioners of dental medicine

Recruit, retain, and train the highest quality of DMD students

Strategy 1.1. Provide excellence in teaching.

Tactics:

- Develop and deliver an exceptional curriculum
- Work with the CNU Institute for Teaching and Learning Excellence to develop contemporary pedagogy
- Develop a student faculty mentorship program to promote professionalism and ethics

Tactic	February 2019 status	Development Plan	Critical Success Factors	Party responsible for report	Evidence of Achievement
Develop and deliver an exceptional curriculum	A curriculum with four themes (human studies, odontology, oral and maxillofacial studies, behavioral and social sciences) has been presented to the planning committees. 226 course hours and course names have been identified and course directors have been selected	Spring 2019: Completion of syllabi, development of course materials in Canvas . selection of source materials 2019-2020: presentation of D1 courses with assigned auditors and 360 degree course assessment Repeat this cycle for D2, 2021, D3, 2022, and D4 2023	Positive assessment of courses at 360 degrees: students auditor, faculty, course director, academic Dean, Dean Pass or remediation to pass for all courses (for academic reasons) with competency-based grading policy Performance at or above national average on National Board Exam	Associate Dean of Academic Affairs	1. Student course evaluations 2. Student engagement dashboard 3. Faculty self assessment 4. Course auditors report
Work with the Institute for Teaching and Learning Excellence (ITLE) to develop contemporary pedagogy	The center is an emerging organization for which was launched in October 2018 by the College of Medicine, Pharmacy, and Psychology	Participate fully in all activities of the ITLE with a broad engagement of full and part time faculty	Demonstrated participation resulting in incorporation of ITLE directed advance pedagogy in CODM courses	Associate Dean of Academic Affairs	Implementation of active learning in CODM courses Reports of course directors on implementation of ITLE training
		Train faculty in mentorship	Improved student life	Dean	Survey of students on the

Develop a student faculty mentorship program to promote professionalism and ethics	No mentorship program has been established as of February 2019	<p>through faculty development program.</p> <p>Create assessment rubric for faculty to individually assess mentorship performance</p> <p>Assign each faculty member mentees</p> <p>Apply CDM resources to support mentorship activities</p> <p>Perform annual review of program and participants</p>	<p>Improved faculty staff and student satisfaction.</p> <p>Development of values of professionalism in students</p>	Assistant Dean of Student Affairs	<p>mentorship program</p> <p>Survey of faculty on the mentorship program</p> <p>Evaluations of student reflective essay on the mentorship program and its impact on professionalism</p>
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Goal 1: Strategy 1.2 Recruit and retain exceptional dental students

Tactics:

- Recruit a qualified class ensuring scientific clinical ability with a holistic approach to promote social consciousness and action
- Retain all these qualified students with timely completion of the DMD program

Tactic	February 2019 Status	Development Plan	Critical Success Factors	Party responsible for report	Evidence of Achievement
Recruit a qualified class ensuring scientific clinical ability with a holistic approach to promote social consciousness and action	The college has begun to integrate into university recruitment and admissions processes. Participation in the university wide admissions and student affairs retreat in January 2019	Implement the admissions marketing plan as in the CODA self study Appendix XX INSERT HERE MARKETING PLAN	Application pool from the region (central valley, delta, Shasta, Humboldt, Sierras) in excess of applicants to other California dental programs. Social science majors represented. Students from universities of the Delta, Central Valley, mountains and Northern California HPSA shortage areas represented Immigrants and underrepresented minorities exceed the region	Dean of admissions and student affairs	More than 50% of students from the underserved region and colleges associated to the region 20% social science majors Immigrants and underrepresented minorities in excess of other regional dental programs
Retain all students with timely completion of the DMD program	No students are enrolled in the college of dentistry but programs to assist in retention are in place for medicine and pharmacy	Assess the effect of the mentorship program in Strategy 1.1 on retention of students Monitor student performance consistently and continuously		Associate Dean of Academic Affairs.	1.

Goal 2. Develop a high quality faculty and staff

Develop and distribute resources to recruit, retain and promote the effective activities of faculty and staff.
Promote research and scholarship in the college.

Tactics:

- Recruit outstanding sufficient founding faculty of the college
- Complement faculty with appropriate staff
- Develop a program of scholarship and research that supports faculty development

Tactic	February 2019 status	Development plan	Critical Success factors	Party responsible for report	Evidence of achievement
Recruit outstanding sufficient founding faculty of the college	65 interested full and part time faculty engaged and interviews commenced Hiring plan for faculty accepted by university.	Implement hiring plan for 36 FTE faculty as well as Volunteer onsite faculty. Complete MOU's for community based faculty	Sufficient faculty to deliver curriculum and clinical care/clinical education at each stage of development	Dean Associate Dean of Academic affairs	Administrators in place in critical areas of academic affairs, curriculum, clinical affairs and research. Course directors and sufficient faculty in place for each of the courses at least 90 days prior to course delivery Faculty in place to care for patients in CNU clinics ready for students to join care teams
Complement faculty with appropriate staff	Staff hires have begun with Dean's administrator and hiring plan for academic and clinical operations under development	Complete hiring plan for all academic, administrative and clinical staff. Complete hiring of qualified personnel as needed during development.	High functioning qualified staff hired in timely fashion associated with need	VP for human resources Dean Dean of Clinical Affairs Dean of Academic affairs	Clinical staffing model achieved consistent with industry standards in all areas. Academic and administrative staffing consistent with CNU collaborative models and standards and task based needs
Develop a program of scholarship and research that supports faculty development	Interview and hiring plan completed for assistant Dean of research	Develop collaborative public health oriented research program	Active college research program with external funding including NIH, HRSA, state of California, industry and foundation grants	Dean of research VP for Research	Research program in top 50% of the 67 dental programs in the US by the first 5 years of operation

Goal 3. Achieve effective leadership in oral health care delivery

Tactics

- Provide patient care that becomes recognized as some of the best oral health care available anywhere.
- Gain the benefits of good oral health for the patients served and in our communities beyond.

Tactic	Initial status February 2019	Development plan	Critical Success Factors	Responsible for reporting	Evidence of achievement
Provide patient care that becomes recognized as some of the best oral health care available anywhere	Plans for clinics and clinical partners are under development	Complete construction of 2 clinics each of 30 clinical treatment units and appropriate supporting clinical facilities. Equip clinics and hire expert renowned, clinical staff. Complete MOUs with health systems in the region for clinical education and care partnerships.	60 operational units. Core radiology, digital clinical facilities, operational electronic health record system, sterilization and equipment management program Marketing program to attract sufficient patients with oral health needs fulfilled by CNU clinics	Dean of Clinical Affairs Dean	Operational program attracts patients who communicate the triple aim in surveys of the highest quality of care at the lowest cost and with the best patient experience 10,000 new patients in the first year of operation and additional 5000 per year to threshold of 20,000 active patients. Measure: Press Ganey, faculty and staff engagement survey
Gain the benefits of good oral health for the patients served and in our communities beyond	Clinics are not operational in February 2019. Analytics of outcomes based care and value based care for diseases including caries, periodontal disease and oral cancer have been undertaken	Develop thresholds for impact on extant pathologic entities in clinics and utilize standards/parameters of care to develop rubrics regarding thresholds for high quality outcomes: e.g. CAMBRA assessment tools, cancer screening outcomes and disease management and control profile for periodontal disease. Engage Sacramento community in population health initiatives to improve oral health	Reduced recurrent caries rate for enrolled patients as compared to cohort Greater tooth retention and periodontal index in patients with periodontal disease Prevention of oral cancer above community standards in patients with premalignant disease and high risk factors. Increased utilization and decreased disease as outcome of community engagement	Dean of Clinical affairs	Chart review pre- and post-interventions to assess value based care model Community-based interviews with stakeholders to assess community engagement

Goal 4: Promote a diverse and inclusive environment in dental medicine and in the communities we serve

Tactics

- Create and sustain an environment that respects all its students, staff and faculty and the patients we serve.
- Promote multiculturalism and American values of equality and inclusiveness in the college and for community oral health

Tactic	Status February 2019	Development Plan	Critical Success Factors	Party Responsible for report	Evidence of achievement
Create and sustain an environment that respects all its students, staff and faculty and the patients we serve.	Consistent CNU values and applied environment in student affairs admissions and academic affairs are present to create a community of respect.	The humanistic environment for dental education will be addressed by the appointed Dean of academic affairs to interface with extant CNU activities. Both curricular and faculty development program will be initiated to promulgate a dental college culture of respect for diversity in all aspects	Faculty and students demonstrate a respectful and inclusive culture in plenary activities, interest group development, and individual assessment.	Dean	<ul style="list-style-type: none"> • Engagement survey • Interviews with community of students staff and faculty
Promote multiculturalism and American values of equality and inclusiveness in the college and for community oral health	CNU is established as a remarkably multicultural academic health center in one of the most diverse communities in California.	Promote multicultural activities that engage the CNU community and the larger regional community	<p>Achieve broad multicultural engagement with students, faculty and staff. Examples Celebracion de Salud, Indian dentistry day, Asian dental society activity, National Dental Association</p> <p>Engage Multicultural programs in the Northstate community: California state fair, other community events,</p>	Dean Dean of student affairs and admissions	<p>Assess CNU activities and outcome assessments for these activities</p> <p>Assess in engagement survey</p>

			International engagement with Asia for dental education and practice		
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Goal 5. Create exceptional facilities and infrastructure

Tactics:

Build an efficient infrastructure to support and sustain learning, teaching, communication, research and scholarship while keeping education affordable.

Tactics	Status February 2019	Development Plan	Critical Success Factors	Party responsible for reporting	Evidence of achievement
Build an efficient infrastructure to support and sustain learning, teaching, communication, research and scholarship while keeping education affordable.	<p>Sites are under consideration for development of clinical and preclinical facilities</p> <p>Library, anatomy, general labs and contemporary classroom access at CNU are being positioned for use by the CDM</p>	<p>Phase 1: Identify space for two clinics and one type 1 and 2 laboratory and simulation clinic</p> <p>Create plans with A-dec for the lab, simulation and first clinic.</p> <p>THIS WILL BE DEVELOPED TO ENROLL A CLASS OF 2023 LATE IN 2019 OR EARLY IN 2020/</p> <p>Complete construction in 2019 of lab and preclinical lab and in 2019-2020 for the first clinic</p> <p>Phase 2: Initiate construction on the second clinic in 2020 with vendor to be named for completion in 2021</p>	<p>Completion of phase one of infrastructure plan in 2019</p> <p>Completion of phase 2 of infrastructure plan in 2021</p>	<p>Dean Dean of academic affairs Dean of clinical affairs</p>	<p>Timely enrollment of class</p> <p>Timely opening of clinics</p> <p>Effective operation of all facilities</p>

Goal 6. Ensure financial sustainability and growth

Tactics:

Build a financially sustainable budget that will provide effective support of existing programs while being poised for expansion through strategic growth of programs

Tactic	Status February 2019	Development Plan	Critical Success Factors	Party responsible for reporting	Evidence of Achievement
Build a financially sustainable budget that will provide effective support of existing programs while being poised for expansion through strategic growth of programs	The proforma and budget for the school of dentistry has been completed with the Chief Financial Officer accounting for sufficient funding and scaling up of programs for the next 10 years	<p>Expend funds for personnel, faculty and staff, for facilities, equipment and educational materials sufficient to enroll a class in late 2019 or 2020.</p> <p>Gain tuition funds during the first matriculation and growing to 4 classes of 80 student each</p> <p>Gain clinical income, grants, gifts and other sources of income to support programs.</p>	A balance sheet and annual closing statement demonstrating the COD in the black within the proposed return on investment.	Dean President Chief financial officer.	Budget Balance sheets Annual report Audit results



CALIFORNIA
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Assessment of Student Learning Outcomes' Handbook

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Learning Outcomes' Assessment at CNU

Learning Outcomes' Assessment

Learning outcomes assessment is the purposeful, systematic measurement of student learning at various levels of learning. The goal is a cycle of continued improvement of academic quality for the institution. Effective learning outcomes' assessment is always responsive to the following questions:

- What knowledge, skills, and attitudes will successful students have acquired upon graduation?
- How well do students perform relative to these learning outcomes?
- How can programs improve to provide a stronger academic experience to students?

Purpose of the Handbook

The purpose of this handbook is to assist CNU faculty, program chairs, and Directors of Assessment, and Assessment Committee Chairs in conducting learning outcomes' assessment. It is a step-by-step guide that expounds the basic concepts and processes, provides examples and strategies for meeting the specific requirements, and offers approaches for making assessment a useful tool in curricular renewal.

Learning Outcomes Assessment and Academic Quality

CNU has two processes for assessing academic quality: *Program Review* and *Learning Outcomes' Assessment*. Learning outcomes' assessment is an annual process by which faculty assess student mastery of program-level outcomes. Program review occurs every five years and examines programs' overall functioning by studying administrative data, graduate outcomes, and other measures of effectiveness. In addition, the program review also provides an opportunity for academic program faculty to examine learning outcomes data collected through the annual learning outcomes assessment.

Benefits of Learning Outcomes Assessment

When conducted properly, learning outcomes' assessment has benefits for the entire institution. It benefits students by ensuring they master the material of their degree program and by providing academic and professional programs that are responsive to both their own (and society's) needs. It benefits faculty by providing the tools necessary to lead curricular development. Finally, it benefits the entire institution by giving the institution documented evidence of student learning and achievement, thereby validating the institution is achieving its mission and goals.

Learning Outcomes' Assessment at CNU

At CNU, there are four primary groups directly involved with assessment activity.

- Faculty develop learning outcomes, assess student performance, and provide the necessary analysis to understand learning outcomes in their programs.
- Directors of Assessment manage the assessment process within their programs and submit yearly assessment reports that provide evidence of the activity.
- The Directors of Assessments work with the Vice President of Institutional Research and

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Effectiveness to plan for appropriate assessment methodology and practices and provides support throughout the process. The Director of Assessment for each college coordinates the overall effort for the college's assessment activities with assistance from the Assessment Committee and Assessment Committee Chair.

- The University's Assessment Committee, consisting of representatives from all the schools and divisions in the University, reviews and advises assessment activity to keep the university aligned with requirements of regional accreditation. The college's Assessment Committees review student learning results from which specific recommendations for improvement are generated to be addressed program faculty. The student learning outcomes' reports are used to provide evidence, where appropriate, in the budget process.

Six steps of learning outcomes assessment

There are six steps of learning outcomes' assessment: develop/revise learning outcomes, design outcome measures, collect data, analyze and evaluate data, create assessment report, and plan for the next assessment cycle. The Assessment Handbook is divided into six sections addressing each of these steps. Each section provides a basic overview of the goals and purpose of the step, lists the specific activities for departments associated with the step, and offers suggestions and potential strategies for effectively completing the step.

SIX STEPS OF LEARNING ASSESSMENT

1. Develop/revise learning outcomes
2. Design outcome measures
3. Collect data
4. Analyze and evaluate assessment data
5. Write action plans and create annual assessment report
6. Plan for next assessment cycle

The ideas and suggestions for completing the steps are intended to provide useful information for faculty and department chairs. Since each academic department differs in terms of size, approach, and outlook, it is important to ensure that the assessment approach matches the needs of the program. Staff from the Office of Institutional Effectiveness are available to discuss ideas and plan for programs to build a learning outcomes' assessment program that meets its needs.

Cyclical nature of learning assessment

Since the primary goal of learning outcomes program assessment is continued improvement of the quality of education offered by CNU; the process is cyclical in nature. Assessment is an ongoing process that should grow and change as programs evolve and develop.

Section I: Developing Learning Outcomes

The first step in learning outcomes' assessment is the creation of outcomes, which reflect the core knowledge and material of the program. Most programs have previously developed learning outcomes, so this step of the process allows for reexamination and potential

Checklist of Needed Activity for Developing Learning Outcomes:

- ☐ Key learning outcomes developed
- ☐ Evidence of faculty participation in developing learning outcomes
- ☐ Verification that outcomes are; being performed by students, observable, and measurable

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revision. The development of learning outcomes should capitalize on the depth of knowledge of the faculty and thereby help shape the nature and direction of the program.

This section describes characteristics of strong learning outcomes, provides suggestions on how to develop outcomes, and discusses a process by which programs can scrutinize learning outcomes to ensure their strength.

Effective learning outcomes

Learning outcomes are statements that specify what students will be able to do or demonstrate as a result of earning their degrees. Effective outcomes are usually expressed as knowledge, skills, or abilities that students will possess upon successful completion of a program. They provide guidance for faculty regarding content, instruction, and evaluation, and serve as the basis for ensuring program effectiveness. Because we evaluate student performance in terms of specific actions, the strongest learning outcomes are measurable and observable.

Tool 1: Key questions to consider when drafting learning outcomes

- What is the most essential knowledge students need to have acquired upon successful completion of the program?
- Are there specific skills or abilities students need? What are they?
- How does the program attempt to shape students' attitudes or views regarding the discipline or profession?

Selecting the right verb

Given that learning outcomes focus on observable and measurable actions performed by students, the selection of an action verb for each outcome is crucial. Determining the best verb to use in a learning outcome can be challenging because of its need to accurately reflect the knowledge, skills and abilities being studied. *Tool 2: Common learning outcome action verbs* provides a brief list of verbs that are used in writing learning outcomes at the collegiate level.

Tool 2: Common learning outcome action verbs

Analyze	Demonstrate	Prepare
Apply	Design	Rate
Compare	Develop	Revise
Compile	Discuss	Select
Compute	Evaluate	Use
Create	Explain	Utilize
Critique	Predict	Write

Certain verbs are unclear and subject to different interpretations in terms of what action they are specifying. Verbs/verb phrases such as know, become aware of, appreciate, learn, understand, and become familiar with should be avoided; they frequently denote behavior that is not easily observed or measured.

Strengthening weak learning outcomes

Tool 3: Evaluating learning outcomes

5

- Is the action done by the students?
- Is the specified action observable?
- Can the specified action be measured?

The process for strengthening learning outcomes re-examines the original characteristics used of strong outcomes. By asking the three questions in *Tool 3: Evaluating learning outcomes*, weaknesses in learning outcomes emerge.

Revising learning outcomes

The process of writing learning outcomes is not simple. Determining the outcomes a program wants to examine can pose the first challenge. In addition, drafting the outcome often takes several revisions to develop a strong one that reflects the intentions of the faculty. However, the effort put into drafting strong outcomes will be returned through an easier time developing measures, collecting data, analyzing the results, and ultimately making recommendations for improvement. Strong outcomes will help to focus the entire process and allow for the most useful results from the assessment process.

Section II: Designing Outcome Measures

After developing learning outcomes, the second step in the assessment process is to select outcome measures. While learning outcomes describe the knowledge, skills and abilities that students should possess after instruction (or completion of the program), outcome measures are the specific tools and methods that generate data and information about students' performance relative to learning outcomes.

There are two types of outcome measures: direct measures and indirect measures. Each serves an important function in assessment, and when used together they provide a richer perspective on student learning by providing direct evidence and context to understand student performance.

Checklist of Needed Activity for Developing Outcome Measures:

- ☐ At least one direct measure for each learning outcomes
- ☐ Indirect measures that will facilitate understanding of the assessment data, when appropriate
- ☐ Evidence of faculty participation in the development of measures
- ☐ Established performance standards for each measure being used
- ☐ Expected results for each measure being used

→ **Direct measures** are methods for assessing actual samples of student work to provide evidence of student performance relative to the learning outcomes.

→ **Indirect measures** are methods for assessing secondary information on student learning that do not rely on actual samples of student work.

Each type of outcome measure serves a particular purpose. Direct measures assess the extent to which students' work meets the learning outcome performance standards. Indirect measures compliment direct measures by providing supportive evidence, information, and student perspective. Together they provide a richer perspective on student learning by providing direct evidence and context to understand student performance.

Outcome measures should meet three criteria

Regardless of the type of measure used, strong measures share three basic qualities:

- Provide sufficient data and information to measure the learning outcome
- Are not overly burdensome departments to collect
- Have established performance standards and expected results to help guide the analyses

Selecting direct measures

There are many issues to consider when selecting direct measures of learning. Programs should be creative in determining the most useful way to measure student performance, but at the same time ensure that the methods allow for meaning from interpretation and results. *Tool 1: Sample direct measures* provides a list of some of the more common methods within higher education and can help foster ideas for developing measures.

Tool 1: Sample direct measures

- Student Portfolio Evaluation
- Student Performances or OSCEs
- Tests and Examinations
- Thesis Evaluation
- Course-Embedded Assessments
- Pre-test/Post-test Evaluation

Course-embedded assessments are direct measures which use student work in specific courses to assess student learning. Students are already motivated to do their best on these assessments because they are conventionally graded on them. For example, if one learning outcome requires students to synthesize the literature on a topic in the field, student research papers may be evaluated using a rubric to assess how well they meet the learning outcome. Many classroom assignments can be used for course-embedded assessment as long as they assess a program's student learning outcome. Course-embedded assessment measures are often selected because they take place in the classroom, take advantage of student motivation to do well, and directly assess what is taught in the classroom.

Examinations: Many course-level learning Outcomes can be assessed by examinations given within the course. In some cases the outcomes measured by the examinations will be identical to the program's student learning outcomes and, the exam questions will assess both course and program outcomes. With some creativity, exam questions can also be written to cover broader Program Learning Outcomes (PLOs) without losing their validity for course grading. In programs without capstone courses, it might be possible to write a coordinated set of exam questions that provide a fuller picture of student learning when administered in exams across a series of courses.

Analysis of course papers: Course papers can be used as measures for student learning outcomes. Because students create these papers for a grade, they are motivated to do their best and these papers may reflect the students' best work. This process typically requires development of a rubric that focuses on program learning outcomes. Faculty groups read these same papers to assess the attainment of PLOs. This second reading should be done by someone other than the instructor or by others along with the instructor, as the purpose for the assessment is different from grading. Scoring rubrics for the papers, based on the relevant learning outcomes should be developed and shared with faculty raters prior to rating to promote inter-rater reliability.

Analysis of course projects and presentations: Products other than papers can also be assessed for attainment of program learning outcomes. For example, if students are required to give oral presentations, other faculty and even area professionals can be invited to these presentations and can serve as outside evaluators using the same rubric as other raters.

Student performances: In some areas, such as teaching or counseling, analysis of student classroom teaching, mock counseling sessions or other performances can provide useful measures of student learning. A standardized evaluation form is necessary to ensure consistency in assessment. One advantage of using performances is that they can be videotaped for later analysis.

Cross course measures are direct measures of student work across the program. Cross course measures examine students' work that incorporates multiple dimensions of knowledge, skills and abilities developed throughout the entire program. The most common types of cross course measures are capstone course papers and projects, and student portfolios.

Capstone courses: Capstone courses provide an opportunity to measure student learning, because this is where students are most likely to exhibit their cumulative understanding and competence in the discipline. One of the purposes of capstone courses is to provide an opportunity for students to "put it together," which typically requires students to integrate the knowledge, skills and abilities found in the program's learning outcomes.

Student portfolios: Compilations of students' work in their major can provide a rich and well-rounded view of student learning. The program usually specifies the work that goes into the portfolio or allows students to select examples based on established guidelines. By compiling a range of student work, portfolios can be used as the measure for more than one learning outcome. Portfolios can also be valuable for the student by providing a reflection of their skills and abilities. Portfolios do require strong, well-constructed rubrics to make the process of extracting assessment data manageable.

Internship supervisor evaluations: If the program has a number of students who are doing relevant internships or other work-based learning, standard evaluations by supervisors using a rubric designed to measure a particular learning outcome across the duration of the internship may provide data on attainment of learning outcomes. In addition, when programs exercise control over the content of internships, those settings can serve as capstone experiences where students can demonstrate their knowledge skills and abilities.

Selecting indirect measures

Like selecting direct measures, there are many issues to consider when selecting indirect measures of learning. Programs should be creative in determining the most useful way to measure student performance, but at the same time ensure that the methods allow for meaning from interpretation and results. *Tool 2: Sample indirect measures* provides a list of some of the more common methods within higher education and can help cultivate ideas for developing indirect measures.

CNU conducts two surveys each year that can be analyzed as indirect measures of learning. The Alumni Survey and the Graduating Student Survey both contain questions regarding the learning experience at CNU.

Tool 2: Sample indirect measures

- Graduating student and alumni surveys
- Employer and internship supervisor surveys
- Exit interviews and focus groups

In addition, programs are able to add supplemental questionnaires to the Alumni Survey that can be used to answer specific questions and issues of the program. The benefits of including these types of measures into department assessment plans are that they have built in comparisons by examining the program's responses relative to the University or school and they require limited work by chairs and faculty in collecting the data.

While University surveys may provide some insights into students learning experience, they sometimes lack the specificity needed by programs in their assessment activity. Accordingly the programs may need to conduct their own primary research to address the issues. These methods may be quantitative or qualitative in nature, but should still address the key issues of strong measures.

Internship Supervisor Survey: Internship supervisors may provide general feedback to programs regarding the overall performance of a group of students during the internship providing indirect evidence of attainment of learning outcomes. This should not be confused with internship supervisors' evaluation of student performance on specific learning outcomes.

Focus Groups: Focus Groups provide in-depth, qualitative interviews with a small number of carefully selected people who are thought to represent the population of interest (students in the program). For program assessment, students are brought together to discuss their perceptions of how well they achieved the program's learning outcomes.

Exit Interviews: Graduating students are interviewed individually to obtain feedback on the program. Data obtained can address strengths and weaknesses of the program and/or assess relevant concepts, theories or skills related to the program's learning outcomes.

Area Expert Comments: Comments made by area experts can be useful in gaining an overall understanding of how students will be judged in a given field. This differs from having experts use the same rubric faculty raters use, and instead focuses on their opinion of the quality of students' work and the program in general. This should not be considered a direct outcome measure but it can serve as a valuable indirect measure.

Establishing performance standards: When interpreting assessment results, it is useful to set a performance standard that specifies the acceptable level of student work or response. For each learning outcome the program should ask "What is an acceptable performance standard for this learning outcome?" This performance standard may be a passing score on an exam, a rubric rating of "meets program standards" on a student paper or another indicator of the quality of student work.

Establishing expected results: By setting expected results for the percentage of students meeting or exceeding performance standards before data collection begins, the program can gauge its effectiveness in helping students meet the learning outcomes. For example: Seventy-five percent of students met the performance standard set by the department for the outcome measure on ethical reasoning. This can be compared to the expected result of 80% meeting the performance standard which reveals an area for improvement.

Evaluating measures

It is possible to evaluate outcome measures by asking the three questions found in *Tool 3*:

Questions for evaluating outcome measure. If faculty and chairs are able to answer “yes” to all of three questions, it is likely that a strong set of measures has been developed.

Tool 3: Questions for evaluating outcome measures

- Does the measure provide sufficient data and information to analyze the learning outcome?
- Does the measure require a reasonable amount of work to collect?
- Does the measure establish performance standards to help guide the analysis?

Section III: Collecting Data

Data collection is the next step in the assessment process. This section will cover the process of collecting student work and indirect measures, rating work, and storing data. The collection process may seem like a daunting task, but with planning, it can move more smoothly and provide quality data and information about the programs learning outcomes.

The data collection process consists of three basic steps: **gathering** necessary student work and other information, **evaluating** the results, and **storing** the data. The **Gathering, Evaluating, and Storing (GES)** process is used for both direct and indirect measures; however some of the specific steps will vary. The key to simplifying the data collection process is planning. *Tool 1: Questions to ask in planning data collection* provides a number of questions to think about before gathering data.

Checklist of Needed Activity for Collecting Data:

- ☐ Direct data collected for each learning outcome and measure
- ☐ Indirect data collected, if appropriate
- ☐ Secure electronic database of both direct indirect measures
- ☐ Examples of the student work for each performance standard in either paper or electronic form.

Tool 1: Questions to ask in planning data collection

Direct Measures	Indirect Measures
<ul style="list-style-type: none"> Where is the student work coming from? How will the student work be organized and stored for evaluation? When will it be evaluated? Who will be responsible for evaluating? How will the performance data be stored? How will it be secured? How will examples of student work be stored? Paper? Electronically? Are there FERPA issues to consider? 	<ul style="list-style-type: none"> Who will conduct the research for the measure? When will research be done? In a class? How will the results be tabulated or a categorized? If you are using institutional data, will special data analysis need to be done?

Step 1: Gathering

The process of gathering materials for direct measures varies greatly depending on the measures used. For course-embedded measures or capstone experiences, it is necessary to coordinate with the faculty member teaching the course to ensure the student work is collected and forwarded for assessment. If a portfolio is being used, it will be necessary to determine who is responsible for putting the portfolio together.

When using indirect measures, the gathering phase consists of conducting the necessary research (survey, focus group, or other measures). Indirect measures based on secondary analysis of

material (e.g. course syllabi) need these materials to be compiled. Programs should set a schedule that outlines the materials needed to simplify follow up and ensure all student work is collected.

Step 2: Evaluating

The evaluation phase for direct measures includes the examination of student's work by faculty to determine the level to which it meets the learning outcome. Because assessment looks to evaluate specific aspects of the student work, rubrics are often used as guidelines in the process.

Effective rubrics, standardized evaluation forms used to assess student work toward meeting learning outcomes, can be developed in many different ways to assist the evaluation process. They can describe qualitative as well as quantitative differences; and are often used to assess assignments, projects, portfolios, term papers, internships, essay tests, and performances. They allow multiple raters to assess student work effectively by increasing the consistency of ratings and decreasing the time required for assessment. The development of rubrics is covered in Appendix A: Rubric Toolbox.

Regardless of the type or style of rubric used, there are a few general principles to ensure they are effective. *Tool 2: Steps for using a rubric to evaluate student work* outlines the basic process of using rubrics.

Tool 2: Steps for using a rubric to evaluate student work

- Review the rubric with all raters to ensure it is consistently understood.
- Use the descriptors in each performance level to guide ratings
- Assign the rating that best represents the student's work

The key to achieving consistency between raters is conducting a "norming" session to allow faculty raters to reach consensus on the levels of student work at each level of the performance standard. *Tool 3: Steps to "norming" a rubric* provides the basic process of a norming session.

Tool 3: Steps in "norming" a rubric

- Explain to the raters how to use the rubric
- Provide samples of student work
- Discuss each sample and determine how raters determine scores
- Reach a general consensus on each level of the performance standard

For indirect measures that the department is conducting, the evaluation phase consists of the compiling of the results into a form that are meaningful to those doing the assessment. For survey data, this will generally include entering the data into a data set for analysis and generating the descriptive statistics. For more qualitative work such as focus groups, this part of the process maybe the extraction of any themes or ideas.

Step 3: Storing

There are two different storage issues which departments need to address. The first is an electronic storage system of all the data that are compiled from students' work and results from indirect measures.

For tracking direct (and some indirect) measures programs may create an electronic database/Excel spreadsheet to store all of their assessment data for later analysis.⁵ The database will typically list all students and their performance on the measure. *Tool 4: Example of a program database* illustrates how to compile the database of assessment data.

Tool 4: Example of a program database			LO 1: Portfolio Rating	LO 1: Senior Exit Interview	LO 2: Paper Rating from 300-level course
Last Name	First Name	Year			
Allan	Jane	Senior	4	More writing needed	4
Miller	Larry	Senior	5	Not present	5
Smith	Bob	Senior	3	More writing needed	3
Bloom	Desmond	Junior			
Jones	Robin	Junior			3
Smith	Troy	Junior			1

Because this database will have individual student information, it is very important to ensure it remains secure and that only faculty and staff involved in the assessment activity have access to the contents.

Many times, however, indirect measures may not be trackable by specific students. For these types of measures a descriptive report of the results will be useful as the program reviews the direct measures.

The second storage issue facing the department revolves around copies of student work and responses to questionnaires. It is generally advisable to retain copies of or access to the direct measures until the University Assessment Committee has reviewed the final report. If these examples contain either students' names or student id numbers, it will be necessary to maintain a secure filing system. *Tool 5: Protecting student identification* provides a procedure to limit inappropriate access to student information. While this requires a bit of work upfront, it can help the program avoid thorny issues later.

Additionally, it is recommended that samples of students' work be stored to document the assessment process. Generally for each direct measure, an example at each level of the performance standard should be saved. Electronic copies of student work can reduce space required for storage and allow the original work to be returned to the students. These documents can be scanned and stored as PDF files to help limit the amount of storage space necessary.

Tool 5: Protecting Student Identity

- Assign a unique numeric code to all students enrolled in program (Do not use student ID or Social Security Number)
- Store number in secured database
- Collect student work with name
- Print appropriate code on each example of student work
- Redact work to eliminate evidence of authorship

Student awareness of assessment activity and privacy issues

Students should be aware that their work may be used in the assessment purposes. *Tool 6: Syllabi statement regarding student work in assessment* provides an example of a statement that departments may want to use. By incorporating the statement on select or all program courses the department informs students about its assessment work.

Tool 6: Syllabi statement regarding the retention of student work
Notice:

Copies of your coursework including any submitted papers and/or portfolios may be kept on file for institutional research, assessment and accreditation purposes.

As noted in the section about keeping data work secure, student work is protected by The Family Educational Rights and Privacy Act (FERPA) (20 U.S.C. § 1232g; 34 CFR Part 99). To comply with FERPA regulations, student work should either be maintained in a secure system with access limited to those involved in assessment or should have all personally identifiable information removed. Even without a name, some student work is considered identifiable if it contains sufficient information about the student to enable the author to be identified.

Strategies for collecting data

By reviewing the original planning questions in *Tool 1: Questions to ask in planning data collection* before collecting data, programs can avoid many potential roadblocks in the data collection process. The following example lists three common roadblocks that can occur during this process and illustrates an effective plan for data collection.

Section IV: Analyzing Assessment Data

Analysis of data is the next step in the assessment process. Analysis is a process that provides better understanding of data and allows inferences to be made. It summarizes the data, enhances the value of information gathered and provides direction for decisions regarding program improvement. While data analysis can be relatively complex, for the purpose of assessment it is usually basic.

Checklist of Needed Activity for Analyzing Assessment Data:

- ☐ An indication of the number students participating in the assessment activity for each outcome measure
- ☐ The percentage of students who met or exceeded the performance standard for each outcome measure

This section discusses the core elements of data analysis and provides strategies for and examples of analysis. The underlying theme of this section is to illustrate how to link data to the learning outcomes and provide a basis for using data to improve student learning.

Before analyzing data

Two important steps should be completed before analyzing data. The first step is to review the data visually. Reviewing data has two benefits: It allows for the identification of outliers and possible mistakes, and it enables basic patterns or trends to emerge. For example, it may be clear that all students who took a particular class had difficulty with a particular outcome.

The second step of the process is to determine the appropriate method for analyzing the data. This can range from simply counting the number of successful students to higher powered statistical analyses. The two key factors are first to make sure the analysis method fits the data; and second, to ensure that method aligns with the program's needs. There are two types of data used in assessment each with different methods of analysis.

Categorical data are based on groupings or categories for the evaluation of student performance. For example a simple passed/failed score is categorical because there are two groups into which students can be placed. Often rubrics generate categorical data by using a scale of “exceeding expectations,” “meeting expectation,” and “failing to meet expectations”.

Numerical data are based on scales that reflect student performance. Tests which are scored based on the percentage of questions answered correctly generate numeric data.

Direct measures can generate either categorical or numerical data. Student's papers rated on an assessment rubric may be categorized as “meeting standard” or “failing to meet standard”. However the papers may be scored on a numerical scale indicating the overall quality of the paper with respect to the learning outcome.

Indirect measures can also generate either categorical or numerical data. By asking students on a questionnaire: “Did you have sufficient writing in the program?” a program would compile categorical data based on those saying “yes” and those saying “no.” However, by asking students to indicate how strongly they agree with a statement like “there was sufficient writing required in

my program”, numeric data could be generated by applying an agreement scale. (5 – Strongly agree, 4 – Agree, 3 – Neither, 2 – Disagree, 1 – Strongly disagree).

Analyzing assessment data

Once the data have been reviewed and the type determined, the process of analyzing data follows. *Tool 1: Methods for analyzing data* provides a brief overview of the basic methods used to analyze assessment data.

Assessment’s focus on student achievement of learning outcomes typically requires the determination of counts and percentages. Together they show clearly the number of students involved in the activity and the rate of successful display of the outcome. All data, regardless of type can be analyzed using counts and percentages. Numeric data has the additional benefit of being able to be analyzed using descriptive statistics. Mean, median, and mode provide useful information to interpret data by allowing for easier comparison between groups and tests for significant differences.

Tool 1: Methods for analyzing data

- **Percentage:** Proportion of total cases falling into a category
- **Mean:** Average of a set of scores
- **Median:** Middle value in an ascending list of scores
- **Mode:** Most frequent score
- **Standard Deviation:** Average distance of scores from the mean
- **Percentile:** Percentage of a distribution of scores that is equal to or below a specified value.

The impact of dispersion

By examining how data are distributed around measures of central tendency, particularly the mean and median, a richer understanding of the data emerges. The standard deviation represents the average deviation of scores about the mean. Small standard deviations in student performance indicate that performance levels varied little across students in the sample. Large standard deviations indicate a greater variability in levels of student performance. Standard deviations are commonly reported with the mean. Percentiles represent the percentage of a distribution of scores that are at or below a specified value. They are calculated by the formula $\text{Percentile} = S_b/n \times 100$, where S_b is the number of scores below the score of interest, and n is the total number of scores. They are often reported with the median which by definition is the 50th percentile. For example: a median score of 75 on a final exam would be the 50th percentile indicating 50% of students scored above 75 and 50% scored below. By examining the 25th, 50th, and 75th percentiles one can gain a sense of a student’s performance relative to the group.

Missing data and valid responses

Working with assessment data, there are many instances when data will not be available for every student. As a general rule, missing data should be excluded from calculations of percentages and descriptive statistics. If a program has ten (10) students, and eight (8) submit a needed paper for the assessment of an outcome; then eight (8) submitters become the basis of the analysis. Extending the example, if six (6) of the submitted papers meet or exceed the performance standard, then a program would indicate 75% of students submitting papers showed mastery of the outcome rather than 60% of all students in the program.

Presenting analysis

Tables and graphs are useful in presenting analysis because they focus attention to specific results. Tables are useful for reporting multiple percentages and frequencies, comparison of student performance with stated performance standards and some descriptive statistics. They provide an ordered way for readers to see results quickly for each outcome measure without having to search through text to find a particular result. Graphs can further enhance the visual impact of assessment. Graphical representations of results show differences in variables, which makes graphs highly effective in showcasing assessment results.

When sharing the results of program assessment it may be useful to report each learning outcome and outcome measure paired with the corresponding results of the analyses, which joins the multiple outcome measures (direct and indirect) for each learning outcome. Next, compare the results with the specified performance standard and discuss the implications of the data as they relate to the program. Both strengths and areas for improvement are discussed, because showcasing program success is just as important as identifying areas for improvement, when it comes to making data based decisions about the program.

When comparing student performance to specified performance standards, a table with the counts and percentages may be useful to summarize the data. The example in *Tool 2: Example of table of counts and percentages* shows data collected from 20 student portfolios for two learning outcomes. It indicates the number of students completing the portfolio component and the percentage who were below, met and above the performance standard. While 70% of students in the sample achieved or exceeded the standard, 30% were below the performance standard.

Tool 2: Example of table of counts and percentages				
	# of students evaluated	% of students		
		Below Performance Standard	Meeting Performance Standard	Above Performance Standard
Demonstrate critical thinking and writing skills within the discipline	20	30	50	20
Apply specialized knowledge within Trans Psych and related fields	18	5	5	90

The role of advanced statistical analysis

As a program's assessment activity and data increase, more advanced analysis may be useful in understanding student learning. It is possible to

- Study differences in performance to examine the effects of curricular change
- Conduct pre and post assessments to evaluate effect of specific learning experiences
- Compare program students to national performance on certification examinations

The Office of Institutional Effectiveness will work with programs looking to incorporate these and other types of analysis into their assessment activity.

Section V: Reporting Results

The next step of the cycle is reporting results of program assessment. This phase focuses on interpreting strengths, areas for improvement, and identifying recommendations to enhance student learning. There are two steps in writing the assessment report:

1. Working with faculty to understand assessment results
2. Writing the final assessment report

Working with faculty to understand assessment results

Including program faculty in all steps of the assessment process is important to ensure its meaningfulness and effectiveness. The inclusion of faculty insights is probably most important in interpreting results and identifying strategies for improving student learning. The methods used for sharing results is driven by character of the department, with some pouring over all the data generated and others simply reviewing summary analysis outlined in Section IV of the handbook. Using summary reports of assessment results, and the University Assessment Committee's review of the previous year's report will typically facilitate rich discussion and generate useful interpretation for the assessment report.

Writing the assessment report

The assessment report is the document which summarizes a program's assessment activities, program decisions, and future directions. The report is reviewed by the University's Assessment Committee, and used by the academic program to evaluate its effectiveness. This report also serves as the principle evidence of learning outcomes assessment for institutional accreditation. It is typically compiled by the program chair and faculty based on the work outlined earlier in this Handbook. The report contains three components: Outcome Reports, Executive Summary, and Appendix of Supporting Material.

Outcome reports examine each learning outcome individually (see Appendix C). This section of the report is divided into three sections: Outcome and Past Assessment, Assessment Activity, and Interpretation of Results.

Outcome and Past Assessment gives an overview of past assessment activity with this learning outcome. This section gives a brief description of trends and general findings.

Checklist of Needed Activity for Reporting Assessment Results:

- ☐ One completed outcome-specific report for each learning outcome assessed during the year which includes results, interpretation, and implications
- ☐ An executive summary including a list of student learning outcomes, description of the overall findings, any challenges the program faced in its assessment activity, and Assessment Committee recommendations.
- ☐ An appendix of materials used in the assessment process including direct and indirect measures

Assessment Activity describes each component of the assessment process. It includes the following sections:

Outcome measures includes a description of each measure used for this outcome by identifying how the measure was created, when it was implemented, and who used it. The description also indicates if it is a direct or indirect measure.

Performance standard defines the assessment criteria and how well students (overall) are expected to perform on this measure. This section also includes a justification for the expected performance level. For example, if a new outcome was added to the program, students may not be expected to perform at 80%, but rather 50%. It is important to explain the justification for this standard not only for the reviewers, but also to create and maintain a record for the program.

Data collection explains the collection procedures. A clear description of this process will also allow for easy replication in the future. *Tool 1: Data collection questions* gives a list of three basic questions to address when completing this section of the report.

Tool 1: Data collection questions

- *How were data collected?*
Did each professor ask students to submit 2 copies of papers so that one copy could be used for the assessment? Did the chair ask each faculty member to submit papers to him/her?
- *When was data collection?*
Fall semester? Spring semester?
- *Which students were included?*
Students in a specific course? Seniors? Juniors?

Analysis section describes results and how data were analyzed. The following questions should be addressed:

What approach was used to analyze data?

Average scores on a multiple-choice test? Percent rated in each category on a rubric?

What did you find?

What are your results?

Did you have the level of participation expected?

Did you receive data from all courses who should have contributed? How many participants are missing? Does the work received provide a good sample to determine if the learning outcome was or was not achieved?

Interpretation of results provides meaning to the data collected in the assessment process and includes the following three sections:

Extent this Learning Outcome has been achieved by students discusses how well students performed on each measure (direct and indirect) by summarizing information from **Analysis** section for each measure. In this section, the outcome

is viewed as a whole entity and not in its component parts as in the *Assessment Activity* section.

Program strengths and opportunities for improvement relative to assessment of outcome requires the program to define where students are performing at the highest and lowest, and what this means for the program. How do results indicate that the department is adequately supporting (or not supporting) this learning outcome?

Discuss planned curricular or program improvements for this year based on assessment of outcome.

This section describes the plan for action for the next year. Planned improvements usually address one of the following areas:

- Courses supporting learning outcomes
- Learning outcomes
- Measures (rubrics, tests, surveys)

Executive summary through its different sections provides a brief history of previous assessment activities and linkages to school and university mission. This section includes the following components:

Description of where documents are stored provides direction for finding assessment data. It is advisable for programs to retain (or have access to) student work generating assessment data for one year. This allows for easy reference while the University Assessment Committee is reviewing the report. This can be done either in paper form or electronically. Programs should maintain samples of student work for each level of performance standards used in the assessment activity (e.g. exceeding the standard) as part of the report to make future examination possible.

Lists of all outcomes past and present provides an ongoing history of learning outcomes for the program. All learning outcomes should be included in this list.

Description of linkage to departmental and university mission refers to specific aspects of the school and

university mission that relate to the program. Completing this section requires an explanation of how the program connects to the university mission and school plan. *See Tool 2: University Mission and Link to Strategic Plan* for further information.

Describe how the program implemented its planned improvements from last year
It is important to provide the program and reader an understanding of what occurred and why. The following information needs to be included in this section:

Tool 2: University Mission and Link to Strategic Plan

University Mission

To advance the Art and Science of Healthcare

See University portal for Strategic Plan

- Description of the specific planned improvement for each outcome
- How the program concluded that improvements needed to be made
- Who was involved in the implementation
- When the completion occurred

Tool 3: Example of Documentation of Implemented Planned Improvements		
Outcome	Planned Improvement	Update (<i>Indicate when, where, and how planned improvement was completed. If planned improvement was not completed, please provide explanation.</i>)
Apply ethical reasoning in discussing applied issues.	Add a case-study assignment to course that reinforces ethical theories learned in previous course	The professor who primarily teaches course X reviewed the course syllabus and decided to add a homework assignment to week 5 in which students reflect on the ethical consideration of a research project.
Write a coherent argument using primary sources	Invite the library faculty to course X to review finding primary sources	We decided against this planned improvement because starting in the fall course X is no longer a requirement for the major. Instead we have decided to work with the library faculty to develop an online refresher that will be targeted to a series of elective courses

Response to University Assessment Committee Recommendations

Each program will receive a report from the Assessment Committee with one of the following boxes selected:

Report accepted as submitted – If this box was selected, indicate that your report was accepted as submitted.

Revisions required to accept report this year – If this box was selected, describe what actions taken to have report accepted.

Recommendations for next year's assessment process – If this box was selected, list each recommendation and if it was or was not implemented. A thorough response to this item gives context for why recommendations were or were not acted on.

Appendix of supporting materials is a compilation of materials that aids in the understanding of the outcome reports and the executive summary. *Tool 3: Items often included in assessment report appendices* lists the types of materials that are most commonly included. Appendices should include copies of all assessment instruments including rubrics. By including items such as rubrics and other measures in the appendices, those who read the assessment report will have a better understanding of how the results were achieved and a context for interpreting recommendations for improvement.

Tool 4: Items often included in assessment report appendices

- Notes from meetings with faculty
- Examples of outcomes measures
- Rubrics used to score student work
- Questionnaires used in indirect measures
- Charts and graphs illustrating results of data analyses
- Reports from institutional surveys

Section VI: Planning for the Next Assessment and Closing the Assessment Loop

Assessment is a cyclical process that builds on previous work and activity. The “assessment loop” is closed once a program takes findings from its assessment results, and implements changes based on those findings. Generally, assessment findings indicate a need to modify the assessment process or the academic program.

Checklist of Needed Activity for Planning and Implementing Changes:

- ☐ Results from current assessment cycle
- ☐ Draft of assessment report

Making any change also requires consideration of resources and developing a plan of action. The following section provides a framework for thinking about taking action to close the assessment loop.

Changes in the assessment process

When reviewing the assessment results, it is also important to evaluate the assessment process. This involves considering all aspects involved in creating the assessment report. Reviewing learning outcomes as well as approaches to gathering data will provide direction on improving the assessment process.

Learning outcomes

Tool 1: Re-assessing learning outcomes provides a structure for reviewing student learning outcomes. Based on findings from the student learning outcome assessment results, a program may want to retain, modify, or eliminate an outcome.

Tool 1: Re-assessing learning outcomes	
<u>Results from assessment activity</u>	<u>Likely use of outcome during next cycle</u>
Students not performing adequately relative to outcome	→ If recommendations impact student learning immediately, re-assess outcome using same measure during next cycle.
	→ If recommendations impact student learning over an extended timeframe; schedule re-assessment for later
Students performing adequately relative to outcome	→ If same results for the past 3 years, consider replacing this outcome. Potentially schedule re-assessment at an appropriate interval (e.g. three years)
Students performance relative to outcome yields unclear current results	→ If difficulty in determining appropriate level relates to outcome; re-write outcome and reassess during next cycle
	→ If difficulty relates to measures; retain outcome; revise measure; and re-assess during next year

Measures

In addition to changing outcomes, there might be a need to change the type of data collected. If results obtained were not as expected, it is also important to know if better information could be collected to demonstrate student learning. This change could vary from modifying items on a multiple-choice test to creating a new rubric for reviewing essays.

Data collection procedures

In addition to having the correct measures, it is also important to consider how data were collected in previous student learning assessments. Knowing who was included in the assessment data, and when data were collected are important to understanding if changes need to be made in data collection procedures.

Changes in the academic program

Results from the student learning assessment may indicate that program curricula need to be reviewed and adjusted. Mapping learning outcomes to the curriculum is the first step to understanding if changes are necessary. Changing how concepts are introduced and the timing of that introduction to students are two common findings from student learning assessments.

Mapping outcomes to the curriculum

Results may indicate a need to understand where students are introduced to concepts defined in the learning outcomes. Mapping learning outcomes to program courses is the first step in understanding where students are introduced to the material they need to master.

Examining concept reinforcement

Often programs will discover that students are introduced to the concept in the curriculum, but course assignments and planned experiences are not sufficient to help students master those concepts. This may lead to considering modifications in assignments, readings, or general teaching approaches to reinforce concepts with students. A program may also discover that a new course needs to be created to sufficiently address a learning outcome.

Examining course sequencing

Sometimes faculty will discover that the course provides sufficient support for the student to master the material, but course sequencing should be adjusted so that students are introduced to concepts that build on and complement each other. The student learning assessment process can be used as an audit of the programmatic educational experience.

Taking Action

Opportunities to improve the assessment process and curriculum may emerge from assessment results, but will not be realized without planning and implementation. The assessment loop is only closed if actions are taken to make modifications where necessary. Answering who, what, when, and where questions about assessment modifications are helpful to planning and implementing any changes. *Tool 2: Questions for planning change* provides a few questions to assist with mapping and implementing changes.

Tool 2: Questions for planning change

- Who will implement the changes?
- Who needs to be involved to make these changes successful?
- What will be changed?
- What needs to occur in order for things to change?
- When will the changes be put in place?
- Where will they be implemented?
- How will they be implemented?

The cycle of continuous improvement based upon the strategic plan

STRATEGIES AND TACTICS FOR OUR GOALS

Goal 1. Educate effective practitioners of dental medicine

Recruit, retain, and train the highest quality of DMD students

Strategy 1.1. Provide excellence in teaching.

Tactics:

- Develop and deliver an exceptional curriculum
- Work with the CNU Institute for Teaching and Learning Excellence to develop contemporary pedagogy
- Develop a student faculty mentorship program to promote professionalism and ethics

Tactic	February 2019 status	Development Plan	Critical Success Factors	Party responsible for report	Evidence of Achievement
Develop and deliver an exceptional curriculum	A curriculum with four themes (human studies, odontology, oral and maxillofacial studies, behavioral and social sciences) has been presented to the planning committees. 226 course hours and course names have been identified and course directors have been selected	Spring 2019: Completion of syllabi, development of course materials in Canvas . selection of source materials 2019-2020: presentation of D1 courses with assigned auditors and 360 degree course assessment Repeat this cycle for D2, 2021, D3, 2022, and D4 2023	Positive assessment of courses at 360 degrees: students auditor, faculty, course director, academic Dean, Dean Pass or remediation to pass for all courses (for academic reasons) with competency-based grading policy Performance at or above national average on National Board Exam	Associate Dean of Academic Affairs	1. Student course evaluations 2. Student engagement dashboard 3. Faculty self assessment 4. Course auditors report
Work with the Institute for Teaching and Learning Excellence (ITLE) to develop contemporary pedagogy	The center is an emerging organization for which was launched in October 2018 by the College of Medicine, Pharmacy, and Psychology	Participate fully in all activities of the ITLE with a broad engagement of full and part time faculty	Demonstrated participation resulting in incorporation of ITLE directed advance pedagogy in CODM courses	Associate Dean of Academic Affairs	Implementation of active learning in CODM courses Reports of course directors on implementation of ITLE training
Develop a student faculty mentorship program to promote	No mentorship program has	Train faculty in mentorship through faculty	Improved student life	Dean	Survey of students on the mentorship program

professionalism and ethics	been established as of February 2019	<p>development program.</p> <p>Create assessment rubric for faculty to individually assess mentorship performance</p> <p>Assign each faculty member mentees</p> <p>Apply CDM resources to support mentorship activities</p> <p>Perform annual review of program and participants</p>	<p>Improved faculty staff and student satisfaction.</p> <p>Development of values of professionalism in students</p>	Assistant Dean of Student Affairs	<p>118</p> <p>Survey of faculty on the mentorship program</p> <p>Evaluations of student reflective essay on the mentorship program and its impact on professionalism</p>
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Goal 1: Strategy 1.2 Recruit and retain exceptional dental students

Tactics:

- Recruit a qualified class ensuring scientific clinical ability with a holistic approach to promote social consciousness and action
- Retain all these qualified students with timely completion of the DMD program

Tactic	February 2019 Status	Development Plan	Critical Success Factors	Party responsible for report	Evidence of Achievement
Recruit a qualified class ensuring scientific clinical ability with a holistic approach to promote social consciousness and action	The college has begun to integrate into university recruitment and admissions processes. Participation in the university wide admissions and student affairs retreat in January 2019	Implement the admissions marketing plan as in the CODA self study Appendix XX INSERT HERE MARKETING PLAN	Application pool from the region (central valley, delta, Shasta, Humboldt, Sierras) in excess of applicants to other California dental programs. Social science majors represented. Students from universities of the Delta, Central Valley, mountains and Northern California HPSA shortage areas represented Immigrants and underrepresented minorities exceed the region	Dean of admissions and student affairs	More than 50% of students from the underserved region and colleges associated to the region 20% social science majors Immigrants and underrepresented minorities in excess of other regional dental programs
Retain all students with timely completion of the DMD program	No students are enrolled in the college of dentistry but programs to assist in retention are in place for medicine and pharmacy	Assess the effect of the mentorship program in Strategy 1.1 on retention of students Monitor student performance consistently and continuously		Associate Dean of Academic Affairs.	1.

Goal 2. Develop a high quality faculty and staff

Develop and distribute resources to recruit, retain and promote the effective activities of faculty and staff.
Promote research and scholarship in the college.

Tactics:

- Recruit outstanding sufficient founding faculty of the college
- Complement faculty with appropriate staff
- Develop a program of scholarship and research that supports faculty development

Tactic	February 2019 status	Development plan	Critical Success factors	Party responsible for report	Evidence of achievement
Recruit outstanding sufficient founding faculty of the college	65 interested full and part time faculty engaged and interviews commenced Hiring plan for faculty accepted by university.	Implement hiring plan for 36 FTE faculty as well as Volunteer onsite faculty. Complete MOU's for community based faculty	Sufficient faculty to deliver curriculum and clinical care/clinical education at each stage of development	Dean Associate Dean of Academic affairs	Administrators in place in critical areas of academic affairs, curriculum, clinical affairs and research. Course directors and sufficient faculty in place for each of the courses at least 90 days prior to course delivery Faculty in place to care for patients in CNU clinics ready for students to join care teams
Complement faculty with appropriate staff	Staff hires have begun with Dean's administrator and hiring plan for academic and clinical operations under development	Complete hiring plan for all academic, administrative and clinical staff. Complete hiring of qualified personnel as needed during development.	High functioning qualified staff hired in timely fashion associated with need	VP for human resources Dean Dean of Clinical Affairs Dean of Academic affairs	Clinical staffing model achieved consistent with industry standards in all areas. Academic and administrative staffing consistent with CNU collaborative models and standards and task based needs
Develop a program of scholarship and research that supports faculty development	Interview and hiring plan completed for assistant Dean of research	Develop collaborative public health oriented research program	Active college research program with external funding including NIH, HRSA, state of California, industry and foundation grants	Dean of research VP for Research	Research program in top 50% of the 67 dental programs in the US by the first 5 years of operation

Goal 3. Achieve effective leadership in oral health care delivery

Tactics

- Provide patient care that becomes recognized as some of the best oral health care available anywhere.
- Gain the benefits of good oral health for the patients served and in our communities beyond.

Tactic	Initial status February 2019	Development plan	Critical Success Factors	Responsible for reporting	Evidence of achievement
Provide patient care that becomes recognized as some of the best oral health care available anywhere	Plans for clinics and clinical partners are under development	Complete construction of 2 clinics each of 30 clinical treatment units and appropriate supporting clinical facilities. Equip clinics and hire expert renowned, clinical staff. Complete MOUs with health systems in the region for clinical education and care partnerships.	60 operational units. Core radiology, digital clinical facilities, operational electronic health record system, sterilization and equipment management program Marketing program to attract sufficient patients with oral health needs fulfilled by CNU clinics	Dean of Clinical Affairs Dean	Operational program attracts patients who communicate the triple aim in surveys of the highest quality of care at the lowest cost and with the best patient experience 10,000 new patients in the first year of operation and additional 5000 per year to threshold of 20,000 active patients. Measure: Press Ganey, faculty and staff engagement survey
Gain the benefits of good oral health for the patients served and in our communities beyond	Clinics are not operational in February 2019. Analytics of outcomes based care and value based care for diseases including caries, periodontal disease and oral cancer have been undertaken	Develop thresholds for impact on extant pathologic entities in clinics and utilize standards/parameters of care to develop rubrics regarding thresholds for high quality outcomes: e.g. CAMBRA assessment tools, cancer screening outcomes and disease management and control profile for periodontal disease. Engage Sacramento community in population health initiatives to improve oral health	Reduced recurrent caries rate for enrolled patients as compared to cohort Greater tooth retention and periodontal index in patients with periodontal disease Prevention of oral cancer above community standards in patients with premalignant disease and high risk factors. Increased utilization and decreased disease as outcome of community engagement	Dean of Clinical affairs	Chart review pre- and post-interventions to assess value based care model Community-based interviews with stakeholders to assess community engagement

Goal 4: Promote a diverse and inclusive environment in dental medicine and in the communities we serve

Tactics

- Create and sustain an environment that respects all its students, staff and faculty and the patients we serve.
- Promote multiculturalism and American values of equality and inclusiveness in the college and for community oral health

Tactic	Status February 2019	Development Plan	Critical Success Factors	Party Responsible for report	Evidence of achievement
Create and sustain an environment that respects all its students, staff and faculty and the patients we serve.	Consistent CNU values and applied environment in student affairs admissions and academic affairs are present to create a community of respect.	<p>The humanistic environment for dental education will be addressed by the appointed Dean of academic affairs to interface with extant CNU activities.</p> <p>Both curricular and faculty development program will be initiated to promulgate a dental college culture of respect for diversity in all aspects</p>	Faculty and students demonstrate a respectful and inclusive culture in plenary activities, interest group development, and individual assessment.	Dean	<ul style="list-style-type: none"> Engagement survey Interviews with community of students staff and faculty
Promote multiculturalism and American values of equality and inclusiveness in the college and for community oral health	CNU is established as a remarkably multicultural academic health center in one of the most diverse communities in California.	Promote multicultural activities that engage the CNU community and the larger regional community	<p>Achieve broad multicultural engagement with students, faculty and staff. Examples Celebracion de Salud, Indian dentistry day, Asian dental society activity, National Dental Association</p> <p>Engage Multicultural programs in the Northstate community: California state fair, other community events,</p> <p>International engagement with Asia for dental education and practice</p>	Dean Dean of student affairs and admissions	<p>Assess CNU activities and outcome assessments for these activities</p> <p>Assess in engagement survey</p>

Goal 5. Create exceptional facilities and infrastructure

Tactics:

Build an efficient infrastructure to support and sustain learning, teaching, communication, research and scholarship while keeping education affordable.

Tactics	Status February 2019	Development Plan	Critical Success Factors	Party responsible for reporting	Evidence of achievement
Build an efficient infrastructure to support and sustain learning, teaching, communication, research and scholarship while keeping education affordable.	<p>Sites are under consideration for development of clinical and preclinical facilities</p> <p>Library, anatomy, general labs and contemporary classroom access at CNU are being positioned for use by the CDM</p>	<p>Phase 1: Identify space for two clinics and one type 1 and 2 laboratory and simulation clinic</p> <p>Create plans with A-dec for the lab, simulation and first clinic.</p> <p>THIS WILL BE DEVELOPED TO ENROLL A CLASS OF 2023 LATE IN 2019 OR EARLY IN 2020/</p> <p>Complete construction in 2019 of lab and preclinical lab and in 2019-2020 for the first clinic</p> <p>Phase 2: Initiate construction on the second clinic in 2020 with vendor to be named for completion in 2021</p>	<p>Completion of phase one of infrastructure plan in 2019</p> <p>Completion of phase 2 of infrastructure plan in 2021</p>	<p>Dean</p> <p>Dean of academic affairs</p> <p>Dean of clinical affairs</p>	<p>Timely enrollment of class</p> <p>Timely opening of clinics</p> <p>Effective operation of all facilities</p>

Goal 6. Ensure financial sustainability and growth

Tactics:

Build a financially sustainable budget that will provide effective support of existing programs while being poised for expansion through strategic growth of programs

Tactic	Status February 2019	Development Plan	Critical Success Factors	Party responsible for reporting	Evidence of Achievement
Build a financially sustainable budget that will provide effective support of existing programs while being poised for expansion through strategic growth of programs	The proforma and budget for the school of dentistry has been completed with the Chief Financial Officer accounting for sufficient funding and scaling up of programs for the next 10 years	<p>Expend funds for personnel, faculty and staff, for facilities, equipment and educational materials sufficient to enroll a class in late 2019 or 2020.</p> <p>Gain tuition funds during the first matriculation and growing to 4 classes of 80 student each</p> <p>Gain clinical income, grants, gifts and other sources of income to support programs.</p>	A balance sheet and annual closing statement demonstrating the COD in the black within the proposed return on investment.	Dean President Chief financial officer.	Budget Balance sheets Annual report Audit results

Employee Handbook

California Northstate University



February 2016

This employee handbook supersedes all previous employee handbooks.

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1. General Employment Policies

1.1 Introductory Statement

Welcome to California Northstate University! As an employee of California Northstate University (the "University"), you are an important member of a team effort. We expect all of the employees of the University to demonstrate initiative, enthusiasm, a passion for the advancement of the University, including its colleges and programs, respect for co-workers and students, and dedication to our mission, vision, and values. We hope that you will find your position with the University rewarding, challenging, and productive.

Because our success depends upon the dedication of our employees, we are highly selective in choosing new members of our team. We look to you and the other employees to contribute to the success of the University.

This employee handbook is intended to explain the terms and conditions of employment of all full-time and part-time employees and supervisors, help you understand many of your responsibilities as an employee, and provide you with easy access to the general policies and practices of the University. Written employment contracts between California Northstate University and some individuals may supersede some of the provisions of this handbook. The University also has policies in its Faculty Handbook and other policies or guidelines posted on its network drives which are intended to complement and/or expand upon the policies contained herein.

This handbook summarizes the policies and practices in effect at the time of publication. This handbook supersedes all previously issued handbooks and any policy or benefit statements or memoranda that are inconsistent with the policies described herein. The University reserves the right to alter, revise or abolish any of the practices or policies set forth in this handbook, which has been approved by the Board of Trustees.

As a University employee, you are expected to abide by the intent and language of this handbook. If you have any questions, please contact your immediate or departmental supervisor and/or an authorized member of Human Resources or the appropriate University official.

1.2 Mission, Vision, and Values

- A. **Mission:** *To advance the art and science of healthcare.*
- B. **Vision:** *To provide innovative education and healthcare delivery systems.*
- C. **Core Values (WECARE)**

Working as a team

Embracing diversity and workplace excellence

Caring about our students, our staff, our faculty and our profession

Advancing our university, our goals, and our discipline

Responding to challenges that may impede our Mission

Enhancing communication and partnership

1.3 Core Principles

1. Education is our business.
2. Education is about teaching and learning.
3. Education is effective when students can solve problems, pass the board exam, and have gainful careers.
4. Educational affordability is about the least time and cost to obtain the degree.
5. Education is delivered by faculty who are committed to high-yield teaching, low-stress/stress-free learning, and outcome-based SLOs (CLOs, PLOs, ILOs, and CoCLOs) assessment.
6. Education is delivered with a relevant curriculum characterized by integration of basic and clinical sciences, supported by technology, and taught by responsible and qualified faculty and staff who are loyal to the CNU's values, interests, and priorities.
7. Education should encompass not only cognitive and intellectual growth, but also social and emotional growth, moral development and character building.
8. Educational quality is maintained through governance oversight, program review, judicial use of resources, accountability, and administrative leadership.

1.4 Anti-Harassment

California Northstate University is committed to providing a work environment free of harassment, disrespectful or other unprofessional conduct. University policy prohibits conduct that is disrespectful or unprofessional, as well as harassment based on sex (including pregnancy, childbirth, breastfeeding or related medical conditions), race, religion (including religious dress and grooming practices), color, gender (including gender identity and gender expression), national origin, ancestry, physical or mental disability, medical condition, genetic information, marital status, registered domestic partner status, age, sexual orientation, military and veteran status or any other basis protected by federal, state or local law or ordinance or regulation. It also prohibits harassment, disrespectful or unprofessional conduct based on the perception that anyone has any of those characteristics, or is associated with a person who has or is perceived as having any of those characteristics. **All such conduct violates University policy.**

The University's anti-harassment policy applies to all persons involved in the operation of the University and prohibits harassment, disrespectful or unprofessional conduct by any employee of the University, including supervisors and managers, as well as vendors, students, independent contractors and any other persons. Applicants, employees, unpaid interns, volunteers and independent contractors are all protected from harassment.

Prohibited harassment, disrespectful or unprofessional conduct includes, but is not limited to, the following behavior:

- Verbal conduct such as epithets, derogatory jokes or comments, slurs or unwanted sexual advances, invitations or comments;

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- Visual displays such as derogatory and/or sexually-oriented posters, photography, cartoons, drawings or gestures;
- Physical conduct including assault, unwanted touching, intentionally blocking normal movement or interfering with work because of sex, race or any other protected basis;
- Threats and demands to submit to sexual requests as a condition of continued employment, or to avoid some other loss, and offers of employment benefits in return for sexual favors;
- Retaliation for reporting or threatening to report harassment; and
- Communication via electronic media of any type that includes any conduct that is prohibited by state and/or federal law, or by University policy.

Sexual harassment does not need to be motivated by sexual desire to be unlawful or to violate this policy. For example, hostile acts toward an employee because of his/her gender can amount to sexual harassment, regardless of whether the treatment is motivated by any sexual desire.

If you believe that you have been the subject of harassment or other prohibited conduct, bring your complaint to your supervisor or Human Resources of the University as soon as possible after the incident. You will be asked to provide details of the incident or incidents, names of individuals involved and names of any witnesses. It would be best to communicate your complaint in writing, but this is not mandatory. Supervisors will refer all complaints involving harassment or other prohibited conduct to Human Resources. The University will immediately undertake an effective, thorough and objective investigation of the allegations.

If the University determines that harassment or other prohibited conduct has occurred, effective remedial action will be taken in accordance with the circumstances involved. Any employee determined by the University to be responsible for harassment or other prohibited conduct will be subject to appropriate disciplinary action, up to, and including termination. A University representative will advise all parties concerned of the results of the investigation. The University will not retaliate against you for filing a complaint and will not tolerate or permit retaliation by management, employees or co-workers.

The University encourages all individuals to report any incidents of harassment or other prohibited conduct forbidden by this policy **immediately** so that complaints can be quickly and fairly resolved. You also should be aware that the Federal Equal Employment Opportunity Commission and the California Department of Fair Employment and Housing investigate and prosecute complaints of prohibited harassment in employment. If you think you have been harassed or that you have been retaliated against for resisting or complaining, you may file a complaint with the appropriate agency. The nearest office can be found by visiting the agency websites at www.dfeh.ca.gov and www.eeoc.gov.

1.5 At-Will Employment Status

California Northstate University employees are employed on an at-will basis. Employment at-will means that the employment relationship may be terminated, with or without cause and with or without advance notice at any time by the employee or the University. Nothing in this handbook shall limit the right to terminate at-will employment. Nothing in this employee handbook or in any other personnel document, including benefit plan descriptions, creates or is intended to create a

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promise or representation of continued employment for any employee.

No employee of the University has any authority to enter into an agreement for employment for any specified period of time or to make an agreement for employment on other than at-will terms. Only the President of California Northstate University has the authority to make any such agreement, which is binding only if it is in writing.

Nothing in this at-will statement is intended to interfere with an employee's rights to communicate or work with others toward altering the terms and conditions of his or her employment.

1.6 Equal Employment Opportunity and Non-Discrimination

California Northstate University is an equal opportunity employer and makes employment decisions on the basis of merit. We want to have the best available persons in every job. University policy prohibits unlawful discrimination based on race, color, creed, gender (including gender identity and gender expression), religion (all aspects of religious beliefs, observance or practice, including religious dress or grooming practices) marital status, registered domestic partner status, age, national origin, ancestry, physical or mental disability, medical condition (including cancer or a record or history of cancer, and genetic characteristics), sex (including pregnancy, childbirth, breastfeeding or related medical condition), genetic information, sexual orientation, military and veteran status or any other consideration made unlawful by federal, state, or local laws. It also prohibits unlawful discrimination based on the perception that anyone has any of those characteristics, or is associated with a person who has or is perceived as having any of those characteristics.

Pay discrimination between employees of the opposite sex performing substantially similar work, as defined by the California Fair Pay Act and federal law, is prohibited. Pay differentials may be valid in certain situations defined by law. Employees will not be retaliated against for inquiring about or discussing wages. However, California Northstate University is not obligated to disclose the wages of its employees, and encourages employees to treat wages as a matter of privacy.

Discrimination can also include failing to reasonably accommodate religious practices or qualified individuals with disabilities where the accommodation does not pose an undue hardship.

All such discrimination is **unlawful**.

The University is committed to compliance with all applicable laws providing equal employment opportunities. This commitment applies to all persons involved in University operations. The University prohibits unlawful discrimination against any job applicant, employee or unpaid intern by any employee of the University, including supervisors and coworkers.

If you believe you have been subjected to any form of unlawful discrimination, submit a complaint to your supervisor or Human Resources. Your complaint should be specific and should include the names of the individuals involved and the names of any witnesses. If you need assistance with your complaint, or if you prefer to make a complaint in person, contact Human Resources. The University will immediately undertake an effective, thorough, and objective investigation and attempt to resolve the situation.

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If the University determines that unlawful discrimination has occurred, effective remedial action will be taken commensurate with the severity of the offense. Appropriate action also will be taken to deter any future discrimination.

To comply with applicable laws ensuring equal employment opportunities to qualified individuals with a disability, the University will make reasonable accommodations for the known physical or mental limitations of an otherwise qualified individual with a disability who is an applicant or an employee unless undue hardship would result. Any job applicant or employee who requires an accommodation in order to perform the essential functions of the job should contact Human Resources and discuss the need for an accommodation. The University will engage in an interactive process with the employee to identify possible accommodations, if any, which will help the applicant or employee perform the job.

An applicant, employee or unpaid intern who requires an accommodation of a religious belief or practice (including religious dress and grooming practices, such as religious clothing or hairstyles) should also contact Human Resources and discuss the need for an accommodation. If the accommodation is reasonable and will not impose an undue hardship, the University will make the accommodation.

The University will not retaliate against you for bringing a complaint of discrimination, participating in the investigation of any complaint, or requesting a reasonable accommodation, and will not knowingly tolerate or permit retaliation by management, employees or co-workers.

1.7 Right to Revise

This employee handbook contains the employment policies and practices of California Northstate University in effect at the time of publication. All previously issued handbooks and any inconsistent policy statements or memoranda are superseded.

California Northstate University reserves the right to revise, modify, delete, or add to any and all policies, procedures, work rules, or benefits stated in this handbook or in any other document, except for the policy of at-will employment. However, any such changes must be in writing and must be signed by the president of California Northstate University.

Any written changes to this handbook will be distributed to all employees so that employees will be aware of the new policies or procedures. No oral statements or representations can in any way alter the provisions of this handbook.

2. Hiring

2.1 Orientation

All employees are required to participate in New Employee Orientation on their first day of employment. Orientation will be conducted by Human Resources. The HR Manager will provide an introduction to the University, its mission, vision, values, and culture. Employees will be given a new hire packet which will be reviewed with them. All required forms in that packet must be completed that day. Expectations and guidelines contained in this Handbook will be discussed in detail.

2.2 New Hires

Completion of the introductory period does not entitle you to remain employed by California Northstate University for any definite period of time. Your status as an at-will employee does not change. The employment relationship may be terminated, with or without cause and with or without advance notice, at any time by you or the University.

The first 90 worked days of continuous employment at California Northstate University is considered an introductory period. During this time, you will learn your responsibilities, get acquainted with fellow employees, and determine whether or not you are happy with your job. Your supervisor will closely monitor your performance.

2.3 Bridging of Time

California Northstate University will give credit to employees previously employed by the University, provided the break in service does not exceed 365 days. Generally, the break in service time will be deducted from the employee's original service date. Special rules apply to reinstatement of sick leave benefits under the California Healthy Workplaces, Healthy Families Act.

Human Resources will discuss reinstatement of benefits and other length of service issues with rehired employees.

2.4 Regular Employees

Regular employees are those who are hired to work on a regular schedule. Regular employees may be classified as full-time or part-time.

2.5 Full-Time Employees

Regular full-time employees are those who are scheduled for and do work 40 hours per week. Regular full-time employees are eligible for most employee benefits described in this handbook. Benefit eligibility may depend on length of continuous service. Benefit eligibility requirements may also be imposed by the plans themselves or by law. Please refer to the Benefits section of this Handbook.

2.6 Part-Time Employees

Part-time employees are those who are scheduled for and do work fewer than 40 hours per week. Part-time employees may be eligible for some of the California Northstate University employee benefits if they meet certain eligibility requirements. Benefit eligibility requirements may also be imposed by the plans themselves or by law. Please refer to the Benefits section of this Handbook.

2.7 Special Project Employees

Special project employees are those employees hired to perform a special job task or work for a limited time period. An example of a special project employee is a student hired to perform services during the summer months. Special project employees may not be eligible for any or some benefits. If you have questions regarding your eligibility for particular benefits, see the Human Resources Department. The conditions of eligibility for benefits are set forth in the particular plan documents for each benefit.

2.8 Temporary Employees

Temporary employees are those employed for short-term assignments. Short-term assignments generally are periods of three months or fewer; however, such assignments may be extended. Temporary employees are not eligible for employee benefits except those mandated by applicable law.

2.9 Job Duties

During the introductory period, your supervisor will explain your job responsibilities and the performance standards expected of you. Be aware that your job responsibilities may change at any time during your employment. From time to time, you may be asked to work on special projects, or to assist with other work necessary or important to the operation of your department or college, other colleges, or California Northstate University. Your cooperation and assistance in performing such additional work is expected.

California Northstate University reserves the right, at any time, with or without notice, to alter or change job responsibilities, reassign or transfer job positions, or assign additional job responsibilities.

3. Leaves of Absence

3.1 Bereavement Leave

California Northstate University grants leave of absence to employees in the event of the death of the employee's current spouse, registered domestic partner, child, parent, legal guardian, brother, sister, grandparent, or grandchild; or mother-, father-, sister-, brother-, son-, or daughter-in-law. An employee with such a death in the family may take up to three consecutive scheduled workdays off, without pay, with the approval of the University. Accrued sick leave or vacation hours may also be used. If additional time off is needed, through use of vacation or unpaid leave, the employee should discuss this with his/her supervisor.

3.2 Civil Air Patrol Leave

No employee with more than 90 days of service shall be disciplined for taking time off to perform emergency duty as a volunteer in the California Civil Air Patrol. If you are a Civil Air Patrol volunteer, please alert your supervisor that you may have to take time off for emergency duty. When taking time off for emergency duty, please alert your supervisor before doing so, giving as much advance notice as possible.

Up to 10 days of leave for duty may be taken each year. However, leave for a single emergency mission cannot exceed three days, unless the emergency is extended by the entity in charge of the operation and the extension of leave is approved by the University. The employee may elect to take this leave as unpaid or elect to use any paid vacation time previously accrued and unused.

3.3 Extended Medical Leave

A medical leave of absence may be granted for non-work-related medical disabilities (other than pregnancy, childbirth, and related medical conditions addressed in the following section) with a doctor's written certificate of disability to Human Resources. Extended disability leaves will also be considered on a case-by-case basis, consistent with the University's obligations under federal and state disability laws.

Employees should request any leave in writing directed to Human Resources as far in advance as possible. If you are granted a medical leave, California Northstate University will pay you sick pay for the period of time equivalent to your accumulated sick pay earned. You also may use any paid vacation time previously accrued.

A medical leave begins on the first day your doctor certifies that you are unable to work, and ends when your doctor certifies that you are able to return to work. Your doctor should provide you with a form showing the date you were disabled and the estimated date you will be able to return to work. An employee returning from a medical disability leave must present a doctor's certificate declaring fitness to return to work.

If returning from a non-work-related medical leave, you will be offered the same position you held at the time your leave began, if available. If your former position is not available, a comparable position will be offered. If neither the same nor a comparable position is available, your return to work will depend on job openings existing at the time of your scheduled return. California Northstate University makes no guarantees of reinstatement, and your return will

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depend on your qualifications for existing openings.

California workers' compensation laws govern work-related injuries and illnesses. California pregnancy disability laws govern leaves taken because of pregnancy, childbirth, and related medical conditions. An employee that needs reasonable accommodations should contact Human Resources and discuss the need for an accommodation.

Any leave taken under this provision qualifying as leave under the state and/or federal family and medical leave laws (FMLA/CFRA) will be counted as family/medical leave, charged to your entitlement of 12 workweeks of family/medical leave in a 12-month period, and governed by the rules relating to family/medical leave.

3.4 Family and Medical Leave

State and federal family and medical leave laws provide up to 12 workweeks of unpaid family/medical leave within a 12-month period, under the following conditions:

- The employee has been employed with the University for a total of at least 12 months prior to the commencement of leave. The 12 months of employment must have accumulated within the previous seven years (certain exceptions apply);
- The employee has worked at least 1,250 hours during the previous 12-month period before the need for leave; and
- The employee is employed at a work site where there are 50 or more employees within a 75 mile radius.

Leave may be taken for one or more of the following reasons:

- The birth of the employee's child, or placement of a child with the employee for adoption or foster care (FMLA/CFRA);
- For incapacity due to pregnancy, prenatal medical care or child birth (FMLA only);
- For a serious health condition that makes the employee unable to perform his or her job (FMLA/CFRA);
- To care for the employee's spouse, child, or parent who has a serious health condition (FMLA/CFRA);
- To care for the employee's registered domestic partner (CFRA only).

For additional information about eligibility for family/medical leave, contact Human Resources.

Pregnancy, Childbirth or Related Conditions

Leave because of the employee's disability for pregnancy, childbirth or related medical condition is not counted as time used under California law (the California Family Rights Act). However, time off because of pregnancy disability, childbirth or related medical condition does count as family and medical leave under federal law (the Family and Medical Leave Act). Employees who

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take time off for pregnancy disability and who are eligible for family and medical leave will also be placed on family and medical leave that runs at the same time as their pregnancy disability leave. Once the pregnant employee is no longer disabled, or once the employee has exhausted PDL and has given birth she may apply for leave under the California Family Rights Act, for purposes of baby bonding.

Any leave taken for the birth, adoption, or foster care placement of a child does not have to be taken in one continuous period of time. California Family Rights Act leave taken for the birth or placement of a child will be granted in minimum amounts of two weeks. However, the University will grant a request for a California Family Rights Act leave (for birth/placement of a child) of less than two weeks' duration on any two occasions. The University may also grant additional requests for leave lasting less than two weeks at its discretion. Any leave taken must be concluded within one year of the birth or placement of the child with the employee.

Military Family Leave Entitlements

- Eligible employees whose spouse, son, daughter or parent is on covered active duty or call to covered active duty status may use their 12-week leave entitlement to address certain qualifying exigencies. Qualifying exigencies may include attending certain military events, arranging for alternative childcare, addressing certain financial and legal arrangements, attending certain counseling sessions, and attending post-deployment reintegration briefings.
- Eligible employees may also take a special leave entitlement of up to 26 weeks of leave to care for a covered service member during a single 12-month period. (FMLA/CFRA for 12 weeks if the care provider is eligible for both, followed by 14 weeks of FMLA only, or 26 weeks of FMLA only if leave is not CFRA covered leave). A covered service member is either:
 - A current member of the Armed forces, including a member of the National Guard or Reserves, who is undergoing medical treatment, recuperation or therapy, is otherwise in outpatient status, or is otherwise on the temporary disability retired list, for a serious injury or illness*; or
 - A veteran who was discharged or released under conditions other than dishonorable at any time during the five-year period prior to the first date the eligible employee takes FMLA leave to care for the covered veteran, and who is undergoing medical treatment, recuperation, or therapy for a serious injury or illness.*

*The FMLA definitions of "serious injury or illness" for current service members and veterans are distinct from the FMLA definition of "serious health condition."

Calculating the 12-month Period

For purposes of calculating the 12-month period during which 12 weeks of FMLA or qualifying exigency leaves may be taken, California Northstate University uses a rolling year, which is defined as a year beginning on a yearly anniversary of an employee's date of hire.

Under most circumstances, leave under federal and state law will run at the same time and the

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eligible employee will be entitled to a total of 12 weeks of family and medical leave in the designated 12-month period.

For leave to care for a covered service member, the 12-month period begins on the first day of the leave, regardless of how the 12-month period is calculated for other leaves. Leave to care for a covered service member is for a maximum of 26 workweeks during a 12-month period.

Leave Procedures

The following procedures shall apply when an employee requests family medical leave:

- Please contact Human Resources as soon as you realize the need for family/medical leave. If the leave is based on the expected birth, placement for adoption or foster care, or planned medical treatment for a serious health condition of the employee or a family member, the employee must notify the University at least 30 days before leave is to begin. The employee must consult with his or her supervisor regarding scheduling of any planned medical treatment or supervision in order to minimize disruption to the operations of the University. Any such scheduling is subject to the approval of the health care provider of the employee or the health care provider of the employee's child, parent, or spouse.
- If the employee cannot provide 30 days' notice, the University must be informed as soon as is practical.
- If the Family and Medical Leave Act/California Family Rights Act request is made because of the employee's own serious health condition, the University may require, at its expense, a second opinion from a health care provider that the University chooses. The health care provider designated to give a second opinion will not be one who is employed on a regular basis by the University.
- If the second opinion differs from the first opinion, the University may require, at its expense, the employee to obtain the opinion of a third health care provider designated or approved jointly by the employer and the employee. The opinion of the third health care provider shall be considered final and binding on the University and the employee.

Certification

California Northstate University requires the employee to provide certification. You will have 15 calendar days from the University's request for certification to provide it to the University, unless it is not practicable to do so. The University may require recertification from the health care provider if the employee requests additional leave upon expiration of the time period in the original certification. *(For example, if an employee needs two weeks of family and medical leave, but following the two weeks needs intermittent leave, a new medical certification will be requested and required.)* If the employee does not provide medical certification in a timely manner to substantiate the need for family and medical leave, the University may delay approval of the leave, or continuation thereof, until certification is received. If certification is never received, the leave may not be considered family and medical leave.

If an employee cites his/her own serious health condition as a reason for leave, the employee must provide a certification from the health care provider stating:

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- Date of commencement of the serious health condition;
- Probable duration of the condition; and
- Inability of the employee to work at all or to perform any one or more of the essential functions of his/her position because of the serious health condition.

If an employee is absent because of his/her own serious health condition, the University will also require a medical release to return to work form or certification from the employee's health care provider that the employee is able to resume work. Failure to provide a release to return to work certificate from the employee's health care provider will result in denial of reinstatement for the employee until the certificate is obtained.

If the leave is needed to care for a sick child, spouse, or parent, the employee must provide a certification from the health care provider stating:

- Date of commencement of the serious health condition;
- Probable duration of the condition;
- Estimated amount of time for care by the health care provider; and
- Confirmation that the serious health condition warrants the participation of the employee.

When both parents are employed by the University, and request simultaneous leave for the birth or placement for adoption or foster care of a child, the University will not grant more than a total of 12 workweeks family/medical leave for this reason.

Certification of Leave Related to Military Service

A leave taken due to a "qualifying exigency" related to military service must be supported by a certification of its necessity. A leave taken due to the need to care for a service member shall be supported by a certification by the service member's health care provider or other certification allowed by law. Special certification requirements apply to leaves related to military service.

Health and Benefit Plans

An employee taking family medical leave will be allowed to continue participating in any health and welfare benefit plans in which he/she was enrolled before the first day of the leave (for a maximum of 12 workweeks, or 26 workweeks if the leave is to care for a covered service member) at the level and under the conditions of coverage as if the employee had continued in employment for the duration of such leave. The University will continue to make the same premium contribution as if the employee had continued working. The continued participation in health benefits begins on the date leave first begins. In some instances, the University may recover from an employee premiums paid to maintain health coverage if the employee fails to return to work following family/medical leave.

Employees on pregnancy disability leave will be allowed to continue to participate in group health coverage for up to a maximum of four months of pregnancy disability leave (if such insurance was provided before the leave was taken) on the same terms as if you had continued

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to work. The right to continued group health coverage during pregnancy disability leave is a separate and distinct entitlement from the CFRA entitlement.

Payment is due when it would be made by payroll deduction.

Substitution of Paid Leave

FMLA/CFRA leave is unpaid. The University may require, or employees may choose, to use accrued paid leave while taking FMLA leave. In order to use paid leave for FMLA leave, employees must comply with the University's normal paid leave policies. For more information on those specific circumstances requiring or allowing the substitution of paid leave contact Human Resources.

Reinstatement

Under most circumstances, upon return from family/medical leave, an employee will be reinstated to his or her original job or to an equivalent job with equivalent pay, benefits, and other employment terms and conditions. However, an employee has no greater right to reinstatement than if he or she had been continuously employed rather than on leave. For example, if an employee on family/medical leave would have been laid off had he or she not gone on leave, or if the employee's job is eliminated during the leave and no equivalent or comparable job is available, then the employee would not be entitled to reinstatement. In addition, an employee's use of family/medical leave will not result in the loss of any employment benefit that the employee earned before using family/medical leave.

Reinstatement after family/medical leave may be denied to certain salaried "key" employees under the following conditions:

- An employee requesting reinstatement was among the highest-paid 10 percent of salaried employees employed within 75 miles of the worksite at which the employee worked at the time of the leave request;
- The refusal to reinstate is necessary because reinstatement would cause substantial and grievous economic injury to the University's operations;
- The employee is notified of the University's intent to refuse reinstatement at the time the University determines the refusal is necessary; and
- If leave has already begun, the University gives the employee a reasonable opportunity to return to work following the notice described previously.

Time Accrual

Please contact Human Resources with any questions regarding accrual or use of other university provided paid leave benefits (such as vacation or sick leave) during unpaid FMLA/CFRA leave.

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Carryover

Leave granted under any of the reasons provided by state and federal law will be counted as family/medical leave and will be considered as part of the 12-workweek entitlement (26-workweek entitlement if leave is to care for a service member) in any 12-month period. No carryover of unused leave from one 12-month period to the next 12-month period is permitted.

Intermittent Leave

Employees may take Family and Medical Leave Act/California Family Rights Act leave intermittently (in blocks of time, or by reducing their normal weekly or daily work schedule) if the leave is for the serious health condition of the employee or a qualifying family member and the reduced leave schedule is medically necessary as determined by the health care provider of the person with the serious health condition. The smallest increment of time that can be used for such leave is one hour.

See also the discussion of Pregnancy, Childbirth or Related Medical Conditions above.

3.5 Jury Duty and Witness Leave

California Northstate University encourages employees to serve on jury duty when called. Employees who have completed their introductory periods will receive full pay while serving up to 5 days of jury duty. You should notify your supervisor of the need for time off for jury duty as soon as a notice or summons from the court is received. You may be requested to provide written verification from the court clerk of performance of jury service. If work time remains after any day of jury selection or jury duty, you will be expected to return to work for the remainder of your work schedule.

Fees Paid by the Court

You may retain any mileage allowance or other fee paid by the court for jury services.

3.6 Military Leave

Employees who wish to serve in the military and take military leave should contact Human Resources for information about their rights before and after such leave. You are entitled to reinstatement upon completion of military service, provided you return or apply for reinstatement within the time allowed by law.

3.7 Military Spouse Leave

Employees who work more than 20 hours per week and have a spouse in the Armed Forces, National Guard or Reserves who have been deployed during a period of military conflict are

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eligible for up to 10 unpaid days off when their spouse is on leave from (not returning from) military deployment.

Employees must request this leave in writing to Human Resources within two business days of receiving official notice that their spouse will be on leave. Employees requesting this leave are required to attach to the leave request written documentation certifying the spouse will be on leave from deployment.

3.8 Organ and Bone Marrow Donor Leave

Employees who are donors for organ or bone marrow may take paid time off as follows:

- Employees may take up to 30 business days of leave in any one-year period for the purpose of donating an organ to another person. The one-year period is calculated from the date the employee begins his/her leave.
- Employees may take up to 5 business days of leave in any one-year period for the purpose of donating bone marrow to another person. The one-year period is calculated from the date the employee's leave begins.
- During the leave for organ/bone marrow donors, California Northstate University will continue to provide and pay for any group health plan benefits the employee was enrolled in prior to the leave of absence.
- Leave taken for the purpose of organ or bone marrow donation is not leave for the purpose of family medical leave under state law, The California Family Rights Act.
- Employees who wish to take a leave of absence to donate bone marrow or an organ will be required to provide written verification of the need for leave, including confirmation that the employee is an organ or bone marrow donor and that there is a medical necessity for the donation of the organ or bone marrow.

California Northstate University requires that employees taking leave for organ donation use two weeks of accrued but unused sick leave, and/or vacation.

California Northstate University requires that employees taking leave for bone marrow donation use five days of accrued but unused sick leave, and/or vacation.

Once a Donor has exhausted the required paid sick, and/or vacation leave, the employee will be paid for the remaining leave of absence, if additional leave is needed, up to the maximum allowed by law.

3.9 Personal Leave

A personal leave of absence without pay may be granted at the discretion of California Northstate University. Requests for personal leave should be limited to unusual circumstances requiring an absence of longer than two weeks. Approved personal absences of shorter duration are not normally treated as leaves, but rather as excused absences without pay.

Concurrent Personal and Family/Medical Leave

Any leave taken under this provision that qualifies as leave under the state and/or federal Family and Medical Leave Acts will be counted as family/medical leave and charged to your entitlement of 12 workweeks of family/medical leave in a 12-month period.

3.10 Pregnancy Disability Leave (PDL)

Any female employee planning to take pregnancy disability leave should advise the HR Department as early as possible. The individual should make an appointment with Human Resources to discuss the following conditions:

- Duration of pregnancy disability leave will be determined by the advice of the employee's physician, but employees disabled by pregnancy may take up to four months. Part-time employees are entitled to leave on a pro rata basis. The four months of leave includes any period of time for actual disability caused by the employee's pregnancy, childbirth, or related medical condition. This includes leave for severe morning sickness and for prenatal care.
- California Northstate University will also reasonably accommodate medical needs related to pregnancy, childbirth, or related conditions or temporarily transfer you to a less strenuous or hazardous position (where one is available) or duties if medically needed because of your pregnancy.
- Employees who need to take pregnancy disability must inform California Northstate University when a leave is expected to begin and how long it will likely last. If the need for a leave, reasonable accommodation, or transfer is foreseeable, employees must provide reasonable advance notice at least 30 days before the pregnancy disability leave or transfer is to begin. Employees must consult with Human Resources regarding the scheduling of any planned medical treatment or provision in order to minimize disruption to the operations of the University. Any such scheduling is subject to the approval of the employee's health care provider;
- If 30 days' advance notice is not possible, notice must be given as soon as practical;
- Failure to give reasonable advance notice may result in delay of leave, reasonable accommodation, or transfer;
- Pregnancy leave usually begins when ordered by the employee's physician. The employee must provide California Northstate University with a written certification from a health care provider for need of PDL, reasonable accommodation or transfer. The certification must be returned within 15 calendar days. Failure to do so may, in some circumstances, delay PDL leave, reasonable accommodation or transfer. The certification indicating the need for disability leave should contain:
 - A statement that the employee needs to take pregnancy disability leave because she is disabled by pregnancy, childbirth or related medical condition;
 - The date on which the employee became disabled due to pregnancy;
 - The probable duration of the period or periods of disability;
 - If the employee needs a reasonable accommodation or transfer, a medical certification is sufficient if it contains all of the following: a description of the requested reasonable accommodation or transfer; a statement that describes the

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medical advisability of the reasonable accommodation or transfer because of pregnancy; and the date on which the need for reasonable accommodation or transfer became/will become medically advisable and the estimated duration of the reasonable accommodation or transfer;

- Leave returns will be allowed only when the employee's physician sends a release;
- An employee will be allowed to use accrued sick time (if otherwise eligible to take the time) during a pregnancy disability leave. An employee will be allowed to use accrued vacation during a pregnancy disability leave; and
- Leave does not need to be taken in one continuous period of time and may be taken intermittently, as needed. Leave may be taken in increments of one hour.

If intermittent leave or leave on a reduced work schedule is medically advisable the employee may, in some instances, be required to transfer temporarily to an available alternative position that meets the employee's needs. The alternative position need not consist of equivalent duties, but must have the equivalent rate of pay and benefits. The employee must be qualified for the position. The position must better accommodate the employee's leave requirements than her regular job. Transfer to an alternative position can include, at the University's discretion, altering an existing job to better accommodate the employee's need for intermittent leave or a reduced work schedule.

Upon submission of a medical certification that an employee is able to return to work from a pregnancy disability leave, an employee will be reinstated to her same position held at the time the leave began or, in certain instances, to a comparable position, if available. There are limited exceptions to this policy. An employee returning from a pregnancy disability leave has no greater right to reinstatement than if the employee had been continuously employed.

Employees on pregnancy disability leave will be allowed to continue to participate in group health insurance coverage for up to a maximum of four months of disability leave (if such insurance was provided before the leave was taken) at the level and under the conditions that coverage would have been provided if the employee had continued in employment continuously for the duration of the leave. In some instances, an employer can recover from an employee premiums paid to maintain health coverage if the employee fails to return following pregnancy disability leave.

PDL may impact other benefits or a seniority date. Please contact the Human Resources Department for more information.

3.11 School and Child Care Activities Leave

Employees are encouraged to participate in the school or child care activities of their child(ren).

The absence is subject to all of the following conditions:

- Time off under this policy can only be used by parents, guardians, grandparents, stepparents, foster parents or a person who stands *in loco parentis* to one or more children of the age to attend kindergarten through grade 12 or a licensed child care provider;

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- The amount of time off for school or child care activities described below cannot exceed a total of 40 hours each year;
- Covered employees can use the time off to find, enroll or reenroll a child in a school or with a licensed child care provider or to participate in activities of the child's school or licensed child care provider. The time off for these purposes cannot exceed eight hours in any calendar month. Employees planning to take time off for these purposes must provide reasonable advance notice to their supervisor;
- Covered employees can also use time off to address a "child care provider or school emergency" if the employee gives notice to the employer. A child care provider or school emergency means that the employee's child cannot remain in a school or with a child care provider;
- Employees must provide their supervisor with documentation from the school or licensed child care provider verifying that they were engaged in these child related activities on the day and time of the absence;
- If more than one parent is employed by California Northstate University, the first employee to request such leave will receive the time off. Another parent will receive the time off only if the leave is approved by his or her supervisor;
- Employees must use vacation leave in order to receive compensation for this time off; and
- Employees who do not have accrued sick and/or vacation time available will take the time off unpaid.

3.12 School Appearances Involving Suspension

If an employee who is the parent or guardian of a child facing suspension from school is summoned to the school to discuss the matter, the employee should alert his or her supervisor as soon as possible before leaving work. In agreement with California Labor Code Section 230.7, no discriminatory action will be taken against an employee who takes time off for this purpose.

3.13 Sick Leave

As of July 1, 2015, California law provides for mandatory paid sick leave under the Healthy Workplaces, Healthy Families Act (the "Act"). This paid sick leave policy is intended to comply with the requirements of the Act.

Employees cannot be discriminated or retaliated against for requesting or using accrued paid sick time.

If you have any questions about paid sick leave, please contact Human Resources.

Eligible Employees

Beginning July 1, 2015, all employees who have worked in California for the same employer for 30 or more days within a year from the start of their employment will be entitled to paid sick time.

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However, employees are not eligible to take paid sick time until they have worked for the University for three months from their date of hire.

Sick Pay Amount

Eligible employees will receive sick leave as follows:

Eligible full-time employees accrue 8 hours of sick time per month; Part-time employees accrue 2.68 hours of sick time per month. At a minimum, employees will: (1) have at least one day or eight hours of paid sick time within **three months** of employment, each calendar year or each 12-month period; **and** (2) be eligible to earn at least three days or 24 hours of sick leave within **nine months** of employment.

You will need to meet the **three months** employment requirement before taking any leave.

Full-time employees can earn a maximum of 96 hours paid sick time and part-time employees can earn a maximum 32 hours paid sick time. After an employee has reached this maximum amount, no additional paid sick time will be earned until some or all of the employee's accrued paid sick time is used.

The University does not pay employees for unused paid sick leave. Accumulated unused paid sick leave is not redeemable for pay at time of separation or under any other circumstances. Employees who are rehired with one year of separation from employment may be eligible for reinstatement of previously accrued and unused paid sick time.

Qualifying Reasons for Paid Sick Leave

Paid sick time can be used for the following reasons:

- Diagnosis, care or treatment of an existing health condition for an employee or covered family member, as defined below.
- Preventive care for an employee or an employee's covered family member.
- For certain, specified purposes when the employee is a victim of domestic violence, sexual assault or stalking.

For purposes of paid sick leave, a covered family member includes:

- A "child" defined as a biological, foster or adopted child; a stepchild; or a legal ward, regardless of the age or dependency status of the child. A "child" also may be someone for whom you have accepted the duties and responsibilities of raising, even if he or she is not your legal child.
- A "parent" defined as a biological, foster or adoptive parent; a stepparent; or a legal guardian of an employee or the employee's spouse or registered domestic partner. A parent may also be someone who accepted the duties and responsibilities of raising you when you were a minor child, even if he or she is not your legal parent.
- A spouse.

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- A registered domestic partner.
- A grandparent.
- A grandchild.
- A sibling.

Use of Paid Sick Leave

If the need for paid sick leave is foreseeable, employees shall provide advance oral or written notification to their manager. If the need for paid sick leave is not foreseeable, employees shall provide notice to their manager as soon as practicable.

Paid sick leave for non-exempt employees can be used in two hour increments.

If an employee is absent from work for more than three consecutive workdays due to illness, medical evidence of illness (a doctor's note) is required prior to the employee being permitted to return to full duties. If the employee cannot return to full duties, a physician must specify the employee's limitations in sufficient detail to determine whether a reasonable accommodation should be made.

Paid sick leave is a benefit that also covers absences for work-related illness or injury. Employees who have a work-related illness or injury are covered by workers' compensation insurance. However, workers' compensation benefits usually do not cover absences for medical treatment. When you report a work-related illness or injury, you will be sent for medical treatment, if treatment is necessary. You will be paid your regular wages for the time you spend seeking initial medical treatment.

Any further medical treatment will be under the direction of the health care provider. Any absences from work for follow-up treatment, physical therapy or other prescribed appointments will not be paid as time worked. If you have accrued and unused paid sick leave, the additional absences from work will be paid with the use of paid sick leave.

Except when prohibited by law, employees are required to exhaust all accrued and unused sick leaves before taking unpaid leaves or having unpaid absences. If you do not have accrued sick leave, or if you have used all of your sick leave, you may choose to substitute vacation time for further absences from work related to your illness or injury. An employee's use of paid sick time may run concurrently with other leaves under local, state or federal law.

3.14 Time Off for Voting

If an employee does not have sufficient time outside of working hours to vote in an official state-sanctioned election, the employee may take off enough working time to vote. Such time off shall be taken at the beginning or the end of the regular working shift, whichever allows for more free time, and the time taken off shall be combined with the voting time available outside of working hours to a maximum of two hours combined. Under these circumstances, an employee will be allowed a maximum of two hours of time off during an election day without loss of pay. When possible, an employee requesting time off to vote shall give his or her supervisor at least two days' notice.

3.15 Vacation

Vacation Accrual from First Day

Full-time staff employees are entitled to accrue, pro-rated over 24 pay periods per year:

Date of hire to completion of 5th year = 80 hours per year
 Beginning of 6th year to completion of 10th year = 120 hours per year
 Beginning of 11th year and thereafter = 160 hours per year

Full-time faculty and administrative employees with a Vice President Title or higher are entitled to accrue a maximum of 160 hours of vacation each year, pro-rated over 24 pay periods.

Active service commences with an employee's first day of work and continues thereafter unless broken by an absence or leave of absence without pay or termination of employment. Temporary and part-time employees do not accrue paid vacation.

Vacation can accrue up to a maximum of 80 hours for full-time staff employees from their first year of continuous employment to the completion of their fifth year of continuous employment, then 120 hours beginning their sixth year of continuous employment to the completion of their tenth year of continuous employment, and 160 hours beginning their 11th year of continuous employment. Full-time faculty employees earned vacation time accrues to a maximum of 160 hours. Upon accrual of the maximum number of hours, no additional vacation will be earned until accrued vacation time is used. Once some vacation time is taken, accrual will recommence at the usual rate. Employees will not be retroactively granted any unearned vacation hours that he/she would have earned, had he/she not reached the cap. Employees are responsible for tracking their accrued vacation time.

Employees become eligible to take accrued vacation immediately as accrued, as work schedules permit. Vacation schedules must be coordinated and cleared with your supervisor. Vacations shall be scheduled to provide adequate coverage of job responsibilities and staffing requirements. The scheduling of your vacation depends in part on California Northstate University's operational needs and the requests for vacations and leaves of absences of other employees. Vacation leave generally will not be approved while school is in session, unless the person requesting leave has no classroom or practice experience obligation on those days. All vacations must be requested in advance on a Vacation Authorization Request Form and approved by the employee's direct supervisor.

The University encourages employees to take vacation annually, generally within the year following accrual. No exempt or non-exempt employee will receive pay in lieu of vacation, except on the termination of his or her employment. Accrued vacation pay that has not been used will be paid at the time of resignation or termination. Vacation pay is paid at the employee's final rate of pay at the time of separation.

Required Use of Vacation Before Unpaid Leave

You are required to take accrued and unused vacation before taking unpaid leave, or having unpaid absences. Family and Medical Leave (under both state and federal law) is included in

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this requirement, unless the absence is pregnancy-related or the leave is FMLA-related and you are receiving wage replacement through a disability benefit plan (regardless of whether the plan is employer-provided or mandatory under state or federal law, such as state disability insurance).

If you are absent for a reason that qualifies you for Paid Family Leave (PFL) or because of a disability that qualifies you for State Disability Insurance (SDI) benefits, please contact immediate supervisor to discuss coordination of your benefits.

3.16 Victims of Crime Leave

An employee who is themselves a victim or who is the family member of a victim of certain serious crimes may take time off from work to attend judicial proceedings related to the crime or to attend proceedings involving rights of the victim.

A family member of a crime victim may be eligible to take this leave if he/she is the crime victim's spouse, parent, child or sibling. Other family members may also be covered depending on the purpose of the leave.

The absence from work must be in order to attend judicial proceedings or proceedings involving rights of the victim. Only certain crimes are covered. You must provide reasonable advance notice of your need for leave, and documentation related to the proceeding may be required. If advance notice is not possible, you must provide appropriate documentation within a reasonable time after the absence.

Any absence from work to attend judicial proceedings or proceedings involving victim rights will be unpaid, unless you choose to take accrued vacation or sick time.

For more information regarding this leave (including whether you are covered, when and what type of documentation is required, and which type of paid time off can be used), please contact Human Resources.

3.17 Victims of Domestic Violence, Sexual Assault or Stalking

Employees who are victims of domestic violence, sexual assault and stalking are eligible for unpaid leave. Although the leave is unpaid, employees can use their paid sick time under California's Healthy Workplaces, Healthy Families Act for the purposes described below.

You may request leave if you are involved in a judicial action, such as obtaining restraining orders, or appearing in court to obtain relief to ensure your health, safety or welfare, or that of your child. Please provide reasonable advance notice of the need for leave to Human Resources unless advance notice is not feasible.

Employees who are victims of domestic violence, sexual assault or stalking and need a reasonable accommodation for their safety at work should contact Human Resources to discuss the need for an accommodation. If you are requesting such a reasonable accommodation, you will need to submit a written statement signed by you, or by an individual acting on your behalf,

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to Human Resources, certifying that the accommodation is for the purpose of your safety at work.

For reasonable accommodation requests, the University will also require certification demonstrating that you are the victim of domestic violence, sexual assault or stalking. Any of the forms of certification described above for leave purposes will suffice. The University may request recertification every six months from the date of the previous certification.

The University will engage in an interactive process with the employee to identify possible accommodations, if any, which are effective and will make reasonable accommodations unless an undue hardship will result. California Northstate University will, to the extent allowed by law, maintain the confidentiality of an employee requesting leave or accommodation under these provisions.

You should notify the University if an approved accommodation is no longer needed.

3.18 Victims of Domestic Violence, Sexual Assault or Stalking - Treatment

Employees who are victims of domestic violence, sexual assault or stalking are eligible for unpaid leave. Although the leave is unpaid, employees can use their paid sick time under California's Healthy Workplaces, Healthy Families Act for the purposes described below.

You may request leave for any of the following purposes:

- To seek medical attention for injuries caused by domestic violence, sexual assault or stalking;
- To obtain services from a domestic violence shelter, program or rape crisis center as a result of domestic violence, sexual assault or stalking;
- To obtain psychological counseling related to experiencing domestic violence, sexual assault or stalking;
- To participate in safety planning and take other actions to increase safety from future domestic violence, sexual assault or stalking including temporary or permanent relocation.

Please provide reasonable advance notice of the need for leave unless advance notice is not feasible to Human Resources.

California Northstate University will, to the extent allowed by law, maintain the confidentiality of an employee requesting leave under this provision.

The length of unpaid leave an employee may take is limited to 12 weeks provided for in the federal Family and Medical Leave Act of 1993 for eligible employees.

3.19 Volunteer Civil Service Personnel

No employee shall be disciplined for taking time off to perform emergency duty as a volunteer firefighter, peace officer, or emergency rescue personnel. Employees who perform emergency duty as a volunteer firefighter, reserve peace officer, or emergency rescue personnel may take up to a total of fourteen days unpaid leave time per calendar year to engage in required fire, law enforcement, or emergency rescue training. Please alert your supervisor as soon as possible that you may have to take time off for emergency duty or emergency duty training. The employee may elect to take this leave as unpaid or elect to use any paid vacation time previously accrued and unused.

4. Benefits

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4.1 Benefits Overview

California Northstate University is committed to providing certain benefits for eligible employees. Benefit eligibility may be dependent upon your employee classification (full-time versus part-time, for example) and on length of continuous employment at California Northstate University. Benefit eligibility requirements may also be imposed by the plans themselves.

Upon becoming eligible for certain employee benefit plans, you will receive Summary Plan Descriptions which describe the benefits in greater detail. For information regarding employee benefits and to answer any questions you may have contact Human Resources.

The University reserves the right to modify, amend or terminate benefits and to modify or amend benefit eligibility requirements at any time and for any reason, subject to any legal restrictions.

The University offers the following benefits for full-time employees:

- Medical Insurance
- Dental Insurance
- Vision Coverage
- Long Term Disability Insurance
- 401(k) Retirement Plan (conditional upon meeting 401(k) plan eligibility requirements)

Part-time employees who work at least 30 hours per week are eligible for the following California Northstate University benefits:

- Medical Insurance
- Dental Insurance
- Vision Coverage
- 401(k) Retirement Plan (conditional upon meeting 401(k) plan eligibility requirements)

Part-time employees who work at least 20 hours per week but less than 30 hours per week are eligible for the following California Northstate University benefits:

- 401(k) Retirement Plan (conditional upon meeting 401(k) plan eligibility requirements)

Important Note: This handbook provides only a general overview of the benefits provided to eligible employees. Employees should refer to the separate publication distributed by the third party benefit/service carrier contracted by the University for each benefit for more details. In the event there is a conflict between the handbook and the separate publication, the separate publication will control. California Northstate University reserves the right to alter, modify, suspend or eliminate any California Northstate University-sponsored benefits (this does not include State Disability Insurance or Paid Family Leave, which are operated by the State of California).

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Health Insurance

The University provides a medical, dental, and vision insurance plan for eligible employees and their dependents. Employees who work 30 or more hours per week are eligible to participate on the first day of the month following 30 consecutive days of employment. For example, if an employee starts work on March 1st, the employee is eligible to participate in the University's medical insurance plan on April 1st. Unless health benefits extension is covered by state or federal law, benefits will terminate according to our insurance carrier's policy. Contact Human Resources for more information.

Disability Insurance

Each employee contributes through payroll tax to California's state disability insurance programs. Disability insurance is mandated by the California Unemployment Insurance Code and administered by the Employment Development Department. Disability insurance is payable when you cannot work because of illness or injury not caused by employment at the University. An additional tax funds the state's Paid Family Leave program, and provides partial wage replacement for absences related to care of a family member, or bonding with a new child. Specific rules and regulations governing disability are available from Human Resources. The SDI claim form can be obtained from EDD website: www.EDD.ca.gov.

Unemployment Compensation

The University contributes each year to the California Unemployment Insurance Fund on behalf of its employees.

Social Security

Social Security is an important part of every employee's retirement benefit. The University pays a matching contribution to each employee's Social Security taxes.

4.2 Bonuses

Occasionally, the University may award a discretionary bonus to qualifying employees. Bonuses are based on such factors as business performance and individual merit and are awarded at the sole discretion of University management. Award of a bonus does not establish the right to or expectation of future bonuses.

4.3 External Employee Education/ Faculty and Staff Development

Some employees may need to attend offsite training programs, seminars, conferences, lectures, meetings, or other outside activities for the benefit of California Northstate University or the individual employees. Attendance at such activities, whether required by the University or requested by individual employees, requires the written approval of the College Dean or appropriate University Administrator, and is subject to the availability of budgeted funds. To obtain approval, any employee wishing to attend an activity must submit a written request detailing all relevant information, including date, hours, location, cost, expenses, and the nature, purpose, and justification for attendance.

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Faculty are authorized up to a maximum of five paid offsite professional development days per each year with approval from the College Dean. Development must fulfill the requirements as stated in the Faculty Development portion of this policy below.

Staff are authorized up to a maximum of three paid offsite professional development days per each year with the approval from the College Dean. Development must fulfill the requirements as stated in the Staff Development portion of this policy below.

Attendance at any such event is subject to the following policies on reimbursement and compensation. For attendance at events required or authorized by the University, customary and reasonable expenses will be reimbursed upon submission of proper receipts. Acceptable expenses generally include registration fees, materials, meals, transportation, and parking. Reimbursement policies regarding these expenses should be discussed with the College Dean or appropriate University Administrator in advance. Employees are required to take advantage of early registration for conferences, advance booking of hotel and flights, and other available discount programs, when available; reimbursement will be at rates based on early registration, advance booking and other available discount programs.

Employee attendance at authorized outside activities will be considered hours worked for non-exempt employees and will be compensated in accordance with normal payroll practices.

This policy does not apply to an employee's voluntary attendance, outside of normal working hours, at formal or informal educational sessions, even if such sessions generally may lead to improved job performance. While California Northstate University generally encourages all employees to improve their knowledge, job skills, and promotional qualifications, such activities do not qualify for reimbursement or compensation under this policy unless prior written approval is obtained as described previously.

Faculty Development

Faculty development is an ongoing process designed to enhance the teaching and research skills of academics throughout the careers of University faculty. The goal is to increase both teaching effectiveness and scholarly productivity. The success of the program is highly dependent on the sustained commitment of the administration to provide the appropriate space and resources and the faculty's commitment to continuous development of their skills. The purpose is to provide an academic environment that stimulates innovation in teaching, research, and scholarly activity and encourages University faculty to develop and grow intellectually and professionally and maximize their academic productivity.

Basic resources needed for a successful faculty development program include:

- Encouragement and support from administration for developmental activities
- Release time away from certain faculty and patient care responsibilities
- Funds for travel, research expenses, and equipment consistent with the University's budget
- Appropriate space and routine equipment to conduct research

Programmatic responsibility for the Faculty Development Program is shared between the Department Chairs and the individual faculty. It is the responsibility of the Department Chair to provide the guidance and counseling necessary to assist the faculty member in focusing on

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specific needs and facilitating activities to address those needs. Ultimate success of a Faculty Development Program rests with the individual faculty member. Each faculty member should address his or her own needs, and through discussions with the Department Chair, focus on and address those needs through the Faculty Development Program.

Staff Development

Staff development is an ongoing process designed to enhance the skills University staff need throughout their careers. The goal is to increase both effectiveness and productivity. The success of the program is highly dependent on the sustained commitment of the administration to provide the appropriate space and resources and the staff's commitment to continuous development of their skills. The purpose is to provide an environment that stimulates innovation in administration and related activities and encourages University staff to develop and grow intellectually and professionally and maximize their productivity.

Basic resources needed for a successful staff development program include:

- Encouragement and support from administration for developmental activities
- Release time away from certain staff responsibilities
- Funds for developmental activities consistent with the University's budget.

Responsibility for the Staff Development Program is shared between University Administration, supervisors and the individual staff. It is the responsibility of the individual staff's supervisor to provide the guidance and counseling necessary to assist the staff member in focusing on specific needs and facilitating activities to address those needs. Ultimate success of a Staff Development Program rests with the individual staff member. Each staff member should address his or her own needs and through discussions with his or her manager.

4.4 Holidays

For the calendar year, California Northstate University observes the following paid holidays:

- January 1 (New Year's Day)
- Martin Luther King Jr.'s Birthday
- Presidents' Day
- Memorial Day
- July 4th (Independence Day)
- Labor Day
- Thanksgiving Day and the Friday after
- December 25 (Christmas Day)

When a holiday falls on a Saturday or Sunday, it is usually observed on the preceding Friday or the following Monday. However, California Northstate University may grant another day off in lieu of closing. Holiday observance will be announced in advance.

To be eligible for holiday pay, you must be regularly scheduled to work on the day on which the

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holiday is observed and must work your regularly scheduled working days immediately preceding and immediately following the holiday, unless an absence on either day is approved in advance by your supervisor or the absence is otherwise protected by law.

Non-exempt employees may not work on paid holidays. Any exceptions must be approved in advance by Human Resources.

4.5 Lactation Policy

California Northstate University accommodates lactating employees by providing a reasonable amount of break time to any employee who desires to express breast milk for an infant child. The break time shall, if possible, run concurrently with any break time already provided to the employee. Any break time provided to express breast milk that does not run concurrently with break time already provided to the employee shall be unpaid.

We will make reasonable efforts to provide employees who need a lactation accommodation with the use of a room or other private location that is located close to the employee's work area.

Employees who desire lactation accommodations should contact their supervisor or Human Resources to request accommodations.

Discrimination on the basis of sex includes discrimination based on breastfeeding and related medical conditions, and is unlawful.

4.6 Paid Family Leave

During an authorized unpaid leave of absence, employees may receive Paid Family Leave (PFL) from the State of California's Employment Development Department (EDD) up to six paid weeks off in a 12 month period to: 1) care for a seriously ill family member (parent, spouse, child, domestic partner or child of a domestic partner or to bond with a child); or to 2) bond with a new child during the first year after the birth or placement of the child in connection with foster care or adoption. For bonding, PFL is limited to the first year after the birth, adoption or foster care placement of a child. A separate certification must be completed for leave associated with bonding.

A seven calendar day waiting period exists before an employee may draw PFL. If an employee is absent for a reason that qualifies him/her for PFL payments, he/she is required first to use any accrued and unused vacation, up to a maximum of 10 days in a 12-month period. Thereafter, at the employee's option, PFL benefits may be supplemented with any accrued and unused vacation or sick time (as PFL benefits do not replace all of the employee's usual wages).

Eligibility for benefits is determined by the State. Benefits under PFL include approximately fifty-five percent (55%) of lost wages for employees who contribute to SDI. PFL does not create any rights to a leave of absence or reinstatement, but simply provides partial wage replacement for qualified employees. Employees must meet all EDD eligibility requirements to qualify for PFL benefits. Employees may contact the EDD or gather additional information regarding PFL

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benefits by visiting www.edd.ca.gov.

Employees collecting workers' compensation, unemployment or SDI are not eligible to collect PFL.

4.7 Workers' Compensation

California Northstate University, in accordance with state law, provides insurance coverage for employees in case of work-related injury. The workers' compensation benefits provided to injured employees may include:

- Medical care;
- Cash benefits, tax free, to replace lost wages; and
- Assistance to help qualified injured employees return to suitable employment.

To ensure that you receive any workers' compensation benefits to which you may be entitled, you will need to:

- Immediately report any work-related injury to your supervisor, Chair of the Safety Committee and Human Resources;
- Seek medical treatment and follow-up care if required;
- Complete a written *Employee's Claim for Workers' Compensation Benefits* (DWC Form 1) and return it to Human Resources; and
- Provide the University with a certification from your health care provider regarding the need for workers' compensation disability leave, as well as your eventual ability to return to work from the leave.

Upon submission of a medical certification that an employee is able to return to work after a workers' compensation leave, the employee under most circumstances will be reinstated to his or her same position held at the time the leave began, or to an equivalent position, if available. An employee returning from a workers' compensation leave has no greater right to reinstatement than if the employee had been continuously employed rather than on leave. For example, if the employee on workers' compensation leave would have been laid off had he or she not gone on leave, or if the employee's position has been eliminated or filled in order to avoid undermining the University's ability to operate safely and efficiently during the leave, and no equivalent or comparable positions are available, then the employee would not be entitled to reinstatement.

An employee's return depends on his or her qualifications for any existing openings. If, after returning from a workers' compensation disability leave, an employee is unable to perform the essential functions of his or her job because of a physical or mental disability, the University's obligations to the employee may include reasonable accommodation, as governed by the Americans with Disabilities Act.

The law requires California Northstate University to notify the workers' compensation insurance company of any concerns of false or fraudulent claims.

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University-Provided Physician

California Northstate University provides medical treatment for work-related injuries through a medical provider network, which the University has chosen to provide medical care to injured employees because of their experience in treating work-related injuries.

Workers' Compensation and FMLA/CFRA

Employees who are ill or injured as a result of a work-related incident, and who are eligible for family and medical leave under state and federal law (Family Medical Leave Act (FMLA) and the California Family Rights Act (CFRA)), will be placed on FMLA/CFRA during the time they are disabled and not released to return to work. The leave under these laws runs concurrently with Workers' Compensation Coverage, and eligible employees will be on FMLA/CFRA for a maximum of 12 weeks in a 12-month period calculated using a rolling year, which is defined as a year beginning on a yearly anniversary of an employee's date of hire.

5. Management

5.1 Employee Property

An employee's personal property, including but not limited to lockers, packages, purses, and backpacks, may be inspected upon reasonable suspicion of unauthorized possession of California Northstate University property, possession of dangerous weapons or firearms, or abuse of the University's drug and alcohol policy.

5.2 Employment of Relatives

Relatives of employees may be eligible for employment with California Northstate University only if individuals involved do not work in a direct supervisory relationship, or in job positions in which there is a conflict of interest. The University defines "relatives" as spouses, registered domestic partners, children, siblings, parents, in-laws, and step-relatives. Present employees who marry or become registered domestic partners will be permitted to continue working in the job position held only if they do not work in a direct supervisory relationship with one another or in job positions involving conflict of interest.

5.3 Names and Addresses Policy

California Northstate University is required by law to keep current all employees' names and addresses. Employees are responsible for notifying the University in the event of a name or address change.

5.4 Open-Door Policy: Suggestions and Complaints

Suggestions for improving California Northstate University are always welcome. At some time, you may have a complaint, suggestion, or question about your job, your working conditions, or the treatment you are receiving. Your complaints, questions, and suggestions also are of concern to the University. We ask you to first discuss your concerns with your supervisor, following these steps:

- Within a week of the occurrence, bring the situation to the attention of your immediate supervisor, who will then investigate and provide a solution or explanation.
- If the problem persists, you may describe it in writing and present it to your department manager, who will investigate and provide a solution or explanation. If you need assistance with your complaint, or you prefer to make a complaint in person, contact your department manager. We encourage you to bring the matter to your department manager as soon as possible after you believe that your immediate supervisor has failed to resolve it.
- If the problem is not resolved, you may present the problem in writing to the next level up of uninvolved institutional management, who will attempt to reach a final resolution. If you need assistance with the written complaint or who should review it, contact your department manager or Human Resources for help.

If you are not comfortable speaking to your immediate supervisor, please bring the issue to Human Resources or another member of management.

This procedure, which we believe is important for both you and the University, cannot guarantee that every problem will be resolved to your satisfaction. However, California Northstate University values your observations and you should feel free to raise issues of concern without

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the fear of retaliation.

5.5 Performance Evaluations

Each employee will receive annual performance reviews conducted by his or her supervisor. The frequency of additional performance evaluations may vary depending upon length of service, job position, past performance, changes in job duties, or recurring performance problems.

Your performance evaluations may review factors such as the quality and quantity of the work you perform, your knowledge of the job, your initiative, your work attitude, and your attitude toward others. The performance evaluations are intended to make you aware of your progress, areas for improvement, and objectives or goals for future work performance. Favorable performance evaluations do not guarantee increases in salary or promotions. Salary increases and promotions are solely within the discretion of California Northstate University and depend upon many factors in addition to performance. After the review, you will be required to sign the evaluation report simply to acknowledge that it has been presented to you, that you have discussed it with your supervisor, and that you are aware of its contents.

It is a requirement that all employees are to perform their respective job duties with due diligence and care, fulfilling their respective responsibilities with good will and commitment. Each and every employee is expected to recognize meeting performance expectations as a condition to maintaining employment status with the University.

5.6 Personnel Records

You have a right to inspect or receive a copy of the personnel records that California Northstate University maintains relating to your performance or to any complaint concerning you. Certain documents may be excluded or redacted from your personnel file by law, and there are legal limitations on the number of requests that can be made.

Any request to inspect or copy personnel records, subject to the above exclusions, redactions, and limitations, must be made in writing to Human Resources. You can obtain a form for making such a written request from Human Resources.

The personnel records may be made available to you either at the place where you work or at a mutually agreeable location (with no loss of compensation for going to that location to inspect or copy the records). The records will be made available no later than 30 calendar days from the date California Northstate University receives your written request to inspect or copy your personnel records (unless you/your representative and California Northstate University mutually agree in writing to a date beyond 30 calendar days). If you request a copy of the contents of your file, you will be charged the actual cost of copying.

You may designate a representative to conduct the inspection of the records or receive a copy of the records. However, any designated representative must be authorized by you in writing to inspect or receive a copy of the records. California Northstate University may take reasonable steps to verify the identity of any representative you have designated in writing to inspect or receive a copy of your personnel records.

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Disclosure of personnel information to outside sources, other than your designated representative, will be limited. However, California Northstate University will cooperate with request from authorized law enforcement or local, state, or federal agencies conducting official investigations and as otherwise legally required.

5.7 Privacy of Health Information (HIPAA)

Pursuant to state and federal law, including the Health Insurance Portability and Accountability Act (HIPAA), the University must take certain measures to protect employees' "protected health information." Protected health information is information relating to an individual's medical condition, the provision of medical care for that individual, or the payment for that individual's medical care, which can identify the individual to whom it relates. The University will not intimidate, threaten, coerce, discriminate against, or take other retaliatory action against an individual for exercising his/her HIPAA rights, filing a complaint, participating in an investigation or opposing any improper practice. Employees will not be required to waive these rights as a condition of treatment, payment enrollment or eligibility.

Information regarding an employee's medical condition is maintained in files separate from personnel files. Only those University officials who need to be informed regarding an aspect of the employee's personnel record or medical condition will be allowed access to these records. Confidential medical information may also be available to first aid or safety personnel in the event of an emergency.

5.8 Workplace Privacy - Audio/Video Recordings

California Northstate University is committed to the protection of privacy rights and proprietary or confidential information, as well as the prevention of sexual and other forms of harassment. Consequently employees may not make unauthorized audio or video recordings while on working time. Such recordings must be approved by your supervisor and are subject to legal review and oversight. Employees may not use any audio or video recordings in work areas that California Northstate University has identified as confidential, secure or private (e.g., restrooms, locker rooms, changing areas).

The University uses or may use video surveillance in public areas (not in restrooms, locker rooms or changing areas). The video surveillance will not include sound recording.

6. University Property

6.1 Employer Property

University owned or provided lockers, furniture, desks, computers, cell phones, and data processing equipment/software, are California Northstate University property and must be maintained according to University rules and regulations. They must be kept clean and are to be used only for work-related purposes. California Northstate University reserves the right to inspect all University property including computer or phone data or messages to ensure compliance with its rules and regulations, with or without notice to the employee and at any time, not necessarily in the employee's presence. Prior authorization must be obtained before any University property may be removed from the premises.

All your work product created in your employment or with University resources are the property of the University. As a result you must preserve, protect, and safeguard such work product, and you shall not destroy, delete, mutilate, or remove your work product.

University voice mail and/or electronic mail (e-mail) including texting, pagers and mobile email are to be used for business purposes. California Northstate University reserves the right to monitor voice mail messages, and e-mail messages, and texts to ensure compliance with this rule, with or without notice to the employee and at any time, not necessarily in the employee's presence.

California Northstate University may periodically need to assign and/or change "passwords" and personal codes for:

- Email
- Voicemail
- Computer access
- Alarm codes

These communication technologies and related storage media and databases are to be used only for University business and they remain the property of California Northstate University.

California Northstate University reserves the right to keep a record of all passwords and codes used and/or may be able to override any such password system. Messages on the University voice-mail and email systems are subject to the same University policies against discrimination and harassment as are any workplace communications. Offensive, harassing or discriminatory content in such messages will not be tolerated.

For security reasons, employees should not leave personal belongings of value in the workplace. Terminated employees should remove any personal items at the time they leave California Northstate University. Personal items left in the workplace are subject to disposal if not claimed at the time of an employee's termination.

6.2 Bulletin Boards

California Northstate University maintains bulletin boards located in the breakrooms. Bulletin boards are used to provide information to employees concerning pictures, events, notices, etc.

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Employees may not post items on University bulletin boards unless the following conditions are met:

- Postings may be made by University employees only;
- The information to be posted must first be approved by the immediate supervisor;
- Postings are limited to 8.5" x 11" in size;
- Bulletin boards will be updated monthly; and
- Posted items will be dated and will be removed after three months.

6.3 Electronic and Social Media

This policy is intended to protect the University's computer systems and electronic information.

For purposes of these policies, the following definitions apply:

"Computers" are defined as desktop computers, laptops, handheld devices (including but not limited to iPhones, Black berries, smart phones, iPads, and other electronic tablets and cell phones), computer software/hardware and servers.

California Northstate University also uses various forms of "electronic communication." "Electronic communications" includes e-mail, text messages, telephones, cell phones and other handheld devices (such as Blackberries, smart phones or writing tablets or iPads), fax machines, and online services including the Internet.

"Electronic information" is any information created by an employee using computers or any means of electronic communication, including but not limited to, data, messages, multimedia data, and files.

The following general policies apply:

- Computers and all data transmitted (by uploading, downloading, sending, or receiving) through California Northstate University servers are University property owned by the University for the purpose of conducting University business. These items must be maintained according to California Northstate University rules and regulations. Computers must be kept clean and employees must exercise care to prevent loss and damage. Prior authorization must be obtained before any University property may be removed from the premises.
- All electronic communications also remain the sole property of California Northstate University and are to be used for University business. For example, email messages are considered University records.
- Electronic information created by an employee using any computer or any means of electronic communication is also the property of California Northstate University and remains the property of California Northstate University.
- Information stored in California Northstate University computers and file servers, is the property of the University and may not be distributed outside the University in any form whatsoever without the written permission of the Legal Counsel, including but not limited to:

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- New business ideas;
- University financial information, strategies and plans;
- Information related to potential acquisitions or investments;
- Databases and the information in them;
- Student financial/personal information;
- Computer software source codes and computer/network access codes;
- Terms of the University's agreements with vendors, suppliers, landlords, consultants, and others doing business with the University;
- Information that has been identified as confidential or proprietary by the University;
- Employee, vendor, and student information are to be handled in accordance with the University procedures regarding confidentiality and privacy, including the University's HIPAA privacy policies. All documents containing employee, vendor, and student information are to be handled and disposed of in accordance with University privacy procedures;
- Accreditation, licensing, and related documents;
- Laboratory documents;
- Research and experimental research activities.

Violation of any of the provisions of this policy, whether intentional or not, will subject California Northstate University employees to disciplinary action, up to and including termination.

Monitoring of University Property

California Northstate University reserves the right to inspect all University property to ensure compliance with its rules and regulations, with or without notice to the employee and at any time, not necessarily in the employee's presence. California Northstate University computers and all electronic communications and electronic information are subject to monitoring, and no one should expect privacy regarding such use. The University reserves the right to access, review and monitor electronic files, information, messages, text messages, e-mail, Internet history, browser-based webmail systems and other digital archives and to access, review and monitor the use of computers, software, and electronic communications to ensure that no misuse or violation of University policy or any law occurs.

E-mail may be monitored by the University and there is no expectation of privacy. Assume that e-mail may be accessed, forwarded, read or heard by someone other than the intended recipient, even if marked as "private."

Employee passwords may be used for purposes of security but the use of a password does not affect the University's ownership of the electronic information or ability to monitor the information. The University may override an employee's password for any reason. System security features such as passwords and message delete functions do not neutralize or inhibit California Northstate University's ability to access such materials.

Employees are not permitted to access the electronic communications of other employees or third parties unless directed to do so by California Northstate University management.

Portable Electronic Storage Devices

To prevent the unauthorized release of proprietary or confidential information, all portable

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electronic storage devices are prohibited from use on campus (e.g. USB, CD, DVD, all other portable electronic storage devices).

Prohibited Use

All existing University policies apply to employee use of computers, electronic communications, electronic information, and the Internet. This includes policies that deal with misuse of University assets or resources. It is a violation of California Northstate University policy to use computers, electronic communications, electronic information, or the Internet, in a manner that: is discriminatory, harassing or obscene; constitutes copyright or trademark infringement; violates software licensing rules; is illegal; or is against California Northstate University policy. It is also a violation of policy to use computers, electronic communications, electronic information, or the Internet to communicate confidential or sensitive information or trade secrets.

The communication or display of any kind of sexually explicit or suggestive multimedia content, racial slurs, or any other offensive comment related to gender, age, sexual orientation, religious or political beliefs, national origin, or disability on any University property is prohibited. Employees should refrain from putting any information on University-owned equipment that is inappropriate, unlawful or that could prove embarrassing.

University provided computers; electronic communications, electronic information, telephone systems, and the Internet are to be used only for work-related purposes. No personal use of this University property is permitted at any time.

Employees that engage in such prohibited actions will be subject to discipline and/or immediate termination.

Social Media

When engaging in social networking, it is the expectation that employees are respectful of our University, our employees, our students, our products and services, our competitors, and other business related individuals and organizations (e.g., vendors, community service affiliates, entertainers, etc.) at all times. Communications in breach of confidentiality and University proprietary interests or that disparage the University to third parties shall be grounds for discipline and/or immediate termination.

Personal Use of University Computer and Electronic Mail Systems

Employees may not install personal software on University computer systems. Employees are not permitted to access the electronic communications of other employees or third parties unless directed to do so by University management. No employee may install or use anonymous e-mail transmission programs or encryption of e-mail communications, except as specifically authorized by management.

All non-exempt employees are prohibited from having CNSU email or access to CNSU email on their personal cell phones, tablets, or smart phones.

6.4 Guests and Visitors

It is extremely important that the impression left with California Northstate University visitors is that of a professional organization with the highest standards of conduct. Employees must recognize that the University may have an insurance liability for persons visiting University business locations. Therefore, it becomes necessary for the University to establish this policy, the intent of which restricts business hours and work location visitation, excluding suppliers, vendors, business associates, applicants, and students. Friends, relatives, or other unauthorized persons, including employees who are not scheduled for work, will not be permitted to visit an employee during working hours or at work locations without the express permission of supervisory personnel. If warranted by the nature of an unforeseen visit, the employee may request taking an authorized unscheduled break from work away from University property, the time of which may be non-compensated. Friends, relatives, or other unauthorized persons, including employees who are not scheduled for work, will not be permitted to ride in University vehicles. The University reserves its right in its sole discretion to deny such a request for reasons including, but not limited to, the requested guest or visitor has been disruptive in the past, there is a special event scheduled on the date(s) requested, or the work environment is not appropriate for the visitor or guest due to safety or other reasons.

6.5 Housekeeping

All employees are expected to keep their work areas clean and organized. People using common areas such as lunch rooms, conference rooms, and restrooms are expected to keep them sanitary. Please clean up after meals and dispose of trash properly.

6.6 Off-Duty Use of Facilities

Employees are prohibited from unreasonably remaining on California Northstate University premises or unreasonably making use of University facilities while not on duty, unless specifically authorized. Employees are prohibited from unreasonably using University facilities, University property, or University equipment for personal use.

6.7 Parking

Employees may park their vehicles in designated areas, if space permits. If space is unavailable, employees may park in permissible public areas in the vicinity of California Northstate University property. Employees may not use parking areas specifically designated for visitors or vendors. Parking spaces specifically designated for Administrators should be used only by those Administrators. California Northstate University is not responsible for any loss or damage to employee vehicles or contents while parked on University property. All vehicles must clearly display a California Northstate University parking placard.

Parking areas may be monitored with video or other surveillance for purposes of protecting University property. Employees should not rely upon the surveillance system to provide them with personal security.

6.8 Smoking

Smoking is not allowed in any enclosed area of the facility. This also includes e-cigarettes.

6.9 Solicitation and Distribution of Literature, Commercial Interests/Products

In order to ensure efficient operation of the University's business and to prevent disruption to employees, the University has established control of solicitations and distribution of literature, outside and unrelated commercial interests/products on University property. California Northstate University has enacted rules applicable to all employees governing solicitation, distribution of written material, and entry onto the premises and work areas. All employees are expected to comply strictly with these rules. Any employee who is in doubt concerning the application of these rules should consult with his or her supervisor.

No employee shall solicit or promote support for any outside cause or organization during his or her working time or during the working time of the employee or employees at whom such activity is directed. No employee shall distribute or circulate any such written or printed material in work areas at any time, or during his or her working time, or during the working time of the employee or employees at whom such activity is directed.

Under no circumstances will non-employees be permitted to solicit or to distribute written material for any purpose on University property.

7. Employee Conduct

7.1 Business Conduct and Ethics

This Ethics Policy Statement applies to all employees and members of California Northstate University, its Board of Trustees, and California Northstate University LLC, and its affiliates' Board of Directors/ Managers.

Honesty and integrity is the cornerstone upon which California Northstate University was founded and upon which we operate. We are proud that California Northstate University employees have always maintained a high standard of behavior. We intend that California Northstate University always conducts its affairs according to the highest standards of corporate performance, and that its business and the actions of all California Northstate University employees comply with the spirit and intent of the law and moral codes under which we operate and live. Form and appearance are important. We expect California Northstate University employees to behave in a manner that is consistent with the highest standards of both corporate and personal behavior.

Our overriding principle is integrity, and we pledge ourselves to be honest in our relationships with each other, with individuals outside the University, and with other organizations. In the final analysis, there is no way to insure proper behavior except through the desire of the individual. There is no way to provide rules of conduct that will apply to every possible situation. This Ethics Policy Statement establishes a broad code of conduct which sets minimum goals and provides guidelines to cover the most common and the most sensitive situations. All Officers, department chairs, and managers of the University, its subsidiaries, and affiliates are responsible for the monitoring and enforcement of this policy statement within their specific areas of supervisory responsibility.

Any employee of the University who discovers any event of a questionable, fraudulent, or illegal nature which is, or may be, in violation of the University's policies, is to immediately report such event to the General Counsel or other officers of the University. Such reports may be made without fear of retaliation of any kind.

Business Transactions

- All employees shall at all times adhere to all laws and regulations that may be applicable to the University's business.
- The use of funds, property, or things of value of the University or any of its subsidiaries for any purpose which would be in violation of any applicable law or regulation is strictly prohibited.
- Compliance with generally accepted accounting rules and controls is required. No false, artificial, or misleading entries on the books and records of the University or its subsidiaries shall be made for any reason whatsoever.
- No fund or asset which is not fully and properly recorded on the books and records of the University, its subsidiaries and affiliates, as appropriate, shall be created or permitted to exist.
- No transaction shall be effected and no payment shall be made on behalf of the University, any of its subsidiaries, or affiliates, with the intention or understanding that the

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transaction or payment is other than that as described in the documentation evidencing the transaction or supporting the payment.

- No promise or statement shall be made on behalf of the University which the author or speaker knows to be false or misleading.
- No employee shall engage in any illegal or unethical act, including but not limited to payments or promises to make payments, to obtain special favors or consideration, or to obtain business for the University.

Unless explicitly approved in writing by the Office of the President, no employee is allowed or permitted to enter into any binding contract on behalf of the University or its colleges. Only the University President has the signatory authority and authority to represent the University or its colleges and enter into contracts or binding agreements on behalf of the University or its colleges. All contracts or binding agreements must be reviewed by the University General Counsel before execution by the Office of the President.

International Business Laws

Employees are required to comply with the applicable laws in all countries to which they travel, in which they operate, and where the University otherwise does business, including laws prohibiting bribery or corruption. In addition, employees are required to comply with U.S. laws, rules, and regulations governing the conduct of business by its citizens and corporations outside the U.S., including the Foreign Corrupt Practices Act, the U.S. Embargoes or Sanctions Program, Export Controls, and Anti-boycott Compliance.

7.2 Conducting Personal and Other Business

Employees should conduct only California Northstate University business while at work. Personal business should be kept to a minimum in a way that does not interfere with the employee's work performance, take away from work time or violate any University policy. Employees may not conduct business for another employer during their scheduled working hours, without explicit written authorization from University General Counsel.

7.3 Confidential Information and Privacy

Each employee is responsible for safeguarding the confidential information obtained during employment.

In the course of your employment you will be exposed to information that California Northstate University considers and protects as confidential, proprietary and trade secret information. It is your responsibility to in no way reveal or divulge any such information in the performance of your duties. Access to confidential information should be on a "need-to-know" basis and must be authorized by the appropriate University official. Any breach of this policy will not be tolerated and the University may take legal action. Even after your employment with California Northstate University terminates, you are required to maintain the confidentiality of this information and not disclose it for any reason.

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The confidential information to which you are privy and which you must maintain as confidential includes, but is not limited to: student names and contact information; billing, payment, budget, and pricing information; other financial information relating to students; business and marketing strategies or practices; any information disclosed to the University; student files and all information contained in those files; computer files and access information.

Employees shall not use information that is confidential and proprietary to the University for their own benefit or purposes unrelated to University business or disclose it, directly or indirectly, to anyone outside the University during or at any time after employment with the University. Such information includes, but is not limited to:

- Financial information.
- New business ideas.
- University strategies and plans (excluding the published strategic plan).
- Information related to potential acquisitions or investments.
- Databases and the information in them.
- Student financial/personal information.
- Computer software source codes and computer/network access codes.
- Terms of the University's agreements with vendors, suppliers, landlords, consultants, and others doing business with the University.
- Information that has been identified as confidential or proprietary by the University.
- Employee, vendor, and student information are to be handled in accordance with the University procedures regarding confidentiality and privacy, including the University's HIPAA privacy policies. All documents containing employee, vendor, and student information are to be handled and disposed of in accordance with University privacy procedures.
- Accreditation, licensing, and related documents.
- Laboratory documents.
- Research and experimental research activities (excluding the publications).

Attorney-Client Confidentiality

On occasion, you may be a participant in discussions involving confidential University business, including matters that are the subject of a pending or potential lawsuit. The dissemination of this information to you and others is necessary to communicate litigation strategy and implement the advice of counsel. You must maintain the confidentiality of this information. The information is protected by the attorney-client privilege. The privilege is owned by the University. As a result, only the President or the Board of Directors can authorize the dissemination of any litigation

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information. You cannot discuss the information with others including co-workers, spouses or friends.

Document Retention

In some cases, such as when litigation is pending or foreseeable, you may have a duty to stop normal purging procedures and preserve existing data. The University will provide notice to affected employees if this duty arises. Altering or deleting documents during a purging or litigation hold will be considered grounds for discipline up to and including termination.

7.4 Conflicts of Interest

All employees must avoid situations involving actual conflict of interest. All employees are expected to have read the University's entire Conflict of Interest Policy and complete the required annual Acknowledgement and Disclosure form including the required updates throughout the year.

Personal, financial, or romantic involvement with a competitor, supplier, or subordinate employee of California Northstate University, which impairs an employee's ability to exercise good judgment on behalf of the University, can create an actual conflict of interest. Supervisor-subordinate romantic or personal relationships also can lead to supervisory problems, possible claims of sexual harassment, and morale problems.

An employee involved in any of the types of relationships or situations described in this policy should immediately and fully disclose the relevant circumstances to his or her immediate supervisor, or any other appropriate supervisor, for a determination about whether an actual conflict exists. If an actual conflict is determined, California Northstate University may take whatever corrective action appears appropriate according to the circumstances. Failure to disclose facts shall constitute grounds for disciplinary action.

All employees have a duty to the University to be free from the influence of any conflicting interest when representing the University in negotiations, or when making recommendations with respect to dealing with third parties. Such employees are expected to deal with students, suppliers, students, contractors, landlords, and all others doing business with the University on the sole basis of what is in the best interest of the University, without favor or preference to third parties based on personal considerations.

Financial Interests

Employees who deal with suppliers, students, contractors, landlords, or anyone else doing business with the University – or who make recommendations with respect to such dealings or pass judgment upon them – shall not own any interest in, or have any personal contract, agreement, or understanding of any nature whatsoever with those individuals who might tend to influence the decision of the employee with respect to the business of the University.

Ownership of publicly offered stock in any of our suppliers or in any competitive organization is permissible, provided that the interest is of an investment nature and constitutes no more than 5% of the outstanding capital stock.

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Employees shall not do business with a close relative on behalf of the University unless expressly authorized in writing to do so by the Conflict of Interest Committee after the relationship has been disclosed.

Employees are prohibited from exploiting their positions with the University for personal gain, or for the gain of any other person or outside organization. Employees may also not engage in a business that competes with the University.

Any deviation from the foregoing statements must have the written consent of the President or delegated University official who has the final authority and responsibility, to determine what steps are to be taken to correct any situation deemed not in the best interest of the University.

Gift Policy

Every vendor, student and other person dealing with California Northstate University is entitled to efficient and courteous service. Since such service is given impartially to all, gratuities and gifts are not appropriate. In addition, all vendors are contracted based on level of service and operations demands. To maintain a fair marketplace and minimize the perception of obligation or entitlement, employees are not allowed to accept gifts from students or vendors. If an individual presses an employee to accept such a gift, the employee should thank him/her, but explain that University policy prohibits accepting gifts valued at \$25 or greater unless the gift or favor is disclosed to and approved in advance in writing by the appropriate University official.

No employee may accept a gift or gratuity from any student, vendor, supplier, or other person doing business with the University outside the scope of their job. Doing so may give the appearance of influencing business decisions, transactions, or service. Please discuss expenses paid by such persons for business meals or trips with the University in advance.

Employees shall not seek or accept, directly or indirectly, payments, loans, services, entertainment, or gifts from any individual or from the representative of any business doing or seeking to do business with the University. Routine loans of reasonable amounts from commercial banks are excluded from this restriction.

Executive officers and members of the Board of Trustees and Board of Directors/Managers may not accept personal loans from any person or entity doing business with the University, nor may any such person or entity guarantee any personal obligation of such executive officer or director. The foregoing shall not prohibit an executive officer or member of the Board of Trustees or Board of Directors/Managers from accepting a loan from a commercial bank or lender doing business with the University, provided that such loan is made in the ordinary course of such bank or lender's business on commercially reasonable terms. Executive officers and members of the Board of Trustees and Board of Directors/Managers also may not request or accept loans or payroll advances from the University.

Employees may not furnish or offer to furnish any gifts, entertainment, meals, or anything of value to a person who has business dealings with the University under circumstances that might create the appearance of impropriety. Such items may be provided, other than to governmental officials and employees, if they are reasonable complements to business relationships, or modest value, and not against the law or the policy of the recipient's University. These items must also be documented on an expense report. Giving or receiving money or a cash equivalent as a business gift is prohibited.

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Giving gifts or entertainment to any domestic or foreign government official or employee is highly regulated and often prohibited. A government employee is any individual employed by the federal, state, or local entity, or a consultant acting on behalf of the entity. For this reason, employees shall not directly or indirectly pay, give, offer, or promise any entertainment or gift of value to any government official or employee without the prior approval of the General Counsel.

Meals and entertainment are only to be offered or accepted when both the employee and individual or representative of a business concern are present and a substantial business discussion takes place during, directly before, or directly after the activity, and only with the prior approval of the responsible University official. Sponsored events that are a part of University authorized attendance at trade shows, seminars, or conventions do not require prior notice.

The solicitation, purchase, or acceptance of entertainment or sporting event tickets for personal use is prohibited. There may be special circumstances in which terms such as entertainment tickets are converted to use by and for the benefit of the University. In such cases, adequate documentation must be maintained and prior approval of the responsible University official is required.

Government Programs

The University is committed to compliance with all federal and state higher education statutes, rules, regulations, guidelines, and programs that may be applicable. The University is also committed to preparing and submitting accurate billings consistent with applicable and appropriate procedures. It is the University's policy to comply strictly with all laws that regulate government contracting and to prohibit employees from submitting false, fraudulent, or misleading information in connection with goods and services reimbursable by the federal or state government.

Anti-Kickback

It is the University's policy to comply with all laws that regulate business transactions. Employees acting on behalf of the University may not demand, extract, give, or receive anything of value for their own benefit or for the unlawful benefit of others, including but not limited to entertainment or free or below cost services, in exchange for referring or receiving referrals, contracts, goods, or services.

Vendor Responsibility

California Northstate University requires all trading companies with which it does business and all final assembly manufacturers of goods to California Northstate University to comply with all applicable laws and regulations that relate to the conduct of their business. Representatives of the University will not knowingly purchase products from a supplier using child labor, as defined by the country of origin, prison labor, or involuntary labor. Any employee who becomes aware of a supplier violating this policy will immediately cease all relationships with that supplier and report the occurrence to a corporate attorney.

Reporting and Non Retaliation

Employees should feel free to report what they believe, in good faith, to be violations of ethics policies set forth above, without fear of retaliation. Employees may report or discuss violations with their supervisor, Human Resources, or General Counsel.

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Employees who receive complaints or concerns, whether verbal or written, related to any applicable law or University policy, should communicate those complaints or concerns to their supervisor, Human Resources, or General Counsel.

Employees who receive complaints, concerns, whether verbal or written, related to accounting, internal accounting controls, or auditing matters should communicate those complaints to the General Counsel or Human Resources for review and investigation.

7.5 Dress Codes and Other Personal Standards

California Northstate University considers the presentation of its image to students, other employees, and the public to be an important factor in our success. As such, the University requires all employees to dress in good taste and observe good habits of grooming and personal hygiene. The University strives to present a professional image that will inspire confidence in our ability to represent the University. Clothing should be neat, clean, not create undue distractions, and consistent with safety guidelines. Hair must be trimmed and neat. Beards and mustaches may be worn if they are kept neat and well-trimmed. Make-up, jewelry and other accessories should be appropriate for our business and the employee's specific job function. Dress code requirements may vary based on job function, gender, level of client contact, safety issues and other business considerations.

Your professional appearance on campus reflects the overall impression of the University. Therefore, business casual attire is required for all employees during working hours. Business casual attire includes: suits, sport coats, or dress shirts and slacks with ties, collared shirts, blouses and sweaters with skirts or dress slacks or dresses. All clothing should be clean and without rips or holes. The following clothing is not considered business casual and should not be worn: jeans, sweatpants, shorts, mini-skirts, T-shirts, sweatshirts, halter tops, low-cut tops and tops which do not completely cover the midriff, all overly tight or revealing clothing, sneakers or sport shoes, flip-flops, or hiking boots.

California Northstate University observes occasional casual dress days. Some employees who have important business interactions may not be permitted to participate in the casual dress day. Employees who do participate in a casual dress day still are expected to report to work properly groomed. Acceptable casual dress **excludes** ripped or torn clothing, T-shirts of any kind (with or without a written message), tennis shoes, sweats, mini-skirts, tank or halter tops, or shorts. Employees required to wear safety equipment or clothing still must do so on a casual dress day. Department managers may issue more specific guidelines concerning any exceptions to this policy.

The College Deans have the discretion to administer more specific dress code requirements within these standards for their respective colleges. Employees who report to work inappropriately dressed may be asked to clock out and return in acceptable attire.

If you are uncertain as to the appropriateness of a specific clothing item, accessory or style of dress, please consult the appropriate University official. Employees who need a reasonable accommodation because of religious beliefs, observances or practices should contact Human Resources and discuss the need for accommodation.

7.6 Drug and Alcohol Abuse

California Northstate University is concerned about the use of alcohol, illegal drugs, or controlled substances as it affects the workplace. Use of these substances, whether on or off the job, can detract from an employee's work performance, efficiency, safety, and health, and therefore seriously impair the employee's value to the University. In addition, the use or possession of these substances on the job constitutes a potential danger to the welfare and safety of other employees and exposes the University to the risks of property loss or damage, or injury to other persons.

The following rules and standards of conduct apply to all employees either on University property or during the workday (including meals and rest periods). Behavior that violates University policy includes:

- Possession or use of an illegal or controlled substance, or being under the influence of an illegal or controlled substance while on the job;
- Driving a University vehicle while under the influence of alcohol; and
- Distribution, sale, or purchase of an illegal or controlled substance while on the job.

Violation of these rules and standards of conduct will not be tolerated. California Northstate University also may bring the matter to the attention of appropriate law enforcement authorities.

In order to enforce this policy, California Northstate University reserves the right to conduct searches of University property or employees and/or their personal property, and to implement other measures necessary to deter and detect abuse of this policy.

An employee's conviction on a charge of illegal sale or possession of any controlled substance while off University property will not be tolerated because such conduct, even though off duty, reflects adversely on California Northstate University. In addition, the University must keep people who sell or possess controlled substances off University premises in order to keep the controlled substances themselves off the premises.

Any employee who is using prescription or over-the-counter drugs that may impair the employee's ability to safely perform the job, or affect the safety or well-being of others, must notify a supervisor of such use immediately before starting or resuming work. Furthermore, the use of prescription drugs and/or over-the-counter drugs also may affect an employee's job performance and may seriously impair the employee's value to the University.

California Northstate University will encourage and reasonably accommodate employees with alcohol or drug dependencies to seek treatment and/or rehabilitation. Employees desiring such assistance should request a treatment or rehabilitation leave. The University is not obligated, however, to continue to employ any person whose performance of essential job duties is impaired because of drug or alcohol use, nor is the University obligated to re-employ any person who has participated in treatment and/or rehabilitation if that person's job performance remains impaired as a result of dependency. Additionally, employees who are given the opportunity to seek treatment and/or rehabilitation, but fail to successfully overcome their dependency or problem, will not automatically be given a second opportunity to seek treatment and/or rehabilitation. This policy on treatment and rehabilitation is not intended to affect the University's treatment of employees who violate the regulations described previously. Rather, rehabilitation

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is an option for an employee who acknowledges a chemical dependency and voluntarily seeks treatment to end that dependency.

7.7 News Media Contacts

Employees may be approached for interviews or comments by the news media. Only contact people designated by General Counsel may comment to news reporters on California Northstate University policy or events relevant to California Northstate University. If you are approached by a news medium for this purpose please immediately contact General Counsel.

7.8 Off-Duty Conduct

While California Northstate University does not seek to interfere with the off-duty and personal conduct of its employees, certain types of off-duty conduct may interfere with the University's legitimate business interests.

Off-duty conduct by an employee that directly conflicts with the University's essential business interests and disrupts business operations and conduct which reflects poorly on the University will not be tolerated.

7.9 Other Employment

While employed by California Northstate University, employees are expected to devote their energies to their jobs with the University. Employment that directly conflicts with the University's essential business interests and disrupts business operations is strictly prohibited. Below are prohibited conflicts:

- Additional employment that conflicts with an employee's work schedule, duties, and responsibilities at the University;
- Additional employment that creates a conflict of interest or is incompatible with the employee's position with the University;
- Additional employment that impairs or has a detrimental effect on the employee's work performance with the University;
- Additional employment that requires the employee to conduct work or related activities on University property during the employer's working hours or using University facilities and/or equipment; and
- Additional employment that directly or indirectly competes with the business or the interests of the University.

Employees who wish to engage in additional employment that may create a conflict of interest must submit a written request to California Northstate University explaining the details of the additional employment. If the additional employment is authorized, California Northstate University assumes no responsibility for it. California Northstate University shall not provide

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workers' compensation coverage or any other benefit for injuries occurring from or arising out of additional employment. Authorization to engage in additional employment can be revoked at any time.

7.10 Political Activity

Many employees participate in political activities on their own time. University time, facilities, property or equipment (including all computers, networks, and electronic equipment) must not be used for an employee's outside political activities. California Northstate University will not reimburse any employee for political contributions, and employees should not attempt to receive or facilitate such reimbursements.

Absent a formal statement by California Northstate University announcing any political endorsements, employees must not, through their own actions, speech, contributions, or written communication, mislead others to believe that California Northstate University officially endorses or opposes any political position or candidates for political office that California Northstate University itself has not publicly announced. University employees are entitled to their own personal position.

The University will not discriminate against employees based on their lawful political activity engaged in outside of work.

7.11 Prohibited Conduct

Employees are expected to conduct themselves in a manner to further the University's objectives. The following conduct is prohibited and will not be tolerated by California Northstate University. This list of prohibited conduct is illustrative only; other types of conduct that threaten security, personal safety, employee welfare and University operations also may be prohibited and will result in disciplinary action up to and including termination.

- Falsifying employment records, employment information, or other University records;
- Inefficient or careless performance of job responsibilities or inability to perform job duties satisfactorily;
- Recording the work time of another employee or allowing any other employee to record your work time, or falsifying any time card, either your own or another employee's;
- Theft and deliberate or careless damage or destruction of any University property, or the property of any employee or student;
- Removing or borrowing University property without prior authorization;
- Unauthorized use or misuse of University equipment, time, materials, or facilities;
- Provoking a fight or fighting during working hours or on University property;
- Participating in horseplay or practical jokes on University time or on University premises;
- Carrying firearms or any other dangerous weapons on University premises at any time;
- Engaging in criminal conduct whether or not related to job performance;
- Causing, creating or participating in a disruption of any kind during working hours on University property;

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- Insubordination, including but not limited to: improper conduct, failure or refusal to obey the orders or instructions of a supervisor or member of management, refusal to obey order to perform job assignments, disrespectful behavior, or the use of abusive or threatening language toward a supervisor or member of management;
- Using abusive, threatening or intimidating language at any time on University premises;
- Violation of University punctuality and attendance policies. Absences protected by state or federal law do not count as violations of this policy. Protected paid sick time under California law does not count as a violation of this policy;
- Failing to obtain permission to leave work for any reason during normal working hours, not including meal periods;
- Failing to observe working schedules, including rest and lunch periods;
- Sleeping or malingering on the job;
- Making or accepting personal telephone calls, including cell phone calls, of more than three minutes in duration during working hours, except in cases of emergency or extreme circumstances;
- Working overtime without authorization or refusing to work assigned overtime;
- Violation of dress code standards;
- Violating any safety, health, security or University policy, rule, procedure or violation of the University's drug and alcohol policy;
- Committing a fraudulent act or a breach of trust under any circumstances;
- Violating the University's anti-harassment or equal employment opportunity policies; and
- Failing to promptly report work-related injury or illness.

The foregoing is not all-inclusive, but only serves as examples of conduct that will not be tolerated. This statement of prohibited conduct does not alter the University's policy of at-will employment. Either you or California Northstate University remain free to terminate the employment relationship at any time, with or without reason or advance notice.

7.12 Prohibited Use of Cell Phone While Driving

California Northstate University employees are prohibited from the unlawful use of cell phones while driving on University business and/or University time. This prohibition extends to spoken, text, and other communication prohibited by law.

7.13 Punctuality, Attendance, and Job Abandonment

As an employee of California Northstate University, you are expected to be punctual and regular in attendance. Any tardiness or absence causes problems for your fellow employees and your supervisor. When you are absent, your assigned work must be performed by others.

Employees are expected to report to work as scheduled, on time, and prepared to start work. Employees also are expected to remain at work for their entire work schedule, except for meal periods or when required to leave on authorized University business. Late arrivals, early departures or other unanticipated and unapproved absences from scheduled hours are

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disruptive and must be avoided.

If you are unable to report for work on any particular day, you must provide reasonable advance notice to your supervisor before the time you are scheduled to begin working for that day. You must inform your supervisor of the expected duration of any absence. If you fail to provide reasonable advance notice to your supervisor at least two hours before your scheduled time to begin work and do not arrive on time for your assigned shift, you will be considered tardy for that day. If the circumstances for your tardiness or absence were unforeseen, inform your supervisor as soon as practicable of the reason for the tardiness or absenteeism.

Excessive absenteeism or tardiness, providing false information or abuse of leave laws will not be tolerated. If you fail to report for work without any notification to your supervisor and your absence continues for a period of three consecutive days of scheduled work, California Northstate University will consider that you have voluntarily abandoned or quit your employment.

Absences protected by local, state and federal law do not count as a violation of the punctuality and attendance policy. Paid sick time protected under California law does not count as a violation of this policy.

7.14 Student Relations

Employees are expected to be polite, courteous, prompt, and attentive to every student. When an employee encounters an uncomfortable situation that he or she does not feel capable of handling, your immediate supervisor should be called immediately. You must respond to inquiries from students, whether in person or by telephone, promptly and professionally. Student success is our first priority.

All correspondence and documents, whether to students or others, must be neatly prepared and error-free. Attention to accuracy and detail in all paperwork demonstrates your commitment to those with whom we do business.

Never argue with a student. If a problem develops or if a student remains dissatisfied, ask your supervisor to intervene.

Confidentiality of Student Lists and No Solicitation of Students

The employee agrees that student lists of California Northstate University, for which the employee has or will have access to during the employee's employment, are trade secrets and shall be solely the property of the employer. The employee agrees that he/she shall neither directly nor indirectly solicit business as to products or services based on information from the student lists.

FERPA

To ensure the California Northstate University campus community is in compliance with FERPA regulations, all employees are required to complete the online FERPA training module and quiz at least once during their employment at the University. After having completed the training, all employees will be required to attest to the Code of Confidentiality. FERPA training will be provided on a yearly basis for all employees whether online or in-person.

8. Wages

8.1 Advances

California Northstate University does not permit advances against paychecks or against unaccrued vacation or sick time.

8.2 Deductions for Exempt Employees

Employees paid on a "salary basis" regularly receive a predetermined amount of compensation each pay period. Subject to the exceptions listed below, exempt employees will receive full salary for any workweek in which they perform any work, regardless of the number of days or hours worked. Exempt employees may not be paid for any workweek in which they perform no work, subject to California Northstate University benefits programs and policies.

No deductions from salary may be made for time when work is not available, provided the exempt employee is ready, willing, and able to work. Deductions from pay are permissible when an exempt employee:

- Is absent from work for one or more full days for personal reasons other than sickness or disability;
- Is absent for one or more full days due to sickness or disability if the deduction is made in accordance with a bona fide plan, policy, or practice of providing full compensation for salary lost due to illness and the employee has exhausted his or her leave under this policy;
- Is absent for military duty for a full week and performs no work during the week; or
- Works less than a full week during the initial or final week of employment.

Partial day deductions from available accrued vacation or sick leave balances will also be made by the University when applicable.

It is University policy to comply with these salary basis requirements. Therefore, California Northstate University prohibits all University managers from making any improper deductions from the salaries of exempt employees. The University wants employees to be aware of this policy and know that the University does not allow deductions that violate federal or state law.

If you believe that an improper deduction from your salary has been made, you should immediately report this information to your direct supervisor, or to the bookkeeper. Reports of improper deductions will be investigated promptly. If it is determined that an improper deduction has occurred, you will be promptly reimbursed for any improper deduction made.

8.3 Expense Reimbursement

California Northstate University expects the employee to act responsibly and professionally when incurring and submitting his/her expense reimbursement. The employee will be reimbursed for reasonable expenses on pre-approved business activities. This includes, for example, travel fares, accommodations, meals, tips, taxi charges, and any other business transaction purchases made on behalf of California Northstate University.

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Should an employee use his/her personal vehicles for business travel, mileage will be reimbursed as per the current IRS standard business mileage rate. However, the employee is still responsible for any expenses associated with operating his/her own vehicle during business travel time, including but not limited to insurance deductible. California Northstate University will not be responsible for fuel, maintenance, traffic or parking violations.

Personal and/or vacation travel may be combined with business travel provided there is no additional cost to California Northstate University, and it meets with approval of the immediate supervisor. California Northstate University credit cards are not to be used for personal expenses.

General guidelines:

- Original receipts are required for reimbursement for all expenses.
- Receipts must be accompanied by the Expense Reimbursement Form itemizing each receipt on its own line. The Expense Reimbursement Form must include the following:
 - The nature of the expense
 - The name and title of the individuals involved
 - The purpose for the expense
 - Signature of the individual involved
 - Signature of Supervisor
 - Signature of the Dean for all faculty members
- All expense reimbursement forms and supporting documentation must be submitted to Accounting Department no later than the 30th of each month in which the expenses incurred.
- Any incomplete expense reimbursement form will be returned to the requester or manager/supervisor.
- Any expense reimbursement form without proper supporting documentation and or proper signature will be returned to the requester or manager/supervisor.

Travel guidelines:

- Employee is encouraged to fly coach class with the lowest available airfare.
- If a car rental is required, employee is requested to rent mid-sized or compact vehicles. The employee will be reimbursed for the fuel costs associated with the renting a vehicle with its original receipt(s).
- Employee will be reimbursed for reasonable hotel accommodations. Discounted room rates should be requested at the time of room booking.
- California Northstate does not honor Per Diem rates for meals while on business trip; therefore, receipts are required for all business transactions. No receipts, no reimbursement. The guidelines on how much to spend for breakfast, lunch, and dinner for an employee traveling on business trip are:
 - Under \$10.00 for breakfast
 - Under \$20.00 for lunch
 - Under \$30.00 for dinner
- The following are examples of non-reimbursable expenses:

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- Personal travel insurance
- Personal reading materials
- Childcare
- Pet care
- Toiletries, cosmetics, or grooming products
- Expenses incurred by spouses, children, or relatives
- In-room movies or video games
- Alcohol
- Sporting activities, shows, etc.

If you have any questions about the University's expense reimbursement policy, contact your immediate supervisor.

8.4 Makeup Time

California Northstate University allows the use of makeup time when non-exempt employees need time off to tend to personal obligations. Employees may take time off and then make up the time later in the same workweek, or may work extra hours earlier in the workweek to make up for time that will be taken off later in the workweek. Makeup time worked will not be paid at an overtime rate.

Makeup time requests must be submitted in writing to your supervisor, with your signature, on the University-provided form. Requests will be considered for approval based on the legitimate business needs of the University at the time the request is submitted. A separate written request is required for each occasion the employee requests makeup time.

If you request time off that you will make up later in the week, you must submit your request at least 24 hours in advance of the desired time off. If you request to work makeup time first in order to take time off later in the week, you must submit your request at least 24 hours before working the makeup time. Your makeup time request must be approved in writing before you take the requested time off or work makeup time, whichever is first.

All makeup time must be worked in the same workweek as the time taken off. The University's seven-day workweek is Sunday through Saturday. Employees may not work more than 11 hours in a day or 40 hours in a workweek as a result of making up time that was or would be lost due to a personal obligation.

If you take time off and are unable to work the scheduled makeup time for any reason, the hours missed will normally be unpaid. However, your supervisor may arrange with you another day to make up the time if possible, based on scheduling needs. If you work makeup time in advance of time you plan to take off, you must take that time off, even if you no longer need the time off for any reason.

An employee's use of makeup time is completely voluntary. California Northstate University does not encourage, discourage, or solicit the use of makeup time.

8.5 Meal and Rest Periods

Rest Breaks

All non-exempt employees are entitled to rest break periods during their workday. If you are a nonexempt employee, you will be paid for all such break periods, and you will not clock out. You are required to remain on the work premises during your rest break(s). You are expected to return to work promptly at the end of any rest break.

Number of Rest Breaks

You will be authorized and permitted one (1) 10-minute net rest break for every four (4) hours you work (or major fraction thereof, which is defined as any amount of time over two [2] hours). A rest break need not be authorized for employees whose total daily work time is less than three and one half (3.5) hours.

If you work a shift from three and one-half (3.5) to six (6) hours in length you will be entitled to one (1) ten-minute rest break. If you work more than six (6) hours and up to 10 hours, you will be entitled to two (2) ten-minute rest breaks. If you work more than 10 hours and up to 14 hours, you will be entitled to three (3) ten-minute rest breaks.

Timing of Rest Breaks

You are authorized and permitted to take a rest break in the middle of each four hour work period.

Your rest break will be scheduled by your supervisor.

Meal Period

All non-exempt employees will be provided an uninterrupted unpaid meal period of at least 30 minutes if you work more than five (5) hours in a workday. You must clock out for your meal period. You will be permitted a reasonable opportunity to take this meal period, and you will be relieved of all duty. During your meal period, you are free to come and go as you please and are free to leave the premises. You are expected to return to work promptly at the end of any meal period.

If your total work period for the day is more than five hours per day but no more than six hours, you may waive the meal period. This cannot be done without the mutual consent of you and your supervisor. The waiver must be in writing. You must discuss any such waiver with your supervisor in advance.

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Timing of Meal Period

Your meal period will be provided no later than the end of your fifth hour of work. For example, if you begin work at 8:00 a.m., you must start your meal period by 12:59 p.m. (which is before the end of your fifth hour of work).

Your meal period will be scheduled by supervisor.

Second Meal Period

If you work more than 10 hours in a day, you will be provided a second unpaid meal period of at least 30 minutes. Again, you must clock out for your meal period. You will be permitted a reasonable opportunity to take this meal period, and you will be relieved of all duty. There will be no control over your activities during your meal period. During your meal period, you are free to leave the premises and are free to come and go as you please. You are expected to return to work promptly at the end of any meal period.

Depending on the circumstances, you may be able to waive your second meal period if you took the first meal period and if your total hours worked for the day is no more than twelve hours. This cannot be done without the mutual consent of you and your supervisor and must be in writing. You must discuss any such waiver with your supervisor in advance.

Timing of Second Meal Period

This second meal period will be provided no later than the end of your 10th hour of work.

Your second meal period will be scheduled by supervisor.

Recording Meal Periods

You must clock out for any meal period and record the start and end of the meal period. Employees are not allowed to work "off the clock." All work time must be accurately reported on your time record.

If for any reason you are not provided a meal period in accordance with our policy, or if you are in any way discouraged or impeded from taking your meal period or from taking the full amount of time allotted to you, please immediately notify Human Resources.

Anytime you miss a meal period that was provided to you (or you work any portion of a provided meal period), you will be required to report to your supervisor and document the reason for the missed meal period or time worked.

Please also refer to the California Northstate University Timekeeping Policy.

8.6 No Work from Home

California Northstate University does not have a policy that allows working from home, in lieu of working at the workplace. All employees are required to work their scheduled shift on University campuses or as dictated by job requirements.

8.7 Overtime for Non-Exempt Employees

Employees may be required to work overtime as necessary. Only actual hours worked in a given workday or workweek can apply in calculating overtime. California Northstate University will attempt to distribute overtime evenly and accommodate individual schedules. All overtime work must be previously authorized by a supervisor. California Northstate University provides compensation for all overtime hours worked by non-exempt employees in accordance with state and federal law as follows:

- All hours worked in excess of eight hours in one workday or 40 hours in one workweek will be treated as overtime. A workday begins at 12:01 a.m. and ends at midnight 24 hours later. Workweeks begin each Sunday at 12:01 a.m.;
- Compensation for hours in excess of 40 for the workweek, or in excess of eight and not more than 12 for the workday, and for the first eight hours on the seventh consecutive day of work in one workweek, shall be paid at a rate one and one-half times the employee's regular rate of pay;
- Compensation for hours in excess of 12 in one workday and in excess of eight on the seventh consecutive workday in a workweek shall be paid at double the regular rate of pay; and
- Exempt employees may have to work hours beyond their normal schedules as work demands require. No overtime compensation will be paid to exempt employees.

Make-up time worked in accordance with the make-up time policy is not paid at the overtime rate. Please refer to the make-up time policy.

8.8 Pay for Mandatory Meetings/Training

California Northstate University will pay non-exempt employees for their attendance at meetings, lectures, and training programs under the following conditions:

- Attendance is mandatory;
- The meeting, course, or lecture is directly related to the employee's job;
- The employee who is required to attend such meetings, lectures, or training programs will be notified of the necessity and approval for such attendance by his or her supervisor;
- The employee will be paid at their regular wage for time spent at meetings, lectures, and training programs; and
- Any hours in excess of eight in a day or 40 in a week will be paid at the appropriate overtime rate, at the hourly rate in effect at the time the overtime work is being performed.

8.9 Payment of Wages

Paydays normally occur and paychecks are normally available at the 15th and last day of each month. If a regular payday falls on a weekend or holiday, employees will be paid on the preceding business day. If one of these days falls on a weekend or a holiday, paychecks will be distributed the preceding Friday or the following Monday. Please refer to the University payroll schedule for specific dates.

If you observe an error on your check, please report it immediately to the bookkeeper.

California Northstate University offers automatic payroll deposit. You may begin and stop automatic payroll deposit at any time.

To begin automatic payroll deposit, you must complete a form (available from the payroll department) and return it to the bookkeeper at least 3 days before the pay period for which you would like the service to begin. You should carefully monitor your payroll deposit statements for the first two pay periods after the service begins.

To stop automatic payroll deposit, complete the form available from the payroll department and return it to the bookkeeper at least three days before the pay period for which you would like the service to end. You will receive a regular payroll check on the first pay period after the receipt of the form, provided it is received no later than three days before the end of the pay period.

8.10 Reporting-Time Pay

California Northstate University will comply with all applicable regulations regarding reporting-time pay for non-exempt employees.

California Northstate University will pay a minimum of two hours of pay to employees who are required to report to work on a day other than their normally scheduled workday.

California Northstate University will not pay employees who report to work but are unable to work under the following circumstances:

- Interruption of work because of the failure of any or all public utilities; or
- Interruption of work because of natural causes or other circumstances beyond the University's power to control.

8.11 Timekeeping Requirements for Non-Exempt Employees

All non-exempt employees are required to use timesheets to record time worked for payroll purposes. All time worked must be accurately reported on your time record.

Employees must record their own time at the start and at the end of each work period. Employees must clock out for their meal period and record the start and end of the meal period. Employees also must record their time whenever they leave the building for any reason other than California Northstate University business.

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Employees are not allowed to work "off the clock." Working off the clock violates University policy. Any work performed before or after a regularly scheduled shift must be approved in advance by your supervisor. If you perform any off-the-clock work, please report the work to your supervisor.

Employees will be required to certify that their time record is accurate.

Any handwritten marks or changes on the timecard must be initialed by a supervisor. Altering another employee's timecard or allowing another employee to alter your timecard is not permissible and is subject to disciplinary action.

Any errors on your timecard should be reported immediately to your supervisor.

Please also refer to California Northstate University's Meal and Rest Periods Policy.

8.12 Work Schedules

California Northstate University is normally open for business between the hours of 8:00a.m. to 7:00p.m., Monday through Friday. Your supervisor, with approval from the Dean of the College, will assign your individual work schedule. All employees are expected to be at their desks or workstations at the start of their scheduled shifts, ready to work.

Exchanging work schedules with other employees is discouraged. However, if you need to exchange schedules, notify your supervisor, who may authorize, with approval from the Dean of the College an exchange if possible. Work schedule exchanges will not be approved for the mere convenience of an employee or if the exchange interferes with normal operations or results in excessive overtime.

The workweek begins at 12:01 a.m. Sunday and ends at midnight on Saturday.

9. Safety and Health

9.1 Employees Who Are Required to Drive

Employees whose job duties require them to drive a University vehicle or their own vehicles for University business will be required to show proof of current valid driving licenses and proof of insurability under the University's policy or current effective insurance coverage before the first day of employment.

California Northstate University reserves the right to participate in a system that regularly checks state Department of Motor Vehicles (DMV) records of all employees who are required to drive as part of their job.

If an employee is required to drive as part of his or her job, California Northstate University retains the right to transfer to an alternative position, suspend, or terminate an employee whose license is suspended or revoked, who fails to maintain personal automobile insurance coverage, or who is uninsurable under the University's policy. The employee's direct supervisor is responsible for obtaining proof of insurance and a valid driver's license from the employee and then submit it to Human Resources.

Employees who drive their own vehicles on University business will be reimbursed at the Internal Revenue Service mileage reimbursement rate (54 cents per mile as for 2016). The mileage reimbursement rate will be adjusted each January 1 and/or when the IRS changes the rate, to the current rate allowed by the IRS. Mileage in excess of the distance driven from your home to the office will be paid. Where air travel is more feasible than driving, reimbursement will be to the extent of airfare unless approved otherwise. Receipts must be submitted for all expenses to be reimbursed. If necessary, advances can be obtained from the University for travel expenses.

9.2 Ergonomics

California Northstate University is subject to Cal/OSHA ergonomics standards for minimizing workplace repetitive motion injuries. The University will make necessary adjustments to reduce exposure to ergonomic hazards through modifications to equipment and processes and employee training. The University encourages safe and proper work procedures and requires all employees to follow safety instructions and guidelines.

California Northstate University believes that reduction of ergonomic risk is instrumental in maintaining an environment of personal safety and well-being, and is essential to our business. The University intends to provide appropriate resources to create a risk-free environment. If you have any questions about ergonomics, please contact Human Resources.

9.3 Fragrance Policy

California Northstate University strives to maintain a fragrance-free workplace. Employees may not wear an excessive amount of any of the following in the workplace or when on the job, regardless of location, if they may come in contact with coworkers or students: cologne, after shave lotion, perfume, perfumed hand lotion, fragranced hair products, fragranced deodorants and/or similar products.

9.4 Health and Safety

All employees are responsible for their own safety, as well as that of others in the workplace. To help us maintain a safe workplace, everyone must be safety-conscious at all times. Report all work-related injuries or illnesses immediately to your supervisor or to the Human Resources Department. In compliance with California law, and to promote the concept of a safe workplace, California Northstate University maintains an Injury and Illness Prevention Program. The Injury and Illness Prevention Program is available for review by employees and/or employee representatives in the lab manager's office.

Environmental Matters

The University desires to preserve and protect human health and the environment and is committed to compliance with all related laws and regulations. All materials which may contain toxic or hazardous substances must be properly disposed. It is essential that the University comply fully with all applicable state and federal laws and regulations concerning the receipt, storage, and shipment of any chemicals, dangerous drugs, and medications.

In compliance with Proposition 65, California Northstate University will inform employees of any known exposure to a chemical known to cause cancer or reproductive toxicity.

9.5 Heat Illness

The University is concerned with employee health and safety. Employees who work outside may be exposed to extreme temperatures or adverse working conditions, particularly in the summer months. All supervisors are trained in the recognition and prevention of heat illness. Employees who work outside are encouraged to frequently drink water. Employees who work outside are also allowed and encouraged to take a cool-down rest in the shade of at least five minutes (in addition to the time needed to access the shade) when needed to protect themselves from overheating. These preventative cool-down rests are paid time.

Please refer to the University's Injury Illness and Prevention Program or talk to your supervisor for details on how to ensure you are protected from heat illness dangers.

9.6 Inclement Weather/Natural Disasters

In the event of severe weather or a natural disaster that prevents employees from safely traveling to and from work, the following leave policies will apply:

- Inclement weather: Conditions that excuse absence from work include: flood, extreme storm, earthquake, or road closure. If weather conditions prevent you from safely traveling to work, you must notify your supervisor by phone, if telephone service is functional, or by any other available means. Employees may be paid for up to one day(s) per year when weather conditions prevent them from reaching the worksite. Absences in excess of one day(s) will be unpaid or will be deducted from accumulated vacation time.

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- In the event of a natural disaster, the office will be closed if the building is damaged or highways leading to the office are damaged. For instructions on reporting to another location, contact the University immediately, if possible.
- Employees are to keep abreast of important emergency communications generated from the University's Emergency Notification System.

9.7 Recreational Activities and Programs

California Northstate University or its insurer will not be liable for payment of workers' compensation benefits for any injury that arises out of an employee's voluntary participation in any off-duty recreational, social, or athletic activity that is not part of the employee's work-related duties.

9.8 Security

California Northstate University has developed guidelines to help maintain a secure workplace. Be aware of persons loitering for no apparent reason in parking areas, walkways, entrances and exits, and service areas. Report any suspicious persons or activities to security personnel. Secure your desk or office at the end of the day. When called away from your work area for an extended length of time, do not leave valuable and/or personal articles in or around your workstation that may be accessible. The security of facilities as well as the welfare of our employees depends upon the alertness and sensitivity of every individual to potential security risks. You should immediately notify your supervisor when known or unknown persons are acting in a suspicious manner in or around the facilities, or when keys, security passes, or identification badges have been reported missing.

The University's workplace security program is described in detail in the University's Illness and Injury Prevention Program (IIPP) and Annual Security Report. Please refer to the Annual Security Report for detailed information on reporting crimes and accessing personnel to help in time of crises or perceived threat. Employees are to keep abreast of important emergency communications generated from the University's Emergency Notification System.

9.9 Workplace Violence

California Northstate University has adopted the following workplace violence policy to ensure a safe working environment for all employees.

The University has zero tolerance for acts of violence and threats of violence. Without exception, acts and threats of violence are not permitted. All such acts and threats, even those made in apparent jest, will be taken seriously, and will lead to discipline up to and including termination.

It is every employee's responsibility to assist in establishing and maintaining a violence-free work environment. Therefore, each employee is expected and encouraged to report any incident which may be threatening to you, your co-workers, students or any event which you

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reasonably believe is threatening or violent in nature that could affect the campus community at large. You may report an incident to any supervisor or manager.

Possession of non-work related weapons on University premises and at University-sponsored events shall constitute a threat of violence.

A threat includes, but is not limited to, any indication of intent to harm a person or damage University property. Threats may be direct or indirect, and they may be communicated verbally or nonverbally. The following are examples of threats and acts that shall be considered violent - this list is in no way all-inclusive:

Example	Type of Threat
Saying, "Do you want to see your next birthday?"	Indirect
Writing, "Employees who kill their supervisors have the right idea."	Indirect
Saying, "I'm going to punch your lights out."	Direct
Making a hitting motion or obscene gesture	Nonverbal
Displaying weapons	Extreme
Stalking or otherwise forcing undue attention on someone, whether romantic or hostile	Extreme
Taking actions likely to cause bodily harm or property damage	Acts of violence

The University's workplace violence program is described in detail in the University's Illness and Injury Prevention Program (IIPP) and Annual Security Report.

10. Termination

10.1 Employee References

All requests for references must be directed to Human Resources. No other manager, supervisor, or employee is authorized to release references for current or former employees.

By policy, California Northstate University discloses only the dates of employment and the title of the last position held of the former employees. If you authorize disclosure in writing, California Northstate University also will inform prospective employers of the amount of salary or wage you last earned.

10.2 Involuntary Termination and Progressive Discipline

Violation of California Northstate University policies and rules may warrant disciplinary action. The University has a system of progressive discipline that may include verbal warnings, written warnings, performance improvement plans, and suspension. The system is not formal, and California Northstate University may, in its sole discretion, utilize whatever form of discipline is deemed appropriate under the circumstances, up to, and including, immediate termination of employment. The University's policy of progressive discipline in no way limits or alters the at-will employment relationship.

All University-owned property, including vehicles, keys, uniforms, identification badges, portable computer equipment, and credit cards, must be returned immediately upon termination of employment.

10.3 Reductions in Force

Under some circumstances, California Northstate University may need to restructure or reduce its workforce. If restructuring our operations or reducing the number of employees becomes necessary, the University will attempt to provide advance notice, if possible, to help prepare affected individuals. If possible, employees subject to layoff will be informed of the nature of the layoff and the foreseeable duration of the layoff, whether short-term or indefinite.

In determining which employees will be subject to layoff, California Northstate University will take into account, among other things, operation and requirements, the skill, productivity, ability, and past performance of those involved, and also, when feasible, the employee's length of service.

10.4 Voluntary Resignation

Voluntary resignation results when an employee voluntarily quits his or her employment at California Northstate University, or fails to report to work for three consecutively scheduled workdays without notice to, or approval by, his or her supervisor (unless the absence is protected by law). All University-owned property, including vehicles, keys, uniforms, identification badges, and credit cards, must be returned immediately upon termination of employment.

11. Confirmation of Receipt

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11.1 Confirmation of Receipt

I confirm my receipt of my copy of the University's employee handbook. I understand that it is my responsibility to read and familiarize myself with the policies and procedures contained in the handbook. I have read the entire handbook including but not limited to sections 1.2, 1.3, 1.4, 1.5, 1.6, and 1.7.

Employee's Signature _____

Employee's Printed Name _____

Date _____



Current Demographics and Future Trends of the Dentist Workforce

Institute of Medicine

The U.S. Oral Health Workforce in the Coming Decade:
A Workshop

February 9, 2009

Richard W. Valachovic, D.M.D., M.P.H.
Executive Director
American Dental Education Association

American Dental Education Association



Dentists in the United States, 2006*

American Dental Education Association

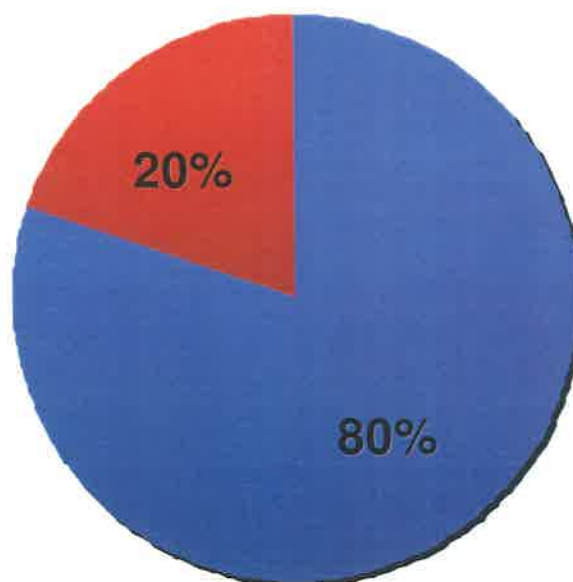
- ✧ There are about ~**230,000** dentists in the U.S.
- ✧ ~**78%** (**180,000**) are professionally active
- ✧ ~**72%** (**165,000**) are in private practice

General Dentistry vs. Specialty*

American Dental Education Association

All Dentists in Private Practice

■ Gen Dent ■ Specialty

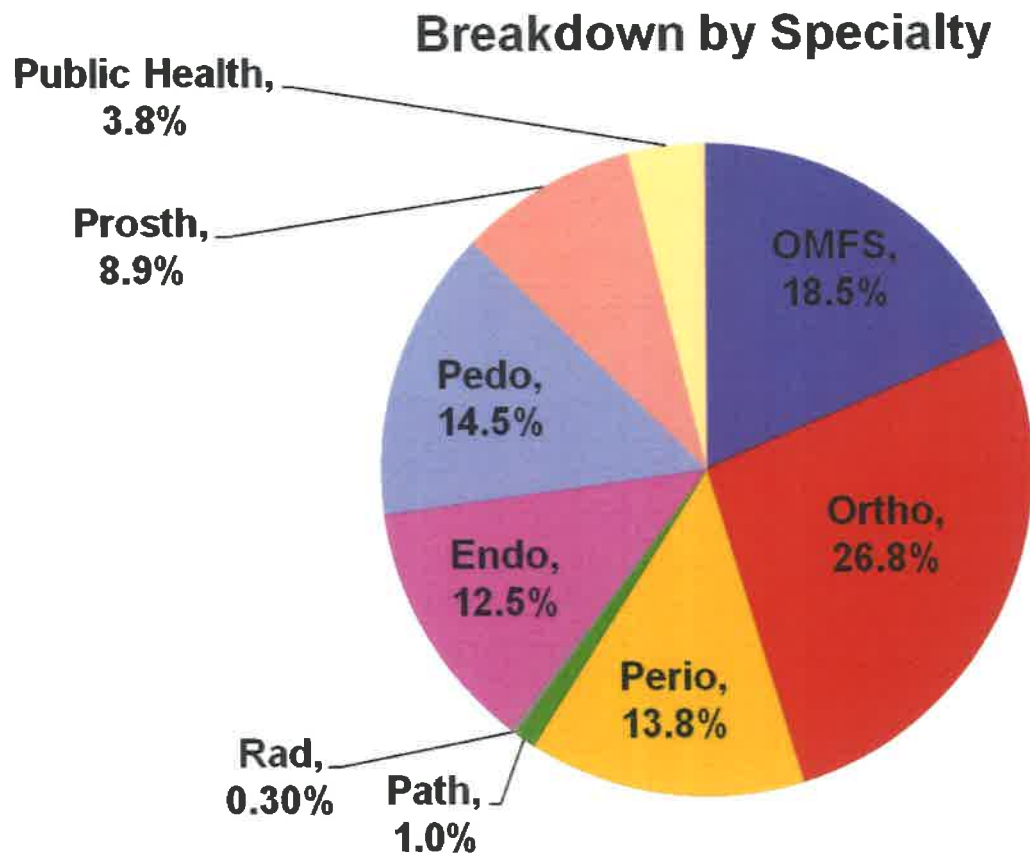


Source: American Dental Association, 2008

*Numbers are approximate

Distribution of Specialists, 2006

American Dental Education Association



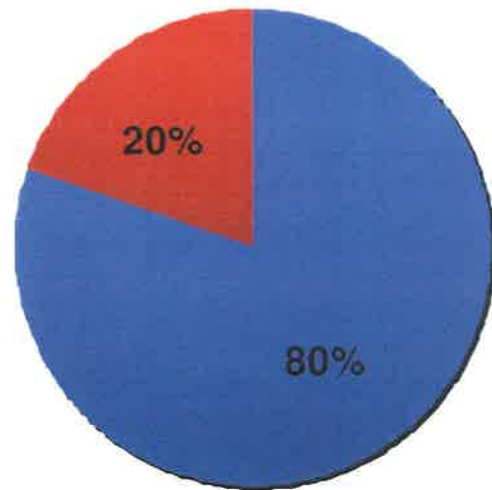
Source: American Dental Association, 2008

Gender Distribution Among Professionally Active Dentists*

American Dental Education Association

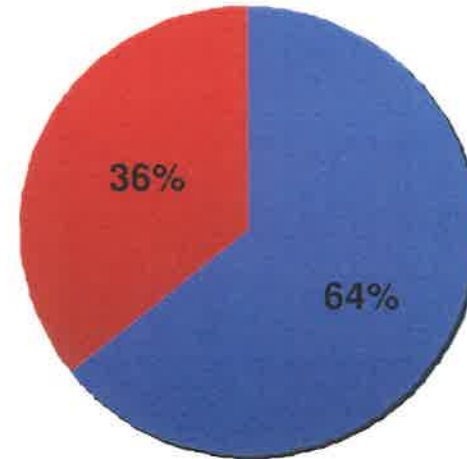
All Graduates

■ Male ■ Female



Dentists Graduating from 1997-Present

■ Male ■ Female

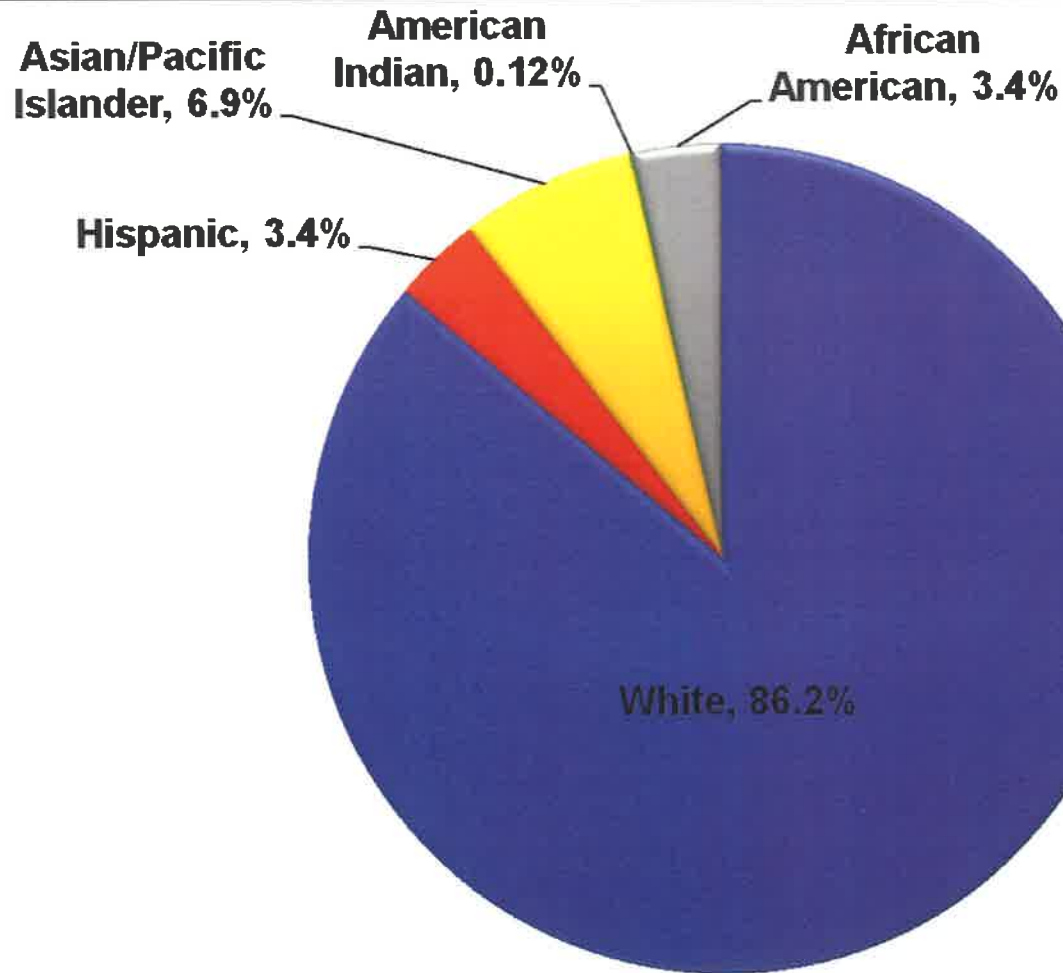


Source: American Dental Association, 2008

*Numbers are approximate

Distribution of Race and Ethnicity: Professionally Active Dentists, 2006

American Dental Education Association

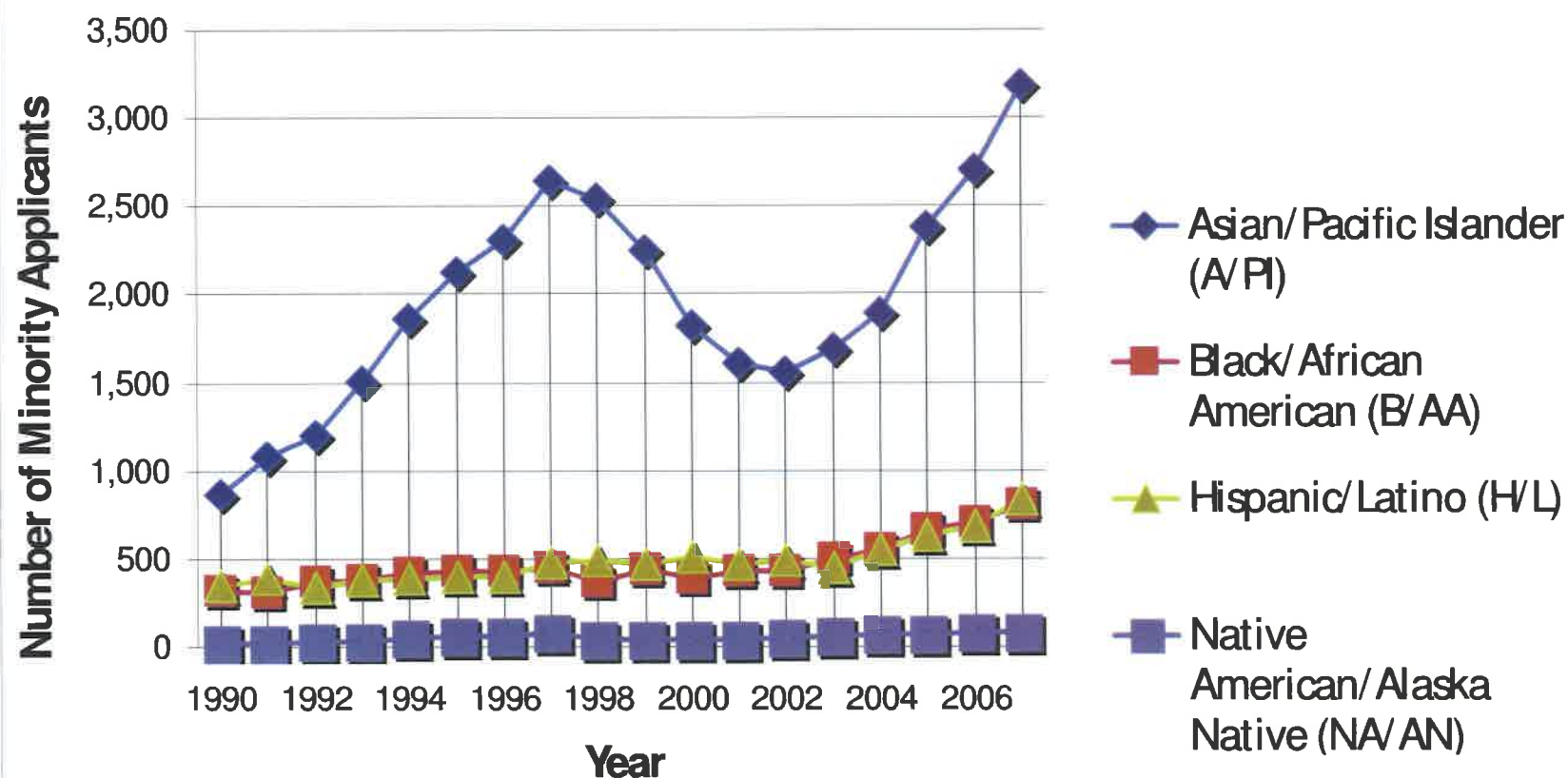


Source: American Dental Association, 2008

Minority Applicants to U.S. Dental Schools: 1990 - 2007



American Dental Education Association



Source: American Dental Education Association

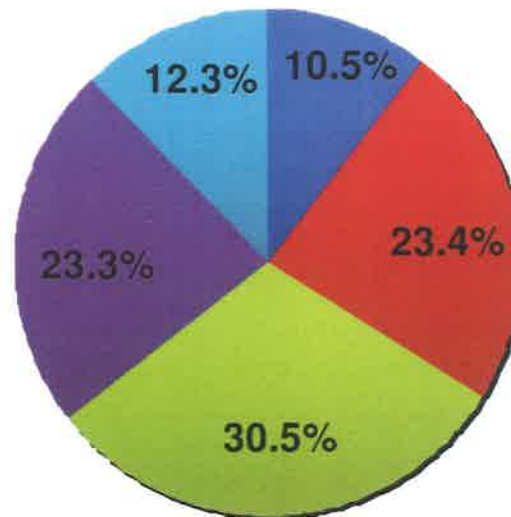
Age Distribution of Professionally Active Dentists, 2006



American Dental Education Association

Percentage of Professionally Active Dentists by Age Bracket

■ 65+ ■ 55-64 ■ 45-54 ■ 35-44 ■ Under 35



Source: American Dental Association, 2008



Dentists in the United States, 2006*

American Dental Education Association

- ▣ Nearly 65% of dentists are 45 years of age or older
- ▣ The average age of dentists in the U.S. is about 50 years of age

Distribution of Dentists in the U.S.

American Dental Education Association

Dental Health Professions Shortage Areas ("Dental HPSAs")

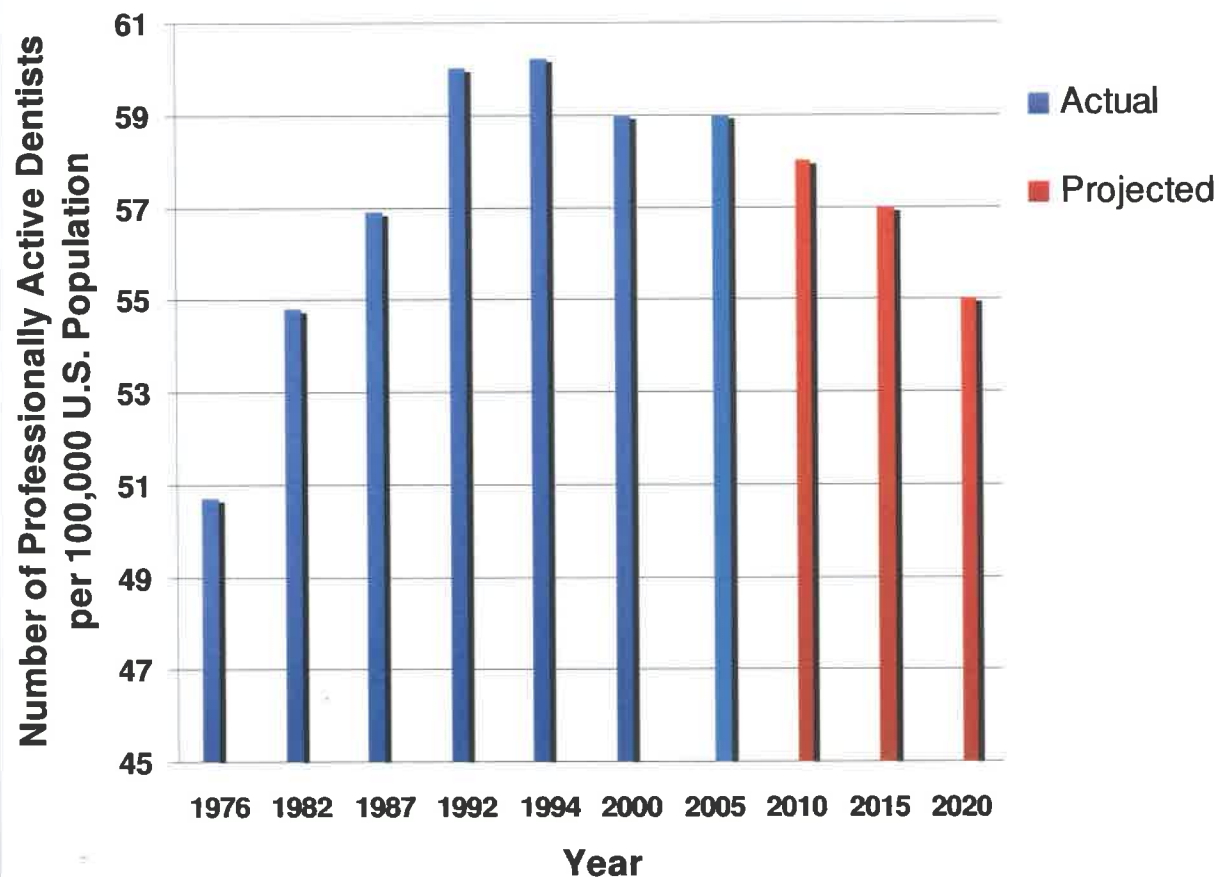
- ✧ In 2000, ~1,275 Dental HPSAs in U.S. in which 28,000,000 people resided
- ✧ In 2008, >4,000 Dental HPSAs in U.S. in which 48,000,000 people reside

Source: U.S. Health Resources and Services Administration, 2009

Number of Professionally Active Dentists per 100,000 U.S. Population, 1976 - 2020



American Dental Education Association

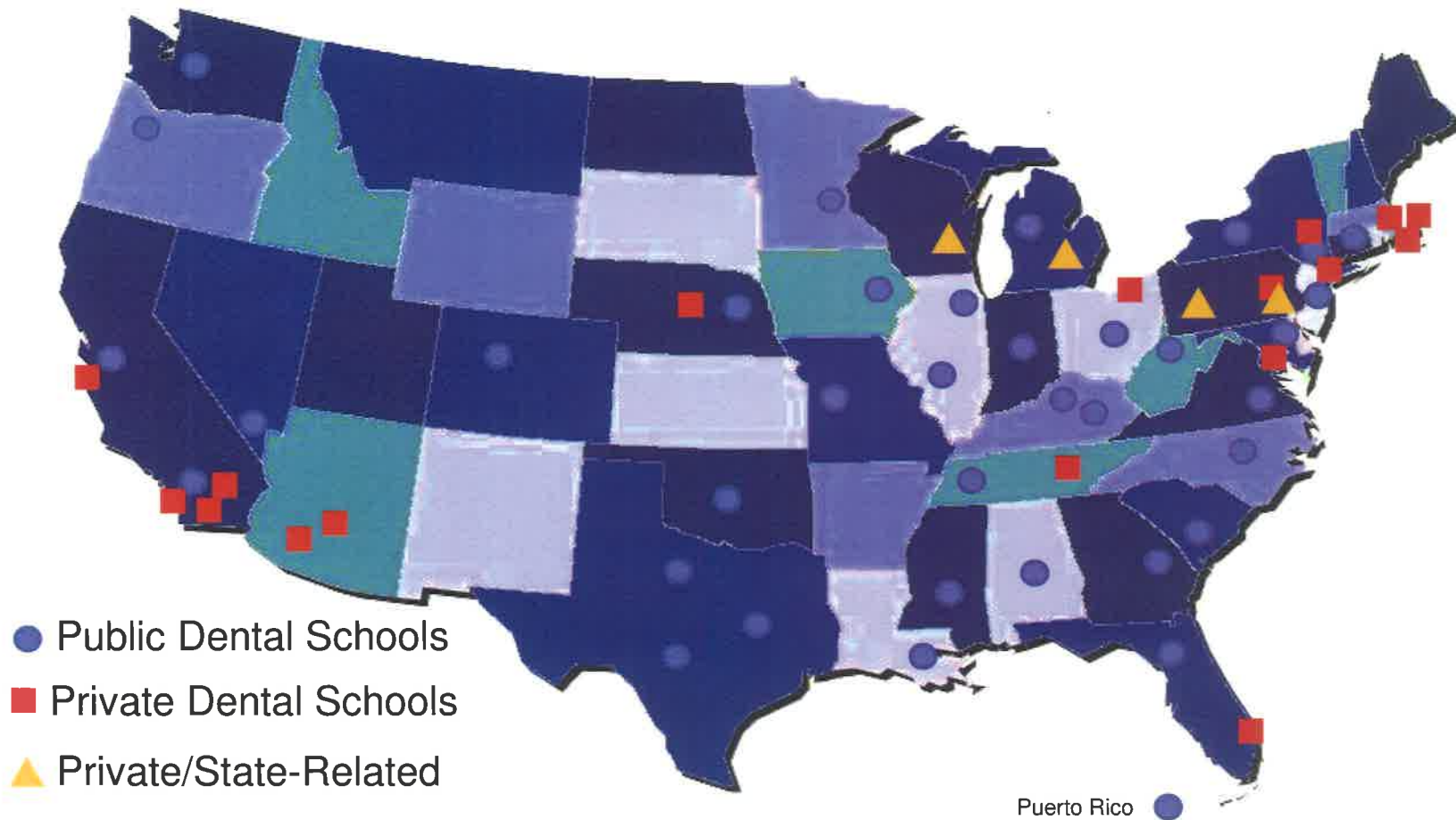


- ▣ The American Dental Association estimates that the national supply of dental services will increase due to a significant increase in dental productivity
- ▣ Dental productivity is expected to increase through increased employment of allied dental professionals

Source: American Dental Association, Survey Center, Dental Workforce Model 2001-2025,
http://www.ada.org/ada/prod/survey/publications_workforce.asp#historicalreport

United States Dental Schools, 2008

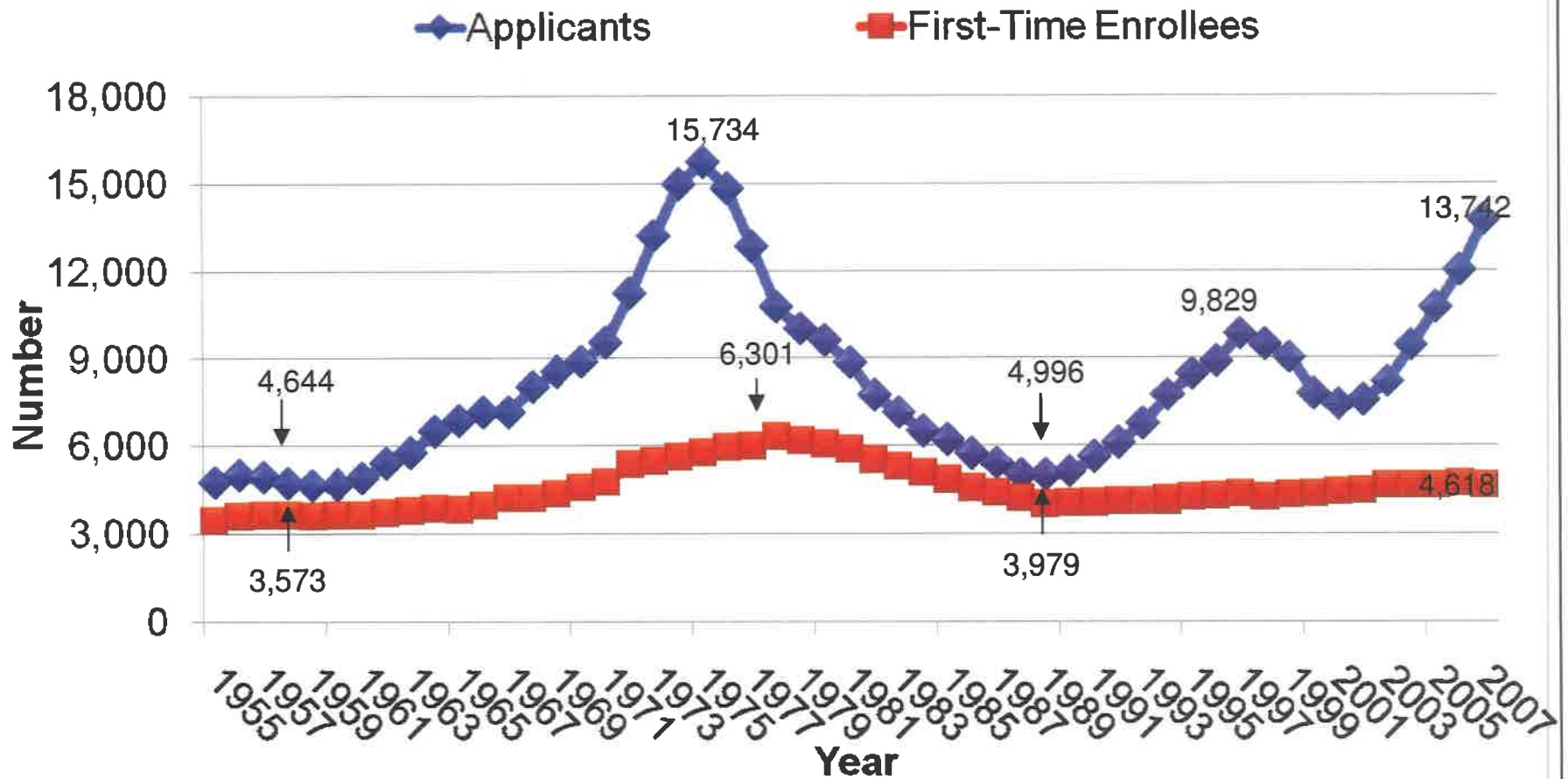
American Dental Education Association



U.S. Dental School Applicants and First-Year Enrollment Trends 1955 - 2007



American Dental Education Association



Source: American Dental Education Association, Applicant Analysis Survey



Closings and Openings of Dental Schools*

American Dental Education Association

- ▣ 1982 and 2000: seven dental schools closed
- ▣ Class sizes at many remaining schools were reduced
- ▣ 6,300 dental graduates in 1977
- ▣ 3,979 dental graduates in 1989
- ▣ ~4,700 dental graduates in 2008

*Numbers are approximate

Closings and Openings of Dental Schools*

American Dental Education Association

- ▣ 4 accredited dental schools have opened since 2000
 - ▣ Nova Southeastern, University of Nevada-Las Vegas, Arizona School of Dentistry and Oral Health, Midwestern University (Arizona Campus)
- ▣ 2 new dental schools are seeking accreditation
 - ▣ Western University of Health Sciences, East Carolina University
- ▣ 6 new dental schools are under consideration
 - ▣ Arkansas, California, Illinois, Maine, Nevada, Texas
- ▣ 12 new schools since 2000, but net increase of only 5 compared to 1982
 - ▣ 7 of these are associated with universities that have osteopathic medical schools

Observations

American Dental Education Association

- ▣ Increases in the U.S. dentist workforce are not consistent with increases in the U.S. population
- ▣ Closure of dental schools and reductions in class sizes between 1982 and 2000 are having a long-term impact on the U.S. dentist workforce

Observations

American Dental Education Association

- ✧ The effect of the openings of new dental schools will be in the long-term and not the short-term
- ✧ There are definite trends reflecting increasing percentages of women and under-represented minorities in the U.S. dentist workforce



American Dental Education Association

THANK YOU



Appendix 1-4 Diversity and Inclusion Policy

Diversity and Inclusion Policy

I. Policy Statement

- A. California Northstate University (CNU) considers diversity an integral part of the entire academic enterprise. Blending of different life and cultural experiences is of prime importance in the hiring of staff, faculty and administrators and in the selection of students and the education of future healthcare providers.
- B. CNU seeks to foster a broad and diverse community of students, faculty, staff, and administrators to enrich the educational environment and expand the knowledge base for our students.
- C. The value of this diversity emphasis for CNU educational programs and institutional environment will be realized by the production of culturally competent healthcare providers who can serve our nation's increasing diverse population.

II. Purpose

- A. Diversity enhances the educational environment and enriches the experience of the students, faculty, staff, and administrators.
- B. CNU aims to create a culture in which everyone feels valued and included. This culture of inclusion fully appreciates differences in perspective, not only in composition, but of thought, expression, desires, and goals.
- C. CNU values all dimensions of diversity among students, faculty, staff and administrators, including but not limited to age, race/ethnicity, gender, gender identity, gender expression, sexual orientation, physical ability, geographic locations, and socioeconomic up-bringing.
- D. CNU aims to increase the numbers of "racial and ethnic populations that are underrepresented in the healthcare professions" among CNU students, faculty, staff and administrators. Diversity goals include:
 - i. Recruiting and retaining diverse student body, faculty, staff and administrators;
 - ii. Creating and evaluating diversity initiatives;
 - iii. Developing educational and training sessions for students, faculty, staff and administrators to ensure cultural competency;
 - iv. Engaging the community through programs to increase diversity in the health care profession.

III. Scope/Coverage

This policy applies to all University students, faculty, staff, and administrators.



IV. Procedure

- A. A University-wide Diversity and Inclusion Committee is constituted on the University level, and populated by representatives from the student body, faculty, staff, and administration from each separate college as appointed by their respective Dean. The Chair for the University level committee will be appointed by the University President who will charge the committee with their duties and responsibilities. The purpose of this committee is to monitor the efforts and progress being made towards recruiting and retaining a diverse student body, faculty, staff and administrators, and creating and evaluating diversity and inclusion initiatives across campus. This committee will be responsible for providing on-going reports to the Office of the President of the progress being made on these important and compelling issues.
- B. Each college may have its committee or form a subcommittee from the main committee responsible for Diversity and Inclusion, whose representatives will serve on the University's Committee on Diversity and Inclusion. The members of the committee will be appointed by the Dean of the respective college and will be charged with the oversight of the programs and initiatives set forth on the college level that are geared towards accomplishing the institution's interests in recruiting, retaining, and including a diverse faculty, staff and students, that contributes to the educational and societal benefits associated with having a diverse and inclusive university committee.
- C. The College Admissions Committees will conduct a holistic admissions process whereby the University's compelling interests towards creating a diverse student population that will contribute to the educational depth and breadth of the campus will be realized.
- D. Faculty Search Committees will be charged with keeping the University's compelling educational interests in recruiting a diverse faculty as a central tenet of the academic search and hiring process.
- E. Staff and Administrators Hiring: Those charged with the responsibility for hiring qualified staff and administrators to work in the various capacities necessary to operate a University, will be expected to keep as a central tenet of the hiring process the University's compelling need to recruit and maintain a diverse support staff and administrators.
- F. The Human Resource's Office is responsible for working with representatives from each college to develop educational and training sessions for students, faculty, staff and administrators to ensure cultural competency.
- G. On an annual basis, a report of diversity and inclusion achievement will be presented to the Board of Trustees.



Approval record:

APPROVED: PEC: 2/13/17

APPROVED BOT: 8/13/17

REVIEW: every two years (or more often if required)

Good evening CNU Faculty and Staff!

CNU's **Diversity and Inclusion Committee** is so pleased to announce that Dr. Stacie Walton will be on campus March 4th to give a talk titled, "Strategies for Developing a Culturally Competent Mindset in Healthcare". *This is a university wide event – all students, faculty, and staff are invited and encouraged to attend.*

Date: Monday, March 4th

Time: 12pm – 1pm

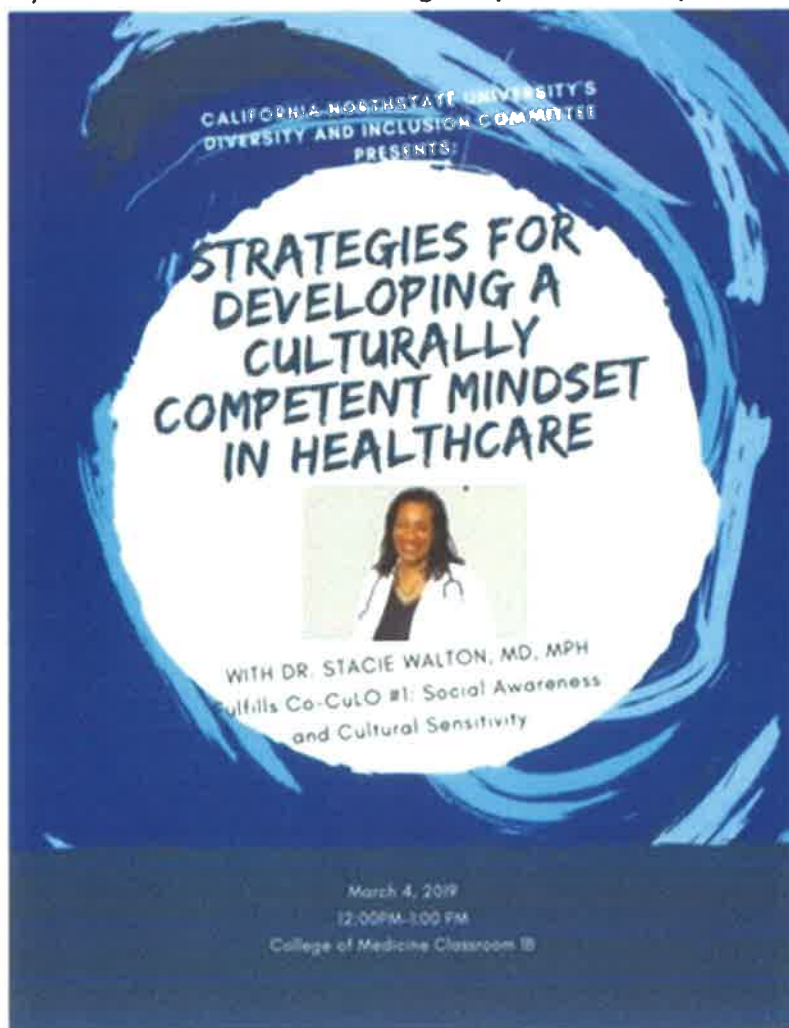
Location: COM Classroom 1B

Objectives:

- 1) Understanding the significance of cultural competence
- 2) Defining cultural competence
- 3) Learning how unconscious bias impacts cultural competence

Light refreshments will be provided.

If you are interested in attending this presentation, please accept this invitation.



Stacie Walton, MD, MPH, recently retired from a large HMO as a clinical Pediatrician serving in the roles of both Diversity Champion and Communication Consultant. She has been a teacher and consultant for healthcare providers and institutions for over 25 years. After over 10 years as an academic Pediatrician and adjunct professor in public health, she has provided Grand Rounds, lectures, interactive workshops, and facilitated conferences on cultural competence for healthcare providers in medicine, dental, public health and nursing in multiple venues across the United States, including Puerto Rico.

Recently, her cultural competency themes highlight the impact of Implicit Bias and Privilege in patient interactions and health outcomes, as well as, how effective patient provider communication between cultures requires empathy, emotional intelligence, as well as cultural competence.

Dr. Walton attended Stanford University, majoring in Cultural Anthropology. She received her MD from Columbia University Vagelos College of Physicians and Surgeons in New York City. She completed her residency training at the Children's Hospital Philadelphia. She received her MPS in Maternal Child Health with a policy focus from the University of California at Berkeley.

Working Pro forma**CNUCDM****April 3, 2019**

Expenses: assumptions include faculty hiring per plan, operation of first clinic beginning in 2020-2021 and second clinic in 2022-2023. Second clinic will be purchased for 8 million dollars with \$5,000,000 down. This is due to presumed size of 70 units, within 25 miles of campus per WASC requirement at 36,000 feet.

Category	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024
Faculty Salaries	350,000	850,000	2,500,000	4,500,000	6,000,000	8,000,000
Staff Salaries	40,000	150,000	300,000	1,200,000	2,000,000	3,000,000
Benefits	60,000	150,000	420,000	800,000	1,200,000	1,500,000
Building purchase/construction	3,400,000	500,000	500,000	0	3,500,000	0
Mortgage princ/interest						400,000
Capital preclinic/clinic	0	550,000	2,500,000	250,000	4,000,000	250,000
Software/hardware	0	50,000	100,000	100,000	250,000	250,000
Fac/staff devel	10,000	25,000	50,000	75,000	100,000	100,000
Preclin/Clinic variable costs	0	50,000	150,000	250,000	600,000	1,000,000
scholarships	0	0	100,000	200,000	300,000	400,000
Legal/regulatory/accred	100,000	50,000	50,000	50,000	50,000	50,000
Contribution margin COM	0	0	200,000	400,000	400,000	400,000
Building maint/util	0	50,000	50,000	50,000	50,000	50,000
Prof liability ins	0	0	50,000	100,000	100,000	100,000
Marketing	0	50,000	50,000	50,000	50,000	50,000
Educational materials	10,000	50,000	200,000	400,000	400,000	400,000
Student services	0	0	100,000	100,000	100,000	100,000
TOTAL EXPENSES PER ANNUM	3,970,000	2,525,000	7,320,000	8,625,000	19,100,000	15,750,000
NOTES	Building purchase		Clinic opens		Building and clinic purchase	

Income CDM: tuition at 75,000 per year with 80 students per year. Student fees \$11,000

Clinical income per visit of \$110

Category	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024
Student tuition	0	250,000	5,600,000	11,200,000	16,800,000	22,400,000
Student fees	0	30,000	900,000	1,800,000	2,700,000	3,600,000
Grants and contracts	0	250,000	350,000	350,000	350,000	350,000
Clinical Income	0	0	500,000	1,000,000	2,500,000	5,500,000
SUMMATION						
TOTAL INCOME PER ANNUM	0	280,000	7,350,000	14,350,000	22,350,000	31,850,000
TOTAL EXPENSES PER ANNUM(FROM PAGE 1)	3,970,000	2,525,000	7,320,000	8,625,000	19,100,000	15,750,000
OPERATING MARGIN PER YEAR	(3,970,000)	(2,245,000)	30,000	5,725,000	3,250,000	16,100,000
NOTES	Building purchase Capital exp		First class enrolls fall Clinic opens spring		Building and clinic purchase Capital exp	Mature per annum expenses with future accelerating clinical income

Total expenses in first 6 years = \$ 57,040,000

Total income in first 6 years = \$69,565,000

Total operating margin in first 6 years= \$12,275,000

Operating margin exclusive of real estate in first 6 years = \$20,625,000

Operating margin per year (until subsequent capital expense) +2024 thereafter = \$15,750,000

MEMORANDUM OF UNDERSTANDING
BETWEEN
ASIAN HEALTH SERVICES
AND CALIFORNIA NORTHSTATE UNIVERSITY

This Memorandum of Understanding ("MOU") is entered into by and between Asian Health Services (hereinafter referred to as "Site"), and California Northstate University, on behalf of its College of Dental Medicine DMD program (hereinafter referred to as "CNU").

WITNESSETH:

Whereas, Site and CNU are entering into this MOU for the purpose of establishing supervised community-based clinical education experiences, also known as "clinicals", in the sequence of professional training of students in CNU's dental medicine education program, designed to meet the training goals of the doctorate program.

NOW, THEREFORE, it is mutually agreed between the parties hereto as follows:

I. Term and Termination

The term of this MOU shall commence as of February 4, 2019, and shall continue for a period of three (3) years thereafter. This MOU may be extended by the written agreement of both parties, and may be terminated at any time by the written agreement of both parties or upon 30 days' advance written notice by one party to the other.

II. Nature and Scope of Affiliation

The affiliation between Site and CNU will be established by an agreement between them, which will address their respective responsibilities in regard to the Clinicals, including but not limited to the following areas:

- CNU and Site will share responsibility for creating and maintaining an appropriate learning environment for DMD students participating in the Practicum;
- Site will provide dental students, and faculty if applicable, access to their facilities, appropriate supporting resources, and practicing dentists to support the students' participation in the Practicum;
- CNU will retain ultimate responsibility for the dental education program and academic affairs including but not limited to grades and dental student assessment, and will retain primary responsibility for appointing and hiring faculty members for dental student teaching.

III. Nature of Relationship with Patients

Site will provide students and faculty with access to patients at Site's facilities in an appropriately supervised environment, in which the students can complete CNU's curriculum. Site will retain full authority and responsibility for patient care and quality standards, and will maintain a level of care that meets generally accepted standards conducive to satisfactory instruction. While at Site's facilities, students will have the status of trainees, are not to replace Site's staff, and, are not to render unsupervised patient care and/or services. All services rendered by students must have educational value and meet the goals of the dental education program. Site and its staff will provide such supervision of the educational and clinical activities as is reasonable and appropriate to the circumstances and to the student's level of training.

IV. Students Not Employees; No Agency Relationship Between Parties

The students participating in the Clinicals will not be considered employees or agents of Site or CNU for any purpose. Students will not be entitled to receive any monetary or other compensation from Site or CNU or any benefits of employment from Site or CNU, including but not limited to, health care or workers' compensation benefits, vacation, sick time, or any other benefit of employment, direct or indirect.

The parties hereto are independent contractors as to each other; this MOU does not create any agency, employer/employee, partnership, joint venture, or fiduciary relationship between the parties. No payments will be made between the parties in connection with this MOU.

V. Injuries, Insurance, and Indemnity

The affiliation agreement will define responsibility for obtaining emergency treatment for students who are injured or exposed to an environmental hazard by a patient or otherwise during the Clinicals. Students will be responsible for obtaining their own health insurance, and shall be financially responsible to the extent that they require any emergency treatment as described in the preceding sentence or other treatment as the result of an injury or environmental hazard occurring while participating in the Clinicals.

The affiliation agreement will set forth the insurance requirements for the parties.

The parties will defend, indemnify, and hold each other and each other's respective officers, employees, and agents harmless from and against any and all liability, loss, expense (including reasonable attorneys' fees), and claims for injury or damages arising out of the performance of this Agreement, in proportion to and to the extent such liability, loss, expense, attorneys' fees, or claims for injury or damages are caused by or result from the negligent or intentional acts or omissions of the indemnifying party, or its officers, employees, or agents.

VI. No Discrimination

In performing the terms of this MOU, the parties shall not unlawfully discriminate against any person on the basis of race, ethnicity, color, ancestry, national origin, gender identity or expression, sexual orientation, marital status, religion, veteran status, age, physical or mental disability, medical condition, or other protected category.

VII. General Provisions**A. Notices**

Notices required under this MOU shall be sent to the parties at the addresses set forth below:

California Northstate University
College of Dental Medicine
9700 West Taron Drive
Elk Grove, CA 95757
Attn: Leon Assael, DMD, Dean
Email: leon.assael@cnsu.edu

Site: Asian Health Services
101 8th Street, Suite 100
Oakland, CA 94607

Attn: Huong Le, DDS, Chief Dental Officer
Email: huongle@ahschc.org

B. Applicable Law

This MOU shall be construed in accordance with and governed by the laws of the State of California.

C. Severance

If any provision of this MOU shall be determined by a court of law with proper jurisdiction to be illegal or otherwise unenforceable, that provision will be given effect to the extent not illegal or unenforceable and remaining within the intent of the parties, and the remaining provisions shall remain in full force and effect.

D. Non-Assignable

This MOU shall not be assigned or otherwise transferred by either party without the prior written consent of the other.

E. Entire Agreement; Amendments

This MOU sets forth the entire agreement of the parties relating to the subject matter hereof, and supersedes any and all prior agreements and understandings, written and oral, between the parties relating to the subject matter hereof. This MOU may be amended or modified at any time if in writing signed by both parties, or as otherwise set forth in this MOU.

VIII. Execution; Counterparts

This MOU is effective when signed by all parties, and may be signed in counterparts, all of which together constitute one complete MOU. The individuals executing this MOU certify that they are authorized to sign on behalf of their institutions, and by doing so agree to bind their respective institutions to all the terms, provisions, and conditions contained in this MOU.

**California Northstate University,
College of Dental Medicine**

By: _____



Title: _____

President

Date: _____

Feb. 6, 2019

Site: Asian Health Services

By: _____



Dong Suh

Title: Chief Deputy of Administration

Date: February 4, 2019

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MEMORANDUM OF UNDERSTANDING
BETWEEN
Health And Life Organization, Inc. (HALOI)
AND CALIFORNIA
NORTHSTATE UNIVERSITY

This Memorandum of Understanding ("MOU") is entered into by and between Health And Life Organization, Inc. (hereinafter referred to as "Site"), and California Northstate University, on behalf of its College of Dental Medicine DMD program (hereinafter referred to as "CNU").

WITNESSETH:

Whereas, Site and CNU are entering into this MOU for the purpose of establishing supervised community-based clinical education experiences, also known as "clinical"), in the sequence of professional training of students in CNU's dental medicine education program, designed to meet the training goals of the doctorate program,

NOW, THEREFORE, it is mutually agreed between the parties hereto as follows:

I. Term and Termination

The term of this MOU shall commence as of February 1st, 2019, and shall continue for a period of three (3) years thereafter. This MOU may be extended by the written agreement of both parties, and may be terminated at any time by the written agreement of both parties or upon 30 days' advance written notice by one party to the other.

II. Nature and Scope of Affiliation

The affiliation between Site and CNU will be established by an agreement between them, which will address their respective responsibilities in regard to the Clinicals, including but not limited to the following areas:

- CNU and Site will share responsibility for creating and maintaining an appropriate learning environment for DMD students participating in the Practicum;
- Site will provide dental students, and faculty if applicable, access to their facilities, appropriate supporting resources, and practicing dentists to support the students' participation in the Practicum;
- CNU will retain ultimate responsibility for the dental education program and academic affairs including but not limited to grades and dental student assessment, and will retain primary responsibility for appointing and hiring faculty members for dental student teaching.

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III. Nature of Relationship with Patients

Site will provide students and faculty with access to patients at Site's facilities in an appropriately supervised environment, in which the students can complete CNU's curriculum. Site will retain full authority and responsibility for patient care and quality standards, and will maintain a level of care that meets generally accepted standards conducive to satisfactory instruction. While at Site's facilities, students will have the status of trainees, are not to replace Site's staff, and, are not to render unsupervised patient care and/or services. All services rendered by students must have educational value and meet the goals of the dental education program. Site and its staff will provide such supervision of the educational and clinical activities as is reasonable and appropriate to the circumstances and to the student's level of training.

IV. Students Not Employees; No Agency Relationship Between Parties

The students participating in the Clinicals will not be considered employees or agents of Site or CNU for any purpose. Students will not be entitled to receive any monetary or other compensation from Site or CNU or any benefits of employment from Site or CNU, including but not limited to, health care or workers' compensation benefits, vacation, sick time, or any other benefit of employment, direct or indirect.

The parties hereto are independent contractors as to each other; this MOU does not create any agency, employer/employee, partnership, joint venture, or fiduciary relationship between the parties. No payments will be made between the parties in connection with this MOU.

V. Injuries, Insurance, and Indemnity

The affiliation agreement will define responsibility for obtaining emergency treatment for students who are injured or exposed to an environmental hazard by a patient or otherwise during the Clinicals. Students will be responsible for obtaining their own health insurance, and shall be financially responsible to the extent that they require any emergency treatment as described in the preceding sentence or other treatment as the result of an injury or environmental hazard occurring while participating in the Clinicals.

The affiliation agreement will set forth the insurance requirements for the parties.

The parties will defend, indemnify, and hold each other and each other's respective officers, employees, and agents harmless from and against any and all liability, loss, expense (including reasonable attorneys' fees), and claims for injury or damages arising out of the performance of this Agreement, in proportion to and to the extent such liability, loss, expense, attorney's fees, or claims for injury or damages are caused by or result from the negligent or intentional act or omission of the indemnifying party, or its officers, employees, or agents.

VI. No Discrimination

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In performing the terms of this MOU, the parties shall not unlawfully discriminate against any person on the basis of race, ethnicity, color, ancestry, national origin, gender identity or expression, sexual orientation, marital status, religion, veteran status, age, physical or mental disability, medical condition, or other protected category.

VII. General Provisions

A. Notices

Notices required under this MOU shall be sent to the parties at the addresses set forth below:

California Northstate University
College of Dental Medicine
9700 West Taron Drive
Elk Grove, CA 95757

Health And Life Organization, Inc.
dba Sacramento Community Clinics
3030 Explorer Drive
Sacramento, CA 95827

Attn: Leon Assael, DMD, Dean
Email: leon.assael@cnsu.edu

Attn: Jerry T. Bliatout, JD
Email: jbliatout@sbeglobal.net

B. Applicable Law

This MOU shall be construed in accordance with and governed by the laws of the State of California.

C. Severance

If any provision of this MOU shall be determined by a court of law with proper jurisdiction to be illegal or otherwise unenforceable, that provision will be given effect to the extent not illegal or unenforceable and remaining within the intent of the parties, and the remaining provisions shall remain in full force and effect.

D. Non-Assignable

This MOU shall not be assigned or otherwise transferred by either party without the prior written consent of the other.

E. Entire Agreement; Amendments

This MOU sets forth the entire agreement of the parties relating to the subject matter hereof, and supersedes any and all prior agreements and understandings, written and oral, between the parties relating to the subject matter hereof. This MOU may be amended or modified at any time if in writing signed by both parties, or as otherwise set forth in this MOU.

VIII. Execution; Counterparts

This MOU is effective when signed by all parties, and may be signed in counterparts, all of

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which together constitute one complete MOU. The individuals executing this MOU certify that they are authorized to sign on behalf of their institutions, and by doing so agree to bind their respective institutions to all the terms, provisions, and conditions contained in this MOU.

California Northstate University
College of Dental Medicine
9700 West Taron Drive
Elk Grove, CA 95757

Health And Life Organization, Inc.
dba Sacramento Community Clinics
3030 Explorer Drive
Sacramento, CA 95827

Signature:

Name:

Title:

Date:


Alvin Cheung
President
Feb. 6, 2019

Signature:

Name: Jerry T. Bliatout, JD

Title: Chief Executive Officer

Date: February 1st, 2019



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MEMORANDUM OF UNDERSTANDING
BETWEEN
SHINGLE SPRINGS BAND OF MIWOK INDIANS
AND CALIFORNIA
NORTHSTATE UNIVERSITY

This Memorandum of Understanding ("MOU") is entered into by and between the Shingle Springs Band of Miwok Indians a federally recognized Tribe that owns and operates the Shingle Springs Health and Wellness Center (hereinafter referred to as "Site"), and California Northstate University, on behalf of its College of Dental Medicine DMD program (hereinafter referred to as "CNU").

WITNESSETH:

Whereas, Site and CNU are entering into this MOU for the purpose of establishing supervised community-based clinical education experiences, also known as "clinicals"), in the sequence of professional training of students in CNU's dental medicine education program, designed to meet the training goals of the doctorate program.

NOW, THEREFORE, it is mutually agreed between the parties hereto as follows:

I. Term and Termination

The term of this MOU shall commence as of February 14, 2019, and shall continue for a period of three (3) years thereafter. This MOU may be extended by the written agreement of both parties, and may be terminated at any time by the written agreement of both parties or upon 30 days' advance written notice by one party to the other.

II. Nature and Scope of Affiliation

The affiliation between Site and CNU will be established by an agreement between them, which will address their respective responsibilities in regard to the Clinicals, including but not limited to the following areas:

- CNU and Site will share responsibility for creating and maintaining an appropriate learning environment for DMD students participating in the Practicum;
- Site will provide dental students, and faculty if applicable, access to their facilities, appropriate supporting resources, and practicing dentists to support the students' participation in the Practicum;
- CNU will retain ultimate responsibility for the dental education program and academic affairs including but not limited to grades and dental student assessment, and will retain primary responsibility for appointing and hiring faculty members for dental student teaching.

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III. Nature of Relationship with Patients

Site will provide students and faculty with access to patients at Site's facilities in an appropriately supervised environment, in which the students can complete CNU's curriculum. Site will retain full authority and responsibility for patient care and quality standards, and will maintain a level of care that meets generally accepted standards conducive to satisfactory instruction. While at Site's facilities, students will have the status of trainees, are not to replace Site's staff, and are not to render unsupervised patient care and/or services. All services rendered by students must have educational value and meet the goals of the dental education program. Site and its staff will provide such supervision of the educational and clinical activities as is reasonable and appropriate to the circumstances and to the student's level of training.

IV. Students Not Employees; No Agency Relationship Between Parties

The students participating in the Clinicals will not be considered employees or agents of Site or CNU for any purpose. Students will not be entitled to receive any monetary or other compensation from Site or CNU or any benefits of employment from Site or CNU, including but not limited to, health care or workers' compensation benefits, vacation, sick time, or any other benefit of employment, direct or indirect.

The parties hereto are independent contractors as to each other; this MOU does not create any agency, employer/employee, partnership, joint venture, or fiduciary relationship between the parties. No payments will be made between the parties in connection with this MOU.

V. Injuries, Insurance, and Indemnity

The affiliation agreement will define responsibility for obtaining emergency treatment for students who are injured or exposed to an environmental hazard by a patient or otherwise during the Clinicals. Students will be responsible for obtaining their own health insurance, and shall be financially responsible to the extent that they require any emergency treatment as described in the preceding sentence or other treatment as the result of an injury or environmental hazard occurring while participating in the Clinicals.

The affiliation agreement will set forth the insurance requirements for the parties.

The parties will defend, indemnify, and hold each other and each other's respective officers, employees, and agents harmless from and against any and all liability, loss, expense (including reasonable attorneys' fees), and claims for injury or damages arising out of the performance of this Agreement, in proportion to, and to the extent such liability, loss, expense, attorneys' fees, or claims for injury or damages are caused by or result from the negligent or intentional acts or omission of the indemnifying party, or its officers, employees, or agents.

VI. No Discrimination

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In performing the terms of this MOU, the parties shall not unlawfully discriminate against any person on the basis of race, ethnicity, color, ancestry, national origin, gender identity or expression, sexual orientation, marital status, religion, veteran status, age, physical or mental disability, medical condition, or other protected category.

VII. General Provisions

A. Notices

Notices required under this MOU shall be sent to the parties at the addresses set forth below:

California Northstate University,
College of Dental Medicine
9700 West Taron Drive
Elk Grove, CA 95757

Site:
Shingle Springs Health and Wellness Center
5168 Homie Road
Placerville, CA 95667

Attn: Leon Assael, DMD, Dean
Email: leon.assael@cnsu.edu

B. Applicable Law

This MOU shall be construed in accordance with and governed by the laws of the State of California.

C. Severance

If any provision of this MOU shall be determined by a court of law with proper jurisdiction to be illegal or otherwise unenforceable, that provision will be given effect to the extent not illegal or unenforceable, and remaining within the intent of the parties, and the remaining provisions shall remain in full force and effect.

D. Non-Assignable

This MOU shall not be assigned or otherwise transferred by either party without the prior written consent of the other.

E. Entire Agreement; Amendments

This MOU sets forth the entire agreement of the parties relating to the subject matter hereof, and supersedes any and all prior agreements and understandings, written and oral, between the parties relating to the subject matter hereof. This MOU may be amended or modified at any time if in writing, signed by both parties, or as otherwise set forth in this MOU.

VIII. Execution; Counterparts

This MOU is effective when signed by all parties and may be signed in counterparts, all of

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which together constitute one complete MOU. The individuals executing this MOU certify that they are authorized to sign on behalf of their institutions, and by doing so agree to bind their respective institutions to all the terms, provisions, and conditions contained in this MOU.

California Northstate University
College of Dental Medicine

By:

Title:

Date:

Glenn Frey
President
3/7/2019

Shingle Springs Band of Miwok Indians
Health and Wellness Center

By:

Title:

Date:

Joe C. ...
Chairman
2/15/19



CALIFORNIA NORTHSTATE
UNIVERSITY POLICY ON CONFLICT OF
INTEREST RELATING TO EMPLOYEES

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I. PRINCIPLES

Founding principles:

1. California Northstate University (CNU) originally was and continues to be established with private funding by financial sponsors who believe that a great university is defined by its principal goals of education mission, education effectiveness, student success, and long term sustainability.
2. The financial sponsors who are mainly physicians and pharmacists strongly believe that the University will succeed in discharging its mission only if education is second to no other priority and education effectiveness is defined by student outcomes and efficient and appropriate deployment of resources.
3. Accordingly, the financial sponsors expect the University administrators, faculty, and staff (collectively known as the employees) to act not only in the best interest of fulfilling these principal goals, but also to engage in activities such as research, scholarship, service, consulting, and self-development that benefit the students, the University itself, and the larger public. While recognizing the benefit of such activities, CNU is also committed to ensuring that they are conducted properly and consistently, in accordance with the principal goals that are fundamental to the existence and well-being of a university and with the responsible management of the University's business.

At the inception of the institution and to avoid perceived conflicts between education interest and financial interest, the Board of Trustees was reconstituted to perform the oversight and governance of the institution ensuring the fulfillment of education mission, protection of the students, education effectiveness, integrity of scholarly activities, and service to the larger public. The Board of Trustees is composed of members from the community with no financial relationship with the institution and is self-perpetuating with its own nomination and vetting process, and maintains its continuity of function with multi-year staggering terms.

The appointment of a qualified individual who has no financial relationship with the organization which established the College of Medicine to serve as the Dean and Chief Academic Officer, whose responsibilities include the day-to-day operations and management of the on-going medical education further ensures that the principal goals of the University are fulfilled optimally.

In pursuit of its mission California Northstate University has formulated the following policy to identify and address actual conflicts of interest and conflicts of commitment. The fundamental premise of this policy is that each member of the California Northstate community has an

obligation to act in the best interest of the University and in furtherance of the University's mission, and must not let financial interest interfere with principal goals of the University. This policy is intended to increase the awareness of all the University employees and the Trustees to the potential for conflicts of interest, and to establish procedures whereby such conflicts may be avoided or properly managed.

A. Conflict of Interest

A conflict of interest exists when an individual has a significant financial interest (SFI) that could directly and significantly affect his or her University activities. Generally, this will occur when the external interest provides an **incentive** to affect the individual's conduct of his or her University activities and when the individual has the **opportunity** to affect a University decision or other activity (for example, because he or she is the decision-maker or the principal investigator for a research project). Conflicts of interest can arise naturally from an individual's engagement with the world outside the University, and the mere existence of a potential or perceived conflict of interest does not necessarily imply wrongdoing on anyone's part. When conflicts of interest do arise, however, they must be recognized, disclosed and either properly managed or eliminated.

Conflicts of interest may exist with respect to University financial decisions in which the individual is involved, for example, regarding investments, loans, purchases or sales of goods or services, and financial accounting decisions. They may also exist with respect to the conduct of research, the care of patients, the protection of human research subjects, and the treatment of students and faculty colleagues. Conflicts may also exist with respect to matters with both financial and non-financial implications, such as decisions about the use of University equipment and facilities and the negotiation of research agreements and license agreements.

B. Fundamental Principles

The following principles form the basis that underlies the University's policy on conflicts of interest:

1. When conducting University functions, all employees perform such functions with fiduciary duties: the duty of care (perform the work a prudent individual would do under the same circumstances); the duty of conformance (perform the work in adherence to education mission, policies, standards (including accreditation standards), regulations, laws), and the duty of loyalty (perform the work with the best interest and well-being of the University in mind).
2. The University does not permit any individual with an interest in the financial success of the institution to serve at the University unless the following criteria are met:
 - a. The individual is subject to either supervisory oversight by an individual of higher authority whose compensation is not directly dependent upon the financial success of the Medical College (known as financially disinterested supervisor) or oversight of the Board of Trustees which collectively has no financial relationship with the College of Medicine.

- b. The individual is subject to annual performance evaluation by a financially disinterested supervisor whose assessment and opinion are independent or by a Trustees Committee.
 - c. The individual must disclose the presence of financial relationship annually.
 - d. The individual is not the Dean or the Chief Academic Officer of the College.
 - e. The individual must subscribe to the notion that the mission of education is second to no other priority.
 - f. The individual must adhere to the "Compartmentalization of Decision Authority" table and mitigate conflicts of interest.
3. External activities must not compromise an individual's ability to perform all the activities expected of him or her as an employee of CNU.
 4. An individual may not receive remuneration for the conduct of his or her research or other California Northstate activity except through University channels (such as salary).
 5. An individual may not conduct research or clinical activity at CNU or carry on other CNU activities under circumstances in which there exists an unmanaged conflict of interest.
 6. CNU researchers may not be precluded from publishing their work by agreements with external sponsors or on account of the interest of an external organization in which a faculty mentor or supervisor has a financial interest.
 7. CNU facilities, equipment, and personnel may be used only for CNU activities and purposes, except when the University specifically authorizes other uses.
 8. An individual may not participate directly in the negotiation of research agreements, license agreements, equipment purchases or other arrangements between the University and an organization in which the individual has a **significant** financial interest.
 9. Authors must fully disclose related significant financial interests and outside activities when submitting for publication (including articles, abstracts, manuscripts submitted for publication), in presentations at professional meetings, and in applications for funding.
 10. In all scientific and scholarly publications and all manuscripts submitted for publication, authors must acknowledge the sources of support for all activities leading to and facilitating preparation of the publication or manuscript.
 11. Participation by any individual responsible for the design, conduct or reporting of research involving human subjects and holding a related significant financial interest that may be affected by the research must receive especially rigorous review and must not compromise the objectivity of the research or the well-being of research subjects.
 12. Research that is proposed to be sponsored by a privately held entity in which the faculty member who would conduct such research has an equity interest or Board seat or other significant financial interest (SFI) must be reviewed and approved in advance by the Office of the Vice President of Research (VPR) for conflict of interest evaluation.

C. Conflicts of Interest in Human Subjects Research

Conflicts of interest related to research involving human subjects pose special concerns. The University and its researchers have ethical obligations to honor the rights and protect the safety of persons who participate in research conducted at the University. SFIs held by those conducting the research may compromise the fulfillment of those ethical obligations and the well-being of the research subjects, as well as the integrity of the related research. Accordingly,

a person with an unmanaged conflict of interest is prohibited from participating in the conduct of such research. In addition, research involving human subjects where there is a financial conflict of interest may only go forward if the design and circumstances of the human subjects research are such that they serve to protect both the human subjects and the objectivity of the data obtained. For example, research that includes multiple independent sites, or where the intervention or choice of device is blinded to the investigators, has an independent data and safety monitoring board, or has other such protective elements, may be allowed to proceed with an appropriate conflict of interest management plan. In order to address these special concerns, when human subjects are involved in the research, conflict of interest review will be coordinated with the appropriate CNU Institutional Review Board (IRB).

D. Start-up Companies

Individual relationships with "startup" ventures - relatively newly formed, privately held, for-profit companies that often may be based on intellectual property developed by the individual at California Northstate or elsewhere - present opportunities for development and commercialization of inventions, but may also create conflicts of interest and commitment. In particular, while close involvement of the individual is often critical to the further development of the technology, multiple relationships of the individual with the start-up venture magnify the concern regarding the individual's commitment to their University responsibilities.

Generally, use of CNU space by a startup is not permitted, except when using CNU equipment or laboratories subject to a written agreement with the University, with strict limitations as to time and extent, and only after review and approval by the Office of VPR. For faculty members, the Faculty Handbook and other relevant policies govern the relationships. Policy guidelines specific to faculty relationships with such ventures appear as Appendix C to this general policy statement.

E. Significant Financial Interests (SFIs)

Income and other financial interests that are large compared to the individual's institutional salary pose a special challenge. They can create a perception that calls into question the individual's commitment and obligation to CNU. Some may find it difficult to believe that such high value interests do not compromise the individual's objectivity. And, indeed, high value financial interests do have the potential for greater bias, and are also inherently more difficult to manage. An Independent Committee on Conflicts of Interest (ICOCI) will be established to review the case of SFIs, and carefully consider the greater likelihood of conflict they represent.

In order to provide sufficient information to the ICOCI to enable it to determine whether actual undue bias exists and to recommend appropriate management schemes for relevant conflicts of interest, the independent ICOCI Committee will likely solicit additional detailed information from disclosers whose significant financial interests (excluding University compensation) exceed \$50,000 in the past twelve months and that are related to their institutional responsibilities. Such supplemental questions might request more specificity on the total amounts received, the time that such financial interests demand, a detailed explanation of the relationship of the financial interest to an individual's research or, if the individual is in an academic leadership role, whether and how, the financial interests are related to the purpose of the unit for which the individual has administrative or academic responsibility.

II. PROCEDURE

A. Disclosure

The responsibility for addressing conflict of interest rests, in the first instance, with the individual. An essential step is for the individual involved to make full disclosure of relevant information to the Conflicts of Interest Office. As described in greater detail below, certain individuals are required to make regular, annual disclosures, with updates as needed; others need only disclose on an ad hoc basis. When a disclosure is required, it will be reviewed by the Independent Committee on Conflicts of Interest (ICOCI), which will determine what should be done to avoid or manage any conflict of interest appropriately.

The confidentiality of the disclosures will be respected as far as possible. In particular, the information on the forms will not be shared except with authorized individuals in the conduct of their official University responsibilities.

1. Required initial and annual disclosures

All faculty members with University appointments of greater than 50% time; all faculty who hold administrative positions; all faculty and staff who serve as members of a research reviewing committee (e.g., IRB, IACUC, Radiation Safety); and all faculty and staff who are responsible for the design, conduct or reporting of research are required to submit an annual external interest disclosure form describing their external activities and financial interests. The disclosures must be in writing, on the forms approved by the ICOCI, and must be submitted to the Conflicts of Interest Office within Human Resources Department.

Whenever an application for funding of any research project is submitted, each individual responsible for the design, conduct or reporting of the research is required to have an up-to-date disclosure on file with the Conflicts of Interest Office.

Any individual carrying out research or other activities supported by the federal Public Health Service (PHS) or supported by another sponsor that mandates compliance with the PHS regulations, must refer to and comply with Appendix A. Any individual carrying out research or other activities supported by the National Science Foundation (NSF) or other sponsor that mandates the NSF policy, must refer to and comply with Appendix B. Any individual that is not carrying out research or other activities supported by PHS or NSF must comply with the procedures as prescribed below in this general procedure.

All faculty, irrespective of funding support, that have relationships with startup companies must also comply with Appendix C. All faculty and full time non-faculty employees must also comply with the Policy and Procedure on Conflict of Commitment contained in Appendix D.

2. Material change from annual disclosure

Whenever SFIs or internal responsibilities change materially from those described in the annual disclosure, the disclosure should be resubmitted as soon as possible, but no later than 30 days

after the individual's knowledge of such events.

3. Other required annual disclosures

Certain senior administrators, with or without faculty appointments, designated by the President are also required to submit disclosures of outside activities and financial interests and thereafter annually submit disclosures of outside activities and financial interest for as long as the individual continues to be designated by the President as being required to submit such disclosures. These disclosures must be prepared on the Conflicts of Interest Disclosure Form and submitted to the Conflicts of Interest Office for review.

4. Ad hoc disclosures by those not required to file annual disclosures

Postdoctoral appointees, non-faculty employees other than designated senior administrators, and students are not required to submit annual disclosure forms unless they are identified as being responsible for the design, conduct, or reporting of research. If there is any possibility of a conflict of interest with respect to an individual's non-research activities, the individual should consult with his or her supervisor, a senior administrator in the department, the Dean of the College, or the Conflicts of Interest Office.

B. Review by the Independent Committee on Conflicts of Interest (ICOCI)

The ICOCI is composed of members with no financial relationship with the institution and are jointly appointed by the Human Resource Director, the President, and a member of the Board of Trustees.

ICOCI reviews disclosures submitted to the Conflicts of Interest Office to determine whether the Discloser's SFI(s) present(s) a conflict of interest with the Discloser's University responsibilities, and if so, by what means the conflict should be managed, reduced or eliminated. A conflict exists when a SFI could directly and significantly impact the individual's ability to carry out their University responsibilities without undue bias.

The Committee may delegate review of routine matters to one of its members or supporting staff. If necessary, the Committee may discuss disclosure-related matters with the individual involved and may also consult with others who may have relevant information. A Discloser is entitled to meet with the ICOCI.

The Committee will review any SFIs in the context of the individual's overall California Northstate responsibilities, i.e., academic, clinical or administrative (commonly referred to as an "Activities Review") and with respect to each research award on which the Discloser is identified as responsible for the design, conduct, or reporting of the research to determine if a SFI is related to the award and whether the SFI creates a conflict of interest related to that research award (commonly referred to as "Transactional Review").

C. Guidelines for Determining Conflict of Interest on Research Awards

The Committee will determine whether a Discloser's SFI is related to the funded or proposed

research and, if so, whether the SFI is a financial conflict of interest (FCOI). A Discloser's SFI is related to funded or proposed research when the Committee reasonably determines that the SFI: could be affected by the research; or is in an entity whose financial interest could be affected by the research. The Committee may consult with the Investigator in the determination of whether a SFI is related to the research.

A financial conflict of interest exists when the Committee reasonably determines that the SFI could directly and significantly affect the design, conduct, or reporting of the research.

Among the factors that should be taken into consideration in the determination of an FCOI include the role of the Discloser and the opportunity to bias the results, the nature of the research being proposed, whether the work is funded by an entity in which the Investigator holds a SFI, and consideration of the value of the SFI in relation to the size and value of the entity. The factors that should be considered include:

1. Whether the research is of a basic or fundamental nature directed at understanding basic scientific processes; or
2. Whether the degree of replication and verification of research results is such that immediate commercialization or clinical application is not likely; or
3. Whether the goal of the research is to evaluate an invention linked to the SFI (such as where the SFI is a patent, or an interest in a company that has licensed the invention); or
4. Where the research involves human subjects whether there are double blind conditions or the involvement of a data and safety monitoring board; or
5. Where the SFI is in a privately held company, whether the researcher's SFI could result in the researcher having influence over company decisions, or whether the research could have a significant impact on the company's business or financial outlook (excluding Phase I SBIRs and STTRs); or
6. The magnitude of the SFIs (e.g., the amount of consulting, or the percentage or value of equity); or
7. Where the SFI is in the sponsor of the research, and the sponsor is a licensee of the Discloser's technology, the amount of commercialization payments received by the faculty member from that technology, both currently or in the future; or
8. The number and nature of relationships a Discloser has with an entity. Multiple entanglements can create a relationship with an outside entity that is stronger than the sum of the parts; or
9. Whether the goal of the research is to validate or invalidate a particular approach or methodology that could affect the value of the SFI; or
10. Whether other scientific groups are independently pursuing similar questions; or
11. Whether sufficient external review of the research conducted and the reporting of research results exist to mitigate undue bias; or
12. Whether the goal of the project is a comparative evaluation of a technology in which the Discloser has a SFI; or
13. Whether the project involves a subaward to an entity in which the Discloser has a SFI.

D. Management of Significant Financial Interests that Pose a Conflict of Interest

If a conflict of interest exists, the Committee will determine by what means – such as the individual's recusal from decisions affecting the conflicting entity, abstention from the external activity, modification of the activity, and/or monitoring of the activity by a subcommittee -- the conflict should be avoided or managed in order to mitigate undue bias. In making those determinations, the ICOCI will be guided by the principles discussed in this Policy and in the Faculty Handbook, and may be informed by the deliberations of the relevant Institutional Review Board (IRB), as appropriate. The Committee will also take into consideration whether the Discloser's ongoing role is necessary to continue advancing the research, based upon the factors such as the uniqueness of his or her expertise and qualifications.

Examples of conditions that might be imposed to manage a financial conflict of interest include, but are not limited to:

- Public disclosure of financial conflicts of interest (e.g., when presenting or publishing the research);
- For research projects involving human subjects research, disclosure of financial conflicts of interest directly to human participants;
- Appointment of an independent monitor capable of taking measures to protect the design, conduct, and reporting of the research against bias resulting from the financial conflict of interest;
- Modification of the research plan;
- Change of personnel or personnel responsibilities, or disqualification of personnel from participation in all or a portion of the research;
- Reduction or elimination of the financial interest (e.g., sale of an equity interest);
- Severance of relationships that create financial conflicts;
- For research projects involving human subjects research, use of a data and safety monitoring board;
- Double-blind conditions;
- Provisions to conduct the work simultaneously at multiple sites;
- Written disclosure of the conflict to all individuals working on the research project; and
- Annual reports on the research progress to the Committee.

If the Committee determines that a conflict exists, it will communicate this determination and the means it has identified for eliminating or managing the conflict, in writing, to the individual, to the relevant Principal Investigator in the case of sponsored research, and to the appropriate Dean and Department Chair where conflicts of interest arise with respect to teaching, clinical, or administrative responsibilities. The Committee will also communicate with the Office of VPR the fact that the disclosure has been reviewed and its summary determination, but not the substance of the disclosure. The Committee will keep a record of the disclosure and other relevant information for at least three years. If the Committee prescribes monitoring of the activity, it will describe what monitoring shall be performed and what records are to be kept.

If the individual is not satisfied with the decision of the Committee, he or she may request in writing to the Committee that the matter be referred to the Office of VPR for a decision. A written statement of the findings and recommendations of the Committee shall accompany any matter referred to the VPR, with copies to the individual, and the appropriate Dean and

Department Chair. The VPR will notify the individual, the Committee, and the Dean and Department Chair of his or her decision after receiving the Committee's report. The VPR's decision will be final, and any failure by the individual to adhere to the decision will be cause for disciplinary action, including, in severe cases, termination.

E. Significant Financial Interest Relating to Specific Areas

Conflicts of interest procedures relating to certain specific areas are addressed in the following Appendices:

APPENDIX A – Conflict of Interest Procedures Applicable to Public Health Services Funding

APPENDIX B - Conflict of Interest Procedures Applicable to National Science Foundation Funding

APPENDIX C - Policy Applicable to Faculty with Relationships with Start-Up Companies

APPENDIX D - Policy and Procedure on Conflict of Commitment

F. Compartmentalization of Decision Making Authority to Ayojd Conflicts of Interest

Each individual with decision making authority within the College of Medicine must adhere to the "Compartmentalization of Decision Authority" table and mitigate conflicts of interest. The table accompanies as follows:

APPENDIX E – Compartmentalization of Decision Authority Table

APPENDIX A

CALIFORNIA NORTHSTATE UNIVERSITY

CONFLICT OF INTEREST PROCEDURES APPLICABLE TO PUBLIC HEALTH
SERVICE FUNDING

The federal Public Health Service (PHS) has adopted regulations (42 CFR Part 50 and 45 CFR Part 94) on *Promoting Objectivity in Research*. These regulations describe the actions an individual and the institution must take in order to promote objectivity in research. The regulations apply to all grants, cooperative agreements, and research contracts (but not Phase 1 Small Business Innovation Research or Small Business Technology Transfer program grants) funded by the PHS. The regulations require that applicants for PHS funding (e.g., funding from the National Institutes of Health, the Food and Drug Administration, the Centers for Disease Control, et al.), prior to application for PHS funds, disclose to the institution any significant financial interests related to their institutional responsibilities.

Definitions

Solely for those applying for or receiving funds from the PHS, *Institutional responsibilities* means an Investigator's professional activities on behalf of the Institution (e.g., teaching, administration, research or clinical care). Specifically, these include:

- Externally sponsored research or scholarly activities (includes activities such as proposing, conducting, and analyzing research and disseminating results);
- Departmental/University research (includes participation in study sections, peer review of manuscripts, or effort on non-sponsored research);
- Instruction/University Supported Academic activities (including preparation for and presentations of formal and informal courses to students/trainee groups, mentoring students and trainees, and participation in resident training);
- Clinical service activities such as performing services for the California Northstate Medical Group and affiliated hospitals;
- Administrative activities including serving as Department Chair, Program Director, or service on institutional committees, participation in department activities or faculty advisory boards, etc.; or
- Special Service activities on behalf of the University including institutional community service.

Institutional responsibilities do not include:

- Volunteer individual community or public service unrelated to one's responsibilities on behalf of the University; or
- Other activities over and above or separate from responsibilities in the primary position.

Investigator means the project director or principal Investigator and any other person, regardless of title or position, who is responsible for the design, conduct, or reporting of research funded by the PHS, or proposed for such funding, which may include, for example, collaborators or consultants. The Principal Investigator (Project Director), upon consideration of the individual's role and degree of independence in carrying out the work, will determine who is responsible for the design, conduct, or reporting of the research.

The definition of Significant Financial Interest set forth herein replaces II[E] of the general policy and procedure.

Significant Financial Interest means:

(1) A financial interest consisting of one or more of the following interests of the Investigator (and those of the Investigator's spouse and dependent children) that reasonably appear to be related to the Investigator's institutional responsibilities (e.g., consulting and other outside compensated professional work including service on Scientific Advisory Boards or similar boards directly related to one's University research or scholarship; or service in external professional organizations and societies related to one's work):

- (i) With regard to any publicly traded entity, a *significant financial interest* exists if the value of any remuneration received from the entity in the twelve months preceding the disclosure and the value of any equity interest in the entity as of the date of disclosure, when aggregated, exceeds \$5,000. For purposes of this definition, remuneration includes salary and any payment for services not otherwise identified as salary (e.g., consulting fees, honoraria, paid authorship); equity interest includes any stock, stock option, or other ownership interest, as determined through reference to public prices or other reasonable measures of fair market value;
- (ii) With regard to any non-publicly traded entity, a *significant financial interest* exists if the value of any remuneration received from the entity in the twelve months preceding the disclosure, when aggregated, exceeds \$5,000, or when the Investigator (or the Investigator's spouse or dependent children) holds any equity interest (e.g., stock, stock option, or other ownership interest); or
- (iii) With regard to intellectual property rights and interests (e.g., *patents*, *copyrights*), a *significant financial interest* exists upon receipt of income of greater than \$5,000 related to such rights and interests;
- (iv) With respect to the Investigator only (but not the Investigator's spouse or dependent children), a *significant financial interest* exists if the Investigator is a member of the Board of Directors or serves as a fiduciary officer of any entity.

(2) Any reimbursed or sponsored travel (i.e., that which is reimbursed to or paid on behalf of the Investigator, the Investigator's spouse or dependent children), related to the Investigator's responsibilities, if the cost or value received from a single entity exceeds \$5,000 for the preceding twelve (12) months. This disclosure requirement does not apply to travel that is reimbursed or sponsored by a federal, state, or local government agency, an Institution of Higher Education as defined at 20 U.S.C. § 1001(a), an academic teaching hospital, a medical center, or a research institute that is affiliated with an Institution of Higher Education. The details of this

disclosure will include, at a minimum, the purpose of the trip, the identity of the sponsor/organizer, the destination, and the duration.

(3) The term *significant financial interest* does not include the following types of financial interests:

- (i) Salary, royalties, or other remuneration paid by the Institution to the Investigator if the Investigator is currently employed or otherwise appointed by the Institution, including intellectual property rights assigned to the Institution and agreements to share in royalties related to such rights;
- (ii) Income from investment vehicles, such as mutual funds and retirement accounts, as long as the Investigator does not directly control the investment decisions made in these vehicles;
- (iii) Income from seminars, lectures, or teaching engagements sponsored by a federal, state, or local government agency, an Institution of higher education as defined at 20 U.S.C. 1001(a), an academic teaching hospital, a medical center, or a research institute that is affiliated with an Institution of higher education; or
- (iv) Income from service on advisory committees or review panels for a federal, state, or local government agency, an Institution of higher education as defined at 20 U.S.C. 1001(a), an academic teaching hospital, a medical center, or a research institute that is affiliated with an Institution of higher education.

Disclosure

Prior to the submission of an application for funding from a PHS agency, the Principal Investigator and all other Investigators must have disclosed to the Conflicts of Interest Office an up-to-date listing of their Significant Financial Interests [SFI] (and those of their spouse and dependent children), as defined above. Any new Investigator, who, subsequent to the submission of an application for funding from a PHS agency, or during the course of the research project, plans to participate in the project, must similarly disclose their SFI to the Conflicts of Interest Office promptly and prior to participation in the project.

Each Investigator who is participating in the PHS-funded research must submit an updated disclosure of SFI at least annually, during the period of the award. Such disclosure must include any information that was not disclosed initially to California Northstate, pursuant to this Policy, or in a subsequent disclosure of SFI (e.g., any financial conflict of interest [FCOI] identified on a PHS-funded project that was transferred from another Institution), and must include updated information regarding any previously disclosed SFI (e.g., the updated value of a previously disclosed equity interest).

Each Investigator who is participating in the PHS-funded research must submit an updated disclosure of SFI within thirty (30) days of discovering or acquiring (e.g., through purchase, marriage, or inheritance) a new SFI.

Review by the Independent Committee on Conflicts of Interest (ICOCI)

The Independent Committee on Conflict of Interest (ICOCI) will conduct reviews of disclosures submitted to the Conflicts of Interest Office. The Committee will review any SFI that has been identified in a disclosure; these interests will be compared to each PHS research award on which the Investigator is identified as responsible for the design, conduct, or reporting of the research to determine if a SFI is related to the award and, if so, whether the SFI creates a Financial Conflict of Interest (FCOI) related to that research award.

Guidelines for Determining "Relatedness" and Financial Conflict of Interest

The Committee will determine whether an Investigator's SFI is related to the PHS-funded research and, if so, whether the SFI is a financial conflict of interest. An Investigator's SFI is related to PHS-funded research when the Committee reasonably determines that the SFI: could be affected by the PHS-funded research; or is in an entity whose financial interest could be affected by the research. The Committee may involve the Investigator in the determination of whether a SFI is related to the PHS-funded research.

A financial conflict of interest exists when the Committee reasonably determines that the SFI could directly and significantly affect the design, conduct, or reporting of the PHS-funded research.

In determining if an Investigator's SFI is related to PHS-funded research, and if so, whether the relationship creates a FCOI, the Committee considers the role of the Investigator and the opportunity (if any), to bias the results, the nature of the research being proposed, and the value of the SFI in relation to the size and value of the entity. In addition, the Committee may also consider the following factors:

1. Whether the research is of a basic or fundamental nature directed at understanding basic scientific processes; or
2. Whether the degree of replication and verification of research results is such that immediate commercialization or clinical application is not likely; or
3. Whether the goal of the research is to evaluate an invention linked to the SFI (such as where the SFI is a patent, or an interest in a company that has licensed the invention); or
4. Where the research involves human subjects, whether there are double blind conditions or the involvement of a data and safety monitoring board; or
5. Where the SFI is in a privately held company, whether the researcher's SFI could result in the researcher having influence over company decisions, or whether the research could have a significant impact on the company's business or financial outlook (excluding Phase I SBIRs and STTRs); or
6. The magnitude of the SFIs (e.g., the amount of consulting, or the percentage or value of equity); or
7. Where the SFI is in the sponsor of the research, and the sponsor is a licensee of the Investigator's technology, the amount of commercialization payments received by the faculty member from that technology, both currently or in the future; or
8. The number and nature of relationships an Investigator has with an entity. Multiple entanglements can create a relationship with an outside entity that is stronger than the sum of

the parts; or

9. Whether the goal of the research is to validate or invalidate a particular approach or methodology that could affect the value of the SFI; or
10. Whether other scientific groups are independently pursuing similar questions; or
11. Whether sufficient external review of the research conducted and the reporting of research results exist to mitigate undue bias; or
12. Whether the goal of the project is a comparative evaluation of a technology in which an Investigator has a SFI; or
13. Whether the project involves a subaward to an entity in which the Discloser has a SFI.

Management of Significant Financial Interests that Pose Financial Conflict(s) of Interest

If a conflict of interest exists, the Committee will determine by what means – such as the individual's recusal from decisions affecting the conflicting entity, abstention from the external activity, modification of the activity, and/or monitoring of the activity by a subcommittee- the conflict should be avoided or managed in order to mitigate undue bias. In making those determinations, the Committee will be guided by the principles discussed in this Policy and in the Faculty Handbook, and may be informed by the deliberations of the relevant Institutional Review Board (IRB), as appropriate. The Committee will also take into consideration whether the Investigator's ongoing role is necessary to continue advancing the research, based upon the factors such as the uniqueness of his or her expertise and qualifications.

Examples of conditions that might be imposed to manage a financial conflict of interest include, but are not limited to:

- a) Public disclosure of financial conflicts of interest (e.g., when presenting or publishing the research);
- b) For research projects involving human subjects research, disclosure of financial conflicts of interest directly to human participants;
- c) Appointment of an independent monitor capable of taking measures to protect the design, conduct, and reporting of the research against bias resulting from the financial conflict of interest;
- d) Modification of the research plan;
- e) Change of personnel or personnel responsibilities, or disqualification of personnel from participation in all or a portion of the research;
- f) Reduction or elimination of the financial interest (e.g., sale of an equity interest);
- g) Severance of relationships that create financial conflicts;
- h) For research projects involving human subjects research, use of a data and safety monitoring board;
- i) Double-blind conditions;
- j) Provisions to conduct the work simultaneously at multiple sites;
- k) Written disclosure of the conflict to all individuals working on the research project; and
- l) Annual reports on the research progress to the Committee.

If the Committee determines that a conflict exists, it will communicate its determination and the means it has identified for eliminating or managing the conflict, in writing, to the individual, to the relevant Principal Investigator (Project Director), and the appropriate dean or department

chair. The Conflicts of Interest Office will keep a record of the disclosure and other relevant information for at least three years. If the Committee prescribes monitoring of the activity, it will describe what monitoring shall be performed and what records are to be kept.

If the individual is not satisfied with the decision of the Committee, he or she may request that the matter be referred to the Vice President of Research (VPR) for a decision. A written statement of the findings and recommendations of the Committee shall accompany any matter referred to the VPR, with copies to the individual, and the appropriate Dean or Department Chair. The VPR will notify the individual, the Committee, and the Dean or Department Chair of his or her decision after receiving the Committee's report. The VPR's decision will be final, and any failure by the individual to adhere to the decision may be cause for disciplinary action, including, in severe cases, termination.

No expenditures on PHS awards will be permitted until the Investigator has complied with the Disclosure requirements of this Policy and has agreed, in writing, to comply with any plans determined by the Committee necessary to manage the Conflict of Interest. The Conflicts of Interest Office will communicate with the PHS Awarding Component to notify it of the existence and the nature of a Financial Conflict of Interest and whether the conflict has been managed, reduced, or eliminated.

The Conflicts of Interest Office will keep a record of Investigator disclosures of financial interests and the Committee's review of, and response to, such disclosure and all actions under this policy. Such records will be maintained and kept for three years from the date the final expenditures report is submitted for grants, for three years from the date of final payment for contracts, or, where applicable, for time periods as otherwise specified in relevant PHS Regulations.

Public Accessibility to Information Related to Financial Conflicts of Interest

Prior to the expenditure of any funds under a PHS-funded research project, California Northstate will ensure public accessibility, via a publicly accessible Web site or by written response to any requestor within five business days of a request, of information concerning any SFI disclosed that meets the following three criteria:

- (i) The Significant Financial Interest was disclosed and is still held by the senior/key personnel. Senior/key personnel are the PD/PI and any other person identified as senior key personnel by the University in the grant application, progress report or any other report submitted to the PHS by the University;
- (ii) California Northstate has determined that the Significant Financial Interest is related to the PHS- funded research; and
- (iii) California Northstate has determined that the Significant Financial Interest is a Financial Conflict of Interest.

The information that California Northstate will make available via a publicly accessible Web site or in a written response to any requestor within five days of request will include, at a minimum, the following:

- (i) The Investigator's name;
- (ii) The Investigator's title and role with respect to the research project;
- (iii) The name of the entity in which the Significant Financial Interest is held;
- (iv) The nature of the Significant Financial Interest; and
- (v) The approximate dollar value of the Significant Financial Interest in the following ranges: \$0-\$4,999; \$5,000-9,999; \$10,000- \$19,999; amounts between \$20,000-\$100,000 by increments of \$20,000; amounts above \$100,000 by increments of \$50,000), or a statement that the interest is one whose value cannot be readily determined through reference to public prices or other reasonable measures of fair market value.

If California Northstate uses a publicly accessible Web site to comply with the public disclosure requirements of the PHS regulations, the information posted will be updated at least annually, and within sixty days of receipt or identification of information concerning any additional SFI of the senior/key personnel for the PHS-funded research project that had not been previously disclosed, or upon the disclosure of a SFI of senior/key personnel new to the PHS-funded research project, if it is determined by the Committee that the SFI is related to the PHS-funded research and is a Financial Conflict of Interest.

If California Northstate responds to written requests for the purposes of public accessibility, it will ascertain from the Investigator that the information provided is current as of the date of the correspondence, and will note in its written response that the information is subject to updates, on at least an annual basis and within 60 days of the California Northstate's identification of a new financial conflict of interest, which should be requested subsequently by the requestor.

Information concerning the SFI's of an individual, as limited by this Policy, will remain available, for responses to written requests or for posting via California Northstate's publicly accessible Web site for at least three years from the date that the information was most recently updated.

Reporting of Financial Conflicts of Interest

Prior to the expenditure of any funds under a PHS-funded research project, California Northstate will provide to the PHS Awarding Component an FCOI report compliant with PHS regulations regarding any Investigator's SFI found to be conflicting and will ensure that the Investigator has agreed to and implemented the corresponding management plan. While the award is ongoing (including any extensions with or without funds), California Northstate will provide to the PHS Awarding Component an annual FCOI report that addresses the status of the FCOI and any changes in the management plan.

For any SFI that is identified as conflicting subsequent to an initial FCOI report during an ongoing PHS-funded research project (e.g., upon the participation of an Investigator who is new to the research project), California Northstate will provide to the PHS Awarding Component, within sixty days, an FCOI report regarding the financial conflict of interest and ensure that

California Northstate has implemented a management plan and the Investigator has agreed to the relevant management plan.

Training Requirements

Each Investigator must complete training on *The California Northstate Conflict of Interest Policy Applicable to Public Health Service Funding*. For PHS Investigators, California Northstate has imbedded training on conflict of interest into its annual disclosure form. Each Investigator must complete the disclosure form prior to engaging in research related to any PHS-funded grant, and immediately (as defined below) when any of the following circumstances apply:

- 1) California Northstate revises this Policy, or procedures related to this Policy, in any manner that affects the requirements of Investigators (training will be completed in the manner and within the time frame specified in communications announcing such changes) ;
- 2) An Investigator is new to California Northstate (training must be completed through completion of the disclosure form within 30 days of joining California Northstate); or
- 3) California Northstate finds that an Investigator is not in compliance with this Appendix to California Northstate's Conflict of Interest Policy or a management plan issued under this Appendix (training must be completed within 30 days in the manner specified by the COIC).

Subrecipient Requirements

California Northstate shall as part of a written subrecipient agreement with a subrecipient under a PHS prime award, establish whether the financial conflicts of interest policy of California Northstate or that of the subrecipient will apply to the subrecipient's investigator(s). If the subrecipient relies on its conflicts of interest policy, the subrecipient shall certify as part of the subrecipient agreement, that its policy complies with 42 CFR Part 50 and 45 CFR Part 94, as appropriate. In either case, the subrecipient agreement will include time periods to meet the disclosure and/or Financial Conflict of Interest reporting requirements of California Northstate to PHS.

Failure to Comply with California Northstate's Conflict of Interest Policy Applicable to Public Health Service Funding

Whenever an FOIC is not identified or managed in a timely manner, including, for example, because the underlying Significant Financial Interest is not disclosed timely by an Investigator or, because an FCOI was not timely reviewed or reported by a sub-recipient or by California Northstate); or because an investigator failed to comply with a management plan; then California Northstate will complete a retrospective review to determine whether any PHS-funded research, or portion thereof, conducted during the period of noncompliance was biased in the design, conduct, or reporting of such research. The VPR will appoint one or more individuals to determine if the research was biased. If bias is found, California Northstate will develop and implement a plan to mitigate the bias. California North state will notify the PHS Awarding Component promptly and will submit a mitigation report to the PHS Awarding Component within 120 days of the determination of noncompliance.

No expenditures of funds on PHS awards will be permitted unless the Investigator has complied with the Disclosure requirements of this Appendix and has agreed, in writing, to comply with any Committee-approved FCOI management plan.

In any case in which the Department of Health and Human Services determines that a PHS-funded project of clinical research whose purpose is to evaluate the safety or effectiveness of a drug, medical device, or treatment has been designed, conducted or reported by an Investigator with a financial conflict of interest that was not managed or reported by the Institution as required by the PHS regulations, California Northstate will require the Investigator involved to disclose the financial conflict of interest in each public presentation of the research and to request an addendum to previously published presentations.

Any failure by an individual to adhere to this Policy may be cause for disciplinary action, including, in severe cases, termination.

APPENDIX B

CALIFORNIA NORTHSTATE UNIVERSITY

CONFLICT OF INTEREST PROCEDURES APPLICABLE TO NATIONAL SCIENCE FOUNDATION FUNDING (NSF)

The National Science Foundation (NSF) requires each grantee institution employing more than fifty persons to maintain an appropriate written and enforced policy on conflict of interest and that all conflicts of interest for each award be managed, reduced or eliminated prior to the expenditure of the award funds. Therefore, for every NSF application for funding, each Investigator must disclose to the Conflicts of Interest Office all significant financial interests of the Investigator (including those of the investigator's spouse and dependent children):

- (i) That would reasonably appear to be affected by the research or educational activities funded or proposed for funding by NSF; or
- (ii) In entities whose financial interests would reasonably appear to be affected by such activities.

Definitions

The term "**Investigator**" means the principal investigator, co-principal investigators, and any other person at the institution who is responsible for the design, conduct, or reporting of research or educational activities funded or proposed for funding by NSF.

For those applying for or receiving funds from the NSF, the definition of Significant Financial Interest described herein replaces II[E] of the general policy and procedure. The term "**significant financial interest**" means anything of monetary value, including, but not limited to, salary or other payments for services (e.g., consulting fees or honoraria); equity interest (e.g., stocks, stock options or other ownership interests); and intellectual property rights (e.g., patents, copyrights and royalties from such rights). With respect to the Investigator only (and not the investigator's spouse and dependent children), a *significant financial interest* exists if the Investigator is a member of the Board of Directors of any entity, or serves as a fiduciary officer of such an entity.

The term does not include:

- (i) Salary, royalties or other remuneration from the applicant institution;
- (ii) Any ownership interests in the institution, if the institution is an applicant under the Small Business Innovation Research Program or Small Business Technology Transfer Program;
- (iii) Income from seminars, lectures, or teaching engagements sponsored by public or non-profit entities;
- (iv) Income from service on advisory committees or review panels for public or nonprofit entities;
- (v) An equity interest that, when aggregated for the investigator and the investigator's spouse and dependent children, meets both of the following tests: does not exceed

- \$10,000 in value as determined through reference to public prices or other reasonable measures of fair market value, and does not represent more than a 5% ownership interest in any single entity; or
- (vi) Salary, royalties or other payments that, when aggregated for the investigator and the investigator's spouse and dependent children, are not expected to exceed \$10,000 during the twelve month period.

Disclosure

All Investigators must have a current financial disclosure on file with the University's Conflict of Interest Office at the time the proposal is submitted to NSF. Financial disclosures must be updated during the period of the award, either on an annual basis, or as new reportable significant financial interests are obtained.

Review by the Independent Committee on Conflicts of Interest (ICOCI)

The Independent Committee on Conflicts of Interest (ICOCI) will review financial disclosures, determine whether a conflict of interest exists, and determine what conditions or restrictions, if any, should be imposed to manage, reduce or eliminate such conflict of interest. A conflict of interest exists when the Committee reasonably determines that a significant financial interest could directly and significantly affect the design, conduct, or reporting of NSF-funded research or educational activities.

Guidelines for Determining Conflict of Interest

The Committee will determine whether an Investigator's SFI is related to the NSF-funded research and, if so, whether the SFI is a financial conflict of interest. An Investigator's SFI is related to NSF-funded research when the Committee reasonably determines that the SFI: could be affected by the NSF-funded research; or is in an entity whose financial interest could be affected by the research. The Committee may involve the Investigator in the determination of whether a SFI is related to the NSF-funded research or educational activity.

A financial conflict of interest exists when the Committee reasonably determines that the SFI could directly and significantly affect the design, conduct, or reporting of the NSF-funded research or educational activity.

Factors that may be taken into consideration in this determination include the role of the Investigator and the opportunity to bias the results, the nature of the research being proposed, and consideration of the value of the SFI in relation to the size and value of the entity. Other factors that might be considered include:

1. Whether the research is of a basic or fundamental nature directed at understanding basic scientific processes; or
2. Whether the degree of replication and verification of research results is such that immediate commercialization or clinical application is not likely; or
3. Whether the goal of the research is to evaluate an invention linked to the SFI (such as where the SFI is a patent, or an interest in a company that has licensed the invention); or

4. Where the research involves human subjects whether there are double blind conditions or the involvement of a data and safety monitoring board; or
5. Where the SFI is in a privately held company, whether the researcher's SFI could result in the researcher having influence over company decisions, or whether the research could have a significant impact on the company's business or financial outlook (excluding Phase I SBIRs and STTRs); or
6. The magnitude of the SFIs (e.g., the amount of consulting, or the percentage or value of equity); or
7. Where the SFI is in the sponsor of the research, and the sponsor is a licensee of the Discloser's technology, the amount of commercialization payments received by the faculty member from that technology, both currently or in the future; or
8. The number and nature of relationships a Discloser has with an entity. Multiple entanglements can create a relationship with an outside entity that is stronger than the sum of the parts; or
9. Whether the goal of the research is to validate or invalidate a particular approach or methodology that could affect the value of the SFI; or
10. Whether other scientific groups are independently pursuing similar questions; or
11. Whether sufficient external review of the research conducted and the reporting of research results exist to mitigate undue bias; or
12. Whether the goal of the project is a comparative evaluation of a technology in which an Investigator has a SFI; or
13. Whether the project involves a subaward to an entity in which the Discloser has a SFI.

Management of Significant Financial Interests that Pose Financial Conflict(s) of Interest

If a conflict of interest exists, the Committee will determine by what means – such as the individual's recusal from decisions affecting the conflicting entity, abstention from the external activity, modification of the activity, and/or monitoring of the activity by a subcommittee-- the conflict should be avoided or managed in order to mitigate undue bias. In making those determinations, the Committee will be guided by the principles discussed in this Policy and in the Faculty Handbook, and may be informed by the deliberations of the relevant Institutional Review Board (IRB), as appropriate.

Examples of conditions that might be imposed to manage a financial conflict of interest include, but are not limited to:

- a) Public disclosure of financial conflicts of interest (e.g., when presenting or publishing the research);
- b) For research projects involving human subjects research, disclosure of financial conflicts of interest directly to human participants;
- c) Appointment of an independent monitor capable of taking measures to protect the design, conduct, and reporting of the research against bias resulting from the financial conflict of interest;
- d) Modification of the research plan;
- e) Change of personnel or personnel responsibilities, or disqualification of personnel from participation in all or a portion of the research;
- t) Reduction or elimination of the financial interest (e.g., sale of an equity interest); or

- g) Severance of relationships that create financial conflicts;
- h) For research projects involving human subjects research, use of a data and safety monitoring board;
- i) Double-blind conditions;
- j) Work being conducted simultaneously at multiple sites;
- k) Written disclosure of the conflict to all individuals working on the research project; and
- l) Annual reports on the research progress to the Committee.

If the Committee determines that a conflict exists, it will communicate its determination and the means it has identified for eliminating or managing the conflict, in writing, to the individual, to the relevant Principal Investigator (Project Director), and the appropriate dean or department chair. The COI Office will keep a record of the disclosure and other relevant information for at least three years. If the Committee prescribes monitoring of the activity, it will describe what monitoring shall be performed and what records are to be kept.

If the individual is not satisfied with the decision of the Committee, he or she may request that the matter be referred to the Vice-President of Research (VPR) for a decision. A written statement of the findings and recommendations of the Committee shall accompany any matter referred to the VPR, with copies to the individual, and the appropriate Dean and Department Chair. The VPR will notify the individual, the Committee, and the Dean and Department Chair of his or her decision after receiving the Committee's report.

Any failure by an individual to adhere to this Policy may be cause for disciplinary action, including, in severe cases, termination.

No expenditures of funds on NSF awards will be permitted unless the Investigator has complied with the Disclosure requirements of this Policy and has agreed, in writing, to comply with any plans determined by the Committee necessary to manage the Conflict of Interest.

California Northstate will keep NSF's Office of the General Counsel appropriately informed if it finds that it is unable to satisfactorily manage a conflict of interest.

APPENDIX C

POLICY APPLICABLE TO FACULTY WITH RELATIONSHIPS WITH STARTUP COMPANIES

One important aspect of the University's research endeavors is to enable the dissemination of research and new technologies to the benefit of society. Licensing activities and the start-up of new companies to further develop new technologies are important means of accomplishing this goal. Faculty relationships with "startup" ventures -relatively newly formed, privately held, for-profit companies that often are based on intellectual property developed by the faculty member at California Northstate or elsewhere -- present opportunities for development and commercialization of inventions but may also create conflicts of interest and commitment. In particular, while close involvement of the faculty member is often critical to the further development of the technology, multiple relationships of the faculty member with the start-up venture magnify the concern regarding the faculty member's commitment to their University responsibilities. This Policy, the Faculty Handbook and other relevant policies govern the following relationships.

1. ***Equity interests.*** Faculty may hold equity interests in startups that license intellectual property developed either at California Northstate or at other entities. Such equity ownership must be promptly disclosed (i.e., within 30 days) to the COI Office on the prescribed form. Faculty accepting equity in such ventures should recognize that their ability to conduct research sponsored by that venture - especially research involving human subjects -may be restricted because of the conflict created by their ownership interest in the sponsoring entity. Therefore California Northstate faculty should consult with the Independent Committee on Conflicts of Interest (ICOCI) prior to accepting either an equity interest or financial sponsorship of research by the entity.
2. ***Membership on Boards of Directors.*** Faculty may be permitted to serve on the Board of Directors of a startup (or, as the Faculty Handbook provides, of any company). In accordance with the policy stated in the Faculty Handbook with respect to all for-profit companies, the prospect of Board membership must be disclosed in advance to the Conflicts of Interest Office, and a Board seat may be accepted only with permission of the Committee, because of the fiduciary obligation that the seat creates and its potential for conflict with the faculty member's California Northstate duties and obligations. A faculty member who has personally assumed a Board seat should recognize that his or her ability to conduct research at California Northstate that is sponsored by the venture - especially research involving human subjects - **may be** restricted because of the conflict created by the fiduciary relationship with the venture. Faculty members who assume Board seats on startups should also be sensitive to the need to recuse themselves from all Board decisions that involve the University.
3. ***Service as an Operating Officer.*** A full-time faculty member may not serve as an operating officer of a startup (or, as the Faculty Handbook provides, of any company) while not on leave. If a faculty member believes it is essential for the success of the venture to serve as an operating officer, he or she should request a full or partial leave from the Human Resources Director for a specified period of time, consistent with policies on leave in the Faculty Handbook. Such a leave would be without compensation by the University.

4. *Student employment by a Startup.* Except in special and unusual circumstances, students under a faculty member's direction, paid for by a faculty member's grant, or in a faculty member's research group, may not be employed part- or full-time by a startup in which the faculty member has an SFI. Such special circumstances might exist, for example, where the student sought summer employment with the startup and planned to work in a field unrelated to his or her academic program. These circumstances must be approved in advance by the Vice-President of Research (VPR).
5. *Employment of postdoctoral fellows and associates by a startup.* Postdoctoral fellows and associates under a faculty member's direction, paid for by a faculty member's grant, or in a faculty member's research group, should not be employed by a startup in which the faculty member has an SFI, to conduct research that overlaps with the fellow's university research or is to be conducted on University premises. The VPR must approve in advance any proposed employment of a post-doctoral fellow or associate by a startup.
6. *Use of California Northstate space.* Use of California Northstate space by a startup is not permitted, except as provided in the next paragraph.
7. *Use of California Northstate equipment or laboratory training.* A startup may use California Northstate equipment or laboratories only subject to a written agreement with the University, and with strict limitations as to time and extent and only after review and approval by the VPR.

APPENDIX D

POLICY AND PROCEDURE ON CONFLICT OF COMMITMENT

A. Policy

The responsibility for addressing conflict of commitment rests, in the first instance, with the individual. An essential step is for the individual involved to make full disclosure of relevant information to the Conflicts of Interest Office. A conflict of commitment occurs when the commitment to external activities of a faculty or staff member adversely affects his or her capacity to meet University responsibilities. This form of conflict is easily defined and recognized since it involves a perceptible reduction of the individual's time and energy devoted to University activities.

California Northstate's Faculty Handbook provides guidance about the amount of time that may be given by faculty members to outside activities; it stipulates, for example, that a faculty member may not accept salaried employment at another institution while a full-time employee of California Northstate, that faculty may not spend more than one day in a seven-day work week on consulting activities, and that faculty ownership or management of private enterprises is subject to review and approval by the President and subject to limitations. It is important to recognize, however, that the obligations of California Northstate faculty move beyond the letter of these obligations to their spirit. The University requires that its faculty will meet their class schedules, but it also expects that they will be available to students outside of the classroom, will carry their share of committee responsibilities, will remain productively involved in their research and other scholarly pursuits, and, where applicable, will meet their clinical obligations. External activities that compromise or diminish a faculty member's capacity to meet these obligations represent a conflict of commitment. Deans and Department Chairs are responsible for ensuring that faculty meet their University obligations.

Full-time non-faculty employees are expected to satisfy all of the requirements of their jobs, and should not permit outside activities to interfere with the performance of their California Northstate obligations. Some departments prohibit staff employees from consulting or engaging in other outside employment because of the likelihood of such interference. Other departments may permit certain outside activities, with appropriate notice to and written approval by the employee's supervisor, so long as they do not interfere with employees' California Northstate obligations.

B. Procedure

All faculty members with University appointments of greater than 50% time and all faculty members who hold administrative positions must make full disclosure of their external activities to the Conflicts of Interest Office. The Conflicts of Interest Office will prepare a summary report of an individual's external activities from the disclosure. This report will be provided to the relevant Dean or Chair for a determination of whether a conflict of commitment exists. If such a conflict exists, the Dean or Chair will discuss with the individual steps to be taken to resolve the matter. The Dean or Chair may consult with the President's Office as appropriate.

APPENDIX E
COMPARTMENTALIZATION OF DECISION AUTHORITY
TABLE

Compartmentalization of Decision Authority to Prevent Direct Conflict of Interest

Compartmentalization of Decision Authority to Prevent Direct Conflict of Interest										
Category of decision authority										
A = Approval (integral position authority)										
AD = Approval on the Authority of Board of Trustees										
I = In-charge (execution, implementation, maintaining, monitoring, if more than one entities designated, then all designated entities have shared responsibility), and accountable to the Dean of College of Medicine.										
R = Recommendation (proposing via committee action, advocacy, or supporting after review)										
	Board of Trustees	University President	University Vice President	Dean	Senior Associate Dean of Medical Education	Senior Associate Dean of Clinical Medicine	Other Deans/Chairs	Clinical Governance Committee	Faculty Committees	Faculty
Standard 1: Mission, Planning, Organization, and Integrity										
1.1 Strategic Planning and Continuous Quality Improvement	A	R		R	I			I	I	R
1.2 Conflict of Interest Policies	A	R		R						
1.3 Mechanisms for Faculty Participation in decision making	A			R		R				
1.4 Alliances/Agreements-medical education is under the control of the faculty	A	A		I		R				
1.5 Bylaws- describe the responsibilities and privileges of its administrative officer, faculty, medical students, and committees	A	R		R		R				
1.6 Eligibility Requirements- all eligibility requirements of the LCME for initial and continuing accreditation				I		R				
Standard 2: Leadership and Administration										
2.1 Administrative Officer and Faculty Appointments		OA		LR					R	
2.2 Dean's Qualifications- listed by the President on authority of BOT	A	R						R	R	
2.3 Access and Authority of the Dean to President				Yes						
2.4 Sufficiency of Administrative Staff- a sufficient number of associate or assistant deans, leaders of organizational units, and senior administrative staff				I						
2.5 Responsibility of and to the Dean The principal academic officer at each campus is administratively responsible to the dean				I						
2.6 Functional Integration of the Faculty- the faculty at the departmental and medical school levels at each campus are functionally integrated by appropriate administrative mechanisms				A	I	I	I	R		
Standard 3: Academic and Learning Environments										
3.1 Resident Participation in Medical Student Education				I						
3.2 Community of Scholars/Research Opportunities provide sufficient opportunities, management, and support for medical student participation in research and other scholarly activities of its faculty				I	I		A		R	
3.3 Diversity/Equity Programs and Partnerships- These activities include the use of programs and/or partnerships aimed at achieving diversity among qualified applicants for medical school admission and the retention of students	A		OA					I		
3.4 Anti-Discrimination Policy- does not discriminate on the basis of age, creed, gender, ethnicity, national origin, race, sex, or sexual orientation	A		I	R				R	R	
3.5 Learning Environment/Professionalism The medical school and its clinical affiliates the ongoing development of explicit and implicit professional behaviors in its medical students, faculty, and staff at all facilities, share the responsibility for periodic evaluation, identify and promptly correct violations of professional standards			A				I	I	R	
3.6 Student Misconduct- defines and publishes its code of professional conduct for faculty-student relationships in the medical education program, develops effective action policies that address violations of the code, has effective mechanisms in place for a prompt response to any complaints, maintains for reporting violations without fear of retaliation		OA		I	R	R	I	R	R	
Standard 4: Faculty Preparation, Productivity, Participation, and Policies										
4.1 Sufficiency of Faculty	A	A	R		R					

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R = Recommendation (proposing via committee action, advocacy, or supporting after review)										
	Board of Trustees	University President	University Vice President	Dean	Senior Associate Dean of Medical Education	Senior Associate Dean of Clinical Medicine	Other Deans/Chairs	Clinical Governance Committee	Faculty Committee	Board of Directors
4.2 Scholarly Productivity				A	R	R	I	R	R	
4.3 Faculty Appointment Policies-A medical school has clear policies and procedures in place for faculty appointment, renewal of appointment, promotion, granting of tenure, reappointment, and dismissal that involve the faculty, the appropriate department heads, and the dean	A	AO		I,R		R			R	
4.4 Feedback to Faculty				A	R	R	I	R	R	
4.5 Faculty Professional Development							A,I	R	R	
4.6 Faculty/Dean Responsibility for Educational Program Policies-, the dean and a committee of the faculty determine programmatic policies.				A	I		R	R	R	
Standard 5: Educational Resources and Infrastructure										
5.1 Adequacy of Financial Resources- any derived from diverse sources and are adequate to sustain a sound program of medical education and to accomplish other programmatic and institutional goals.	A	R		I	R		R	R	R	A
5.2 Dean's Authority/Resources for Curriculum Management- The Dean has sufficient resources and budgetary authority to fulfill his or her responsibility for the management and evaluation of the medical curriculum.				A,I	I			R	R	
5.3 Pressure for Self-Financing- A medical school admits only as many qualified applicants as its total resources can accommodate and does not permit financial or other influences to compromise the school's educational mission.				A,I				R	R	
5.4 Sufficiency of Buildings and Equipment A medical school has, or is assured the use of, buildings and equipment sufficient to achieve its educational, clinical, and research missions.			A	I,R				R	R	
5.5 Resources for Clinical Instruction- A medical school has, or is assured the use of, appropriate resources for the clinical instruction of its medical students in ambulatory and inpatient settings and has adequate numbers and types of activities (e.g., history, case mix, age, gender)				A	I	I	R	R	R	
5.6 Clinical Instructional Facilities/Information Resources- has sufficient information resources and instructional facilities for medical student education.				A	I	I	R	R	R	
5.7 Security, Student Safety, and Disaster Preparedness- took measures that adequate security systems are in place at all locations and publishes policies and procedures to ensure student safety and to address emergency and disaster preparedness.		OA		R				R	R	
5.8 Library Resources/Staff- supervised by a professional staff that is familiar with regional and national information resources and data systems and is responsive to the needs				A					R	R
5.9 Information Technology Resources/Staff- well-maintained information technology resources sufficient in scope to support its educational and other missions			I		A				R	R
5.10 Resources Used By Transfer/Visiting Students- do not significantly diminish the resources available to already enrolled medical students.				A			I			R
5.11 Study/Lounge/Storage Space/Call Rooms- ensure that its medical students have, at each campus and affiliated clinical site, adequate study space, lounge areas, personal lockers or other secure storage facilities, and secure call rooms if students are required to participate in late night or overnight clinical learning experiences.				I	A					
5.12 Equalized Facilities for the LOM- neither the LOM of any substantial change in the number of enrolled medical students, nor decrease in the resources available to the institution for its medical education program.				I,A	R	R	R	R	R	

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R = Recommendation (proposing via committee action, advocacy, or supporting after review)									
	Board of Trustees	University President	University Vice President	Dean	Senior Associate Dean of Medical Education	Senior Associate Dean of Clinical Medicine	Chief Medical Officer	Chief Governance Committee	Faculty Committee
including faculty physical facilities, or history, or its plans for any major medical school of its medical curriculum, or for anticipated changes in the medical school of the program's clinical facilities. The program also provides prior notification to the Board of Trustees to increase existing medical student enrollment on the main campus under its own or more existing separately chartered campuses where the medical school of its plans, or all medical students in that state or its parent to their program to start a new or to expand an existing programatically distinct campus or to initiate a new medical education entity.									
Standard 1: Competencies, Curricular Objectives, and Curricular Design									
1.1 Formal Determination of Medical Education Program Objectives and Learning Objectives: The faculty of a medical school define its medical education program objectives in accordance with the mission statement of medical education program in developing the competencies that the medical school and the medical school of its plans.					A	R	R	I	R
1.2 Medical Clinical Experience: The faculty of a medical school define the types of patients and clinical conditions that medical students are required to encounter, the skills to be performed by medical students, the appropriate clinical settings for their experiences, and the expected levels of student student responsibility.					A	R	R	I	R
1.3 Self-Directed and Life-Long Learning: ensure that the medical curriculum includes self-directed learning experiences and time.					A				
1.4 Immunization/Outpatient Experience: The faculty of a medical school ensure that the medical curriculum includes clinical experiences in both inpatient and outpatient settings.					A				
1.5 Effective Opportunities: The faculty of a medical school ensure that the medical curriculum includes effective opportunities that supplement required learning experiences and that provide medical students to gain exposure to and respect their understanding of medical specialties reflecting their career interests and to prepare their students of academic interests.					A				
1.6 Self-Directed Learning: The faculty of a medical school ensure that the medical education program provides sufficient opportunities for, monitoring, and supports medical student participation in self-directed learning and community service activities.					A				
1.7 Academic Environment: The faculty of a medical school ensure that medical students have opportunities to begin to establish environments that permit interaction with students enrolled in other health professions programs.					A	R	R	R	I
1.8 Education Program Oversight: A medical education program includes of Board of Trustees of the medical school.					A	R	R	R	I
Standard 2: Curricular Content									
2.1 Biomedical, Behavioral, Social Sciences: faculty ensure that the medical curriculum includes content from the biomedical, behavioral, and social sciences to support medical students' mastery of contemporary scientific knowledge and language and the methods fundamental to applying them to the needs of individuals and communities.					A	R	R	R	I
2.2 Organ Systems (Life Cycle/Primary Care/Preventive/Wellness/Thyroidism/Symptoms/Differential Diagnosis/Treatment/Prevention/Impact of Biomedical/Social Factors): The faculty of a medical school ensure that the medical curriculum includes content and clinical experience					A	R	R	R	I

Compartmentalization of Decision Authority to Prevent Direct Conflict of Interest

Compartmentalization of Decision Authority to Prevent Direct Conflict of Interest										
Category of decision authority										
A = Approval (Integral position authority)										
AO = Approval on the Authority of Board of Trustees										
I = in charge (execution, implementation, maintaining, monitoring, if more than one entities designated, then all designated entities have shared responsibility), and accountable to the Dean of College of Medicine.										
(R) = Recommendation (proposing via committee action, advocacy, or supporting after review)										
	Board of Trustees	University President	University Vice Presidents	Dean	Senior Associate Dean of Medical Education	Senior Associate Dean of Clinical Medicine	Other Deans/Chairs	Clinical Governance Committee	Faculty Committees	Faculty
										Board of Directors
and to enhance medical education program quality. These data are collected during program evaluation and after program completion.										
8.5 Use of Student Evaluation Data in Program Improvement- A medical school has formal processes to place in effect and transfer medical student evaluations of their courses, clerkships, and teachers, and other relevant information.				A	R	R	R	R	I	R
8.6 Monitoring Of Completion of Required Clinical Experiences- A medical school has in place a system with oversight that monitors and ensures completion by all medical students of required clinical experiences in the medical education program and completes any identified gaps.				A	I	I	R	R	R	R
8.8 Monitoring Student Workload- Faculty committee responsible for the medical curriculum and the program's administration and leadership ensure the development and implementation of effective policies and procedures regarding the amount of time medical students spend in required activities, including the total number of hours medical students are required to spend in clinical and educational activities during clerkships.				A	R	R	I	R	R	R
Standard 9: Teaching, Supervision, Assessment, and Student and Patient Safety										
9.1 Preparation of Resident and Non-Faculty Instructors- In a medical school, residents, graduate students, postdoctoral fellows, and other non-faculty instructors in the medical education program who supervise or teach medical students are familiar with the learning objectives of the course or clerkship and are prepared for their roles in teaching and assessment. The medical school provides resources to monitor residents' and non-faculty instructors' teaching and assessment skills, with varied monitoring of their participation in these opportunities provided.				A		I	R			
9.2 Faculty Appointments- A medical school ensures that supervision of medical student learning experiences is provided throughout required clerkships by members of the school's faculty.	AO			I			R	R	R	
9.3 Clinical Supervision of Medical Students- A medical school ensures that medical students in clinical learning situations involving patient care are appropriately supervised at all times in order to ensure patient and student safety, that the level of responsibility delegated to the student is appropriate to his or her level of training, and that the activities supervised are within the scope of practice of the supervising health professional.				A		I	I	R	R	R
9.4 Variety of Measures of Student Achievement / Direct Observation of Core Clinical Skills- A medical school ensures: A medical school ensures that, throughout its medical education program, there is a diversified system to assess student achievement, including student's acquisition of the knowledge, core clinical skills (e.g., medical history-taking, physical examination, behavior, and attitudes specified in medical education program objectives), and that ensures that all medical students achieve the same medical education program objectives.				A	R	R	I	R	R	R
9.5 Narrative Assessment- A medical school ensures that a narrative description of a medical student's performance, including his or her non-negative achievement, is included as a component of the assessment in each required course and activity of the medical education program, document teaching/clinical interaction given in this form of assessment.				A	R	R	I	R	R	

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R = Recommendation (proposing via committee action, advocacy, or supporting after review)										
	Board of Trustees	University President	University Vice President	Dean	Senior Associate Dean of Medical Education	Senior Associate Dean of Clinical Medicine	Other Deans/Chairs	Clinical Governance Committee	Faculty Committees	Faculty
3.6 Setting Standards of Achievement: A medical school ensures that faculty members with appropriate knowledge and expertise set standards of achievement to which required learning experiences in the medical education program.				A	I	R	R	R	R	R
3.7 Formative Assessment and Feedback: A medical school ensures that each medical student is assessed and provided with formative feedback early enough during each required course or clerkship (four or more weeks in length) to allow sufficient time for remediation.				A	R		I		R	R
3.8 Fair and Timely Summative Assessments: A medical school has in place a system of fair and timely summative assessment of medical students' achievement in each course and clerkship of the medical education program. Final grades are available within a week of the end of a course or clerkship.				A	R	R	I		R	R
3.9 Single Standard for Promotion/Graduation and Appeal Process: A medical school ensures that the medical education program has a single standard for the promotion and graduation of medical students across all locations and a fair and timely process for taking any action that may affect the status of a medical student, including timely notice of the impending action, disclosure of the evidence on which the action could be based, an opportunity for the medical student to respond, and an opportunity to appeal any adverse decision related to promotion, graduation, or dismissal.				A	R	R	I		R	R
Standard 10: Medical Student Selection, Assignment, and Progress										
10.1 Pre-medical Education/Required Coursework: A medical school encourages potential applicants to the medical education program to acquire a broad undergraduate education that includes the study of the humanities, natural sciences, and social sciences, and satisfies the specific premedical course requirements to those deemed essential preparation for successful completion of its medical curriculum.							I		A	R
10.2 Final Authority of Admission Committee: The final responsibility for admitting students to a medical school rests with a formally constituted admission committee. The authority and composition of the committee and the rules for its operation, including voting privileges and the definition of a quorum, are specified in bylaws or other similar school policies. A single person cannot exercise the majority of voting members in all meetings. The selection of individual medical students for admission is not influenced by any political or financial factors.							I		A	R
10.3 Policies Regarding Student Selection/Progress and Their Discontinuation: The faculty of a medical school establish criteria for student selection and develop and implement effective policies and procedures regarding, and make decisions about, medical student application, selection, admission, retention, discontinuation, and any disciplinary action.							I		A	R
10.4 Characteristics of Accepted Applicants: A medical school selects applicants for admission who possess the intelligence, integrity, and personal and academic characteristics necessary for them to become competent physicians.				R	R	R	I		A	R
10.5 Technical Standards: A medical school develops and publishes technical standards for the admission, retention, and graduation of applicants as medical students, such as conditions of attendance with high requirements.				R	R	R	I		A	R
10.6 Content of Informational Materials: A medical school's catalog and other informational, recruiting, and recruitment materials present a balanced and accurate representation of the nature and objectives of the medical education program, state the academic and other (e.g., nonacademic) requirements for the M.D. degree and all associated joint degree programs, provide the most	R	A	R	R	R	R	I		A	R

Compartmentalization of Decision Authority to Prevent Direct Conflict of Interest

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R = Recommendation (proposing via committee action, advocacy, or supporting after review)									
	Board of Trustees	University President	University Vice President	Dean	Senior Associate Dean of Medical Education	Senior Associate Dean of Clinical Medicine	Chief Nurse/Quality Officer	Clinical Governance Committee	Faculty Committees
									Board of Directors
procedures in place that permit a medical student to review and to challenge his or her educational records, including the Medical Student Performance Evaluation, if he or she completes the information contained therein to his satisfaction, including on suspension									
Standard 12: Medical Student Health Services, Personal Counseling, and Financial									
12.1 Financial Aid/Over Management Counseling/ Student Educational Debt: A medical school provides its medical students with effective financial aid and debt management counseling and has mechanisms in place to minimize the impact of direct educational expenses (i.e., tuition, fees, books, supplies) on medical students' indebtedness.				A		I		R	R
12.2 Tuition Refund Policy: A medical school has clear, reasonable, and fair policies for the refund of a medical student's tuition, fees, and other allowable payments.				A		I		R	R
12.3 Personal Counseling/Well-Being Programs: A medical school has in place an effective system of personal counseling for its medical students and includes programs to promote their well-being and to facilitate their adjustment to the physical and emotional demands of medical education.				A		I		R	R
12.4 Student Access to Health Care Services: A medical school provides its medical students with timely access to needed diagnostic, preventive, and therapeutic health services at sites in reasonable proximity to the locations of their required educational experiences and has policies and procedures in place that permit students to be excused from their responsibilities for work-related care.				A		I		R	R
12.5 Non-Involvement of President of Student Health Services in Student Assessment/ Location of Student Health Records: The health organizations who provide health services, including psychiatric/psychological counseling, on a medical student have no involvement in the students' assessment or provision of the medical student requiring those services. A medical school ensures that medical student health records are maintained in accordance with legal requirements for security, privacy, confidentiality, and accessibility.						I			
12.6 Student Access to Health and Disability Insurance: A medical school ensures that health insurance is available to each medical student and his or her dependents, and that each medical student has access to disability insurance.				A				R	
12.7 Immunization Guidelines: A medical school follows accepted guidelines in determining immunization requirements for its medical students.				A		I, R			
12.8 Student Exposure Policies/Procedures: A medical school has policies in place that effectively address medical student exposure to infectious and environmental hazards.				A		I, R			

University of California, San Francisco
CURRICULUM VITAE

Name: Leon Assael, DMD

Position: HS Clinical Professor, Step 5
Preventive & Restorative Dental Sciences
School of Dentistry

Address: University of California, San Francisco
D1025
707 Parnassus St.,
San Francisco, CA
Voice: 415 410 3766
Email: leon.assael@ucsf.edu

EDUCATION

1967 - 1971	Columbia University	BA	Government	
1971 - 1975	Harvard University	DMD	dental medicine	Donoff, thesis advisor
1975 - 1978	Vanderbilt University	OMS residency	oral maxillofacial surgery	
1999 - 2001	University of Kentucky, Gatton School of Business	CMM	medical management	na

LICENSES, CERTIFICATION

07/2012-present	Minnesota #S51 Oral and Maxillofacial Surgery/Anesthesia Class IV
4/2018	California Board of Dentistry #102366

PRINCIPAL POSITIONS HELD

1978 - 1980	private practice, Alton, Illinois	oral and maxillofacial surgeon	OMS
1980 - 1981	Wood VA Medical Center, Milwaukee, WI	head of OMS, residency program director	OMS

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1981 - 1989	Mount Sinai School of Medicine Long Island Jewish Hospital Federation of Jewish Philanthropies City Hospital Center at Elmhurst Mount Sinai Hospital Bronx Veteran's Administration Hospital	Assistant Professor of Surgery, Mount Sinai School of Medicine, program director OMS	OMS
1989 - 1997	University of Connecticut	Associate Professor 1989-94 and Professor 1994-1997 OMS. Program director and chair 1994-1997	OMS
1997 - 2003	University of Kentucky	Dean and Professor, College of Dental Medicine	dental medicine
2003 - 2012	Oregon Health & Science University	Program Director, Residency in Oral and Maxillofacial Surgery Professor of Oral and Maxillofacial Surgery Oregon Health & Science University Chair, Oral and Maxillofacial Surgery School of Dentistry Oregon Health & Science University	OMS
2012 - 2017	University of Minnesota	Dean and Professor Oral and Maxillofacial Surgery, 2012-2017 currently Dean and Professor Emeritus, May 1, 2017	dentistry, OMS

2012 - 2017	University of Minnesota	Chief of Dental Services University of Minnesota Medical Center, Fairview	dentistry
2016 - 2019	ADEA	Chairman of the Board, American Dental Education Association March, 2017-2019	ADEA

OTHER POSITIONS HELD CONCURRENTLY

2015 - present	Oral and Maxillofacial Surgery, Springer Berlin	Co-Editor in Chief	OMS
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HONORS AND AWARDS

1967	National Honor Society: fellowship and scholarship	National Honor Society
1967	New York State Regents Scholar Scholarship	Regents of New York State Board of Higher Education
1971	Frank Randall McCullaugh Scholarship	Harvard University
1972	Biostatistics Academic Achievement Award	Harvard Medical School
1975	Graduation Class Speaker Harvard Medical School Commencement	Harvard Medical School
1975	DMD with Honors for thesis: Outcomes of clinical interventions for osteoradionecrosis	Harvard School of Dental Medicine
1978	Chief resident with chair Vanderbilt University Hospital	Vanderbilt University
1988	Outstanding Service Award	New York State Society of Oral and Maxillofacial Surgeons
1989	Fellowship	American College of Oral and Maxillofacial Surgeons
1989	Advisory Committee Award	American Board of Oral and Maxillofacial Surgery
1994	Fellowship	American College of Dentists

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1994	Distinguished member, chair	Omicron Kappa Upsilon Dental Honor Society, University of Connecticut
1997	Fellowship	International College of Dentists
1999	Distinguished Practitioner Award	National Academies of Practice
1999	Examining Committee Award ,	American Board of Oral and Maxillofacial Surgery
1999	Top Dentist: Guide to America's Top Dentists	Consumer Research Council of America
2000	mentorship award: for mentoring Karen West DMD	Society of Executive Leadership in Academic Medicine (SELAM)
2000	Skagg's Oral and Maxillofacial Surgery Lectureship and Professorship Award	University of Louisville
2000	Silver Anniversary Award, Class of 1975 for most outstanding alumnus	Harvard School of Dental Medicine
2000	Class day speaker and dental medicine representative	Harvard School of Dental Medicine
2001	America's Promise Award: Recognition for University of Kentucky Community Projects Promoting a Healthy Start for Children in Appalachia President George W. Bush Presiding, The White House 2001	America's Promise and The United States of America
2001	Kentucky Colonel	Commissioned by Paul Patton, Governor Commonwealth of Kentucky
2001	First Annual Diversity Commission Award of Excellence President Lee Todd Presiding	University of Kentucky
2002	Certificate of Merit, Commonwealth of Kentucky 2002 D.L. Williams Presiding	The Senate of the Commonwealth of Kentucky
2002	Laskin Oral and Maxillofacial Surgery Distinguished Lectureship	Indiana University
2003	Pierre Fauchard Academy Fellowship	Pierre Fauchard Academy
2004	Sadie Oral and Maxillofacial Surgery Distinguished Lectureship	University of the Pacific
2004	Recognized Top Reviewer	Oral Surgery, Oral Pathology, Oral Medicine, and Oral Radiology (OOOO)

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2004	William H. Ware Visiting Professor Department of Oral and Maxillofacial Surgery, College of Dentistry University of California San Francisco	University of California San Francisco
2005	Peter Connole Lectureship	Washington Hospital Center
2006	William Harrigan Society Lectureship	New York University
2006	Ben Alley Lectureship	University of Tennessee-Knoxville
2006	Donald Osbon Award for Outstanding Educator in Oral and Maxillofacial Surgery	American Association of Oral and Maxillofacial Surgeons
2006	Kurt Thoma Award and Lectureship: Dalhousie University Halifax, Nova Scotia	American and Canadian College of Oral and Maxillofacial Surgeons
2008	Daniel E. Waite Distinguished Lectureship	University of Minnesota
2009	Professional Contribution Award Graduate Medical Education	Oregon Health & Science University School of Medicine
2011	Special Recognition Award: Editor in Chief Journal of Oral and Maxillofacial Surgery 2002-2011	Board of Trustees American Association of Oral and Maxillofacial Surgeons
2012	Founding Fellow	American Academy of Craniomaxillofacial Surgeons
2016	Presidential Achievement Award, American College of Prosthodontists	American College of Prosthodontists
2016	Top Reviewer	Oral Surgery, Oral Medicine, Oral Radiology, Oral Pathology
2017	Journal of Oral and Maxillofacial Surgery Recognized Top Reviewer 2014-2017	Journal of Oral and Maxillofacial Surgery
2017	First dental education visit to Cuban colleagues Site visit leader award	American Dental Education Association

KEYWORDS/AREAS OF INTEREST

health systems based practice
community engagement
community based education
maxillofacial nerve injuries
neuroscience
facial trauma
health outcomes
Value based health care

dental therapy
 oral and maxillofacial surgery
 temporomandibular disorders
 facial pain

CLINICAL ACTIVITIES

CLINICAL ACTIVITIES SUMMARY

Practicing board certified oral and maxillofacial surgeon with special interest and experience in maxillofacial nerve injuries, facial neuropathic pain, facial fractures, cleft lip and palate, pediatric OMS, reconstructive surgery. 22 years as full time at level one trauma center and 15 years experience as chief of OMS at a children's hospital. My current clinical interests are in ambulatory oral and maxillofacial surgery education, maxillofacial nerve injury and neuropathic pain.

CLINICAL SERVICES

1977 - 1978	Chief Resident Oral and Maxillofacial Surgeon Nashville General Hospital Vanderbilt University Medical Center Nashville VA Hospital	full time
1978 - 1980	Private practice, oral and maxillofacial surgery Alton/Godfrey, Illinois	full time
1980 - 1981	Wood VA Medical Center Froedert Memorial Hospital practice of oral and Maxillofacial Surgeon	full time
1981 - 1989	Practicing OMS, chief of OMS and dental service, Mount Sinai Services/City Hospital Center, Mount Sinai Hospital, Bronx VA Hospital, Long Island Jewish Hospital	full time
1989 - 1997	program director and chief of service, John Dempsey Hospital and Connecticut Childrens Medical Center. Attending Hartford Hospital	full time
1997 - 2003	Practicing OMS Chandler Medical Center, University of Kentucky	full time
2003 - 2012	Practicing OMS, OHSU Hospital, Dohrnbacher Childrens Hospital	Full time
2012 - 2017	Practicing OMS, University of Minnesota Hospitals and Clinics	full time

PROFESSIONAL ACTIVITIES

MEMBERSHIPS

1975 - present American Dental Association
 1978 - present American Association of Oral and Maxillofacial Surgeons
 1978 - 1990 Southeastern Society of Oral and Maxillofacial Surgeons

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1981 - 1990	Dental Society of the State of New York New York State Society of Oral and Maxillofacial Surgeons
1981 - 1990	New York Head and Neck Society
1981 - 1997	Northeast Society of Oral and Maxillofacial Surgeons
1984 - 1994	Society of Educators in Oral and Maxillofacial Surgery
1985 - present	The Association for the Study of Internal Fixation (Arbeits Gemeinschaft Fur Osteosynthesen Fragen)
1987 - present	American Association for Dental Research
1987 - 1999	American Cleft Palate-Craniofacial Association
1989 - present	International Association of Oral and Maxillofacial Surgeons
1990 - 1997	Connecticut State Dental Association Hartford Dental Society
1990 - present	American Dental Education Association
1990 - present	International Association for Dental Research
1990 - present	British Association of Oral and Maxillofacial Surgeons
1990 - 1997	Connecticut Society of Oral and Maxillofacial Surgeons
1991 - present	Academy of Osseointegration
1991 - present	International Team for Implantology
1993 - 2003	National Academies of Practice
1994 - present	American College of Dentists
1996 - present	Hispanic Dental Association
1997 - present	International College of Dentists
1997 - 2003	American Student Dental Association
1997 - 2003	Kentucky Rural Health Association
1997 - 2017	Friends of the National Institute of Dental and Craniofacial Research
1997 - 2016	Academy of General Dentistry
1997 - 2003	Blue Grass Dental Society, Kentucky Dental Association, Kentucky Dental Health Coalition, Kentucky Society of Oral and Maxillofacial Surgeons
2001 - 2011	Council of Science Editors
2001 - 2011	American Association of Dental Editors
2003 - 2012	Multnomah Dental Society Oregon Dental Association
2003 - 2012	Oregon Society of Oral and Maxillofacial Surgeons
2003 - present	Western Society of Oral and Maxillofacial Surgeons
2011 - present	American Academy of Craniomaxillofacial Surgeons, founding member

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2012 - 2017 Minnesota Society of Oral and Maxillofacial Surgeons
 2012 - present Minnesota Dental Association Minneapolis District Dental Society
 2014 - present Gesellschaft fur Mund Keifer Chirurgie (German Society of OMS)
 2018 - present California Dental Association, San Francisco Dental Society

SERVICE TO PROFESSIONAL ORGANIZATIONS

1983 - 1989	Board of Directors New York State Society of Oral and Maxillofacial Surgeons	secretary, treasurer, president
1984 - 1988	Committee on Audiovisual Education Services American Association of Oral and Maxillofacial Surgeons	committee member and chair
1985 - 1987	Society of Educators in Oral and Maxillofacial Surgery	President
1985 - 1988	Special Committee on Scope of Oral and Maxillofacial Surgery American Association of Oral and Maxillofacial Surgeons	committee member
1985 - 1993	House of Delegates American Association of Oral and Maxillofacial Surgeons	delegate
1985 - 1988	Committee on Oral and Maxillofacial Surgery Patient Service Needs American Association of Oral and Maxillofacial Surgeons	committee member
1985 - 1989	Special Committee on Standards of Care American Association of Oral and Maxillofacial Surgeons	committee member
1985 - 1989	Task force on Longitudinal Education American Association Oral and Maxillofacial Surgeons	committee member
1987 - 1997	Board Examiner and Member, Advisory Committee Pathology/Reconstruction Section American Board of Oral and Maxillofacial Surgery	committee member Chairman, Pathology Section
1988 - 1988	Reference Committee on Health Care Plans American Association of Oral and Maxillofacial Surgeons	chairman
1988 - 1994	Technical Commission Association for the Study of Internal Fixation	committee member
1989 - 1993	American Association of Oral and Maxillofacial Surgeons AAOMS Board of Directors	Trustee, 1st District
1989 - 1993	Committee on Professional Conduct American Association of Oral and Maxillofacial Surgeons	Board Advisor
1989 - 1993	Budget and Finance Committee American Association of Oral and Maxillofacial Surgeons	Committee Member
1989 - 1993	Building Committee American Association of Oral and Maxillofacial Surgeons	Committee member

1989 - 1993	Board of Trustees' Advisory Commission on Education American Association of Oral and Maxillofacial Surgeons	committee member
1990 - 1993	Special Committee on Quality of Care American Association of Oral and Maxillofacial Surgeons	Co-chair
1990 - 1994	Education Committee, AO/ASIF Association for the Study of Internal Fixation	committee member chair
1990 - 1994	Northeast Society of Oral and Maxillofacial Surgeons	Secretary Treasurer
1991 - 1998	North American section: International Team for Implantology Board of trustees	founding board member
1993 - 1997	Committee on Residency Education American Association of Oral and Maxillofacial Surgeons	committee member
1994 - 1998	Committee on Continuing Education American Association of Oral and Maxillofacial Surgeons	committee member
1994 - 1996	Consensus Conference, TMJ Implants American Association of Oral and Maxillofacial Surgeons TMJ Implant Oversight Committee American Association of Oral and Maxillofacial Surgeons	Co-chair
1995 - 2005	Consultant, Commission on Dental Accreditation American Dental Association	Site Visitor for CODA
1997 - 2017	Council of Deans American Dental Education Association:1997-2003:2012-2017	exec committee chair 2015
1997 - 2003	Council of Dean's American Association of Dental Schools	Committee member
1997 - 2003	Executive Committee Kentucky Dental Health Coalition	board member
1997 - 2003	Board of Trustees Blue Grass Dental Society	executive committee
1997 - 2003	Board of Trustees Kentucky Dental Association	education representative
1997 - 1997	Robert V. Walker Society Oral and Maxillofacial Surgery Foundation	Founding member
1998 - 2004	Council on Dental Education and Licensure American Dental Association	member chairperson
1998 - 2004	Faculty Section Board American Association of Oral and Maxillofacial Surgeons	executive committee chair
2000 - 2004	Committee B Council on Dental Education American Dental Association	chair
2000 - 2004	Research America Board National Institutes of Dental and Craniofacial Research	board member
2001 - 2003	Summer Dental Dean's Institute Program Committee	committee Member,

2002 - 2005	Alaska Taskforce on Dental Therapists American Dental Association	delegate
2002 - 2006	Committee on Scientific Sessions American Association of Oral and; Maxillofacial Surgeons	committee member and chair
2002 - 2002	Third Molar Consensus Conference American Association of Oral and Maxillofacial Surgeons	Chairman,
2003 - 2004	Special committee on Resolution 85 Dental School Clinical Programs American Dental Association	chair
2003 - 2003	Summit on the Future of Dental Education American Dental Association	organizing committee delegate
2003 - 2006	Committee on Lifelong Learning American Dental Association	chair
2004 - 2008	Education Committee International Association of Oral and Maxillofacial Surgeons	committee member
2004 - 2008	Oregon Dental Association Public Information Committee	committee member
2004 - 2010	Taskforce on Osteonecrosis American Association of Oral and Maxillofacial Surgeons	committee member editor
2006 - 2012	Western Society of Oral and Maxillofacial Surgeons	board of trustees president
2009 - 2013	American College of Oral and Maxillofacial Surgeons Board of Trustees	secretary/treasurer of the board
2009 - 2016	Research Review Committee (study section) Trauma, Spine, Maxillofacial, Bone AO/ASIF Foundation (Arbeitsgemeinschaft fur Osteosynthese Fragen)	member vice chair
2012 - 2017	Minnesota National Center for Interprofessional Education Nexus Steering Committee	co-chair
2012 - 2017	Board of Dentistry, State of Minnesota	school of dentistry representative
2012 - 2016	Community University Health Clinic, board of directors Minneapolis, MN	School of Dentistry representative
2012 - 2016	Rice Memorial Hospital Willmar< Minnesota dental advisory committee	school of dentistry representative
2012 - 2016	education committee Minnesota Dental Association	committee member
2013 - present	Commission on Dental Accreditation (CODA) for CODA DDS program review/site visits: Loma Linda, Mississippi, North Carolina, consultant dental therapy standards, prosthodontic standards	Site Visit Team Chair

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2014 - 2017	Technical Innovations Committee Delta Dental of Minnesota	Chair
2015 - 2016	Council of Deans ADEA	Chair
2015 - 2019	Board of Trustees. American Dental Education Association	member
2016 - 2017	Chairman of the Board, American Dental Education Association	chair
2017 - 2017	First liaison meeting of the American Dental Education Association and the Cuban Health Authority for Stomatologic Education	Chair
2017 - present	The International Dental Education Association (IDEA)	Founding chair of the board

SERVICE TO PROFESSIONAL PUBLICATIONS

1988 - present	Reviewer, Journal of Oral and Maxillofacial Surgery Elsevier, New York
1993 - present	Reviewer, Oral Surgery, Oral Pathology, Oral Medicine, and Oral Radiology
1993 - 2000	Consulting Editor, Atlas of the Oral and Maxillofacial Surgery Clinics of North America
1993 - 2000	Assistant Editor, Journal of Oral and Maxillofacial Surgery
2000 - 2001	Editor in Chief Designee, Journal of Oral and Maxillofacial Surgery
2000 - present	Reviewer, Journal of the American Dental Association
2001 - 2011	Editor in Chief, Journal of Oral and Maxillofacial Surgery Elsevier, New York
2003 - 2007	Editorial Board, China Journal of Oral and Maxillofacial Surgery
2004 - present	Reviewer, International Journal of Oral and Maxillofacial Surgery
2006 - present	Reviewer, Head and Neck
2006 - 2012	Editor in Chief, The Westerner- Official Journal of the Western Society of Oral and Maxillofacial Surgeons
2006 - 2008	Editorial Board, Oral Surgery
2007 - present	Reviewer, Bone
2007 - present	Reviewer, Otolaryngology
2008 - present	Editorial Board, Annals of Maxillofacial Surgery
2008 - present	Reviewer, Journal of the American Medical Association
2011 - present	editor in chief emeritus, Journal of Oral and Maxillofacial Surgery Elsevier, New York
2013 - present	Co-Editor in Chief, Oral and Maxillofacial Surgery , Springer, Berlin

- 2015 - present Reviewer, European Journal of Dental Education
- 2015 - present Reviewer, Journal of Dental Education
- 2015 - 2017 Editorial Board, Oral Surgery, Oral Medicine, Oral Pathology, Oral Radiology
Section Editor Elsevier, New York

INVITED PRESENTATIONS - INTERNATIONAL

- | | | |
|------|---|--|
| 1985 | AO/ASIF Maxillofacial Meeting, Davos, Switzerland
Gunshot wounds to the mandible | presenter |
| 1987 | AO/ASIF Maxillofacial Meeting Steckborn, Switzerland
Internal fixation of mandible fractures | presenter |
| 1990 | University of Freiburg, Germany Assessment of
nonsubmerged dental implants and the conical abutment | presenter |
| 1992 | Dental implants and reconstruction with bone grafts for
mandibular defects AO/ASIF and ITI, Basel, Switzerland | presenter |
| 1993 | ITI implants in oncology University of Bern, Switzerland | presenter |
| 1994 | Internal fixation of complex angle fractures mandible
University of Regensburg, Germany | presenter |
| 1995 | Microfixation of midface fractures British Association of Oral
and Maxillofacial Surgeons, Kilarney, Ireland | presenter |
| 1995 | Outcomes of reconstruction of mandible for ablative defects
including dental implants, Acapulco, Mexico | plenary invited
abstract session
presenter |
| 1996 | Cranial based injuries and associated maxillary fractures
AO/ASIF, Cancun, Mexico | presenter |
| 1999 | Kuwait health Authority, Kuwaiti Dental Association, Facial
Pain and Maxillofacial Neurologic Disorders | plenary speaker |
| 1999 | Ajman University, UAE Status of American Dental
Education | plenary speaker |
| 2004 | Japanese Society of Oral and Maxillofacial Surgeons
Internal fixation in Maxillofacial Surgery: trauma,
orthognathic surgery and reconstruction, a two day course | invited plenary
speaker |
| 2006 | Osteonecrosis, bone health and bisphosphonates
International Association of Oral and Maxillofacial Surgeons
Santiago, Chile | invited plenary
speaker |
| 2008 | Contemporary concepts in fibula reconstruction of ablative
defects Turkish Society of Oral and Maxillofacial Surgeons
Istanbul, Turkey | invited plenary
speaker |

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2009	Israeli Society of Oral and Maxillofacial Surgeons Osteonecrosis, wound health and maxillofacial neurologic disorders, a one day course	invited plenary speaker
2013	Status of US dental education: a Bridge to Peace program, AIQuds University, Palestinian Territories, and Hadassah Hospital	invited plenary speaker
2014	Selected topics in oral and maxillofacial surgery, oral medicine and anesthesia University of Minnesota, Croatian Dental Society Zagreb, Split, and Dubrovnik, Croatia	invited plenary speaker
2015	the German Journal of Oral and Maxillofacial Surgery, Editors report Gesellschaft für Mund Keifer Gesichts Chirurgie, Cologne, Germany	invited plenary speaker
2016	The OSCE and examining clinical judgement for dentists Dental Education in the United States Sharjah University, graduation speaker and examiner Sharjah/Dubai, UAE	invited plenary speaker
2017	Cuban Health Department, Havana, Cuba, Escola Estomatologica, US dental education and international programs, Havana, Cuba, April 5, 2017	plenary speaker
2017	Federation Dentaire Internationale Madrid, Spain Assessing the need for an international dental education association	speaker
2017	Association for dental education in Europe: Activities of the American Dental Education Association, June 8, 2017, London, GB	plenary speaker
2018	Improving access to medicaid services for oral health, Academy Health, Seattle, Washington, June 2018	plenary speaker
2018	Educators role in implementing state oral health plan, Oral Health Symposium, State of California Department of Health, Sacramento, California, June 2018	plenary speaker

INVITED PRESENTATIONS - NATIONAL

2013	American Association of Medical Colleges workforce conference: dental therapy Washington DC	presenter
2013	Leader, The Nuts and Bolts of Expanding Access to Dental Care Pew Children's Dental Campaign September 2013	plenary speaker
2013	Presenter, Failures to Communicate or Opportunities to Cure: The Maxillofacial Surgeon/Pathologist Interface on Our Time AAOMP's 2013 Annual Meeting Continuing Education Program June 2013	two day course plenary speaker
2017	Southwest Minnesota Dental Society, exodontia in dental practice, utilization of dental therapists: March 31, 2017	plenary speaker

2017	American Student Dental Association, Dental Therapy practice and economic impact, February 24, 2017, Orlando, FL	plenary speaker
2017	ADEA Annual Session, Symposium on the Oral Physician, impact of workforce and dental therapy March 20, 2017	presenter
2017	Value Based Dental Care, Delta Dental Symposium, Minneapolis, MN, January 19, 2017	plenary speaker
2017	Status of dental education American Association of Dental Boards, Status of American Dental Education, Chicago, IL, April 13, 2017	plenary speaker
2017	ADEA allied program directors, Vision 2030, ADEA, June 4, 2017, Baltimore	speaker
2017	Delta Dental of Minnesota, Medically Necessary Dental Care, April 26, 2017 Minneapolis, MN	plenary speaker
2017	ADEA Student Section: Workforce needs in dentistry, May 16, 2017, Washington, DC	plenary speaker
2017	ADEA Commission for Change and Innovation(CCI): Parameters of change in dental education Visoin 2030, June 6 2017 Baltimore	speaker
2017	Sustainable future of dental education, practice and payment systems: value based care National Association of Dental Plans Atlanta, GA	plenary speaker
2017	Vision 2030: The future of dental education, American Association of Dental Boards, American Association of Dental Boards, Atlanta, GA	plenary speaker
2018	Components of Vision 2030, the future of oral health education, ADEA annual meeting, Orlando, March 2018	head of organizing committee and plenary speaker

INVITED PRESENTATIONS - REGIONAL AND OTHER INVITED PRESENTATIONS

2005	Montana Dental Association: oral surgery plenary speaker Missoula, MT	plenary speaker
2005	Idaho Dental Association, Boise, ID contemporary issues in oral surgery	speaker
2006	Western Society of Oral and Maxillofacial Surgeons :case presentations Whistler, BC	presenter
2006	Cancer Centers of America: bone health during chemotherapy and oral complications, tulsa, OK	grand rounds speaker
2009	Oregon Dental Association: Bone health and oral health	plenary speaker

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2010	Lane County Dental association: oral surgery	plenary speaker
2010	Maxillofacial advance course AO: comminuted fractures Lake Tahoe, NV	presenter
2012	New models of initial licensure American Association of Dental Boards (AADB) Annual Meeting Oct. 17-18, 2012 3.5	presenter
2012	Arizona Society of Oral and Maxillofacial Surgeons	plenary speaker
2012	Colorado Oral health alliance: midlevel providers	speaker
2012	Research Meets Practice: Involve Your Team, Impress Your Patients, Improve Your Profession! PBRN symposium, NIDCR Oct. 12, 2012	speaker
2012	Maxillofacial Nerve Injuries 12th Annual Oral and Maxillofacial Surgery Review University of Minnesota Continuing Dental Education Program Aug. 2012	presenter
2012	Common Oral Diseases and Oral Health Issues in Primary Care Medicine Mini Medical School-University of Minnesota Fall 2012	Presenter
2012	Implant born removable prosthodontics Clinical Grand Rounds for the Dental Team: Removable Prosthodontics Oct. 4, 2012	presenter
2012	Bisphosphonate-Related Osteonecrosis of the Jaw grand rounds, Mayo Clinic, Rochester, MN Nov. 9, 2012	presenter
2012	Presenter, What's New is Dentistry-Bisphosphonates Oral Health University of Minnesota Continuing Dental Education Program Jan. 2013	speaker
2012	Initial clinical licensure in Minnesota 54th Annual Dean's Conference Nov. 10-12, 2012	speaker
2013	speaker, status of research at UMN, 9th Annual Dean's Day: Dental Research Updates from the U of M March 8, 2013	speaker
2013	Clinical Grand Rounds for the Dental Team: University of Minnesota Maxillofacial Nerve Injuries April 4, 2013	speaker
2013	19th Annual CE course with Baylor Col Dentistry Feb. 6-8, 2014 6 Office Oral Surgery: A Guided Experience for the General Dentist	plenary speaker
2013	The Park Dental Education Forum for Students and Faculty Feb. 28, 2013	speaker

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2013	Presenter, Clinical Grand Rounds: Maxillofacial Nerve Injuries University of Minnesota Continuing Dental Education Program April 2013	speaker
2013	Maine Legislature hearing on dental therapy, Augusta, ME	speaker
2013	Presenter, Annual Dean's Day: Dental Research Updates University of Minnesota Continuing Dental Education Program March 2013	speaker
2013	All-School Dentistry Faculty Workshop: Rural Dentistry Strategic Thinking, University of Minnesota Jan. 4, 2013	plenary speaker
2016	American Student Dental Association, Dental Therapy practice and economic impact, February 24, 2017, Orlando, FL	plenary speaker
2016	Vermont legislature hearing on dental therapy: dental therapy in Minnesota Montpelier	speaker
2017	Minnesota Symposium, Delta Dental, Value Based Dental Care, Minneapolis, MN, January 19, 2017	speaker
2017	Southwest Minnesota Dental Society, exodontia in dental practice, utilization of dental therapists: March 31, 2017	plenary speaker
2017	The future of dental education and licensure American Association of Dental Boards, Atlanta, September, 2017	plenary speaker

GOVERNMENT AND OTHER PROFESSIONAL SERVICE

1978 - 1980	Chairman, Medical Records Committee St. Joseph's Hospital Alton, Illinois 1978-1980	chair
1982 - 1986	Member, Committee on Utilization Review Mt. Sinai Services, City Hospital Center 1982-1986	member
1982 - 1988	Member, Surgery Committee Mt. Sinai Services, City Hospital Center 1982-1988	member
1982 - 1988	Member, Quality Assurance Committee Mt. Sinai Services, City Hospital Center 1982-1988	member
1982 - 1988	Member, Medical Education Committee Mt. Sinai Services, City Hospital Center 1982-1988	member
1982 - 1988	Member, Radiation Protection Committee Mt. Sinai Services, City Hospital Center 1982-1988	member
1982 - 1988	Vice Chairman, Ambulatory Care Committee Mt. Sinai Services, City Hospital Center 1982-1988	vice chair
1983 - 1988	Member, Medical Board Mt. Sinai Services, City Hospital Center 1983-1988	member

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1984 - 1986	Chairman, Medical Records Committee Mt. Sinai Services, City Hospital Center 1984-1986	chair
1984 - 1988	Chairman, Committee on Constitutional Amendments Mt. Sinai Services, City Hospital Center 1984-1988	chair
1985 - 1988	Co-Chairman, Committee on the Use of Physicians Assistants Mt. Sinai Services, City Hospital Center 1985-1986	co-chair
1985 - 1987	Member, Case Mix Committee Mt. Sinai Services, City Hospital Center , City Hospital Center 1985-1987	member
1985 - 1987	Secretary Treasurer, Medical Board Mt. Sinai Services, City Hospital Center 1985-1987	secretary treasurer
1985 - 1988	Member, Medical Education Committee Mt. Sinai Services, City Hospital Center 1985-1988	member
1986 - 1988	Member, President's Medical Directors Committee Health and Hospitals Corporation, New York 1986-1988	member
1986 - 1990	Consultant, New York Department of Health Bureau of Dentistry Orthodontic Advisory Committee 1986-1990	consultant
1987 - 1988	Vice President, Medical Board Mt. Sinai Services, City Hospital Center 1987	vice president
1988 - 1989	Chair, president, medical board, City Hospital Center	president
1987 - 1988	Chairman, Credentials Committee Mt. Sinai Services, City Hospital Center 1987-1988	chair
1988 -	Member, Transfusion Committee Long Island Jewish Medical Center (LIJMC) 1988	member
1988 - 1989	Member, Operating Room Committee Long Island Jewish Medical Center (LIJMC) 1988	member
1988 - 1989	Member, Disaster Committee Long Island Jewish Medical Center (LIJMC) 1988	member
1990 - 1997	Member, Operating Room Committee University of Connecticut John Dempsey Hospital 1990	member
1990 - 1997	Member, Medical Board University of Connecticut John Dempsey Hospital 1990	member
1990 - 1997	Member, Joint Conference Committee University of Connecticut John Dempsey Hospital 1990	member
1990 - 1997	Member, Predoctoral Academic Affairs Committee University of Connecticut School of Dental Medicine 1990	member
1990 - 1997	Member, Quality Assurance Committee University of Connecticut John Dempsey Hospital 1990	member

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1990 - 1994	Member, Animal Care Committee University of Connecticut School of Dental Medicine 1990-1994	member
1991 - 1992	Chair, Strategic Planning Committee University of Connecticut School of Dental Medicine	chair
1991 - 1993	Member, Utilization Management University of Connecticut John Dempsey Hospital 1991	member
1991 - 1997	Member, Quality Assurance Committee University of Connecticut School of Dental Medicine 1991-1997	member
1991 - 1997	Member, Advanced Dental Education and Graduate Education Committee University of Connecticut School of Dental Medicine 1991-1997	member
1992 - 1993	Member, CODA Standard 6 Committee University of Connecticut School of Dental Medicine	member
1992 - 1993	Member, CODA Standard 5 Committee University of Connecticut School of Dental Medicine 1992	member
1992 - 1993	Member, CODA standard 2 Basic Medical Science Parallel Planning Committee University of Connecticut School of Dental Medicine 1992	member
1992 - 1996	Member, Dental Council Steering Committee University of Connecticut School of Dental Medicine 1992-1996	member
1992 - 1996	Member, Dental Planning Committee Newington Children's Hospital 1992-1996	member
1992 - 1997	Member, Hospital Directors Advisory Committee John Dempsey Hospital 1992-1997	member
1994 - 1997	Member , Dental Sciences Subject Committee Foundations of Dental Medicine 1994	member
1994 - 1997	Chairman, Committee on Undergraduate Dental Education 1994	Chair
1994 - 1997	Member Academic Performance Committee, Year IV 1994	member
1994 - 1997	Member, Board of Directors University Dentists University of Connecticut 1994	member
1994 - 1997	Member Executive Committee of the Dental Staff University of Connecticut School of Dental Medicine 1994	member
1994 - 1997	Member Dean's Advisory Committee University of Connecticut School of Dental Medicine 1994	member
1994 - 1997	Member, Task Force on Customer Relations/ Communications Physicians Focus Group University of Connecticut School of Dental Medicine 1994	member

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1994 - 1997	Member, Graduate Clinical Education Committee of Dental Council 1994	member
1995 - 1997	Member, Vice President's Advisory Council 1995	member
1996 - 1997	Member, Academic performance committee, Year I 1996	member
1997 - 2003	Member, Hospital Board Chandler Medical Center 1997	member
1997 - 2003	Dean's Advisory Committee Lexington VA Hospital 1997	chair
1998 - 2003	Member University of Kentucky Senate 1998	member
1997 - 2003	Member University of Kentucky Council of Deans	member
1998 - 2003	Member, Healthcare Enterprise Board University of Kentucky 1998	member
1998 - 2003	Board Member Kentucky Dental Health Consortium 1998	member
1999 - 2003	Member, Space Planning Committee Chandler Medical Center 1999	member
1999 - 1999	Chair, Dean Search Committee College of Pharmacy University of Kentucky 1999	chair
2001 - 2003	Member , Commission on Diversity President Lee Todd's University of Kentucky 2001-2003	member
2003 -	Member, Strategic Planning for Clinical Programs Committee University of Kentucky 2003	member
2003 - 2012	Member, Graduate Dental Education Committee Oregon Health and Sciences University 2003	member
2003 - 2012	Member, Graduate Medical Education Committee Oregon Health and Sciences University 2003	member
2003 - 2012	Member, Dental Education Committee for Undergraduate Education Oregon Health and Sciences University 2003	member
2004 - 2012	Member, Patient Safety Committee Oregon Health and Sciences University 2004	member
2006 - 2011	Member, EPIC Implementation Taskforce Oregon Health and Sciences University Hospital 2006-2011	member
2007 - 2011	Member, Credentials Committee of Professional Staff Oregon Health and Sciences University Hospital 2007	member co-chair
2009 - 2011	Member, Patient Quality Resources Subcommittee Oregon Health and Sciences University Hospital 2009	member
2010 - 2012	Member , Surgical Services Leadership Group Oregon Health and Sciences University Hospital 2010-2012	member
2011 - 2012	Member, Patient Safety Executive Committee Oregon Health and Sciences University Hospital 2011	member

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2011 - 2012	Member, Educational Outcomes Leadership Taskforce Office of the Provost Oregon Health and Sciences University 2011	member
2012 - 2016	Deans Council, Twin Cities Deans,	member vice chair chair
2012 - 2014	Chairman, Search Committee, Vice President for Health Sciences and Dean of the Medical School, University of Minnesota 2013-2014	member
2012 - 2017	Executive Committee, Academic Health Center	member
2012 - 2016	Department of dentistry, Univeristy of Minnesota Fairview medical center	chair
2014 - 2016	Executive Committee, Presidents Senior Leadership Team, University of Minnesota	member

UNIVERSITY AND PUBLIC SERVICE**SERVICE ACTIVITIES SUMMARY**

I just became a faculty member at UCSF in August 2017. However, I am planning to participate in committee on curriculum and admissions for the dental school. I have been appointed to the CODA steering committee.

UCSF CAMPUSWIDE

2017 -	Interprofessional education and pharmacy collaboration committee	member
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SCHOOL OF DENTISTRY

2017 -	Course directors committee	member
2017 -	DDS 4 academic performance committee	member
2017 -	Standard 2 CODA committee and 2-25 lead	member
2017 -	CODA site visit steering committee	member
2018 -	Externship and D4 curriculum revision committe	chair

DEPARTMENTAL SERVICE

2017 -	Serve on community based education committee	member
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SERVICE AT OTHER UNIVERSITIES

2017 -	CODA accreditation consultant, Hadassah University	consultant
2017 -	CODA accreditation consultant, New York University	consultant
2017 -	CODA site visit team chair, University of North Carolina	team chair

2018 -	CODA site visit chair site pending	team chair
COMMUNITY AND PUBLIC SERVICE		
1968 -	Columbia strike for peace	volunteer
1968 - 1971	Morningside Park Harlem boys club	volunteer and mentor
1968 -	March on Washington: Civil rights march	organizing committee
1969 - 1971	Earth Day, New York City	steering committee
1969 -	March on Washington: Viet Nam	Columbia steering committee
1972 - 1975	Court Street clinic for homeless Veterans, Boston, MA	volunteer
1972 -	Student's strike: protest invasion of Cambodia, Harvard Medical School	HMS representative to steering committee
1973 - 1975	Lynn Rehab center for spinal cord injuries	swim rehab aide
1975 - 1978	Nashville dept of health, NGH free clinic	oral surgeon
1981 - 1988	City Hospital Center representative to Community Board, Elmhurst, NY	committee member
1990 - 1997	Park Street Inn, Hartford, CT: homeless shelter and clinic	volunteer dentist
1990 - 1995	science curriculum reorganization committee SCRC: Farmington Public Schools, Farmington, Connecticut	committee member
1997 - 2003	Methodist Mission Clinic, Lexington, KY	volunteer dentist
2003 - 2012	Russell Street HIV clinic	oral surgeon community volunteer
2012 - 2017	Union Gospel Mission, health professions program	oral surgeon community volunteer
2012 - 2015	Mission of Mercy: Duluth, Mankato, and Bemidji, Minnesota	oral surgeon volunteer
2017 -	dental therapy development review committee Oregon Department of Health	member
2017 -	Mahubay community clinic, San Francisco	volunteer
2017 -	episcopal community services, health services for recently domiciled homeless	assistant

CONTRIBUTIONS TO DIVERSITY

CONTRIBUTIONS TO DIVERSITY

As a Hispanic Jewish American, I was educated in a very diverse NY school system and immediately became involved with CORE and NAACP including their fight to end de facto school based segregation in the north and concomitant block busting in NYC communities and redlining of retail businesses in Harlem. I lived in Harlem during that time as a student at Columbia and worked for Bobby Kennedy when he ran and as NY senator and in Adam Clayton Powell's campaign in congress as well as other civil rights leaders efforts. When Columbia set out to build a gymnasium in Morningside Park that would not allow community access, I was among the activists that ensured Harlem residents would be welcome at this new site and for other Columbia activities. I marched on Washington 4 times and was involved with civil rights and antiwar activities at various other levels. As a student in Boston after the Cambodia invasion, I helped organize the Boston Common protests and spoke at those rallies and elsewhere.

I entered dental medicine because I could see the adverse effects of poor oral health on the poor and minorities and those discriminated against through unconscious and conscious bias. I entered practice in a safety net hospital and have spent most of my career in safety net hospitals. Among many such activities such as above I have continued in this vein, most recently protesting in Minneapolis, along with a few of my students over the murder by policeman of an innocent man Philando Castile.

In a formal way, I have founded two chapters of the Hispanic Dental Association. Governor Patton of Kentucky appointed me to the diversity commission which has worked on immigrant and African American issues. I have also worked with the tribal communities in Minnesota and Oregon regarding health care access and the development of dental therapy, a new profession founded on the premises of improving diversity, access to care and oral health outcomes.

Also, commitment to diversity includes serving rural communities which are rapidly changing demographically to becoming hispanic and refugee communities. Outreach to 26 rural sites resulted in a HRSA grant to develop rural minority health called MnCROP, headed by Naty Lopez with my personal development in concept and execution of this idea.

As Dean at Minnesota, at my direction the school developed holistic admissions, called UMAST with Naty Lopez who was appointed Dean of admissions and diversity. We developed a diversity committee, a standing committee of the Dean, had annual school wide workshop which included all staff students and faculty enrolling over 850 in our program in one year. We performed outreach into Somali, Hmong, African American, and American Indian communities in Minneapolis, opening seven Tribal sites for clinical care and two in the urban Somali, Hmong communities and we are in development of an additional site in the African American community. We increased our URM enrolment from 12% to 28%. Dental therapy largely enrolled students from underserved minority communities. With these changes, 30% of our 2016 graduates went to practice in underserved urban and rural communities.

As Chair of the Board of the American Dental Education Association, I continue to serve as liaison to the diversity and inclusion committee and to speak at workshops supporting holistic admissions, and diverse faculty development with ADEA.

TEACHING AND MENTORING

TEACHING SUMMARY

I have been graduate program director from 1981-1989 at Mount Sinai, and from 1989-1997 at Connecticut, and from 2003-2012 at OHSU. I have directed four predoctoral courses at Connecticut, and 3 at OHSU. This year I was course director for the dental therapy students in oral surgery didactic and clinical course.

My educational philosophy has evolved over the years, the early years being considerably devoted to the Halsteadian model of surgical education with full time faculty in a vertical team care system and case based learning that considered the Socratic method of questioning at the core. The development of formal coursework for graduate surgical education in OMS evolved nationally and with me personally in the second decade of my career as an educator. In this fashion organized course were developed by me in craniofacial disorders, tumors, other pathology, trauma management, anesthesia and medical assessment of the dental patient. Regarding DDS level education I developed new courses in ambulatory oral surgery, patient assessment, local anesthesia and pain and anxiety control that have continued to evolve to this day. The past five years has brought a new oral health profession forward, dental therapy. I have been faculty and course director of one course to educate dental therapy students in patient assessment and minor surgical procedures. I believe I was the first dentist certified as an ACLS instructor in the early 1980's and have since continued in that role.

Regarding MD level education I have taught in head and neck anatomy, with clinical correlations, in the development of OSCE cases, known as CMPS (correlated medical problem solving), as well as teaching didactically and as a preceptor for medical students in ICM (introduction to clinical medicine)

My general philosophy today as a clinician educator is to be devoted to adult learning theory and contemporary means of accessing and utilizing just in time information when it is needed to use with clinical foundational knowledge and experience to formulate the basis of evidence based medical practice. I use simulated cases in my didactic courses for about 50% of effort and grade which replaces much of the rote aspects of courses in earlier years.

FORMAL TEACHING

	Academic Yr	Course No. & Title	Teaching Contribution	School	Class Size
	1981 - 1989	Surgical orthodontics New York University graduate orthodontic program	teacher	Dentistry	32
	1981 - 1989	Graduate oral and maxillofacial surgery: Mount Sinai School of Medicine	course director lecturer	Grad	12

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	Academic Yr	Course No. & Title	Teaching Contribution	School	Class Size
	1990 - 1997	Faculty, Lecturer and Orthognathic Surgical Case Preceptor Postdoctoral Program in Orthodontics Connecticut Children's Medical Center John Dempsey Hospital	lecturer preceptor advisor	Grad	16
	1990 - 1997	Didactic Program Residency in Oral and Maxillofacial Surgery University of Connecticut School of Dental Medicine	Course Director	Dentistry	18
	1990 - 1993	Fundamentals of Oral and Maxillofacial Surgery University of Connecticut School of Dental Medicine	Course Director,	Dentistry	50
	1990 - 1997	Division Representative, Craniofacial Team Oral and Maxillofacial Surgery Connecticut Children's Medical Center	team leader attending professor	Dentistry	8
	1990 - 1997	TMJ-Facial Pain Clinic University of Connecticut School of Dental Medicine	co-director	Dentistry	6
	1990 - 1997	Faculty Lecturer and Surgical Preceptor Residency in General Surgery and Otolaryngology Connecticut Children's Medical Center Hartford Hospital John Dempsey Hospital	lecturer preceptor	Medicine	160

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	Academic Yr	Course No. & Title	Teaching Contribution	School	Class Size
	1990 - 1997	Pediatric oral and maxillofacial surgery : Connecticut Children's Medical Center	course director	Grad	18
	1990 - 1997	Co-director, Surgery-Orthodontic Teaching Series Connecticut Children's Medical Center John Dempsey Hospital	course director	Dentistry	30
	1991 - 1997	Implant Dentistry Interdepartmental Course, 4th year University of Connecticut School of Dental Medicine ,	Co-developer and Co-director	Dentistry	50
	1993 - 1997	,Advanced Topics in Oral and Maxillofacial Surgery University of Connecticut School of Dental Medicine	Course Director	Dentistry	50
	1993 - 1997	TMJ-Facial Pain Course University of Connecticut School of Dental Medicine	Co-developer and Co-director	Dentistry	50
	1994 - 1997	Head and Neck Anatomy University of Connecticut	Preceptor and Lecturer	Medicine	130
	1994 - 1997	Correlated Medical Problem Solving Basic Medical Science Curriculum	case based group leader	Medicine	12
	1997 - 1997	Oral/Facial Pain University of Kentucky School of Medicine	Lecturer,	Medicine	90
	1997 - 2003	Fundamentals and Advanced Topics of Oral and Maxillofacial University of Kentucky	lecturer	Dentistry	60

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	Academic Yr	Course No. & Title	Teaching Contribution	School	Class Size
	1997 - 2003	Head and Neck Anatomy University of Kentucky School of Medicine	Preceptor and Lecturer	Dentistry	90
	1998 - 2002	Endocrinology University of Kentucky School of Medicine	Lecturer	Medicine	90
	1999 - 2003	Infectious Diseases and Immunology University of Kentucky School of Medicine	lecturer	Medicine	90
	2003 - 2012	Graduate program director, course director graduate oral and maxillofacial surgery	director, lecturer, preceptor	Grad	14
	2003 - 2006	OSG 530 Principles of Oral and Maxillofacial Surgery Oregon Health and Science University	Course director	Dentistry	80
	2003 - 2012	Lecturer and Preceptor, Principles of Clinical Medicine School of Medicine Oregon Health Sciences University	preceptor, lecture	Medicine	120
	2003 - 2012	Lecturer , Advanced Educational Programs in General Dentistry Postdoctoral Program in Endodontics and; Periodontics OHSU	lecturer	Grad	24
	2003 - 2012	Lecturer, Anesthesia and sedation Oregon Health and; Science University	lecturer	Dentistry	80

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	Academic Yr	Course No. & Title	Teaching Contribution	School	Class Size
	2004 - 2012	Course Director, Principles of Medical Writing, Biomedical Informatics Oregon Health and Science University School of Medicine	course director, masters thesis committee	Medicine	40
	2008 - 2009	Lecturer, Anatomy, clinical correlations Oregon Health and Science University	preceptor lecturer	Dentistry	80
	2003 - 2007	Director, Principles of Regional Anesthesia OSG 725 Oregon Health and Science University	course director lecturer preceptor	Dentistry	80
	2008 - 2010	Lecturer, Endocrinology School of Medicine Oregon Health and Sciences University	lecturer	Medicine	120
	2009 - 2011	Course Director, Advanced Oral Maxillofacial Surgery Oregon Health and Science University	course director	Dentistry	80
	2010 - 2012	Course Director, Pain and Anxiety Control School of Dentistry Oregon Health and Science University	course director	Dentistry	80
	2010 - 2012	Local Anesthesia School of Dentistry Oregon Health and Science University	course director	Dentistry	80
	2013 - 2017	Oral Surgery, Dental therapy, University of Minnesota	course director	Dentistry	12
	2017 -	PCC 148 community based education	course director	Dentistry	90

MENTORING SUMMARY

My current activity as a mentor has been both formal and informal. To summarize those activities as a mentor today that lead students and faculty towards career advancement, especially in oral and maxillofacial surgery, academic dentistry, leadership and science are the most meaningful. Currently at UCSF I am the mentor for 8 DDS students in the class of 2021. Several of these students have expressed interest in the leadership aspects of dental medicine as well as interest in specialty education. Currently, several junior and senior students meet with me about potential careers especially in OMFS. Two junior faculty at UCSF have been meeting with me about academic career development.

Regarding my past activities, each of my residents in OMS had semiannual meetings with me a program director to provide career mentorship in addition to the formal mentor experiences noted below.

PREDOCTORAL STUDENTS SUPERVISED OR MENTORED

Dates	Name	Program or School	Mentor Type	Role	Current Position
1991 - 1993	Aurelie Marjoreu	University of Connecticut	Research/Scholarly Mentor, Project Mentor	Master's Thesis-Masticatory Function Following Orthognathic Orthodontic Post- Doctoral Program,	University of Paris

POSTDOCTORAL FELLOWS AND RESIDENTS MENTORED

Dates	Name	Fellow	Mentor Role	Faculty Role	Current Position
1990 - 1997	all OMS residents	Oral and Maxillofacial Surgery Resident Research Advisor University of Connecticut, 1990-1997.	Research/Scholarly Mentor, Project Mentor, Career Mentor	advise on required research projects	
1991 - 1992	Robert Drozd, Dan Geelan, Melissa Pray,	Dental Student Summer Research Internal Fixation of Discontinuity Defects of the Rabbit Mandible, 1991	Research/Scholarly Mentor, Project Mentor, Career Mentor	advisor	

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Dates	Name	Fellow	Mentor Role	Faculty Role	Current Position
1992 - 1993	Silvia Castillo	Masters Co-Advisor Imaging for Dental Implants and Clinical Decision Making, University of Connecticut	Research/Scholarly Mentor, Project Mentor	advisor	
1993 - 1994	Luis Chammoro,	Dental Student Summer Research Outcome Assessment of Alveolar Bone Grafts in Cleft Lip and Palate Patients, 1993		advisor	
1993 - 1994	Matt Goldschmidt	Dental Student Summer Research Outcome Assessment of Internal Fixation of Maxillofacial Fractures, 1993	Research/Scholarly Mentor, Project Mentor, Career Mentor	advisor	

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Dates	Name	Fellow	Mentor Role	Faculty Role	Current Position
1994 - 1995	Gregory Hack,	Master's Thesis- Long Term Stability and Prediction of Soft Tissue Changes Following LeFort I Surgery Orthodontic Post-doctoral Program University of Connecticut	Research/Scholarly Mentor, Project Mentor	advisor	
1996 - 1997	Yuen, Lim,	"Evaluation of submerged and nonsubmerged implants", 1996	Research/Scholarly Mentor, Project Mentor	advisor	
1996 - 1997	Christine Reardon	Co-Advisor- "Early morbidity associated with facial trauma", 1996		advisor	
2002 - 2003	Karen West	Women's Health Center Grant, Advisory Committee University of Kentucky College of Medicine, 2002	Research/Scholarly Mentor, Project Mentor, Career Mentor	advisor	UNLV Dean

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Dates	Name	Fellow	Mentor Role	Faculty Role	Current Position
2004 - 2006	Nathan Lenox, Sharokh Baghieri,	"Assessment of advances in the oral and maxillofacial surgery literature" Oregon Health and; Science University, 1971-2004		advisor	Emory University
2004 - 2006	Hardeep Daliwal	Assessment Fanconi's Anemia Protein Expression in Oral Premalignant Lesions and Squamous Cancer, 2004, OHSU	Research/Scholarly Mentor, Project Mentor	advisor	Case Western University, asst prof

RESEARCH AND CREATIVE ACTIVITIES**RESEARCH AND CREATIVE ACTIVITIES SUMMARY**

Dean, University of Minnesota , Oral Health Research center 27 PI's with \$7.8 million dollars in NIH funding and 5.4 million from other agencies and entities 2012-2017

SCIENTIFIC CONSULTANTSHIPS WITH CORPORATE, EDUCATIONAL AND VOLUNTARY INSTITUTIONS

The PEW foundation , childrens dental care project
 The Kellogg Foundation: dental access project
 Academy of Osseointegration
 America's Promise
 American Association of Oral and Maxillofacial Surgeons
 Association for the Study of Internal Fixation
 Connecticut Association of Oral and Maxillofacial Surgeons
 Farmington Public Schools
 Indian Health Service Alaskan Native Dental Therapist Program
 American Dental Association
 Indiana University/Purdue University Indianapolis

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International Team for Implantology
 Johnson and Johnson Pharmaceuticals
 Kaiser Permanente
 Merck Pharmaceuticals
 Metropolitan Life Insurance Company
 New York University
 Novartis Pharmaceuticals
 Ontario Association of Oral and Maxillofacial Surgeons
 Oral and Maxillofacial Surgery Foundation
 Oral and Maxillofacial Surgery National Insurance Company
 Oregon Health Sciences University
 Scientific Board, InTech online medical publishing
 University of Florida
 University of Manitoba
 Virginia Commonwealth University

RESEARCH AWARDS - PAST

1. 1UL1RR024140 (Orwoll) 10/06 coinvestigator 10% % effort Orwoll (PI)
 - 09/11NIH/NCRR
 NIH 2006 2009
 CTSI
 Clinical training grant to promote research
 Surgeon collaborator, support resident fellowships. I want dental school participant and representative from the BICC
2. student investigator 10 % effort Goldberg (PI)
 Harvard Medical School Funded, department of neurology 1972 1972
 Co Investigator: "The use of heparin in thrombotic and \$ 5000 \$ unk total
 embolic cerebrovascular accidents: a study of 43 patients." direct/yr 1
 1972
3. PI 20% % effort Assael (PI)
 Massachusetts General Hospital 8/1974 5/1975
 "Osteoradionecrosis in 33 patients." Harvard School of \$ 2200
 Dental Medicine, Honors Thesis, 1975. direct/yr 1
 Principal Investigator: "Osteoradionecrosis in 33 patients." Harvard School of Dental
 Medicine, Honors Thesis, 1975.
4. Co Investigator 50% % effort D. Giddon (PI)
 Nassau County Harvard School of Dental Medicine, 1972 1975
 1975 : "An evaluation of the dental health status of indigent
 residents of Nassau County, New York." 1972-75.

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5.	PI		Assael (PI)
	Vanderbilt University Hospital and Vanderbilt Medical School	1977	1978
	"Tissue loss pattern following avascular necrosis of maxillary osteotomy, an evaluation of II patients."		
6.	Principal Investigator:	10% % effort	Assael (PI)
	AO Foundation Synthes USA funded, 1989-1991	1989	1990
	"In Vitro/In Vivo Testing LCDCP for use in Mandible Fractures".		
	Assessment of performance of new fracture plating system		
7.	Co-Investigator		White (PI)
	Agency for Health Care Policy Research, Oral and Maxillofacial Surgery Foundation,		
	"Longitudinal Third Molar Study". American Association of Oral and Maxillofacial Surgeons. Raymond White, principle investigator, 1995-1997 University of Connecticut.		
			\$ 1,100,000 total
8.	Co-Investigator		Taylor (PI)
	International Team for Implantology,		
	Thomas Taylor PI "Outcome of Early Loading of ITI SLA Implants", "site specific analysis of ITI implants 1992-1997		
			\$ 2.5 million dollars total
9.	Co-investigator		Raynor Mullins DMD (PI)
	National Institutes of Health		
	Oral Health Disparities Grant, Oral Health Education, Pikeville Medical College, funding, 2001-2002.		
	Development of oral health education module in appalachia for medical and nursing students		
			\$ 3,000,000 dollars total
10.			Ebersole (PI)
	NIH		
	K 30 Grant "Career training in therapeutics and translational research"	\$ 2001 direct/yr 1	\$ 2003 total
	Advisory Committee University of Kentucky College of Medicine		

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|-----|---|--|---------------------------|
| 11. | PI | 10% % effort | Assael (PI) |
| | Subgrant to NIH OHSU Fanconi's grant direct costs only, 2004-2006 | 2004 | 2006 |
| | "Role of Fanconi's Proteins in Oral Dysplasia" | \$ 5000 direct/yr 1 | \$ 15000 total |
| | | | |
| 12. | investigator with the BICC | 10% % effort | Morris/Orwoll (PI) |
| | NIH | 2006 | 2012 |
| | Oregon Clinical and Translational Research Institute | | \$ 36 million total |
| | This funds the CTSA infrastructure at OHSU. Dr. Cynthia Morris directs all educational activities of the center, including an embedded K30, K12 and T32 2004-2012 | | |
| | Investigator in biomedical informatics on medical writing and nomenclature | | |
| | | | |
| 13. | co-investigator | | Dr. Pham, Dr. Myall. (PI) |
| | Dotter Institute Radiology | 2004 | 2007 |
| | Bisphosphonates and osteonecrosis of the jaws | | |
| | Co-investigator, Correlated Imaging Findings | | |
| | | | |
| 14. | 1UL1RR024140 (Orwoll) 10/06 investigator - 09/11NIH/NCRR | 10% % effort | Orwoll (PI) |
| | NIH/NCRR | | |
| | Clinical Research Training Grant, Oregon Health Sciences University, School of Medicine, 2008 | \$ 10% salary support: 32K direct/yr 1 | |
| | | | |
| 15. | co-investigator | | Ziccardi (PI) |
| | Axogen | 2007 | 2011 |
| | "Multicenter assessment of interpositional decellularized nerve allografts for neurorhaphy of trigeminal nerve" funded, 2007- 2011. | | |
| | | | |
| 16. | investigator | 10% % effort | Naty Lopez, Phd (PI) |
| | HRSA | | |
| | MnCROP, Hrsa | \$ 400,000 direct/yr 1 | |

grant to support rural health education, PI, University of Minnesota
develop sites and regional alliances for rural health

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1. Assael L. Current status of postdoctoral and graduate programs in dentistry. J Dent Educ 2017;81(8 Suppl):eS41–9.
Assael L Graduated Dental Education at the Crossroads, the Gies 21st century report
I contributed the Graduate dental education component of the 21st century Gies report for the section on DDS and graduate education by Dr. Alan Formicola and Howard Bailit
2. Assael L. Oral bisphosphonates as a cause of bisphosphonate-related osteonecrosis of the jaws: clinical findings, assessment of risks, and preventive strategies. J Oral Maxillofac Surg. 2009 May;67(5 Suppl):35-43.

This presents my work on the characterization of clinical phenotype of a rare subset of BRONJ cases, those that are associated with oral bisphosphonate use for osteoporosis
3. Assael LA: Vision 2030, the future of dental education, Journal of Dental Ed, Accepted for publication April 2017. E publish June 2017 J Dent Educ 2017 81:772-774

I contributed the concept and action plan for Vision 2030, the American Dental Education Association initiative to influence the future of dental education across the domains of society, environment, technology, and pedagogy.
4. Assael L Oral and Maxillofacial Surgery 2025: Fifty years of evolution of a surgical specialty. J Oral Maxillofac Surg. 73S: 155-159, 2015

I contributed the assessment of oral and maxillofacial surgery at the crossroads to provide context for the specialty over the status and trends in dental education.

5. Osborn TM, Assael LA, Bell RB, Deep space neck infection: principles of surgical management. *Oral Maxillofac Surg Clin North Am.* 2008 Aug;20(3):353-65.

I contributed OHSU clinical cases and most importantly new concepts for management of deep space infection including new chemotherapy, means of airway management and patient recovery.. Osborn was resident/student author and Bell was complementary faculty at Emanuel

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ACADEMIC LEADERSHIP**CURRENT POSITIONS:**

Appendix 1-7 Assael CV 2019

Dean Emeritus and Professor Oral and Maxillofacial Surgery
 Dean University of Minnesota School of Dentistry May 1, 2017
 Professor, Oral and Maxillofacial Surgery
 University of Minnesota School of Dentistry August 1, 2012
 Chief of Dental Services
 University of Minnesota Medical Center, Fairview
 Chairman of the Board, American Dental Education Association March, 2017-2019
 August 1, 2012

PREVIOUS POSITIONS:

Program Director, Residency in Oral and Maxillofacial Surgery
 Professor of Oral and Maxillofacial Surgery
 Oregon Health & Science University 2003-2012
 Chair, Oral and Maxillofacial Surgery
 School of Dentistry
 Oregon Health & Science University 2005-2012
 Medical Director, Hospital Dental Services
 Oregon Health & Science University 2003-2012
 Professor, Department of Surgery
 School of Medicine
 Oregon Health & Science University 2003-2012
 Dean
 College of Dentistry
 University of Kentucky 1997-2003
 Professor, Division of Oral and Maxillofacial Surgery
 Department of Oral Health Science
 College of Dentistry
 University of Kentucky 1997-2003
 Professor, Department of Surgery
 College of Medicine
 University of Kentucky 1997-2003
 Professor
 Graduate School
 University of Kentucky 1997-2003

OTHER CREATIVE ACTIVITIES

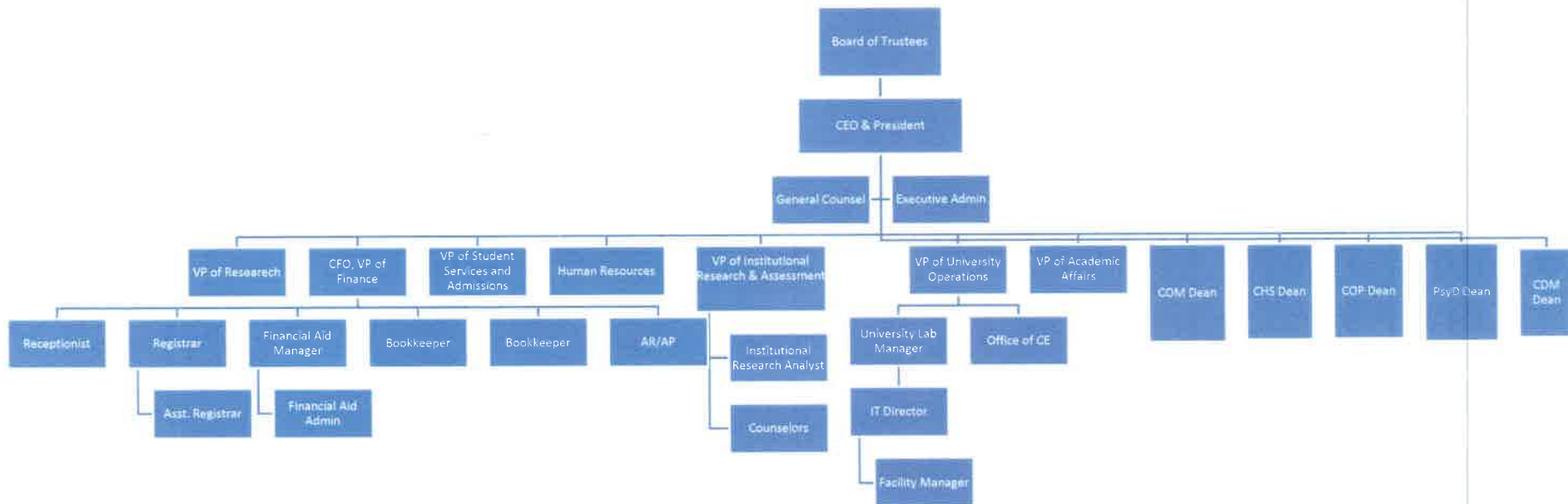
1. ACCREDITATION CONSULTANT COMMISSION ON DENTAL ACCREDITATION
 Hadassah Hebrew University 2017 (independent review)
 University of North Carolina, 2017
 University of Mississippi, 2016
 New York University external consultant 2016
 University of Sharjah, UAE (independent review) 2015/> Loma Linda, Loma Linda, CA
 2015
 Catholic Medical Center, New York
 Columbia University
 Detroit MacComb Hospital
 Fellowship in Head and Neck Oncology
 University of Maryland Hospitals
 Georgetown University
 Nassau County Medical Center
 St. Francis Medical Center, Pittsburgh

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Temple University
Thomas Jefferson Medical School
University of Maryland
US Army Hospital, Augusta, Georgia
Wood Hull Medical Center, New York

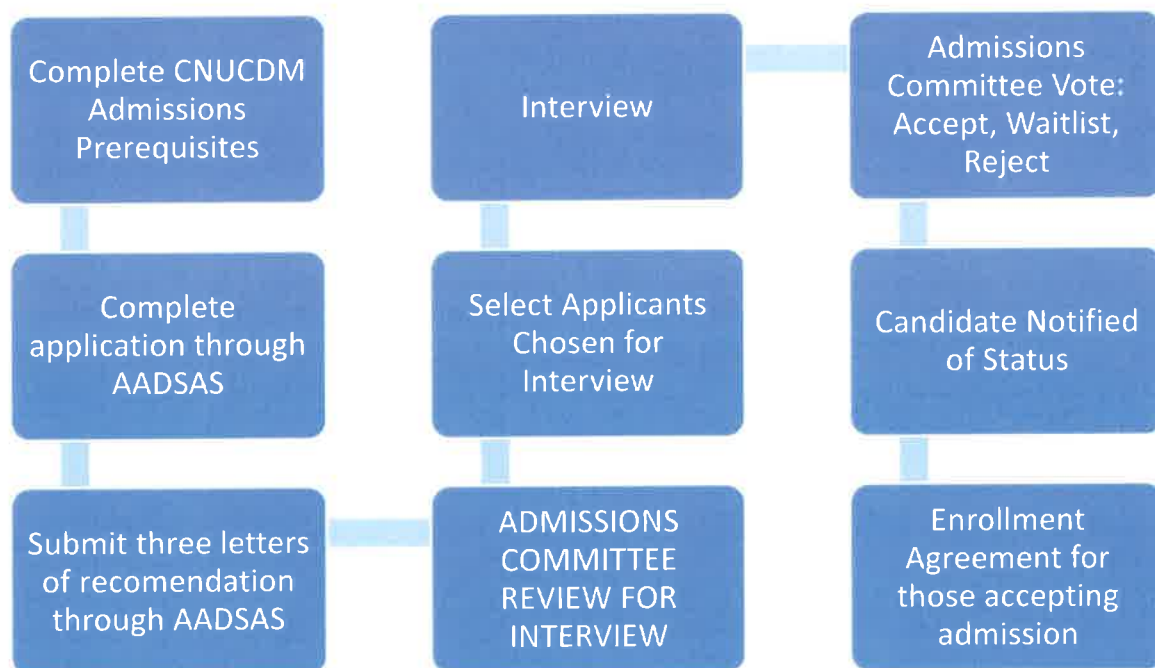
Appendix 1-7 CNU Org Chart

California Northstate University
Organizational Chart





Admissions Flowchart





Admissions Process for Fall 2020 Applicants

Important Communication Policy for Fall 2020 College of Dental Medicine Applicants:

To ensure that all applicants have an equal and ethical assessment of their application, all inquiries regarding your application and material are to be directed and submitted to the Admissions Office only at (916)378-3505 or via e-mail to CDMAdmissions@cnsu.edu

Any type of communication made by the applicant (or applicant's parents, employers/supervisors, and faculty/advisors) to the CNU President, College of Dental Medicine Dean, or Admissions Committee Members is strictly prohibited. Any attempt to do so will be viewed as "inappropriate communication" and may negatively impact your application due to failing to follow the Communication Policy as stated.

1. Complete CNUCDM admission prerequisites.
2. CNUCDM accepts DAT scores from the last 3 years.
3. Complete your application via the centralized application service AADSAS, administered through WebAdmit and the American Dental Association.

NOTE: CNUCDM will be listed in AADSAS informationally but will not go live to accept applications until the Initial Accreditation of the program by the Commission on Dental Accreditation and with subsequent communication of that action to AADSAS.

4. Completed AADSAS application will be reviewed by the CNUCDM Admissions Committee and Admissions Office.
5. Submit three letters of recommendation, including one (1) from a professor in the sciences (i.e., Biology, Chemistry, Physics), one (1) from a professor not in the sciences, and one (1) from someone who has known the applicant for a substantial amount of time (e.g., research principal investigator, shadowed dentist, volunteer coordinator, organization leader, work supervisor, etc.). These letters should be submitted through AADSAS.

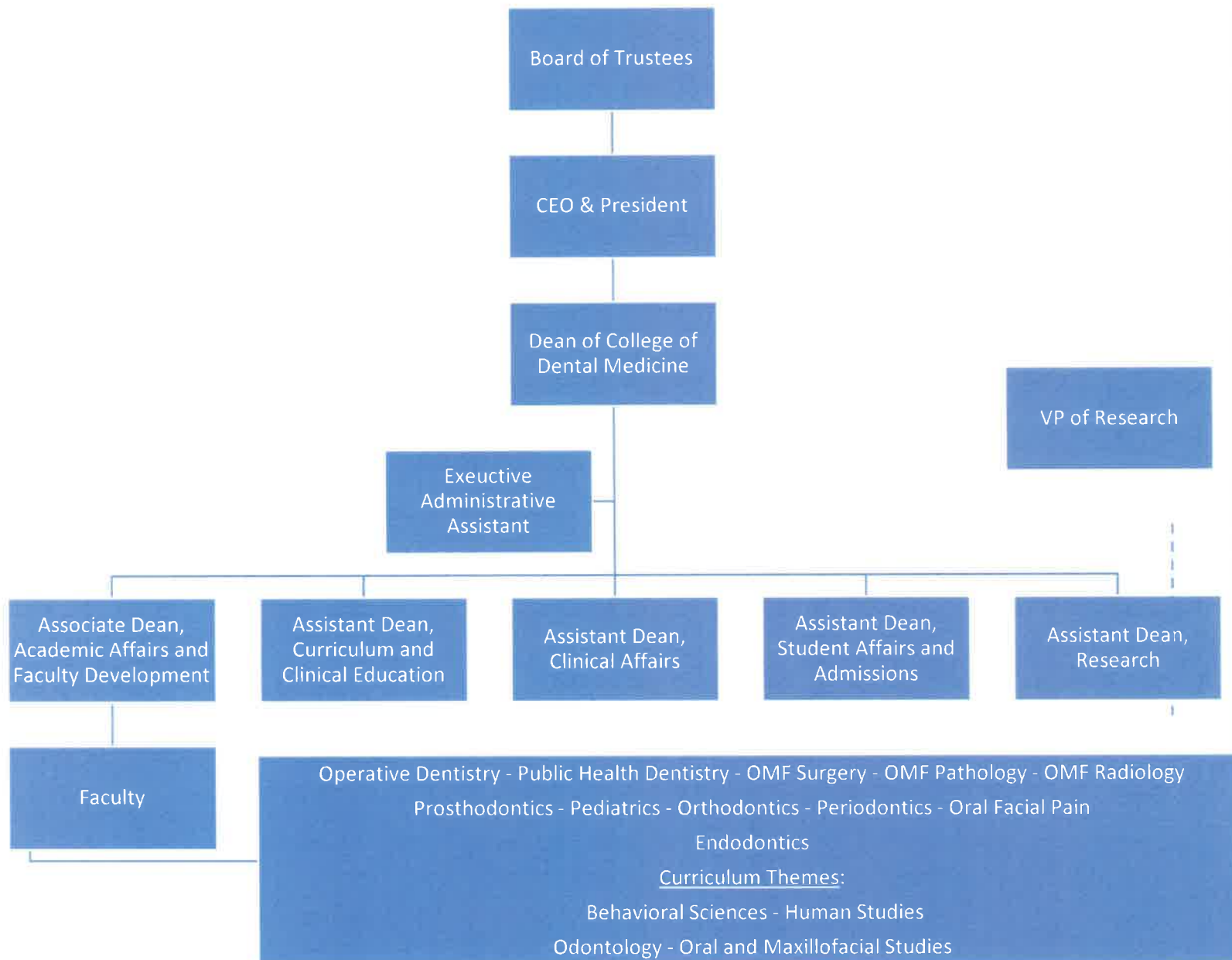
Applicants are encouraged to submit two (2) additional letters from any source.

All letters of recommendation should address the applicant's preparedness to become a doctor. It is recommended that you submit letters written within the past three years and that each letter be written by an individual with whom the applicant has formed a strong ongoing relationship, and not simply someone who has given the applicant a high grade. CNUCDM is particularly interested in references to the applicant's work ethic, integrity, compassion, emotional stability and judgment. Please consider, among others, professors who have taught in your upper-division courses, or individuals who have seen you interact in professional health settings or have witnessed your personal development. Submit all letters of recommendation to the AADSAS letter service only.

6. Completed applications will be thoroughly reviewed. Highly qualified candidates will be sent an invitation to participate in an on-campus interview. All applications that are not selected will remain under review until the end of the cycle.
7. Successfully complete an on-campus interview
8. The Admissions Committee will confidentially review and vote on completed application packages as Accepted, Waitlisted or Rejected.
9. The Admissions Office staff will then communicate the final vote and next steps, if applicable, to candidates.
 - All admission decisions are final. Requests for admission decision appeals will not be accepted.
 - The College of Dental Medicine is not accepting transfer students from other medical schools and/or programs.
 - At this time, the College of Dental Medicine DMD program is only open to U.S. citizens and legal residents with Green Cards.



Appendix 1-7 College of Dental Medicine Organizational Chart





Appendix 1-7 Job Description Dean CDM

JOB DESCRIPTION AND SPECIFICATIONS

JOB TITLE:	Dean of College of Dentistry
SUPERVISOR:	President/CEO of California Northstate University (CNU)
QUALIFICATIONS:	<p>Education: D.D.S. Degree, licensed to practice in California</p> <p>Experience: Extensive experience in teaching and academic administration</p>

California Northstate University is dedicated to educating, developing, and training the next generation of healthcare professionals. After establishing the College of Pharmacy, College of Medicine, College of Psychology, and the College of Health Sciences, CNU now is seeking a Dean that can successfully develop, inaugurate, and manage the new College of Dentistry. Graduates will have the knowledge, skills, and training necessary to take the next steps in becoming a practicing, licensed dentist.

It will be the Dean's responsibility to create this program within the established tenants of the University. Under the general guidance of the President and the other university officers, the Dean must develop the policies and procedures governing the program, create a comprehensive budget, and hire both the faculty and support staff to deliver high quality dental education. The Dean must maintain oversight of the faculty that are responsible for the overall curriculum, admission criteria, and degree requirements of the College.

I. Obligations of the Dean:

The information provided below is a general description of responsibilities; it is not intended to provide an all-inclusive list of responsibilities.

Hours: The Dean of the College of Dentistry shall have a full-time equivalent ("FTE") of 1.0 to be performed from his office.

B. Responsibilities:

1. The Dean is currently recognized as the chief academic officer of the College of Dentistry. As such, s/he will provide extraordinary leadership to enhance the academic, cultural, and fiscal environments of the College.
2. The Dean shall forward and advocate the policies of the College at all academic and public levels and shall be further responsible for keeping the faculty and staff informed of any decisions, activities or



Appendix 1-7 Job Description Dean CDM

plans generated which affect the operation of the system at large, be it at the university or governmental level.

3. The Dean is directly responsible for the recruitment and recommendation of appointments of departmental chairs who serve at the pleasure of the Dean. The Dean establishes periodic review of the achievements and performance of administrators and chairs within the College of Dentistry.
4. The Associate and Assistant Deans (and Directors) are recruited and recommended by the Dean of the College of Dentistry for approval of the hiring and appointment the President who has the delegated authority by the Board of the Trustees.
5. The Dean or his/her designated representative shall confer on a regularly scheduled basis with the Departmental Chairs and the various committees established by the College of Dentistry.
6. The Dean shall assist in the appointment of those committees (faculty-based) which aid in their ability to perform their duties, except where prohibited by established procedure or policy. The Dean shall also appoint those institutional committees as required by accrediting and governmental agencies.
7. The Dean shall convene annually with the faculty to review the general progress of the College of Dentistry at all pertinent levels of development and administration.
9. The Dean is responsible for ensuring that all accreditation requirements of the CODA and WSCUC are successfully met, including the timely submission of all reports and notices of planning for substantive changes.
10. The Dean shall provide oversight and maintain accountability of Department Chairs and faculty performance.
11. The Dean shall be responsible for budgetary compliance and financial sustainability through responsible budgeting and spending oversight. Additionally, other fiscal responsibilities shall include revenue enhancement (when the opportunity arises), participation in University efforts to cultivate philanthropic endowments and annual donation and gift giving campaigns or initiatives.
12. The Dean is responsible for Approval authority, fiscal authority within the approved college budget, personnel decisions, student success, and educational effectiveness.
13. The Dean is responsible for establishing and maintaining a campus environment that is conducive to collegiality, teaching, learning, intellectual discourse, and character and citizenship.



Appendix 1-7 Job Description Dean CDM

II. Performance Expectations: The following is a list, but not limited to, of performance areas that will be subject to annual and or periodic performance appraisal.

1. Leadership:

- Provide effective leadership in carrying out the mission of the College

2. Management:

- Serve as the chief academic officer of the college
- Maintain an effective team of college administrators which shall be responsible for all aspects of the operations of the college and shall be accountable to the University Administration
- Provide oversight of the oral health clinics and training dental operatories to ensure quality of care, provision of care, and fiscal sustainability.
- Establish a management structure to operate oral health clinics and training dental operatories that are in compliance to all applicable the laws and regulations.
- Lead the College to meet and maintain all applicable accreditation requirements
- Establish keep performance indexes to assess and evaluate the effectiveness of the teaching, learning, and training processes of the dental education program
- Maintain and establish a full compendium of policies and procedures
- Maintain oversight of curriculum development to ensure compliance with all State and Federal regulations, as well as industry standards
- Implement an effective personnel system, i.e. recruitment, development, retention, evaluation of the College Administrators, faculty and staff
- Establish, design, and supervise an effective administrative structure that promotes performance, accountability, sub-structure within the College
- Make effective use of, and appropriately allocate, all resources (personnel, money, equipment, space)
- Manage and maintain institutional facilities in a satisfactory manner within available resources
- Implement institutional objectives by proper planning and budgeting



Appendix 1-7 Job Description Dean CDM

- Ensure sound fiscal management
- Ensure academic soundness in activities of students and faculty

3. Planning:

- Provide a clear and well-defined vision of the College consistent with the Strategic Plan and the education mission of the University

4. Academic Quality:

- Understands differences among educational programs
- Promotes efforts to improve quality in academic programs and achieves professional accreditation
- Recruits and retains able faculty
- Encourages institutional efforts to promote student success as defined as student progression, retention, and graduation rates
- Ensure curricular success in Student performance

5. Human Relations and Public Relations:

- Demonstrate effective human relation skills with subordinates, faculty, staff, students, community leaders, and others associated with the institution
- Establish a system of annual performance evaluation of the faculty and staff
- Maintain excellence in public relations with the internal and external communities
- Be a strong and persistent advocate for the institution in its relations with state and local governments, private sector, and the general public

6. Responsibility to the President's Office:

- Inform the University President regarding significant matters affecting the institution
- Participate in fulfilling CNU vision and implementing strategic initiatives
- Insure that all decisions are legal, ethical, and in compliance with policies and procedures of the University



Appendix 1-7 Job Description Dean CDM

7. Resource Development:

- Engage in effective external resource development

IV. Reporting Relationship: The Dean of Medicine will report directly to the University President and shall prepare an annual composite report, in addition to providing intermediate summaries as dictated by the University President and the Board of Trustees.

Qualifications:

Specific requiring qualifications include, but not limited to:

- A D.D.S. from an CODA accredited program
- A license to practice in the state of California
- A minimum of 5 years management experience with 3 at the executive level
- Experience developing large, full scale programs
- Experience managing a staff, both professional and ancillary
- Experience submitting and managing detailed budgets
- A proven track record of writing and approving policies and procedures
- Experience evaluating program and employee effectiveness
- Experience hiring, retaining, and disciplining staff
- Knowledge of accrediting standards, including WSCUC and CODA
- Experience in overseeing or managing a dental clinic or equivalent experience in an academic training dental operatory.
- Comprehensive knowledge of the discipline of dentistry

Additional preferred qualifications:

- Experience working on teams with a variety of healthcare professionals
- Experience in academic affairs or curriculum management
- Experience in precepting or teaching in postgraduate dental residency program
- Experience in either endodontics, oral and maxillofacial pathology, oral and maxillofacial radiology, oral and maxillofacial surgery, orthodontics and dentofacial orthopedics, pediatric dentistry, periodontics, prosthodontics, or dental public health
- Experience in overseeing or managing or establishing a governmental funded dental care clinic
- Knowledge of local training opportunities
- Prior teaching experience at various academic levels
- The ability to analyze complex problems and provide solutions
- Excellent leadership skills
- The ability to speak and write clearly and concisely
- Establishment of positive and harmonious relationships with others
- Proven excellence in public speaking
- Previous experience representing a large organization to the public
- In-depth prior experience with both human and public relations

9700 West Taron Drive, Elk Grove, CA 95757



Appendix 1-7 Job Description Dean CDM

APPLICANT SHOULD SUBMIT

- Cover letter that addresses qualification, experience, and career goals
- Resume/CV
- Name, addresses, and telephone numbers of at least (3) professional references

Please send all application materials to the HR Department at hr@cnsu.edu, or California Northstate University, 9700 West Taron Drive, Elk Grove, CA 95757. CNU is an Equal Opportunity and Affirmative Action Employer. All qualified candidates are encouraged to apply.

****This is an anticipatory search.**

***** Competitive Salary and benefits information will be available to those selected for interview.**



Appendix 1-7 Task Force and Advisory Committee

SDDS CNU College of Dental Medicine Advisory Committee

California Northstate University Campus – College of Medicine
 9700 West Taron Drive
 Elk Grove, CA 95757
 Room 1B

AGENDA

February 4, 2019

6:00 – 8:00 p.m.

Welcome and Introductions	Dr. Kevin Keating Dean Leon Assael	6:00-6:10
Strategic Plan Overview	Dean Leon Assael	6:10-6:30
<i>Action: Motion to accept, in principal, the strategic plan</i>		
Discussion	All	
Curricular Themes	Dean Leon Assael	6:30-6:45
Process for Faculty Appointments	Dean Leon Assael	6:45-6:55
Accreditation Update (CODA and WASC)	Dean Leon Assael	6:55-7:00
Working Groups	All	7:00-7:45

Group 1: basic dental sciences: dental anatomy, occlusion, oral anatomy, oral physiology, growth and development



Group 2: dental caries, operative dentistry, endodontology

Group 3: fixed and removable prosthodontics

Group 4: Periodontology

Group 5: public health dentistry, preventive dentistry, behavioral sciences, practice management, health systems, social determinants of health

Group 6: pediatric dentistry, orthodontics, geriatric dentistry, special needs patient dentistry

Group 7: oral and maxillofacial surgery, oral medicine/oncology, oral pathology, anesthesiology, orofacial pain medicine

Group 8: oral diagnosis, radiology, treatment planning, case presentation

Next Steps and College Tour

Dr. Kevin Keating
Dean Leon Assael

7:45-8:00



SDDS CNU College of Dental Medicine Advisory Committee

California Northstate University Campus – College of Medicine

9700 West Taron Drive

Elk Grove, CA 95757

Room 1B

February 4, 2019

Minutes

Members present: Kevin Keating, Samer S. Alassaad, Craig Alpha, Jenny Apekian, Leon Assael, Amardeep Bains, Aneet S. Bal, Wallace J. Bellamy, Prescilla Bradshaw, Michael Cadra, Wai Chan, Clifford A. Chow, Scott P. Churchill, Tom Clements, Matthew Comfort, Jean Creasey, Margaret M. Delmore, Craig Dial, Robert Fong, Steven Frank, David C. Hatcher, Jagdev S. Heir, Timothy Herman, Carl M. Hillendahl, Paul A. Johnson, Bryan G. Judd, Gregory J. Kolber, Merlin L. Lai, Timothy E. Mickiewicz, Aneel Nath, Charles N. Newens, Vireenchandra R. Patel, Rika Proadhan-Ashraf, Karthik B. Raghuraman, Hana R. Rashid, Shikha Rathi, John Reed, Lindsey Robinson, Stepahnie L. Sandretti, Rajbir K. Sanghvi, Waleed Soliman, Michael Stout, Sang Tran, Brittany N. Vacura, Joel K. Whiteman, Eric Wong, Jamson Wu, Rosemary Wu, Kim Wallace, Gina Savani, Marsha Henry, Mark Zablotsky, Camille Gannam, Tiffany Bal

Dr. Kevin Keating, Chair, called the meeting to order at 6:10pm

Dr. Keating welcomed the attendees and introduced Dr. Leon Assael, Founding Dean of CNU College of Dental Medicine.

Dr. Assael presented the College of Dental Medicine Strategic Plan.

A motion was made for **SDDS CNU College of Dental Medicine Advisory Committee to approve the CNUCDM Strategic Plan to be presented to CODA as part of the application process of accreditation for the CNU College of Dental Medicine.**

Motion passed unanimously.

Dean Assael presented the Curricular themes.

Dean Assael presented the Process for Faculty Appointments.



Dean Assael presented the Accreditation Update (CODA and WASC)

Members were divided into the following 8 workgroups.

Group 1: basic dental sciences: dental anatomy, occlusion, oral anatomy, oral physiology, growth and development

Group 2: dental caries, operative dentistry, endodontology

Group 3: fixed and removable prosthodontics

Group 4: Periodontology

Group 5: public health dentistry, preventive dentistry, behavioral sciences, practice management, health systems, social determinants of health

Group 6: pediatric dentistry, orthodontics, geriatric dentistry, special needs patient dentistry

Group 7: oral and maxillofacial surgery, oral medicine/oncology, oral pathology, anesthesiology, orofacial pain medicine

Group 8: oral diagnosis, radiology, treatment planning, case presentation

Members were informed that work groups discussion results will be incorporated in curriculum design.

Discussion results were presented to members by each workgroup representative.

Meeting was adjourned at 8:10 pm



SDDS/CNU College of Dental Medicine Advisory Committee

February 4, 2019

Attendance

Name	Signature
Kevin Keating	<i>Kevin Keating</i>
Nima Aflatooni	<i>Nima Aflatooni</i>
Samer S. Alassaad	<i>Samer S. Alassaad</i>
Craig Alpha	<i>Craig Alpha</i>
Jenny Apekian	<i>Jenny Apekian</i>
Leon Assael	<i>Leon Assael</i>
Amardeep Bains	<i>Amardeep Bains</i>
Aneet S. Bal	<i>Aneet S. Bal</i>
Junie Dave L. Baldonado	<i>Junie Dave L. Baldonado</i>
Wallace J. Bellamy	<i>Wallace J. Bellamy</i>
N. Michelle Borg	<i>N. Michelle Borg</i>
Prescilla Bradshaw	<i>Prescilla Bradshaw</i>
Michael Cadra	<i>Michael Cadra</i>
Matthew J. Campbell, Jr.	<i>Matthew J. Campbell, Jr.</i>
Arben Celaj	
Wai M. Chan	
Alvin Cheung	
Clifford A. Chow	<i>Clifford A. Chow</i>
Scott P. Churchill	<i>Scott P. Churchill</i>
Tom Clements	<i>Tom Clements</i>
Matthew Comfort	<i>Matthew Comfort</i>
Jean Creasey	<i>Jean Creasey</i>
Margaret M. Delmore	<i>Margaret M. Delmore</i>
Pat Denny	<i>Pat Denny</i>
Craig Dial	<i>Craig Dial</i>



Simiade Fabiyi	
Diana C. Fat	
Volkmar I. Felahy	
Debra S. Finney	
Robert Fong	<i>[Signature]</i>
Steven Frank	<i>[Signature]</i>
David C. Hatcher	<i>[Signature]</i>
Graham L. Hearn	
Jagdev S. Heir	Present
Timothy J. Herman	<i>[Signature]</i>
Carl M. Hillendahl	<i>[Signature]</i>
William A. Jacobson	
Nidhi Jain	
Jeffrey H. Janian	<i>[Signature]</i>
Paul A. Johnson	<i>[Signature]</i>
Daniel P. Jones	<i>[Signature]</i>
Bryan G. Judd	<i>[Signature]</i>
David M. Keating	<i>[Signature]</i>
Gregory J. Kolber	<i>[Signature]</i>
Laurie D. LaDow	<i>[Signature]</i>
Merlin L. Lai	<i>[Signature]</i>
Lisa N. Laptalo	
Huong Le	<i>[Signature]</i>
Timothy E. Mickiewicz	<i>[Signature]</i>
Kenneth E. Moore	
Richard Nagy	<i>[Signature]</i>
Aneel Nath	<i>[Signature]</i>
Charles N. Newens	<i>[Signature]</i>
Virendra R. Patel	<i>[Signature]</i>
Dmitriy Pivnik	<i>[Signature]</i>
Rika Prodhan-Ashraf	<i>[Signature]</i>
Karthik B. Raghuraman	<i>[Signature]</i>
Bryan C. Randolph	



Hana R. Rashid	<i>Hana Rashid</i>
Shikha Rathi	<i>Shikha Rathi</i>
Yasaman Ravandoust	
Abhishek R. Raythatha	
John Reed	<i>John Reed</i>
Lindsey Robinson	
Ture D. Roslund	
Stephanie L. Sandretti	<i>Stephanie L. Sandretti</i>
Rajbir K. Sanghvi	<i>Rajbir K. Sanghvi</i>
Cherag D. Sarkari	
Annie Shih	
Waleed Soliman	<i>Waleed Soliman</i>
Michael Stout	<i>Michael Stout</i>
Ramesh Thondapu	
Judee Tippet-Whyte	
Pedram P. Towfighi	
Sang Tran	<i>Sang Tran</i>
Brittany N. Vacura	<i>Brittany N. Vacura</i>
Joel K. Whiteman	<i>Joel K. Whiteman</i>
Eric Wong	<i>Eric Wong</i>
Jamson Wu	<i>Jamson Wu</i>
Rosemary Wu	<i>Rosemary Wu</i>
Kim Wallace	<i>Kim Wallace</i>
GINA SAVANI	<i>Gina Savani</i>
Michael Stout	<i>Michael Stout</i>
Marsha Henry	<i>Marsha Henry</i>



CNU Task Force

College of Dental Medicine

February 20, 2019

AGENDA

California Northstate University
College of Health Sciences
2910 Prospect Park Drive, Room 108
Rancho Cordova, CA 95670

6:00 – 8:00 p.m.

1. Approval of Agenda: Changes or additions
2. Debrief February 4th meeting of the SDDS/CNU Advisory Committee
3. CODA Tasks
 - a. Curriculum Development for Year 1 Students
 - i. Course and specific instructional objectives
 - ii. Review Foundations of Odontology
 - iii. Review dental anatomy
 - iv. Learning activities
 - v. Evaluation instruments (laboratory evaluation forms, sample tests, quizzes and grading criteria)
 - b. Faculty Development
4. Timelines and Volunteer Assignments
5. Your help
 - a. Does anyone have a good radiation control policy, biohazard policy
 - b. Patients' rights policies
 - c. Clinical manual
 - d. Curriculum Committee, Clinical Quality Assurance Committee, Admissions Committee
6. Adjournment



CNU Task Force

College of Dental Medicine

Meeting minutes February 20, 2019

California Northstate University
College of Health Sciences
2910 Prospect Park Drive, Room 108
Rancho Cordova, CA 95670

Members present: Kevin Keating (Chair), Leon Assael (Founding Dean, College of Dental Medicine), Wai Chan, Jag Heir, Stephanie Sandretti, Eric Wong, Rosemary Wu, Huong Le (phone)

Chair Kevin Keating called the meeting to order at 6:10pm

1. Approval of Agenda.

- a. Added item on different objective of academic/curriculum portion of College of Dental Medicine from the fundraising group.

Kevin had talked with Paul Wagstaff, CNU Legal Counsel. The fundraising for College of Dental Medicine should be separated from the Academic advisory group.

2. Debrief February 4th meeting of the SDDS/CNU Advisory Committee

About 50 members had submitted their interest to be involved. Holly had placed them in groups according to their field of interest. Kevin will be contacting them.

3. CODA Tasks

Leon gave a briefing on:

- a. Curriculum Development for Year 1 Students

i. Course and specific instructional objectives

ii. Leon gave an overview of the course syllabus of Odont 521 Dental Anatomy and Odont 501 Foundation of Odontology

In Odont 501, students will be following a "didactic, lab, clinic" format. Students will start their hands-on experiences early on.

iii. Learning activities

iv. Evaluation instruments (laboratory evaluation forms, sample tests, quizzes and grading criteria)

b. Faculty

We will need faculty in prosthodontics (especially removable prosthodontics), Oral Pathology/Oral Medicine, Behavior sciences, and a faculty that is good in application of basic science into clinical practices.

Jag suggested looking into Journal of Family Practice Medicine for cases to be used in Case Based Learning.

4. Timelines and Volunteer Assignments

Leon will be working with architects in the hospital space design to provide room for hospital based programs and a possible 24 hours emergency dental clinic.

The task force is informed of a dental school building close by Interstate 5. Building has approximately 16000 square ft. Upstairs is sim lab and haptic units. Downstairs will be a 30 Chair clinic. A separate clinic at a different site is needed.

Potential Dental supply/support vendors were discussed. Potential Dental equipment vendors were discussed. Academic pricing from vendors.

5. Help needed:

a. Radiation control policy, biohazard policy

b. Patients right policies

c. Clinical manual

Jag said he can share his copy for the above three items.

d. Members are invited to submit their names and their interest in serving in the following College of Dental Medicine committees - Curriculum Committee, Clinical Quality Assurance Committee, and Admissions Committee. Please email Holly of your interest.

e. Members are asked to think about and/or develop elective classes for students.

Meeting adjourned 7:23pm

SDDS Curriculum Task Force Group Reports

February 4, 2019

Unedited transcription of event

Speaker key

S1	Speaker One
S2	Speaker Two
S3	Speaker Three
S4	Speaker Four
S5	Speaker Five
S6	Speaker Six
S7	Speaker Seven
S8	Speaker Eight
S9	Speaker Nine
S10	Speaker Ten
S11	Speaker Eleven
S12	Speaker Twelve

Timecode	Speaker	Transcript
00:00:00	S1	...there's an area [inaudible 00:00:01] two different at the front so to speak. And the first [inaudible 00:00:08] dental anatomy and function and build that into ways of dental anatomy and function [inaudible 00:00:15]. We'll get to this linear segment here in a second. And then we'll look into the basic sciences and of that, we went into the oral environment which

		has to do with spit and chewing, the oral biology, and then [inaudible 00:00:33] microbiology and [inaudible 00:00:34] morphology, histology, et cetera et cetera et cetera. Right? Yes. It's up. You made it. Good. Good. And then we went linear and as far as the year one and the basic morphology dental anatomy micro and histo, general anatomy, [inaudible 00:00:54] then that transition then from the general learning into the why it's crossing over into removable and the fix, growth oral biology physiology micro materials and since this was a basic, the basics and beginning classes of dentistry did not go onto years three and four. That's our report.
00:01:18	S2	Questions?
00:01:23	S1	There are no [inaudible 00:01:23], it's okay.
00:01:29	S3	Thank you. Group two. That was very an organised group on one hand.
00:01:39	S4	Right. So [inaudible 00:01:40] the group two which includes caries operative and [inaudible 00:01:45]. So if we start all of it on the far end then [inaudible 00:01:48] have a timeline of historical dentistry, operative dentistry, starting with [inaudible 00:01:54] all the way up to modern dentistry. That doesn't have to be a one course necessarily because there's so much technology out now, [inaudible 00:02:02] them through the entire curriculum. So going over caries, you got to start out and have the biology, etiology, pathology , microbiology and everything, with that there's going to be jump in and talk about prevention and camera and intervention which also includes things that are involved with camera now, like we used to have [inaudible 00:02:26] and other restorative materials like GI [inaudible 00:02:31] and other items, and also the tools [inaudible 00:02:37] looking at saliva and testing that. In addition in operative, this has kind of crosses right over, there's also [inaudible 00:02:47] intervention, so you want to look at like a symptomatic crack and other things that you could treat in that way. And then there's also a breakdown between just doing that, doing the operative dentistry for treatment of disease and then looking to aesthetics as well because that's important for people. And then another thing we track down is biological width and so with that, we won't take away from [inaudible 00:03:17]. So then we [inaudible 00:03:20] and we could start brainstorming, going down the list and say [inaudible 00:03:23] including the immune systems, again microbiology, pathology including [inaudible 00:03:30] infection and diagnosis [inaudible 00:03:34]. We want to look at dealing with differential diagnosis. You know, is it [inaudible 00:03:41], and then the other treatment options. Look at comorbidity, risk benefits and alternatives, single treatment versus multi-appointment treatment. Also vital pulp therapy, materials we're using such as [inaudible 00:03:58] and also surgical interventions [inaudible 00:03:59]. And appropriate use for

		antibiotics because I saw other people out there that were going to just shoot antibiotics whatever come to their way. And then prognosis, success versus survival, and some restorative and [inaudible 00:04:19].
00:04:21	S2	Great. Questions? There got to be a question.
00:04:30	S3	I just have a comment. I think that both first groups had a really biological and evidence based approach to looking at the problem and not a procedural approach, whereas we remember dental since we were counting how many widgets we did. I think this is exciting to see this approach. Just as a comment, most dental education and dental students experience were procedurally based. Again this is evidence and scientifically based approach and that's really, really wonderful to see.
00:05:06	S2	Go group three.
00:05:13	S5	All right, I'll put mic. You can get the [inaudible 00:05:14]. (Laughs) Plus it has a couple of main feature, you get fixed or the removable, right? One of our main things, and especially from [inaudible 00:05:32] was talking about is minimally invasive. You know today we had so many options with minimally invasive in comparison to what we use [inaudible 00:05:38]. Now we have all kinds of [inaudible 00:05:41]. So minimally invasive actually covers [inaudible 00:05:42] dentistry. We also have [inaudible 00:05:49] and a proper preparation and uses of all those things because how many times are we seeing somebody do practise that were horrible and now they've created on a problem, there's all kind of operations that we're running into. We also going to need to understand material that we should be using. There are so many materials that exist these days that didn't exist 15, 20, 25 years ago. We need understanding that the concepts were... how to use them properly in those situations, it's doing work properly, and it was one of the things [inaudible 00:06:21] end results of fixed dentistry. You know, how you're using these materials and this partly driven [inaudible 00:06:26] to restore patients appropriately to their desired results, but the end result would last [inaudible 00:06:35] what they want because they're going to last as long-term, which [inaudible 00:06:38] to fixed or removable, what's better for the patient, what do they want, you know. We talked about one of the major things, especially here in the capital town, provisionalisation, are you able to make a good provisional when you come out of the school so that somebody will notice that there is something there. What if they're on TV, what if they were at the [inaudible 00:06:59] that needed a great smile, what if they're running for—something that actually has happened to me, they were running for something and needed something they could smile with, which leads us into the basics of things like impression taking, PVS or digital. Digital's taking over. Digital dentistry is the way to the future as we've discussed

		<p>and everybody in the practises or anywhere else has probably seen, as well as photography. Photography allows us to visualise something in clinic and do the best for our patients. You know we talked about there's always the material [inaudible 00:07:31] out there. This is the best, I'm only going to use this, and that was the only thing that we can never use in this situation. Are we willing to get out of that [inaudible 00:07:38] and say, what's the best for this patient in this situation. Go beyond as the average. You know there's always the basics of removable partial or full dentures where we can really lead into the things like occlusion. I best understood occlusion when we did removable fixed, because we had to create it, we had to understand it, we had to be able to put things in [inaudible 00:08:00] it's actually worked. As I said, with digital dentistry we have digital impression taking, knowing 3D printing and all of that's kind of taking over. And then we went into the sort of modern part in which the implant side of dentistry, you have implant dentures, you have supported, you have retained, you have [inaudible 00:08:22] but even more so for the new graduate because they might not be doing some of that but that's [inaudible 00:08:28] implant that you're going to be restoring. There's so many type of that, you have the anterior and all the challenges that an anterior implant will take. You have the posterior, and so again, [inaudible 00:08:38], but one thing that always do comes back to you, it's always historically driven treatments. Is that young grad going to be able to take and lead the train instead of let them being led by somebody else, because we all—whoever restores implant is the... and all the specialist know, if you're restoring—doctors leading the train, it sort of sometimes goes askew very easily. When you could tell them this is what I want, this is how we want doing this, the end result is everything starts working much better but also there's things like what's impression you're technically using, [inaudible 00:09:15], are you using customer [inaudible 00:09:17] in these situations and what's best and what's going to work best. Understanding connections that implant's going to have, what's that going to do to your [inaudible 00:09:26] success. And so I think that's where we sort of focused on this.</p>
00:09:32	S2	Thank you. Any questions? Okay, we've only got three groups and the curriculum's pretty packed. (Laughter)
00:09:45	S5	Yes?
00:09:47	S6	Do you want to create occlusion as a separate entity or it's all incorporated in that?
00:09:54	S5	The hard part with occlusion is it focuses on everything. Occlusion has a sort of a [inaudible 00:10:00]. It's functional when you have it here. It's periodontal because the periodontal situation will change that. So you

		<p>have—occlusion's a hard part, it's unless you want to make a specific [inaudible 00:10:15] philosophy, I think this is a great place for it because we're doing the removable, it's a great way to start learning the concepts and basics of occlusion. That way you understand, okay, this is how the occlusion's supposed to be generally, it's not going to work for every single individual as we all know. But it helps give you the basics of occlusion and how to [inaudible 00:10:39] courses, that's how they teaches occlusion is based on what we've learned in removable. And I know there are all kinds of other philosophies out there but for me and the way I think, that's the first step in occlusion. Now there's other concepts in occlusion that go beyond that, that like sort of beat my head in all over the years, but that's I think the basics of occlusion and then you can start building that beyond with things like [inaudible 00:11:06] pain where it then takes a whole different dynamics. You can have a beautiful balanced occlusion based on that and then people in extreme pain.</p>
00:11:19	S3	<p>That was great, thank you. We're actually doing great on time so don't worry about—everybody's been keeping the three minutes, you've all been wonderful, so.</p>
00:11:42	S7	<p>Okay, so our [inaudible 00:11:43], we broke it up into three main things, periodontal disease, systemic considerations, and implantology. I think a lot of the schools have done a great job with periodontal disease and management starting up with diagnosis, how do you come up with your diagnosis based on etiology, post response looking at occlusion anatomy, nonsurgical versus surgical therapy, when does that patient start to transition from something that's [inaudible 00:12:10] where they need surgical approach needs to be involved. Outcomes; how do you evaluate the outcomes after [inaudible 00:12:18] after surgical therapy and they'll [inaudible 00:12:20], how do we maintain this, how do we get the hygiene programme involved, periodontal maintenance and how to maintain the patient. Also regarding soft tissue, pretty prosthetic soft tissue [inaudible 00:12:35] tissue underneath your bridge or implant supported bridge or implant supported prosthesis. So the systemic considerations, the post response factor, the inflammation diabetes resorted to therapy that many of the older outpatients were started being on [inaudible 00:12:54] how do you manage it as well as diabetic control. And this is the big thing that we discuss was on the latter education, like I graduated in 2009, the implantology was glassed over, we took an impression on a [inaudible 00:13:08] restore, right? So I think the diagnosing starting off with treatment planning, getting students to understand digital workflow as well as conventional workflow and most importantly, being restoratively driven starting with the outcome in mind, where you want to end up and how to get there [inaudible 00:13:30] surgical considerations looking at the</p>

		medical background, anatomy and physiology. And then provisionalising, how you get the patient to leave with something that they're happy with, as well as when you go to your final prosthesis and that retain screwed versus screw-retained, how to get the patient outcome that you want.
00:13:55	S2	And don't forget those complex bases of [inaudible 00:13:58].
00:14:02	S7	Yeah. And also talking about how to manage the patient with this [inaudible 00:14:05] has had them in the past and how to manage complications that could arise or dealing with complications that walked into your office prior .
00:14:18	S2	Thank you. Questions?
00:14:19	S7	Any questions?
00:14:20	S8	Very little question. What about integrating lasers, there, there, there and there and here, I mean...?
00:14:29	S7	Yeah I think, you know, I think that actually it depends. Different schools are now incorporating lasers, perio lasers therapy, I think that would be if the school could afford the training. And because the problem with the perio lasers [inaudible 00:14:43], so that's a problem that different schools will run into. So that's kind of isolated the [inaudible 00:14:49] programme but I believe that if we could teach diode soft tissue management and any laser incorporation I think would be great.
00:15:00	S8	And there's also laser fulltime activated irrigation techniques or kind of the cutting edge, but the problem is [inaudible 00:15:06], but it's just you know it's probably [inaudible 00:15:15] a great question, but there is a cutting edge of [inaudible 00:15:21].
00:15:25	S9	All right. So our group had public health, disease prevention, behavioural sciences, practise management, health assistance and social. I think, you know, we have quite a unique opportunity with the school to integrate all the different schools we have. We have medical, we have pharmacy, dentals, and we're coming up as well, so we had a good opportunity which we try and integrate all the schools together to try and really have an interdisciplinary approach to public health moving forward. With regards to prevention, and if we were to obviously look at camera and that's—your main focus on of teaching in schools around the country at the moment, it's also going to be [inaudible 00:16:02] deliver this information. A lot of schools now, you know, they're coming to a point where [inaudible 00:16:09] the material just before class and they come and [inaudible 00:16:12] focus on problem based learning approach. That's something you may want to consider with regards to (overlapping background noise)

		<p>teaching the students different techniques with regards to prevention of risk, how do we recognise [inaudible 00:16:24] and so on. With regards to health delivery systems, let's talk about the third party compensation, how does the people (overlapping background noise) the public health needs, there's different healthcare model as well, and this [inaudible 00:16:36] something that we need to explore with students that are going to be graduating because soon after graduating, they're going to be exposed to [inaudible 00:16:44] which they hopefully are going to be exposed through our system as well. As well as, you know, open dentistry, private dentistry and so on. And with that [inaudible 00:16:53] to how these organisations work, which leads us all to practise management, and now [inaudible 00:17:06] working in clinical practises already and that's a good opportunity for the students actually to come out of [inaudible 00:17:13] practises, and that's probably unique opportunity that we have to encourage the students to see what is [inaudible 00:17:19] or shadow in the private practise and a lot of us are already in private clinic so I think of the communities are quite open to having some of the students onboard [inaudible 00:17:30] we can facilitate that I think that'd be quite a good opportunity for the students to get some exposures to what real life private practise industry's like. They'll get [inaudible 00:17:40] experience, they're going to integrate the [inaudible 00:17:42] health services as well that'd be a good opportunity for them to see that. So all these things would hopefully give them quite a well round experience, something out of the dental curriculum. We also explored what would be a good time for these students to look at these different systems, private clinics and so on, have some exposure in third year moving to fourth year might be a good time because it's after the first semester of fourth most of the students are looking for jobs and so and so, you know, you want to get them exposure because it's always that kind of [inaudible 00:18:13] to get a job, what type of job and then they don't really know what open dentistry is all about, what private practise is all about. So if we can give them as much exposure as we can in the school before the full semester of fourth year that might be a good opportunity for them. With regards to social, you know, [inaudible 00:18:33] groups that are going to be looking in [inaudible 00:18:37], different ethnicities, access to care and so on, so we want to expose the students to the different, you know, populations that are out there and at least made them aware of, you know, the different various that can occur. This [inaudible 00:18:51] population that we have [inaudible 00:18:53] good, well rounded student population. With regards to communication as well, that tends to be [inaudible 00:19:03] behavioural sciences, we will look at the communication with these patients, communication with the [inaudible 00:19:08] populations and also communication in terms of how [inaudible 00:19:13] being understood, you want to have like layman's terms, let's try and get the</p>
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		students to understand and don't just throw at them all the dental jargon and encourage communication on the patient [inaudible 00:19:26]. With regards to public health, so we want to encourage global [inaudible 00:19:30] and this is one of the things that a lot of dental school are trying to push out. I gives the students a great experience, a well round experience so if we can push that as well on top of [inaudible 00:19:40] health services, [inaudible 00:19:41] and so on, you normally gives them a good experience in terms of perhaps ability to perform tasks outside but also gives them good memories of the dental school and that gives them a great, you know, when they look back on the experience on dental school you might be given quite a good positive feedback then. School [inaudible 00:19:58] as well, that will promote access to get you on awareness to these students, it also encourage dentistry as a community and perhaps expose the world of dentistry that students perhaps will even know what dentistry was. So that's a good opportunity there. And yeah, do you have question?
00:20:19	S2	Questions?
00:20:23	S10	I think it's a good spot but why organised dentistry is a good place?
00:20:38	S9	Can you say that again? Why organised dentistry...
00:20:42	S10	Is a good place, is a good—the organisation, ADA , CDA , and CDS , why (overlapping conversation)? As an education [inaudible 00:20:51], do you want to give an opinion that it's a good place or do you want to teach students about preparing one form of dentistry (overlapping conversation)?
00:21:00	S9	I think this is (overlapping conversation).
00:21:03	S3	Could I have the mic for a sec? So I completely agree in that I said to my students we're [inaudible 00:21:21] schools the same thing. I usually say [inaudible 00:21:25] where the president say that was [inaudible 00:21:30] usually presented, and I say to the students you cannot be a good dentist unless you're involved in organised dentistry. And the reason is, were you going to [inaudible 00:21:42] with your colleagues, were you going to actually continue your education, were you going to understand the policies that are affecting your practise, were you going to understand the policies that are going to affect the public that you serve, you have to be involved with the profession. I'm not saying with organisation because I'm know perfectly good ADD members that are in the ADA and that's their choice, and I don't [inaudible 00:22:07] with that but I do think that, just like all of us tonight or with our colleagues, the person who isolates themselves from their colleagues is making a terrible mistake and this is a

		big problem now because what used to be 87, 88% penetration, at some states it's like getting to down to 50% and there are some dental schools in which it's less than 50%, and I don't think that those students are well-served. I agree with you 100%. So I think that it's part of our education programme and it's part of what we can teach, what can organised dentistry do to make you more effective with your patients, more effective in the practise.
00:22:51	S2	And I'd like to make a comment. You know, these are first component for school in the country, it's actually how the local component [inaudible 00:22:58] dental school as evidenced by all of you here, by all the people that are [inaudible 00:23:02] there's opportunity. So it is involvement of the local dental community that will have an impact on the school and what are the challenges within dental education, there is old models where the guys my age pushing them back because they [inaudible 00:23:17] teach something different. And [inaudible 00:23:20]. And you have the ability like [inaudible 00:23:28] round up but what they will like to change their programme to and build [inaudible 00:23:36] because of all your involvement here so that speaks [inaudible 00:23:39] being involved with organised dentistry [inaudible 00:23:43] have a voice and shape the future. So we'll move on to [inaudible 00:23:47].
00:23:50	S11	Yeah, I think the organised dentistry, one of the challenges that [inaudible 00:23:53], the corporate dentistry will have [inaudible 00:24:05] for a thousand dentist than our [inaudible 00:24:07] just for that corporate entity. So a lot of those dentists don't feel the need to be connected to organised dentistry because they're getting everything they think they need. And so I'm part of the large [inaudible 00:24:22] now and I still try to get all my doctors to continue to be part of the ADA and CDA and CDS but it's a hard sell for some of them because they don't think they need it like, you know, where did you get insurance when you come out of dental school, you joined ADA, [inaudible 00:24:40], they don't need that anymore because they're on together on insurance. So it's a different thing and a lot of the graduates from here will go into corporate models because that's how they're going to pay the bills.
00:24:53	S2	And being active at CDA for the last decade, it's all part of the strategy for trying to engage those [inaudible 00:25:00] the corporate members involved and so [inaudible 00:25:06] as we typically do unfortunately to say [inaudible 00:25:10]. But anyway, great comments.
00:25:17	S12	Okay, so we have paediatrics, orthogeriatrics for special needs, we did a poor job on geriatrics [inaudible 00:25:25] right now.
00:25:27	S6	[Inaudible 00:25:27].

00:25:29	S12	<p>Yeah, yeah, thank you. So in paediatrics and [inaudible 00:25:33] prevention, prevention, prevention, and more prevention [inaudible 00:25:37] guidance, nutrition, risk and also prevention of injury. We also talk about getting teaching about the dental homes starting early [inaudible 00:25:50]. We also want to talk about anatomy because anatomy's different in kids so to speak than adults, and if you remember when you're in dental school [inaudible 00:26:02] was scary. We have to have the materials as paediatric materials are different, we use a lot of different materials, and [inaudible 00:26:12] in general dentistry, so with that we talk about childhood diseases or pathology and we got to talk about special needs, psychology, behavioural stuff and sedation, we want to talk about traumas that are commonly in childhood and then kind of partly into early orthodontic intervention. And then we also want to talk about paediatric medications and also anaesthetic. All around the other side, ortho [inaudible 00:26:49] good diagnosis, knowing when to refer and what are the options to treat. Of course occlusion is important, case analysis, classification of occlusion, [inaudible 00:27:06], airway assessment, snoring, [inaudible 00:27:08]. Early intervention, when do these [inaudible 00:27:12] maintenance and oral habits, when to intervene. And then there's all about [inaudible 00:27:19] treatment. And radiographic assessment, and a simple ortho [inaudible 00:27:28].</p>
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[00.27.30]

[End of Audio]




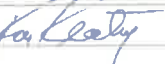

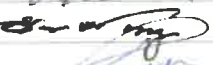



Duration 27 minutes and 30 seconds



CNU Task Force

College of Dental Medicine

February 20, 2019

Name	Signature
Leon Assael	
Wai Chan	
Alvin Cheung	
Debra Finney	
Jagdev Heir	
Kevin Keating	
Huong Le	 via phone
Stephanie Sandretti	
Eric Wong	
Rosemary Wu	

Appendix 1-8 CNU Action Accreditation Letter



June 30, 2017

Dr. Alvin H. Cheung
 President
 California Northstate University
 9700 West Taron Drive
 Elk Grove, CA 95757

Dear President Cheung:

This letter serves as formal notification and official record of action taken concerning California Northstate University (CNU) by the WASC Senior College and University Commission (WSCUC) at its meeting June 21-23, 2017. This action was taken after consideration of the report of the review team that conducted the Accreditation Visit to California Northstate University on March 7-9, 2017. The Commission also reviewed the institutional report and exhibits submitted by California Northstate University prior to the Offsite Review (OSR), the supplemental materials requested by the team after the OSR and the institution's April 6, 2017 response to the team report. The Commission appreciated the opportunity to discuss the visit with you and your colleagues: Dr. Karen McClendon, Vice President for Institutional Research and ALO, and Dr. Joseph Silva, Dean and Chief Academic Officer. Your comments were very helpful in informing the Commission's deliberations. The date of this action constitutes the effective date of the institution's new status with WSCUC.

Actions

1. Receive the Accreditation Visit team report
2. Reaffirm accreditation for a period of eight years
3. Schedule the next reaffirmation review with the Offsite Review in fall 2024 and the Accreditation Visit in spring 2025
4. Schedule the Mid-Cycle Review in spring 2021
5. Request an Interim Report to be submitted by November 21, 2021 to address
 - a. Program Reviews: provide evidence of completed program reviews, including retention and graduation data, for the newly implemented programs in the College of Medicine and the College of Health Science. These programs include the four-year BS, the non-degree 30-unit post-baccalaureate program, and the accelerated professional tracks leading to the MD and Pharm D;
 - b. An updated review of the recently created senior administrative positions and how each functions effectively in relation to the overall mission of the university;
 - c. An update on steps taken by CNU to ensure long-term stability through the retention of administrators, faculty, and staff.

Appendix 1-8 CNU Action Accreditation Letter

985 Atlantic Avenue, Suite 100, Alameda, CA 94501 • phone: 510.748.9001 • e-fax: 510.995.1477 • www.wscuc.org

Commendations

The Commission commends California Northstate University in particular for the following:

1. A strong sense of institutional identity and a clearly articulated mission shared by faculty, staff, and students;
2. Dedication to and engagement with the community outside of the university;
3. A student-centered approach to learning and a commitment to the implementation of innovative educational practices;
4. A thoughtful and realistic approach to expanding the current infrastructure to provide increased support for students;
5. The positive engagement of the Board of Trustees with evidence-based decision-making and accreditation processes.

Recommendations

The Commission identifies the following issues for further development:

1. CNU graduate culture, with special attention and focus on supporting faculty as they conduct research, publish in peer reviewed journals, present at national and regional conferences, and seek grant funding (CFR 2.8, 2.9, 3.4, 3.5);
2. Recruitment and retention of faculty, staff, and administrators (CFR 3.1, 3.3, 4.6);
3. Critically examine organizational structures including roles, responsibilities, reporting structures, and communication expectations, to ensure that CNU continues to achieve its mission. (CFR 3.7);
4. Efforts to provide evidence of student learning, the effective use of program reviews as a basis for decisions regarding increasing educational effectiveness, and clear strategies for communicating student achievement in terms of both graduation rates and levels of student learning (CFR 2.7).

In taking this action to reaffirm accreditation, the Commission confirms that CNU has addressed the three Core Commitments and has successfully completed the two-stage institutional review process conducted under the 2013 Standards of Accreditation. Between this action and the time of the next review for reaffirmation, the institution is encouraged to continue its progress, particularly with respect to student learning and success.

In accordance with Commission policy, a copy of this letter will be sent to the chair of California Northstate University's governing board in one week. The Commission expects that the team report and this action letter will be posted in a readily accessible location on the CNU's website and widely distributed throughout the institution to promote further engagement and improvement and to support the institution's response to the specific issues identified in these documents. The team report and the Commission's action letter will also be posted on the WSCUC website. If the institution wishes to respond to the Commission action on its own website, WSCUC will post a link to that response on the WSCUC website.

Finally, the Commission wishes to express its appreciation for the extensive work that California Northstate University undertook in preparing for and supporting this accreditation review. WSCUC is committed to an accreditation process that adds value to institutions while contributing to public accountability, and we thank you for your continued support of this process. Please contact me if you have any questions about this letter or the action of the Commission.

Sincerely,



Mary Ellen Petrisko
President

MEP/ gc

Cc: Bill Ladusaw, Commission Chair
Karen McClendon, ALO
Candace Fong, Board Chair
Members of the Accreditation Visit team
Geoff Chase, Vice President



Substantive Change Report

Proposal Information:

Proposal Review Date	April 25, 2019
Institution	California Northstate University
Type of Substantive Change	New Degree: Professional Doctorate
Program Name/Location	Doctor of Dental Medicine
ALO	Karen McClendon
WSCUC Staff	Karen Graham
Committee Reviewers	Robyn M. Nelson Mitsue Yokota

Committee Recommendation and Date

Additional Information¹

Interim Approval on 4/25/2019	<input checked="" type="checkbox"/> Notification of Implementation <input type="checkbox"/> Federal Site Visit Required <input type="checkbox"/> International Visit Required <input type="checkbox"/> Fast Track <input type="checkbox"/> Non Compliance <input type="checkbox"/> Competency Based Degree
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¹Items listed above must be fulfilled in order to finalize Substantive Change Approval.

Commission Approval and Date (for Institutional Tracking)^{2,3}:

Implementation of an approved change must occur within two years of Commission approval. If the change will be implemented more than two years after the approval date, contact your WSCUC Staff Liaison to determine if the change requires re-approval.

² Commission approval of a new degree program signifies that the program is covered by the accreditation of the institution as a whole. Approval by WSCUC should not be represented, in marketing materials or other forms of communication, as program-specific accreditation, such as that bestowed by specialized professional, or programmatic accrediting organizations.

³ Record the date that the Commission took action on this Substantive Change proposal for your records.

Findings of the Committee:

Commendations:

1. The proposed program is clearly aligned with the institution's mission.
2. The institution is commended for its responsiveness to previous substantive change and commission recommendations.
3. The faculty are commended for the organization and efficiency of the proposal itself.

Recommendations:

1. Program faculty and administration must ensure that the marketing materials sent to prospective students are more comprehensive and detailed in regard to the length of the program, start date, clinical experience/hours requirements, and bachelor level degree requirements/recency and accommodations (CFR 1.6, 2.2)

Retain this document and attachments for your permanent records.



Substantive Change Report

2. The program faculty are encouraged to highlight the opportunity and potential support for research projects within the program which appear to be a distinctive attribute of the proposed program. (CFR 2.2)

3. Institutional administrators should review the availability of library resources and computers for student use on all days of the week. (CFRs 2.13, 3.5)

WSCUC Liaison Signature:

A rectangular box containing a handwritten signature in black ink. The signature is cursive and appears to read "Karen J. Smith".

Date: 4/25/2019

Additional Information (if applicable):

Notification of Implementation:

Under Standard One, it is the institution's responsibility to notify WSCUC when a program begins. You are required to confirm implementation of the program in order for the program or location to be listed on the WSCUC website for purposes of financial aid eligibility verification by the U.S. Department of Education.

Login to the Accreditation Management Portal and mark this program as Active within 30 days of implementation. Failure to report implementation may result in the suspension of financial aid eligibility for enrolled students. Repeated non-compliance with this requirement could also lead to a sanction of the entire institution under Standard One.

Retain this document and attachments for your permanent records.

Section I: Institutional and Program Overview

A. Program Overview

1. Name of Proposed degree program.

Doctor of Dental Medicine (DMD)

2. Initial date of offering.

Fall of 2019

3. Percent of the program being offered via distance education and/or off campus, if applicable.

N/A

4. Identify the language of instruction, if 50% or more of the program will not be in English.

N/A

B. Descriptive Background, History, and Context

1. Provide a brief description of the institution, including the broader institutional context in which the new program will exist. Connect the anticipated substantive change with the mission, purpose, and strategic plan of the institution.

California Northstate University (CNU) is an institution of higher education dedicated to developing and training professionals who are leaders in healthcare science, education, and research. As an attempt to address the continued deficits faced by California in the production of healthcare professionals, the College of Pharmacy (COP) was founded in 2006 and gained approval to operate as a degree-granting college from the Bureau for Private Postsecondary Education (BPPE) on April 15, 2007, according to the standard operations as set forth in California Education Code 94705.

The College of Pharmacy (COP) welcomed its inaugural class in the fall of 2008, and CNU was granted WSCUC accreditation in June 2012. In continuing the mission of CNU to advance the art and science of healthcare by providing innovative education and delivery systems, the College of Medicine was added through WSCUC's substantive change process in August 2013 and accepted its first class in fall of 2015. In May 2015 WSCUC approved the addition of an undergraduate program in Health Sciences. The College of Pharmacy and the College of Medicine offer a PharmD and MD respectively, and the college of Health Sciences offers a BS degree in Health Sciences. The College of Pharmacy is accredited by the Accreditation Council for Pharmacy Education (ACPE), and the College of Medicine is accredited (Preliminary Status) by the Liaison Committee on Medical Education (LCME).

The doctorate of psychology (PsyD) program was planned in 2016 and created in 2017 to further CNU's mission of advancing the art and science of healthcare by adding another important healthcare-related professional doctoral degree to the current offerings. The PsyD program teaches scientifically proven

interventions and provide hands-on clinical experience to students who are educated to become solo practitioners or work within multidisciplinary treatment teams. Upon graduation, students will possess and demonstrate the knowledge and skills needed to treat diverse and complex mental health populations. This program was added through the Substantive Change process via a proposal in the fall of 2017 and approval in the spring of 2018, and a small class started in September 2018.

The CNU Graduate School was another natural extension of the University's mission *to advance the art and science of healthcare*. The MS in Pharmaceutical Sciences program was added to program offerings within the College of Pharmacy via a substantive change, approved in the summer of 2018.

The new program in dental medicine is strategically aligned with CNU's Vision to provide innovative education and healthcare delivery systems for the Northern California region and beyond. The DMD program will provide a venue for integrating oral health into human health science education and practice. The establishment of graduate courses in health sciences provides an opportunity for CNU to expand its range of scholarly activities and continue its development of an innovative, integrated curriculum; providing development opportunities for existing faculty from other colleges to contribute to another program that speaks to their expertise. The program serves as an additional venue for CNU to prepare a new workforce for a modern, fast-evolving healthcare sector, specifically in the areas of access to care, public health, and technology development and implementation. Dental medicine will assist the other health professional programs in developing oral health as integral to primary care medicine, pharmacy practice and behavioural health among others. It further helps the university expand and advance research opportunities.

2. If this is a joint program, identify the roles and responsibilities of each institution in developing, delivering, and addressing the program.

N/A

3. List the number, variety and longevity of other doctoral programs currently being offered, including student enrollment and projected time to graduation, if applicable, to each doctoral program. At least three and no more than five years of data should be provided. If this is a joint doctoral program, provide this data for each institution.

There are currently three doctoral programs offered at CNU: the MD, PharmD, and PsyD. The College of Pharmacy's inaugural class was in 2008, and it is a four-year program. The College of Medicine's inaugural class was in 2015, and students will graduate in 2019. The College of Psychology's inaugural class was in fall of 2018.

Entering/Graduating	2013/2017	2014/2018	2015/2019	2016/2020	2017/2021	2018/2022
PharmD	114	120	68	125	137	144
MD	N/A	N/A	60	90	94	96
PsyD	N/A	N/A	N/A	N/A	N/A	11

4. If 50% or more of the program will be offered via distance education, describe the institution's prior experience offering distance education. For joint programs, provide this information for each institution.

N/A

5. If the institution currently offers a joint doctorate in this discipline, indicate whether the program will continue and provide details on how the proposed program fits into the strategic plan of the institution. If the joint program will be discontinued, refer to Section VI on teach-out requirements.

N/A

C. Institutional Accrediting History Relevant to Substantive Change

1. Provide a brief response to issues noted in prior substantive change reviews since the institution's last comprehensive review, even if the programs reviewed were at a different degree level or offered in a different discipline. If this is a joint program, provide this information for each institution.

In the new most recent substantive change reviews, the following issues were identified:

The Committee's Action Report, dated 2- 27-2018, with respect to the PsyD program, made the following recommendations:

1. Future substantive change proposals which include clinical experiences must include a completed Memorandum of Understanding specific for the proposed program as requested in the proposal template. (CFR 1.7)
2. Program faculty must monitor carefully the sufficiency of IT and library hours as well as staff support in these areas to assure that resources support the intensity level of doctoral programs. (CFR 3.5)

In response to the issues identified by the Substantive Change Committee, signed MOUs are now a required component of the CNU's Substantive Change process. For the proposed program, MOUs are in place with Health and Life Organization Inc. (HALO) serving 70,000 dental patients in four clinics, Asian Health in Oakland serving nearly 100,000 patients in Oakland, and with correspondences from Shingle Springs Indian Health, Sacramento Native American Health Center, the Yolo County Health Authority, and Colusa Indian Health. Note that the Year 4 community clinic rotation of eight weeks will be accommodated by 14 clinical spots. The plan is for Shingle Springs to take six students for rotations throughout the year and for each of four other sites to have 2-4 spots per year, an excess capacity based upon the current curriculum plan (MOU docs).

The librarian, Scott Minor, monitors library resources to ensure that programs have appropriate resources. Deans incorporate library resource needs and requests into their budget, and faculty determine needed resources. Should the librarian not have a resource that is needed, CNU will buy that individual resource file for the faculty member or student. Additionally, CNU administers an annual survey student survey (as well as a faculty and staff survey) that asks about the sufficiency of library resources, training, and support. Further, the library has Service Area Outcomes that are assessed annually, as well as an SLO for information literacy that is also assessed annually.

The IT Department monitors the sufficiency of IT services, training, and support, and the university administers a survey to students (as well as faculty and staff) regarding satisfaction with IT resources, training, and support. Additionally, the IT department has its own Service Area Outcomes that are assessed annually through a rubric that articulates benchmarks and performance levels as well as assessment by various constituencies (faculty/staff and students) through satisfaction surveys.

For students the following pedagogical and educational technology support services are currently available to students:

- IT staff provide training on relevant software, including Canvas, TurningPoint, and ExamSoft and teaching equipment maintenance.
- Online textbooks and additional expertise and training in literature and database search and other library services from the university library staff: Mr. Scott Minor, MSLS (Director) and Ms. Melania Sukiasyan (Library assistant).
- Access for preceptors to the CNU Health Science Library (<http://pharmacy.cnsu.edu/student-services/library-learning-resources>) for their commitment to educating future pharmacists.
- Library admittance allows access to physical text references, online journals and databases. For any student or faculty needs, the contact is Scott Minor, Health Science Librarian, at (916) 686-8363 or SMminor@CNSU.edu. Students and faculty access library resources via the E*Value Home Page. Updated login information is listed here for all active preceptors.

Recent survey results for the recent IT survey show that a majority of CNU students agree or strongly agree that the library has sufficient resources and are able to acquire needed resources (Overall: 72.6%; PharmD: 65.6%; MD: 78.6%), that the library is accessible during the hours in which they need (Overall: 88.6%; PharmD: 72.8%; MD: 97.2%), and that IT provides quality service in a timely fashion (Overall: 93.3%; PharmD: 96.3%; MD: 92.0%) (refer to IT Resources Report, 2019).

The following databases are available through the Library webpage for all the University community:

- **AccessMedicine** - from McGraw-Hill is an online resource containing electronic copies of major medical and health related textbooks.
- **AccessPharmacy** – from McGraw-Hill is an online curricular resource designed to meet the changing demands of pharmacy education. Containing electronic copies of major pharmacy textbooks. AccessPharmacy allows students to select a core curriculum topic, browse by organ system, review textbooks, or search across leading pharmacy online references.
- **APhA PharmacyLibrary** – features content from a selection of APhA's authoritative textbooks, an interactive NAPLEX® review, case studies, and a variety of news sources.
- **Bates Visual Guide** – A collection of physical examination videos for different systems.
- **Clinical Pharmacology** – a complete drug and toxicology information solution for improved decisions and prevention of clinical quality shortfalls at any point of care.

- EBSCO Academic Search Premiere – A bibliographic multi-disciplinary full-text database, with more than 8,500 full-text periodicals, including more than 7,300 peer-reviewed journals.
- Micromedex – a suite of databases including Drugdex which provides evidence-based, unbiased, fully referenced information and independently reviewed data from major drug centers and pharmacology services worldwide; Identidex which identifies pharmaceuticals by the imprint code and secondary characteristics such as color, size and shape; and Poisindex which identifies ingredients for hundreds of thousands of commercial, biological, and pharmaceutical products.
- Natural Standards) – is a database founded by clinicians and researchers to provide high quality, evidence-based information about complementary and alternative therapies.
- OVID – A collection of approximately 50 full-text journals from the American Journal of Cardiovascular Drugs to Therapeutic Drug Monitoring. An additional 3000+ journals have indices and abstracts available here.
- Resources A-Z – A searchable electronic listing of all our current electronic journals over all our platforms.
- Online public access card catalog for books and other physical items.
- Interlibrary Loan Request form

For the new PsyD program, the Dean is currently adding additional library resources (including PsyInfo and a large collection of psychology articles) based on feedback from faculty. As a result of the important recommendation made by the Substantive Change Committee, in addition to keeping track of database usage and asking questions about satisfaction regarding the library and resources, more specific questions regarding hours, access, and resources have been added to of the satisfaction survey to be administered later this spring.

The Committee's Structural Change Team Report, from the visit of 5-10-2018, with respect to the M.S. in Pharmaceutical Sciences program, made the following recommendations:

- 1) CNU should demonstrate institution-wide commitment to quality assurance practices by consistently implementing assessment practices and program review and involving all relevant groups and individuals. As CNU's programs grow and mature, the institution will need to ensure new faculty understand the importance of assessment and exercise their vital part in institutional culture of learning and improvement (CFR 2.4; 4.3, 4.4).**
- 2) As the program grows, CNU should continue to ensure that there is a sufficient number of qualified faculty to support student/faculty ratios for quality graduate-level culture, mentorship, and collaborative research.**

In response to the substantive change team's thoughtful recommendations, the institution has taken key steps to ensure that this and other new programs will undergo the same program evaluation and assessment processes as other programs in the university. The university has a policy that each program undergo a full academic program review and that they utilize CNU's Program Review Handbook and Assessment Guidebook to help them conduct thorough reviews. The MPS faculty will continue to develop plans for the direct and indirect assessment of student learning, as outlined in the MPS PLO and ILO Assessment Plan. The next programs at the university to be scheduled for program review in later

2019 are the College of Medicine's MD program and the College of Health Science's BS program. Both programs will adhere to institutional and good practices guidelines for program review, which include the requirement for the direct assessment of student learning and an external review component (see 1502 – Academic Program Review Policy).

To ensure that faculty receive training in assessment, MPS faculty will attend the annual Assessment training session provided by the Office for Institutional Research and Assessment. During this last training session in August 2018, the training session was recorded for documentation and the professional development of faculty. The Office for Institutional Research and Assessment will work with program faculty to ensure good practices are utilized, data are captured, and results are analyzed and utilized in the creation of action plans.

Each college's department and/or program regularly monitors student-to-faculty ratios as well as conducts workload analyses to ensure the appropriate numbers of faculty in each area to carry out faculty responsibilities, ranging from teaching to assessing student learning to advising and mentoring to service and research. Currently, this ratio for the MPS program is 1:1. For the PharmD program, this ratio is 12.9: 1, and for the COM, the ratio is 10.45:1. For the PsyD program, the ratio is 5:1.

Refer to Attachment I.C.1 CNUCDM_AHS_MOU.pdf, Attachment I.C.1 CNUCDM_HALO_MOU.pdf, Attachment I.C.1 IT Resources Report, 2019.pdf, Attachment I.C.1 1502 – Academic Program Review Policy.pdf, Attachment I.C.1 Assessing Student Learning and Creating a Culture of Assessment.pdf

2. Provide the institutional response to issues relevant to doctoral level education noted in the last Commission or Interim Report Committee letters or in related team reports. If this is a joint program provide information for each institution.

On June 30, 2017, CNU received an action letter from WSCUC (CNU Action Letter doc), reaffirming CNU's accreditation for a term of eight years. The recommendations include further support of faculty as they conduct research, recruitment and retention of faculty and staff, a critical examination of organizational structures, and evidence of student learning and educational effectiveness for the MD program (including conducting a full program review).

CNU fully agrees with the team's and commission's evaluation and recommendations and has already made progress in response to the issues identified in the action letter from WSCUC and the visiting team's report. CNU has developed and is implementing the following improvements: an advanced recruitment training for search committees and hiring managers, development of an enhanced review process for evaluation of the organizational structure, a committee to improve flow and organization of the CNU website to increase ease of use and access to documentation, increased numbers of faculty to keep each college at the appropriate student-to-faculty ratio and to ensure greater balance of research and teaching duties, a systematic annual review of staff benefits, the creation and use of a task force focus groups for employee satisfaction (Task Force Meeting Notes doc), two new policies geared to faculty and staff retention (tuition reimbursement and legacy policy docs), an increase in research support, and the initiation of a new faculty development seminar series (refer to Faculty and Staff Retention Policy and Procedures doc).

Recently, the CNUCOM has increased support for faculty research in various ways:

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1) The COM has established a mini-grant program to foster research by the faculty. The research mission of the COM is to promote research spanning basic research, translational and clinical research, population sciences and education research. In 2017 funding totaling \$40,000 was provided. This was increased with the recruitment of more research-oriented faculty by 50% to \$60,000. In 2019, the first (winter) cycle of funding was for an amount of \$60,000 with the potential of a second request for applications in the summer cycle. Through the availability of start-up funds dedicated to research, with the expectation that faculty mentor medical students in their research projects and be able to obtain sufficient preliminary data to submit extra-mural grants to NIH and other funding organizations. Additional funding is available to the Course Directors to offset expenses associated with student research in the self-directed student scholarly research program (SDSSP) course for poster preparation and travel to national meetings. Also, the Dean provides protected time for faculty who have a major focus on research to enable them to generate preliminary data and submit extra-mural grants. Further support for grants, collaborations and capital equipment as requested by faculty is processed through the COM Office of Research. In addition to the budgeted allotment for funding for new research, there is also a budget line item for continued research.

2) Establishment of Institutional Regulatory Boards including IRB and IACUC to ensure all faculty follow responsible conduct in research.

3) For the new Center for Translational Medicine we recently hired the Director for the Center in 2018. This will allow for further expansion of research endeavors within the college.

4) Both the Assistant Dean of Research and the Vice-President of Research advise junior faculty in grant writing and critique their research proposals prior to submission to extra-mural funding agencies.

To fulfill the College's commitment to research, CNUCOP's research focuses on laboratory, clinical, pedagogical areas of scholarship, and educational outcomes. The College provides funding to promote faculty development, collaboration, innovation, and discovery in research/scholarship. Each year the college provides \$3000 per faculty member for individual faculty development, and over the last three years the college has provided nearly \$100,000 for internal seed grants, \$33,000 for the student summer research fellowship program and 4 external grants with values of \$323,000. The COP has developed four laboratories for clinical sciences (i.e., Compounding, IV preparation, Simulation patient mannequins, Advance Pharmacy Practice Simulation) and expanded the Research lab. The College also initiated the Summer Research Fellow program in 2016 for students to work with faculty in research and developed the Translational Research Symposium where students, residents, faculty from all Colleges at CNU and the surrounding areas can participate in. As a result, the faculty and students published 55 manuscripts from 2015 through 2017 and 9 in 2018. The College provides short and long-term mentoring programs for new and current faculty. Short-term mentors orient new faculty to University and College policies, procedures, and resources available at CNU. Long-term mentors provide continued guidance to faculty to assist the mentee in achieving his or her professional goals. The College, in collaboration with CNU College of Medicine, regularly provides seminars related to research and teaching

Additionally, to cultivate a climate of inclusion, wellness, and enhanced appreciation of employees, two committees were created: the University Wellness Committee and the Diversity and Inclusion Committee. The University Wellness Committee was created to serve as a base of communication for all of the college-specific wellness committees, with the inclusion of representation for the new PsyD

program. The Diversity and Inclusion Committee has expanded and included student representation, and also planned events, discussions and forums related to race, gender, and other demographics. Colleges within the University have hosted employee appreciation events, and employee of the quarter awards are given at every quarterly town hall meeting (see Meeting Minutes from Wellness Committee doc).

In the 2019 Staff Satisfaction Survey, overall 86% of staff indicated they receive timely feedback from their supervisors regarding their work (PharmD: 100%; MD: 83%; University level: 90%), 78% indicated that CNU fosters a culture of diversity and inclusion (PharmD: 100%; MD: 67%; University level: 71%), and 100% indicated that their work is respected and valued by their supervisor.

Refer to Attachment I.C.2 CNU Action Letter.pdf, Attachment I.C.2 CNUCOP Research Summary (2016-2018).pdf, Attachment I.C.2 Faculty Retention Report, 2019.pdf, Attachment I.C.2 1307 - Faculty and Staff Retention Policy and Procedures.pdf, Attachment I.C.2 Meeting Minutes from Wellness Committee.pdf, Attachment I.C.2 Task Force Notes.pdf

- 3. If the program is within a school accredited by a professional accrediting agency, or is related to a program that is accredited by a professional accrediting agency, list the agency, year accredited, and attach a copy of the most recent team evaluation report and agency action. Also indicate whether the specialized agency needs to review and approve the proposed program prior to implementation and when the review will be completed.**

The College of Dental Medicine DMD program must receive "Initial Accreditation" by the Commission on Dental Accreditation (CODA) before enrolling its first class of students. The Initial Accreditation includes at least one site visit and conveys that the developing program is likely to be successful in meeting the CODA accreditation standards once fully operational. The Self Study for the Initial Accreditation is currently underway. The CNUCDM is completing its Self Study report with plans to submit by the end of February 2019. This will allow for the opportunity to receive Initial Accreditation in Summer 2019 with enrollment of students in Fall 2019.

4. CODA

Section II: Program Need and Approval

A. Program Need

1. **Identify the program need/rationale framed by the institution's mission and strategic goals. Local program need should be documented in addition to any national or statewide need. For joint programs, provide this information for each institution.**

The DMD program supports the institution's mission of preparing future professionals to advance the art and science of healthcare and the vision of the university towards primary care, community service, and social consciousness and accountability. California Northstate University (CNU) currently offers an array of healthcare programs whose students would benefit from the addition of a dental education program and the interprofessional education opportunities that such a program would afford. Currently, the university provides interprofessional education experiences for students in the medical, pharmacy, and psychology doctoral programs.

Sacramento is an ideal location due to its strong professional community, strong need for a dental school, the lower cost of living within California, and access to very prepared students and excellent faculty. CNU's DMD program would be in a position to partner with health systems and the state to improve oral health access and oral health outcomes for Sacramento, the east bay, the central valley and mountain regions of California. Additionally, the dental school would be able to partner with community resources, foundations and charities for care for underserved Californians in Sacramento and beyond.

Sacramento is in need of a dental school, as one of the 30 largest metropolitan areas in the nation, Sacramento and San Diego are the only ones without a single dental school associated with their region. Dentistry is the health profession in the highest demand: The 66 US dental schools have about 6000+ spaces for about 13,000 US applicants and an equal number of non US dental graduates seeking a US dental degree. Graduates of dental schools have virtually 100% employment in professional related activities on day of graduation. California residents seek dental education outside of California at the highest rate of any state.

There is a great need for dental schools due to what is considered a "hidden epidemic": Dental disease is the greatest untreated and undertreated of all diseases in children, the elderly, disabled, special needs patients, the poor and medically compromised. California dental schools have an inadequate record in providing dentists to rural, mountain and central California cities. There are 25,604 dentists in California for a population of 38,441,747, meaning one dentist for every 1,500 people. Academic health centers benefit from the full array of health science education with dentistry integrated into the fabric of healthcare. Policy makers in California have awakened to oral health disparities and increased attention and support for oral health.

Additionally, this program is responsive to the needs within California and beyond for qualified dentists to fill the demand for dentists. According to the Bureau of Labor Statistics, the demand for dentists will continue to grow nationwide as the US populations continues to exponentially grow and age. The aging US populations are more likely to retain their teeth due to advancements in healthcare and the increased risk of oral cancer demands have created an increase in the demand for dental professionals.

The projected employment change from 2016 to 2026 for dentists is a 19% growth, which was determined to be much faster than the projected average US job growth.² Due to this exciting time of growth and possibility for innovation within dentistry, it is important that CNU stays on the cutting edge in training the best and most competent future dentists.

Refer to Attachment II.A.1 CDM Strategic Plan.pdf

2. Describe the process and results used to establish need. Please provide summary of findings, not the full study.

The process used to establish need began with a review of oral health services nationally and in California, the number of current providers, and the projected deficit in dentists. These findings are summarized in A.1. According to a compilation of 2016-2017 admissions data retained by the American Dental Education Association, it was shown that 6,100 first year enrollees were accepted from a total of 12,058 applicants (50.6% acceptance rate). The report showed that the majority of applicants (per million population) to US dental schools were from the Pacific Northwest¹. California has six schools that offer programs for dentistry – two are in San Francisco and four are in the Los Angeles area. There is a need to have an established dental school within California's central valley for prospective students living in the region and outlying locations. Of the 30 largest metropolitan areas in the nation, Sacramento and San Diego are the only ones without a single dental school associated to their region. A total of 1,951 individuals applied to dental programs within the Western US, and a total of 1,031 were enrolled. By establishing more dental programs in this region, more qualified students may be able to attend dental programs.¹

The following attachment shows all six monitored dental schools in California as well as information regarding CODA accreditation status, their applicant pools, and enrollment rates. These numbers indicate that student desire for dental program placements outnumbers current availability. Additionally, the quality of applicants has improved over the years, in spite of the limited number of programs available to them. The DAT average for applicants in 2000 was 17.8 and had risen to 19.3 by 2017. Similarly, GPAs grew from 3.2 in 2000 to 3.4 by 2017.ⁱ This indicates a robust pool of qualified applicants are simply unable to enroll because the number of dental programs is insufficient.

Refer to Attachment II.A.2 Monitored Dental Programs

3. What evidence (surveys, focus groups, documented inquiries, etc.) was used to support enrollment projections and to support the conclusion that interest in the program was sufficient to sustain it at expected levels?

According to the Commission on Dental Accreditation (CODA), there are six dental programs in California, the closest two being in San Francisco at University of the Pacific, Arthur A. Dugoni School of Dentistry (97mi) and UCSF School of Dentistry (101mi). In 2017, University of the Pacific had 2,364 applications and 142 enrollees (6% acceptance rate), and UCSF had 2,022 applications and 86 enrollees (4% acceptance rate)³. Due to the lower acceptance rate, coupled with the scarcity of dental programs within 50 miles of the Sacramento region, it can be determined that there is a need for a dental school in the region. Of the 30 largest metropolitan areas in the nation, Sacramento and San Diego are the only ones without a single dental school associated to their region.

In early fall of 2018, a survey was created and disseminated to CNU College of Health Sciences undergraduate students. The survey contained questions regarding students' interest in the field of dentistry, their desire for more information about CNU's dental program, and whether and when they might wish to submit an application to CNU's dental program. It was found that 76% of CHS students wanted further information about the program, 51% were interested in pursuing dentistry as a career choice, and 50% would apply to CNU's dental program. The majority of respondents who indicated that they would apply to the dental program also indicated that they would desire to do so as soon as they have completed their undergraduate coursework at CHS. Multiple students have indicated that the dental program at CNU fits well within the scope of the university, which reflects CNU's mission, "to advance the art and science of healthcare" (see CHS Dental School Interest Survey doc).

- 1 Wanchek, T., Cook, B. J., & Valachovic, R. W. (2017) US dental school applicants and enrollees, 2016 entering class. *Journal of Dental Education*, 81(11), 1373-1382. Doi: 10.21815/JDE.017.096
- 2 Bureau of Labor Statistics, U.S. Department of Labor, *Occupational Outlook Handbook*, Dentists. Retrieved from <https://www.bls.gov/ooh/healthcare/dentists.htm>
- 3 Commission on Dental Accreditation, *Search for Dental Programs*. Retrieved from <https://www.ada.org/en/coda/find-a-program/>

Refer to Attachment II.A.3 CHS Dental School Interest Survey.pdf

4. Attach the recruitment and/or marketing plan for the program. Describe the geographic scope of the program.

California Northstate is committed to being a California school committed to gaining a student body from underserved communities, including rural California communities, immigrant and migrant communities, underrepresented minorities and other chronically underserved communities. Through our pipeline program we will identify, mentor, and support community members who will seek careers in the health professions broadly and dental medicine specifically.

Refer to Attachment II.A.4 DMD Marketing and Recruitment Plan.pdf

B. Planning/Approval Process

- 1. Describe the planning and approval process within the institution, indicating how the faculty and other groups (administrators, trustees, stakeholders, etc.) were involved in the review and approval of the program. Include any campus established criteria for doctoral level work. Attach documentation of necessary approvals. CSU campuses must attach a letter of approval from the Chancellor's office.**

CNU is engaged in continuous assessment of the critical elements of the institution-- from assessing how well the college achieves its mission to assessing how effectively the institution's strategic thinking and planning advance the institutional mission, vision, values, and goals. Assessment drives programmatic improvements, which are subsequently incorporated into the institution's strategic planning and the budgeting process.

Strategy 6.3 of the University's Strategic Plan is to "research viability of new programs that are consistent with the Mission for implementation." The tactics for this plan include the following: conduct

appropriate research to explore plans for potential growth, create plans for new program development, develop substantive change proposals for new programs, and implement new programs that are good matches.

Initial planning for the DMD program began in 2016 when California Northstate University was exploring the possibility of other doctoral programs within the healthcare professions that not only provided a good fit with the current program offerings but which also was greatly needed in California and beyond. The DMD program emerged as the best fit with the current offerings of CNU due to the mounting dental care needs of Californians.

On September 18, 2017, the Dental School Task Force was created in order to examine the need for a regional dental school in the Sacramento area, as well as the shortage of dentists nationwide. Cost and affordability were discussed within the initial meeting, as well as the responsibility of CNU to provide a quality education and reasonable costs to the students. On November 13, 2017, administration was given an update on the program in the President's Executive Counsel and further feedback and discussion was solicited.

At the February 10, 2018, meeting, the task force discussed the process of accreditation, including planning the timing for the WSCUC change and CODA accreditation processes. Further, Dr. Leon Assael was referred to the group, the person who would eventually be hired as Dean of the College of Dental Medicine after a search conducted in the fall of 2018.

On May 26, 2018, Dr. Leon Assael met with the task force as a consultant, and the group discussed the important goals and creation of curriculum, accreditation timeline, and overall cost. On August 4, 2018, a more detailed idea of the curriculum strategy was discussed, as well as the creation of the dental clinics and student training. On August 6, 2018, the DMD program was introduced to the full faculty and staff in a Town Hall meeting.

On October 30, 2018, Dr. Leon Assael addressed the Board of Trustees and gave a brief description of his background, and his plans on the timeline for accreditation and process for the creation of the dental program. The application for WSCUC was submitted November 29, 2018, and the substantive change review is scheduled for April 2019. The Faculty Senate reviewed and discussed the proposed program during their November 6, 2018, meeting, and final Faculty Senate approval was given on November 12, 2018. After completion of the search for the dental dean, Dr. Leon Assael was hired on a part time basis on November 1, 2018, and as a full-time employee on December 1, 2018.

Refer to Attachment II.B.1 1501 –Attachment II.B.1 DMD Development Meeting Minutes.pdf, New Program Approval Process.pdf, Attachment II.B.1 Faculty Senate Approval Letter.pdf

- 2. If the institution is part of a university system, describe the review process at the system level, including any system requirements for doctoral level work. Attach documentation of approval.**

N/A

C. Collaborative/Cooperative Agreements

1. If the proposed program includes collaboration or cooperation with outside agencies, institutions or other entities, please describe the purpose and nature of the relationships. Attach relevant signed Memoranda or Agreement or other documentation. If this is the first program to be offered 50% or more online, or if the LMS provider has recently changed, please attach the contract with the provider.

	2019-2020	2020-2021	2021-2022	2022-23
Class 1	80	80	80	80
Class 2	N/A	80	80	80
Class 3		N/A	80	80
Class 4			N/A	80
TOTAL STUDENTS NEEDING PLACEMENT	80	160	240	320 80

The planned DMD class size of 80 will engage about 160 students in clinical care at all times beginning in 2021, which may include international dental graduates to the level of 80 or greater. The economies of scale in dental education have kept the average dental school class sizes between 80 and 110. The largest dental school in the US is NYU with 400 per year and the smallest is Harvard with about 45 per year. In assessing the workforce needs of California, the 31,000 dentists of California need to replace and add to their workforce at about 4% per year meaning 1240 dentists. Matriculating dentists in the six dental schools in California include the following:

	Number of First Year Dental Students
University of the Pacific	141
USC	148
Loma Linda	103
Western University	70
UCSF	90
UCLA	87

Thus the total matriculating dentists in California schools is 638 per year A DEFICIT of 600 dentists per year. Within the capacity of the University, CNU acceptance of 80 matriculates a years from this underserved region will address this issue.

To incorporate the DMD program, CNU will build a preclinical laboratory and a clinical simulation at the Elk Grove campus. For clinical facilities, CNU will work in two phases. The first phase will be the development of a clinic in Elk Grove with 30 clinical treatment units in 2019-20. A second clinic, also with 30 clinical treatment units, will be built at another location and completed in 2021. Both clinics will have core radiology, digital clinical facilities, operational electronic health record systems, sterilization and equipment management programs. The College will also partner with primary care clinics, dental specialties and advanced practice clinics associated to health and hospital systems, and community health centers with a FQHC model. These partnerships will be a part of the clinical experience for Year 4 students (see MOU docs).

The DMD program at CNU will partner with health systems and the state to improve oral health access and oral health outcomes for Sacramento, the East Bay, the Central Valley, and mountain regions of California. The program will partner with community resources, foundations, charities for care for underserved Californians, and international dental schools.

Refer to Attachment II.C.1 CNUCDM_AHS_MOU.pdf, Attachment II.C.1 CNUCDM_HALO_MOU.pdf

¹ American Dental Association. Health Policy Institute. 2017-18 Survey of Dental Education (United States Group II, Questions 1 and 10. Canada Group II, Questions 1 and 6).

¹ American Dental Education Association, U.S. Dental School Applicants and Enrollees. Retrieved January 2019 <https://www.adea.org/publications-and-data/data-analysis-and-research/applicants-enrollees-and-graduates.aspx>

Section III: Program Description

A. Curriculum

1. Provide an overall description of the program including the alignment of the program philosophy, curricular design, pedagogical methods, and degree nomenclature selected. Identify the program's emphasis as a professional-practice (applied research, practice-oriented, or clinical) degree or a scholarly research-oriented degree.

California Northstate College of Dental Medicine (CNUCODM)

The proposed dental program culminates in a clinical doctoral degree: the Doctor of Dental Medicine (DMD). The Mission of the College of Dental Medicine is to advance the art and sciences of healthcare through excellence in oral health education, practice, research, service, and social accountability.

Education: Create skilled and knowledgeable clinicians who will constantly advance their capabilities throughout life

Practice: Produce clinical leaders in oral health who will serve in private practice, health systems practice, and in interprofessional settings

Research: Promulgate scientific inquiry throughout the curriculum and support student and faculty research that creates an environment of scientific curiosity and an evidence-based foundation for clinical practice

Service: Provide individual patient care services at all clinical sites under the auspices of CNUCODM that produces the very best oral health outcomes and clinical value

Social Accountability: Advocate for and help build stronger communities in California and globally through improved oral health care, disease prevention, health promotion and protection from oral diseases through community based approaches

The Vision of the College of Dental Medicine is to provide constructive innovation in its education programs and leadership in integrating oral health care into human health care systems.

Values:

- Providing patient-centered didactic and clinical education that always puts improved health outcomes first
- Building stronger communities and creating a better world through improved oral health
- Understanding the professional responsibility of the dentist as the head of the oral health care team
- Practicing health promotion and disease prevention and protection
- Advancing California Northstate University through excellence in all we do

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The integration of oral health into overall human health requires dentists who are capable of performing at the highest level in an ever more complex and demanding environment of emerging technology, social change, human disease management, and evolving health systems.

In response, the California Northstate College of Dental Medicine (CNUCODM) has developed a curriculum with four basic themes: Human Systems, Odontology, Oral and Maxillofacial Studies, and Behavioral and Social Sciences. All four themes will be delivered in a diagonal curriculum to provide both horizontal and vertical integration of clinical and basic sciences in order to build students' competency in both the art and science of dentistry. Patients' assessment and management decisions need to be made through consideration of individual patient's health status and selection of the most appropriate interventions. The curriculum therefore is reflective of the necessary integration of the biomedical, behavioral, and social sciences.

The DMD curriculum will include concurrent didactic, small group learning, simulation and clinical experiences at all phases of the curriculum with increasing clinical experiences and decreasing didactic experiences gradually through all four years. While basic clinical encounters begin in the fall of the first year, advanced clinical practice occurs in the fourth year.

While emphasis on didactic foundations is at a high level in the first year, some didactic components with seminars and case-based didactic experiences continue through the fourth year. Specific types of pedagogical methods during classroom learning include the following: presentation, demonstration, simulations, team-based learning, problem-based learning, and clinical case studies.

CNU's dental program will utilize a common pathway with the Colleges of Health Sciences, Medicine, Pharmacy, and Psychology to build a solid foundation in the medical sciences and to provide a rich interprofessional education for students who will be working in healthcare teams for the benefit of patients. The following principles will be employed throughout the DMD curriculum:

- Interprofessional education experiences
- Collaborative practice models in clinical education
- Strong basic medical sciences with systems-based block segments
- Immediate and continuous clinical correlation
- Patient-centered care with practitioner/faculty led care teams
- Education in health systems and community clinics integrated with CNU based clinical education
- A competency-based clinical practicum
- Eclectic curriculum with "selectives" (electives that students choose) to guide students towards areas of clinical, research and societal interests. Selectives are among an array of clinical experiential, research or didactic courses available as part of the academic calendar to be selected by students in the developed block time.

These principles and designated educational experiences are designed to provide a strong foundation for building competency in the practice of dentistry.

2. **If 50% or more of the program will be offered via distance education, provide a detailed description of the modality and format being proposed (i.e., synchronous, asynchronous, online, correspondence, teleconference, video on demand, etc.). Provide guest log-in access to the**

learning management system for this program for at least one course for which a syllabus is provided. The course must be part of the proposed program, not from another program.

N/A

3. If 50% or more of the program will be offered via distance education, describe how the curricular design and pedagogical approach has been adapted to the modality of the program.

N/A

4. If applicable, describe each track within the program being proposed including the capacity of the institution to support each track. Each track will be acted on independently.

N/A

5. Describe how a doctoral level culture will be established to support the proposed program, including such elements as doctoral level course requirements, nature of the research environment, balance between applied and research components of the degree, and type of culminating experience (full dissertation or a culminating project). Also include plans for faculty research, faculty hires, library resources, and peer and campus collaboration. Discuss how students (both full-time and part-time) will be integrated into the intellectual community of the department and institution. If this is a joint program, provide this information for each institution.

CNU currently has a well-established doctoral culture on campus with students enrolled in both the PharmD and MD programs and, more recently, in the PsyD program. The doctoral culture is pervasive across the university—with research opportunities and support for faculty and students. Research groups at the University have produced over 54 publications, 23 grants, 73 presentations, 37 scholarships and fellowships, four book chapters, and two patents.

For the DMD program, establishment of a graduate culture will begin before students enter the program through appropriately rigorous admission requirements. These include a baccalaureate degree, demonstrated academic excellence and high GPA, evidence of scholastic engagement through letters of recommendation, and a driven desire to succeed in the profession as evidenced by their statement of purpose. Doctoral level course requirements are sequential and increase in difficulty and complexity as the student moves through the program gaining the skills and experience necessary to become a dentist. To ensure that students develop the skills and cultivate the attitudes and values needed for the profession, students will be mentored throughout the entire program.

Students in the DMD program will be integrated into the intellectual community of CNU in three fundamental ways. First, they will share the same semester schedule as the College of Pharmacy and the College of Medicine so that students are encouraged to interact through the same break times, vacations, and active class periods. Within this semester schedule, students in the DMD program will take common pathways courses with their fellow students in the College of Medicine. These courses in Human Systems will provide opportunities for collaboration in coursework and projects.

Students will also be sharing learning spaces in the library and study halls. Additionally, each college has dedicated laboratory spaces, serving various functions inside the spectrum of research and clinical training. For instance, the College of Medicine has approximately 2,100 square feet of dedicated research space for benchtop research applications for faculty and their student mentees. In addition, the COM possesses a 619 square feet simulation lab composed of two digital manikins, PC read outs and emergency response equipment (crash carts, blood pressure cuffs, pseudo-meds, etc.). This space is allocated for simulated emergency room, trauma applications and ultrasound equipment. The manikins are highly interactive and give the students the opportunity to practice their clinical skills without the guilt or stress of potentially injuring a live patient. . CNUCOP has 3 classrooms of 5,000 square feet each, one sterile compounding lab, an IV sterile compounding lab. It shares the manikin lab with COM as well as an interprofessional education program. The COP has an Advanced Pharmacy Practice Simulation Lab and a new lab with 700 square feet finished in 2018 for drug discovery, pharmacology and virology.

CNU recognizes and promotes appropriate linkages among scholarship, teaching, assessment, student learning, and service. Each college of the university allots a percentage of faculty's time for pursuit of research and/or scholarly activities, including mentoring students in these. The institution clearly defines expectations for research, scholarship, and creative activity for its students. In the COM, students participate in a self-directed scholarly project. In the College of Pharmacy, students participate in scholarly activities, create scientific posters, participate in research with faculty mentors, participate in the CNUCOP Summer Research Fellowship Program, and receive travel assistance to represent the college at professional organization conferences. Additionally, students and faculty participate in a multitude of healthcare-related community service events each year. In fact, the COP students participated in 58 health fairs, health education and related health events from July of 2015 to July of 2016.

Students from the dental program also share certain courses and study groups with the students from the other graduate programs. These include sessions covering Statistics, pharmacology, and the yearlong Leadership in Health Professions course in the senior medicine seminar. Each of the common pathway courses in hematology, musculoskeletal/cutaneous, cardiovascular, pulmonary, neurology, gastroenterology and nephrology will have common small group learning sessions. While on clinical rotations in clinics and hospitals, dental students will have interprofessional learning experiences with students in medicine, pharmacy, psychology and allied health programs from affiliated schools.

Another component of creating a doctoral level culture is the appointment of appropriately qualified faculty members. The Rank and Promotion Committee of CNU will examine the CV of each candidate for examples of accomplishments in the areas of teaching, scholarly activity, and professional service to determine their placement in one of four academic ranks: Instructor, Assistant Professor, Associate Professor, and Professor.

At the Instructor level the applicant must have a DDS or DMD and they must have teaching or extensive professional experience. Applicants will need to have experience in the areas of teaching, research, and professional service. Those faculty who were previously hired as Instructors must have at least one year of experience at that rank. An Associate Professor must meet all the qualifications for an Assistant, with the addition of significant accomplishments in teaching, research, and professional service. They must

have at least five years of experience as an Assistant Professor at CNU. This timeframe may be amended by the Rank and Promotion Committee due to previous time and service as determined by the Dean and awarded by the President. They must excel in two of three core competencies: teaching, research, or service. To reach the rank of Professor, a candidate must meet all the requirements for Associate Professor at CNU with the addition of a significant and outstanding record of teaching, research, and professional service. They must have spent a minimum of five years at the rank of Associate, though they may apply for early promotion (refer Hiring Plan doc).

Refer to Attachment III.A.5 Hiring Plan.pdf

6. Provide the student learning outcomes for the proposed program.

The development of the Program Learning Outcomes (PLOs) was informed by the Commission on Dental Accreditation (CODA) standards and are aligned with those expected learning outcomes for similar programs across the nation. The following PLOs represent the intellectual, practical, and professional knowledge and skills that students are expected to demonstrate by the time that they graduate:

1. Patient-Centered Care: Demonstrate understanding of healthcare disparities and cultural awareness in patient counseling and patient advocacy
2. Evidence-Based Care: Apply current, evidence-based oral healthcare within the scope of general dentistry
3. Culturally competent, empathic communication: Demonstrate patient centered, empathic, and culturally competent communication and interpersonal skills
4. Oral and Written Communication: Demonstrate sound oral and written communications in patient care
5. Critical Thinking: Utilize critical thinking, problem solving skills and systemic thinking in assessing and making reasoned, evidence-based decisions in patient care
6. Ethics and Professionalism: Demonstrate professionalism and ethical decision making
7. Biomedical Sciences Knowledge: Demonstrate an understanding of the fundamentals of biomedical sciences and apply them appropriately in oral healthcare
8. Practice Management: Apply legal, regulatory and business management concepts related to provision of oral healthcare services

Attached are detailed descriptions of institution learning outcomes, the program learning outcomes, and the co-curricular learning outcomes.

Refer to Attachment III.B.6 DMD ILO Rubric.pdf, Attachment III.B.6 DMD PLO Rubric.pdf, Attachment III.B.6, DMD CoCuLO Rubric.pdf

7. Attach a curricular map aligning program learning outcomes with course learning outcomes, and demonstrating the progression from introductory to advanced levels.

Refer to Attachment III.A.7 CDM PLO Curricular Map Landscape.pdf, Attachment CDM ILO Curricular Map Landscape.pdf

8. Include a list of all courses in the program, identifying which are required.

All courses are required, with the exception of those chosen as selectives.

Refer to Attachment III.A.8 CNUCDM Curriculum Overview with Course Descriptions

9. Describe the process by which syllabi are reviewed and approved to ensure that 1) course learning outcomes are described and are linked to program learning outcomes; 2) materials are current; and 3) pedagogy is appropriate for the modality of the course.

As part of the syllabus review procedure, a curriculum committee will examine format as well as content considering course learning outcomes, assessment rubrics, the mapping to program learning outcomes, a content outline based on the academic calendar, a schedule of all assignments, credit hours, necessary information about library resources, and all relevant university/departmental policies. The syllabi are also reviewed to ensure that content is appropriate to the level and goals of the DMD program. If significant changes are needed, the committee will provide guidance to the faculty and require resubmission of the syllabus before final approval.

The Associate Dean of Academic Affairs will work with faculty course coordinators to ensure that mapping from courses up to Program Learning Outcomes (PLOs) and Institutional Learning Outcomes (ILOs) is appropriate, such that students are able to fully develop the learning outcomes at appropriate levels of learning over the course of the program. It is the responsibility of the faculty coordinating the course to ensure that appropriate learning outcomes have been created that map to the appropriate PLOs and ILOs. Faculty are encouraged to review CNU's Assessment Handbook for guidance in building their learning outcomes. Training in writing learning outcomes and developing rubrics is available to faculty through an annual training session and by appointment from the Office of IR and Assessment.

10. Attach three sample syllabi and the syllabus for the dissertation or culminating experience, which are adapted to the modality of the course. Sample syllabi must demonstrate rigor appropriate to a doctoral-level course in terms of required reading, course content/topics, and assignments/grading policy. Course syllabi should reflect a learning outcomes orientation and be linked to program outcomes. Syllabi should demonstrate that extensive research, including applied research as applicable, is required.

Syllabi must include:

- specific student learning outcomes for the course
- a course schedule including a schedule of all assignments
- the number of course credit earned in the course and expectations for how those hours are earned both in and out of class (seat time, lab time, homework, etc.)
- use of the library
- relevant university/departmental policies

Syllabi should also be adapted to the modality of the course, and be appropriate to the level of the degree. Online courses must include information about the learning management system and expectations for students participating in the online modality, netiquette, and other considerations specific to the modality.

Refer to Attachment III.A.10 DMD Syllabi.pdf

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11. Describe the clinical, practicum, or internship requirements and monitoring procedures, if required. Attach a sample MOU or agreement with a clinical, practicum, or internship site (if applicable).

All dental students will begin clinical training in their first year, utilizing the preclinical laboratory and clinical simulation labs, as well as with initial clinical experiences as part of the care team in the clinic. The clinical training will be linked to the Program Learning Outcomes and Institutional Learning Outcomes of the university, including such outcomes as professionalism and ethics, patient care, practice management, and biomedical sciences knowledge. The clinical labs will be located near the main campus at an acquired facility.

Second year dental students will undergo supervision in the clinical labs while learning how to practice clinical dentistry, including periodontics, restorative dentistry, orthodontics, and endodontics. Second year students will practice within the labs for 12 hours, under 12 hours of supervision per week. Third year students will also undergo supervision as well and will gain competency in key areas of practice such as oral diagnosis and treatment planning, operative dentistry, and emergencies. Third year students will practice within the labs for six hours, under six hours of supervision per week (see Sample CDM MOU doc).

Another required element of the CNUCDM is the community based clinical practicum, in which each of 80 students per cohort will have 10 encounters per week in general dentistry at CNUCDM operated sites for 12 months. Each clinical site will accommodate 1-3 students for the entire year based on a rotation schedule of 8-week rotations, meaning CNUCDM will partner with as many as 12 clinical sites. Each student will have four months of selectives in other health care settings or in a dental specialty setting, including but not limited to radiology, primary care medicine, community health, oral pathology, orthodontics, and mobile units.

Clinical faculty will monitor student performance to ensure competency at expected performance levels, articulated in the learning outcomes' rubrics and published in course syllabi. Additionally, students must maintain satisfactory academic progress, as stated below and articulated in the SAP Policy (doc). The consequence if a student earns a letter grade lower than 75% in any course in the curriculum is as follows:

Grades	Consequence
2 60-75%	Remediate all courses; Academic Probation at College's option if remediation is unsuccessful
3 or 4 60-75%	Remediate all courses; mandatory Academic Probation if remediation is unsuccessful in three or more courses
5 or 6 60-75%, 1 or 2 below 60%	Repeat both course(s); mandatory Academic Probation
3 below 60%	Dismissal

Students will be allowed to remediate a maximum of 4 courses over the duration of the CDM Program; students will be dismissed if cumulative GPA falls below 60%; GPA will be calculated on completion of remediation; failed courses must be repeated; a failed course can be repeated only once.

Refer to Attachment III.A.11 Sample CDM MOU.pdf, Attachment III.A.11 Satisfactory Student Progress.pdf

12. List any special requirements for graduation.

Requirements for graduation include the following:

1. A 3.0 grade point average and completion of all coursework
2. Approval from Academic Advisor
3. Removal of any probationary status
4. Completion and acceptance by the program of the student's dissertation
5. Completion of all practicum requirements
6. Completion of the first semester of internship

Once the above conditions have been met a student may apply for admission to candidacy to obtain the doctorate degree. The student's record will be reviewed and a contract created stipulating that once the student completes their internship they will have graduated from the doctoral program.

B. Schedule/Format Requirements

1. Describe the length of time that the typical student is expected to complete all requirements for the program.

The DMD program is organized as a full-time cohort based program to be completed in four years. All courses are required with the exception of those not chosen as selectives.

2. Describe the cohort or open registration model being used. Provide minimum attendance/participation requirements and provisions made for students to make up assignments or for students who withdraw and seek to re-enroll. Include a matrix showing the number of students per cohort throughout the first five years of the program and the faculty resources to support such estimates.

CNUCDM will utilize a cohort registration model. All students will be admitted as full-time only. The program will initially admit 80 students to the program and 80 in each subsequent year of the program. Class attendance and attendance in laboratories and clinics is required. Incomplete is offered as a grade per policy as contained in the student handbook and each syllabus.

Year	BMS Educat or	Preclin ical Ed	Clinical Ed (gen)	Clinical Ed (spec)	Total Teaching Faculty	Cohort Size	Enroll ment	Total Classes Covered (yr)	Student: Teacher Ratio
1	6	5	2	2	15	80	80	20	6:1
2	6	8	10	6	30	80	160	36	6:1
3	6	8	20	11	45	80	240	62	6:1
4	6	8	30	16	60	80	320	76	6:1
5	6	8	30	16	60	80	80	76	6:1

* Fifth year in this chart represents our ability to accommodate students who fall behind cohort and need to make up coursework

Utilizing a competency-based grading system, all students must reach a threshold for clinical competency in knowledge and skill set at 75%. Structured remediation activities for each didactic course will ensure a higher level of knowledge for the cohort of students earning a Y, 60-75%. Students earning below 60% receive an F requiring repeat of the course or further academic action. Expectations for classes are defined on individual syllabi with any opportunity for make-up assignments. Students who miss two or more sessions are required to work with the faculty of each class to define make-up opportunities.

If a student fails to meet the above minimum requirements, he or she will be placed on probation. Probation formally begins with a written notification to the student from the advisor. It will include the reason for probation, probationary conditions, and the duration of probation. Students can be removed from probation by addressing the area of concern.

Students may be terminated from the program if they fail to return from probation in the timeframe allotted, if they receive two Cs or lower within an academic year, if they are acting in a manner that violates the ethical and professional standards of CODA as determined by faculty vote, if they fail to return from a leave of absence by the date specified, or if their academic or professional actions have created a situation for which a warning or probation is inappropriate or impossible.

A student may petition for readmission to the program with an endorsement from his or her advisor. The petition will be voted on by the DMD, and the approval must be unanimous. The petition is then sent to the Dean for final approval or rejection.

Students will have the opportunity to remediate a maximum of four (4) courses that resulted in a grade below 75% throughout the didactic program; hence more than 4 courses with a grade of 60-75% (before remediation) will require that additional courses resulting in that grade be repeated. Remediation is not available for a course that resulted in a score of 60% or below. A particular course can be repeated only once. Failing more than two (2) courses (before repeating), below 60%, will result in dismissal.

Incomplete or Withdrawal from a Course

During a semester, a student may withdraw or fail to complete all required assignments and/or examinations due to extenuating circumstances, such as, but not limited to, an illness or a family emergency. In such cases, the course coordinator may give a grade of Incomplete for the course. All missed assignments and exams must normally be completed within 10 business days after the end of the semester in which the Incomplete was received, or within a timeframe determined by the course coordinator. Failure to successfully complete the course will result in an earned F grade for the course and placement on Academic Probation. Withdrawal from a course must first be approved by the course coordinator and the Office of Academic Affairs. Where a student has had to withdraw from a course a grade of W will be applied and the student will have to repeat the course next time it is offered.

Dismissal

A student may be dismissed from CNUCDM if any of the following conditions exist and the Professional and Academic Standards Committee determines that dismissal is warranted: a. Failure to meet any terms of Remediation or Academic Probation b. Conduct subject to dismissal as

described in the Honor Code section of the Student Handbook c. Foregoing an academic semester without obtaining an approved leave of absence d. Failure to complete the degree requirements in five consecutive academic years from the date of the first day the student begins the program.

Appeal of Dismissal

Students dismissed from the College may appeal the decision in writing within thirty (30) calendar days of notification of dismissal to the Dean of the College. The Dean will render a decision in writing within 15 calendar days of receipt of the formal written appeal. The Dean's decision is final.

Students will be allowed to remediate a maximum of 4 courses over the duration of the CDM Program; students will be dismissed if cumulative GPA falls below 60%; GPA will be calculated on completion of remediation; failed courses must be repeated; a failed course can be repeated only once.

Students are not permitted to begin a course if prerequisite course(s) has/have not been successfully completed and passed. Consequently, if a prerequisite course is not passed, the student's academic progression may be delayed by at least one academic year.

3. Describe the typical class size throughout the program.

Class sizes are kept to 20 students or below for small group learning and 80 in large group learning formats. In preclinical laboratory, classes will be 40 students per section.

4. Describe how timely and appropriate interactions between students and faculty, and among students will be assured, including detailed information for online courses. For programs being offered via distance education, describe the provisions available to faculty to ensure that the enrolled student is the student completing the coursework.

Courses will be offered in the regular semester manner. There are no distance or online courses.

Students will meet with their academic advisor four times a year to gauge their progress in the program and to determine if additional resources are necessary to ensure their success. Classes designed to prepare students for practicum work, a class to guide them through the internship application process, and workshops to provide support and encouragement through the completion of the dissertation are built into the program. Students may also utilize the resources available through the Associate Dean of Academic Affairs, whose responsibilities include informing students about degree requirements, leaves of absence, registration for classes, how to obtain fellowships and grants, procedures regarding violations, transfers, withdraws, and degree deadlines. University-wide support includes academic advising and educational planning, a computer lab and library, academic success and financial literacy workshops, and peer mentoring.

Timely and appropriate interactions between faculty and students are fostered through course and program electronic support. E-mail is frequently used to allow for continuous communications and many courses include supplementary web-based tools that include forums and discussion boards.

5. Describe the timeframe of courses, i.e. accelerated, weekend, traditions, etc. If courses are not offered in the traditional 10 week quarter or 15-16 week semester system, please explain how

credit hour and course content expectations can be met within the timeframe established for the program. An institution must allow adequate time for students to reflect on the material presented in class. Faculty using the accelerated course format should be expected to require pre- and post-course assignments, as appropriate. The Committee will expect course syllabi for accelerated courses to be adjusted accordingly to reflect pre- and post-course assignments, the accelerated nature of the curriculum, and conformance to the institution's Credit Hour policy.

Courses will be delivered on the standard 15-week semester schedule with three semesters per year. There are no accelerated courses planned for the DMD program.

6. Attach the institution's Credit Hour Policy, in compliance with WSCUC's Credit Hour Policy, adopted in September 2011. For programs that contain courses that include requirements other than traditional seat time (i.e., laboratory work, internships, practica, studio work, hybrid courses, online courses, and other academic work leading to the award of credit hours), please identify these courses and explain how the time requirements are equivalent to the credit hour requirements as described in WSCUC's Credit Hour Policy.

For each 15-week semester at CNU, one (1) hour of credit is assigned per hour each week of classroom or direct faculty didactic instruction (that is, per hour of lecture or student in-class time) and a minimum of two (2) hours of out-of-class student work (homework). For practicum and internship time, one (1) hour of credit is assigned per three (3) hours each week of student time spent in this activity.

Credit Hours for the DMD program and its corresponding Credit Hour Policy, in accord with the university policy and WSCUC's requirements, are assigned to courses at the time of course creation and syllabus approval by the Curriculum Committee.

Consistent with the policy, 1 credit is assigned for each 15 lecture hours in a course and its associated 30 preparation/ homework hours. 1 credit is assigned for every 25 small group learning hour and its associated 25 preparation/homework hours, and 1 credit for every 30 laboratory hours and 30 preparation/labwork hours.

All courses in the DMD program have assigned one credit for each 15 lecture hours in a course and its associated 30 preparation/homework hours. One credit is assigned for every 25 small group learning hours and its associated 25 preparation/homework hours, and one credit for every 30 laboratory hours and 30 preparation/lab work hours.

When students are in clinic, they will also attend seminars which in the curriculum are noted in the 3rd and 4th year as dental medicine seminars which are counted as small group learning at one unit per 25 hours. Workshops to obtain clinical instruction in simulation environments such as for dental implants and digital dental reconstruction techniques are counted as laboratory hours with one credit per 30 hours per California Northstate policy.

Refer to Attachment III.B.6 Credit Hour Policy.pdf

7 .Provide a sample schedule of courses for a full cycle of the program, with faculty assignments if available.

Refer to Attachment III.B.7 Schedule of Courses.pdf

C. Admissions Requirements

1. List the admissions requirements.

Students seeking admission to the DMD program will use the centralized application service for dental school admission called ADSAS, administered through WebAdmit and the American Dental Education Association. Minimum requirements for entrance to the program are: undergraduate minimum GPA of 2.8 (preferred 3.2), DAT score of 17 or greater with a preferred DAT of 19.

Minimum Requirements

California Northstate University College of Dental Medicine prefers a baccalaureate degree from a regionally accredited, four-year institution within the United States; or a non-U.S. equivalent institution. Required minimum coursework:

- 2 semesters, 3 quarters, or 1 year of college level English (*IB or AP credits may be considered if they are accepted by the undergraduate program*)

IB or AP credits not accepted for the following:

- 2 semesters, or 3 quarters, or 1 year of Biology with Laboratory
- 2 semesters, or 3 quarters, or 1 year of Inorganic (General) Chemistry with Laboratory
- 2 semesters, or 3 quarters, or 1 year of Organic Chemistry with Laboratory
- 2 semesters, or 3 quarters, or 1 year of Physics
- 2 semesters, or 3 quarters, or 1 year of college level Math (*Statistics and/or Calculus preferred*)
- 1 semester, 1 quarter, or 3 units of Biochemistry

Recommended Coursework, but not required:

- Social sciences
- Anatomy
- Microbiology
- Behavior Sciences
- Physiology
- Immunology
- Foreign languages

Standards in five areas must be met by all candidates: Observation, Communication, Motor Function, Cognitive, and Professional.

Each application will be thoroughly reviewed by the admissions committee and all areas of the application will be carefully considered. The ADSAS application has a required personal statement and a required section that asks whether the student is from a disadvantaged background. The personal statement prompt pertains to a student's community engagement and community service background.

Appendix 1-8 WSCUC 2019 CNUCDM

It is important that the student body of the DMD program represents the best of future clinicians, and the admissions committee will pay particular attention to professional, research, education, and life experiences. Along with academic excellence, the committee will be looking for students with diverse cultural, socioeconomic, work, and educational backgrounds. CNU has a diverse faculty and student body and it is the admissions policy of the University that no applicant will be discriminated against on the basis of race, religious creed, color, national origin, ancestry, citizenship status, sex, gender, gender identity, sexual orientation, mental disability, medical condition, genetic information, age, military or veteran status, physical appearance, or any other consideration made unlawful by federal, state, or local laws.

In the interview, we are looking for demonstration of each of the following: 1) Demonstrated academic ability/capacity, 2) critical thinking skills, 3) interpersonal and social skills, 4) commitment to diversity, 5) commitment to community service, 6) a candidate's match in terms of the culture and expectations of CNUCDM (i.e., commitment to the profession and to becoming a healer).

Refer to Attachment III.C.1 DMD Admission Requirements.pdf

2. Identify the type of student targeted and qualifications required for the program.

The DMD program admits students who demonstrate sufficient preparation, potential for professional education, and ability to perform the essential functions needed to practice as a licensed dentist.

Proposed Student Body Profile for California Northstate University College of Dental Medicine

Public and private dental education in the United States has not served the needs of the emerging demographics of American citizens. Current dental students are weighted heavily into those who have family members who are dentists or physicians, students from the most densely populated urban and coastal centers, those from the most competitive public and private universities and those with incomes more than two times the national average. Nearly all dental schools are located in the major population areas of their regions and generate more than substantial workforce for the major cities and suburbs, while inner city communities and rural areas and small cities are left behind. These are referred to as Dental Health Professional Shortage Areas (DHPSA) by HRSA. Inner city California and most of interior California, the Sierras, desert and Northstate are all heavily represented as DHPSA shortage areas. Students applying from underserved communities, from these areas have usually attended regional universities and though qualified, do not perform as highly on the DAT, the Dental Admissions Test. While over 6000 of the 13,000 applicants to dental school will gain admission, those who do not get in or must travel hundreds to thousands of miles to attend are disproportionately from these areas, nowhere more so than in California where over ten million people live in these areas.

In addition, as a health profession dentistry is unable to keep pace with peer professions such as medicine in the recruitment of underrepresented minorities, especially black, Hispanic and American Indian students. For example, California's dental schools bring fewer dentists to rural and/or economically distressed communities than any other state system (4-6% as compared to over 30% for states such as Minnesota and Oregon) DHPSA areas are also heavily represented by the immigrant and migrant communities for whom the barriers to health services are the greatest.

California Northstate is committed to being a California school committed to gaining a student body from underserved communities, including rural California communities, immigrant and migrant communities, underrepresented minorities and other chronically underserved communities. Through our pipeline program we will identify, mentor, and support community members who will seek careers in the health professions broadly and dental medicine specifically. These programs are presented elsewhere in these documents regarding admissions.

In addition, we are committed to having a faculty that broadly reflects the communities we serve. Partnerships with Asian Health, Indian Health, La Clinica de la Raza, West Oakland Community Health, San Diego homeless Veterans clinic, and rural sites in Shasta Lakes will produce community based faculty to serve as role models for our students while assisting in developing the pipeline for future community health leaders. These efforts will have inestimable benefits in advancing the lives of patients and improve the health related quality of life in populations impacted by these programs.

Special efforts will be made to recruit and select a diverse set of candidates from Sacramento and its surrounding counties.

1 HPSA Find (<https://data.hrsa.gov/tools/shortage-area/hpsa-find>)

3. If any part of the program will be offered via distance education, describe how the student's ability to succeed in distance education programs will be addressed and linked to admissions and recruiting policies and decisions.

N/A

4. Describe the residency requirements and policies on the number of credits that students may transfer into the program.

There are no residency requirements for the program. No transfer students will be accepted into the program, though consideration of transfers might be requested after the graduation of the first class. At such time policies will be developed to consider this option consistent with accreditation requirements.

5. Attach a sample brochure or admissions material for the program that will be made available to prospective students. (Note that this material must clearly state, "Pending WSCUC approval" prior to Commission approval.)

Refer to Attachment III.C.5 DMD Program Brochure

Section IV: Education Effectiveness

A. Plan for Evaluating Educational Effectiveness

Assessment should be described at three levels:

1. **Annual assessment leading to the program review:** Describe the annual assessment process for year one and subsequent years leading to the overall program review. Attach an assessment plan for the first several years of the program that describes how core faculty review the performance of the students in each cohort as it progresses annually to determine satisfactory progress. The assessment plan should include the review of student work and achievement of program learning outcomes as well as rubrics for assessment of the qualifying exam, dissertation, and clinical work, as applicable.
2. **Program review:** Describe how and when this program will be incorporated into the department, school and institution's regular assessment and program review process.
3. **Describe any plans for external review of the program.** (External refers to the evaluation of the program by one or more evaluators unaffiliated with the institution. Please note that professional accreditation reviews can be included, but are not expected to be the sole source evaluating the effectiveness of the program.)

1. Annual assessment leading to program review:

All programs at CNU utilize an Assessment Committee to assess student learning at appropriate points across the curriculum and analyze assessment results to make changes in instruction, pedagogy, assignments, and student learning. Students who are not achieving at the appropriate level of learning are issued academic alerts to notify them of any deficiencies; students then work with faculty to remediate deficiencies as needed.

Refer to Attachment IV.A.1 PLO and ILO Assessment Plan.pdf, Attachment IV.A.1 PLO Palooza Results.pdf, Attachment IV.A.1 Assessment Handbook.pdf

Student Learning Outcomes and Assessment

The dental school dean and a group of dental consultants and advisors who will be joining the university as dental school faculty, along with key Ph.D. and MD faculty, collectively developed the learning outcomes for the dental program. These PLOs are based on professional standards and expected competencies. Course Learning Outcomes (CLOs) and corresponding rubrics are created by faculty and are published in syllabi. The Program Learning Outcomes (PLOs) are published in the catalog, printed on posters in the classrooms, and published on the program's website.

PLO rubrics are used to assess student learning through designated signature assignments; these include papers, performances, projects, presentations, and exam questions mapped to learning outcomes. Expectations regarding student learning are defined and articulated through assessment rubrics, course assignments, and regular formative assessments of student learning. Assessments provide needed feedback to both students and instructors so that improvements in learning, teaching, and curriculum can be made. Students' CLO, PLO, ILO, and Co-Curricular (CoCuLO) performance is assessed and

documented; results are used by course coordinators, Department Chairs, and faculty advisors—as well as the Assessment Directors and all interested constituencies.

Institutional Assessment Processes Leading to Program Review: College of Dental Medicine's Plan

The Office of Institutional Research and Assessment provides guidance and support for faculty in planning and conducting assessments of student learning. The assessment of student learning happens at all levels of assessment; for the first year, the assessment will focus on Course Learning Outcomes (CLOs)—which are assessed each term—and formative assessments with a goal of building proficiency (across the course of the program) for Program Learning Outcomes (PLOs), Institutional Learning Outcomes (ILOs), and Co-Curricular Learning Outcomes (Co-CuLOs) .

Assessment activities for the program are outlined in the CODM's Assessment Plan, which includes multiple assessments across various areas of the program. The plan includes the direct assessment of student learning at all levels (course, program, institutional, and co-curricular); assessment results will be shared with the Curriculum Committee and course coordinators for planning and improvement purposes.

A companion document to the Assessment Plan, called the PLO and ILO Assessment Plan is utilized by each program. This plan identifies the Program Learning Outcomes and Institutional Learning Outcomes that are to be assessed within an academic year, the courses identified as those in which students are expected to master those particular learning outcomes, and the specific signature assignments that are to be utilized in the assessment (along with the assessment method). Each program utilizes an annual curricular review process, in which course and faculty evaluations, student survey results, and student learning outcomes are compiled each year in the Assessment Report and are used to make improvements in courses and in teaching and learning. (see Learning Outcomes Palooza Results doc; Assessment Report doc)

Once the first cohort reaches year two, faculty will begin to host an annual event in which they undergo a rater calibration session, followed by an assessment and validation of student learning outcomes through rubric-based assessments of de-identified student artifacts from signature assignments that are embedded at critical points in the curriculum. All of these assessment activities lead to changes in curriculum, pedagogy, assignments, and assessments and all inform the comprehensive program review process, which includes the direct assessment of student learning and which is described in the Assessment and Program Review Handbooks.

Teaching effectiveness will be evaluated during the annual faculty review and during consideration for rank and promotion. Multiple data points will be evaluated including student survey results and performance, peer evaluations, and direct observation of classroom teaching. Faculty are required to solicit student feedback at the conclusion of their courses using a standardized student survey developed by the Assessment Committee.

Practicum and Experiential Education Evaluations

In years one through four, students will be engaged in practicums. Two types of clinical practicums reflect two types of experiences. First, the college will operate two clinics for clinical experiences led by faculty in all aspects of general dentistry including diagnostic, preventive, and procedural dental care.

Secondly students will rotate for eight weeks into regional oral health systems, predominantly community health centers for the provision of oral healthcare. The bulk of clinical practicum will occur in facilities operated by CNU.

Practicums and experiential faculty supervisors must supply the DMD program with written evaluations of students' performance each semester. These evaluations are collected and reviewed by the Field Placement Office if community based, and by the Dean of clinical affairs if based at CNU clinics. All reviews and grades are submitted to the Dean of academic affairs subsequently. They are then copied and sent to the academic advisors. If there are concerns from the practicum or internship sites about student performance, the Field Placement Office relates these issues to academic advisors as soon as they arise, regardless of whether it is time for a formal evaluation. The advisor will then speak with the student and a remedial plan can be created to ensure that the student is meeting the expectations of the program and the practicum site. The student's written performance reviews from practicum and internship sites become an official part of their academic record and is incorporated into each quarterly review completed by the Academic Advisor.

Ongoing Assessment of Student Performance and Satisfactory Academic Progress

Throughout the DMD program, students will meet with their assigned academic advisor quarterly to review progress towards completion of program requirements, the student's expectations, and their career goals.

The dental school Faculty will monitor students' work through the following: (1) Review of student course performance by academic advisors, (2) experiential education evaluations, (3) the direct assessment of Student Learning Outcomes at the course and programmatic levels and (4) the Cumulative Exam. The program will also be monitoring the pass rates of the National Board of Dental Examiners Part 1 and 2 and the outcome of the Western Regional Dental Board examination with expectations that results will exceed national norms.

Resources for Quality Improvement

The Office of Institutional Effectiveness ensures that faculty receive appropriate training in the assessment of student learning, and the Vice President of Institutional Research & Assessment serves as an Ex-Officio member of the CODM's Assessment Committee. In addition to faculty development provided within the CODM, the Vice President of University Operations, Faculty and Program Development ensures that faculty receive additional university-wide faculty development. When quality improvement plans and initiatives involve the need for additional resources, each program utilizes a Dean's Advisory Council that makes recommendations that are passed on to the President's Executive Council for approval and budgetary resolutions.

2. Program Review

The DMD program will be incorporated into the institutional program review process established at CNU. Program effectiveness data will be collected and analyzed on an ongoing basis, and a full program review will be conducted every five years.

Each of CNU's academic programs undergoes a comprehensive program review process, which includes a self-study, analyses of statistical data summaries and learning outcomes' results, feedback from students and course evaluations, a program review report, and an external review. The results of the program review process are used to make improvements in teaching, learning, resources, and support services

CNU's institutional standards and guidelines for the program review process are outlined in the Program Review Handbook and in the Assessment Handbook. The Office of Institutional and Education Effectiveness provides guidance and support in their implementation.

3. Plans for external review of the program

The program review process includes an external review component; this process is outlined in the Program Review Handbook, which is based on WSCUC's good practices for program review. External reviewers evaluate the curriculum, student learning outcomes, training opportunities, research, faculty, facilities, and student support services and resources; they identify deficiencies and propose ideas for improvement and further program development. The external review component leads to an external review report, which includes recommendations for improvement, which the program then considers in its planning and assessment processes.

Refer to Attachment IV.A.3 DMD Assessment Plan.pdf, Attachment IV.A.3 Program Review Handbook.pdf, Attachment IV.A.3 1502 – Academic Program Review Policy

If the program will be offered via distance education:

- 4. How will the education effectiveness of the program (including assessments of student learning outcomes, student retention, and student satisfaction) be evaluated? Include appropriate comparisons with campus-based programs.**

N/A

- 5. Describe procedures to evaluate teaching effectiveness in the distance education modality.**

N/A

Section V: Resources

A. Faculty

1. List the number and type (full-time, part-time, tenured, non-tenured) of faculty allocated to support the program in terms of developing the curriculum, delivering instruction to students, supervising internships and dissertations, and evaluating educational effectiveness.

The College of Dental Medicine at CNU will provide didactic, laboratory and simulation education and experiential patient care education with a team of full and part time faculty. CNU does not offer tenure.

There will also be a dean and four associate deans.

	Year 1	Year 2	Year 3	Year 4
Research Faculty	1	2	2	2
Teaching Faculty	14	28	43	58
Total	15	30	45	60

CNUCDM anticipates 42 FTE salaried faculty, 30 of whom will be full time, making the salaried faculty make-up of 71% full-time. Our target is to have at least 50% of the faculty full-time and the other 50% part-time up to .8. 18 FTE non-salaried Volunteer Community Faculty will be utilized at health systems for which we have or are developing MOUs.

Teaching faculty will be expected to provide instruction for two classes per semester, while research faculty will be expected to teach one course per semester. Each class will be taught for 3-12 hours a week.

Faculty will also be expected to develop curriculum, with their focus on developing student learning outcomes, and faculty will be responsible for assessing student learning. Additionally, faculty will mentor students and serve on dissertation committees. Faculty members are expected to be academic advisors for a maximum of ten students. Research faculty are allotted 30 hours a week for research.

The associate Deans of Academic affairs, curriculum, student affairs and clinical affairs will lead the assessment of educational effectiveness by monitoring set norms and developing programs to address ongoing issues.

Supervision of students while at practicums and internships will occur on site. It is the responsibility of the training locations to have a clinical supervisor on staff to provide supervision and mentorship to the students. Separate faculty are not hired by the university for this purpose, though the Associate Dean of Clinical Training and the Field Placement Office will monitor placements to ensure that students are being trained in area of the key areas of the practice of dentistry and at the expected level proficiency.

Types of Faculty

- Basic Medical Sciences educators (in addition to COM common pathway educators)
- Preclinical educators
- Clinical educators general dentistry
- Clinical educators dental specialties
- Part time clinical educators
- Volunteer Clinical Adjunct Faculty 18 FTE (no cost)

For a breakdown of faculty duties into hours per week, including a list of responsibilities, please refer to the attachments below. The number and type of all CNUCDM faculty are outlined in the hiring plan (doc).

2. Provide information about the balance of full- and part-time faculty members involved, and how that balance will ensure quality and consistency in instruction and advertising.

The College of Dental Medicine at CNU will provide didactic, laboratory and simulation education and experiential patient care education with a team of primarily full-time faculty. Our target is to have at least 50% of the faculty full-time and the other 50% part-time up to .8. While the part time faculty will include the administrative team and content experts across the spectrum of dental medicine, its disciplines and its specialties, part time clinical educators from the Northstate region will provide clinical preceptorship/education, mentorship, lecture and small group learning seminars at the primary campus and in community based education sites.

A planning group of 47 future faculty associated to the Sacramento District Dental Society has met several times to develop curriculum. The 12 original members of the planning group for the College of Dental Medicine will also serve in part time faculty capacity. The hiring plan for 60 FTEs comprised of full- and part-time faculty; this plan provides a comprehensive mix to accommodate instructional, clinical, service and scholarly needs of the college.

3. Describe the plan to orient and mentor junior faculty to support their doctoral-level research, scholarship, and dissertation supervision responsibilities.

The Mentoring Program at CNU provides new faculty with regular feedback and role models to assist in the planning of their careers and attainment of academic goals. Senior faculty share their experiences and techniques in obtaining a balance between academic, service, and personal responsibilities; gaining professional goals such as promotions; securing grants or funding for research; and managing scheduling demands to ensure continued participation in professional activities.

Refer to Attachment V.A.3 Faculty_Mentoring_Program.pdf

4. Provide an analysis of the impact the proposed program will have on the overall faculty workload, including teaching, research, and scholarship. Who will teach courses no longer being taught by the faculty reassigned to this doctoral program? How will the units be assigned for dissertation work (i.e., how many for serving as the chair as opposed to serving on the committee)? What will

be the maximum number of students that each faculty member can advise? Discuss the implication of the faculty resource matrix included in the program description section, particularly to show the workload implications when one cohort is in the dissertation phase and others are in the coursework phase of the program.

The dental program will not place an additional burden on current faculty as new professors and administrators are being hired for the program. The only time in which current faculty will teach within the DMD program is in the case of the common pathway courses; in this case, a common core of courses are taught to dental, pharmacy, psychology, and medical students—and expenses are shared by all programs and faculty workloads are carefully planned and managed.

The DMD program does not require students to complete a dissertation.

5. Describe the support/resources for faculty to develop a doctoral level culture, engage in research, and if applicable, receive an orientation in order to chair dissertation committees.

The basic resources available include the following: encouragement and support from administration for developmental activities, release time away from certain responsibilities when necessary, funds for travel and research expenses, equipment consistent with the University's policies and budget, and appropriate space and routine equipment to conduct research. These funds allocated in the program's budget to assist faculty in starting or continuing their research and can be obtained through approval by the Associate Dean of Research.

The Dean will through the Deans Fund for Excellence (DFE) offer faculty development opportunities in the areas of research development, other scholarship, pedagogy and community/university service each year. The budget will allow for \$250,000 per year to the DFE for this purpose.

The DMD program does not require dissertations.

Refer to Attachment V.A.5 Faculty Handbook.pdf

6. Describe each core faculty member's workload within and beyond this program.

The workload of full time faculty members is based upon explicit teaching and research assignments. Full time faculty are not given a workload by the University beyond the DMD program. Faculty members are expected to work at CNU full time and are not given a workload by the University beyond the DMD program. Faculty responsibilities include the teaching and course preparation, assessment of student learning and grading, mentoring and conducting office hours, and service responsibilities. Included in those responsibilities are service on college and university committees. There will be seven standing committees at CNUCDM: Assessment and Student Performance, Academic Affairs and Curriculum, Clinical Affairs, Admissions, Institutional effectiveness, Diversity Inclusion, and Dean's Executive Committee (DEC). Faculty members provide service by involvement in these committees as chairs or members.

Each college's department and/or program will regularly monitor student-to-faculty ratios as well as conduct workload analyses to ensure the appropriate numbers of faculty in each area to carry out faculty responsibilities, ranging from teaching to assessing student learning to advising and mentoring to

service and research. Each clinical faculty member is expected to provide clinical services in a capacity consistent with their training, continued competency and development and within their clinical privileges. Such care will normally be in a vertical team environment including students and residents where appropriate.

- 7. Describe the faculty background and experience to engage in doctoral-level instruction. Attach abbreviated vitae (three to five pages) for core faculty, which include an overview of the key credentials, publications, and if applicable, prior experience supervising dissertation work. Vitae for core faculty should reflect a range of scholarship including theoretical research, applied research in the field, and practice, as relevant. Vitae should distinguish between peer-reviewed articles and non-peer reviewed articles.**

The Rank and Promotion Committee of CNU will examine the CV of each candidate for examples of accomplishments in the areas of teaching, scholarly activity, and professional service. Faculty must have a DDS or DMD degree, unless they are teaching a course for which another degree would provide the required experience (e.g. a pharmacist could teach the Psychopharmacology course). The committee will also be looking for candidates with teaching or extensive professional experience and a valid California dental license, or those that are license eligible. As they advance through the academic ranks they must show significant accomplishments in teaching, research, and professional service.

CNU is currently recruiting for the associate deans and core faculty positions. A nationwide search is being performed with positions advertised on recruitment services (e.g. HireEdJobs) and the CNU website. Attached are CVs of local dentists and educators who have expressed interest in teaching in the dental program.

Basic Medical Sciences educators (in addition to COM common pathway educators = 6 FTE

These faculty will be DMD, DDS, MD, D. Psych, DPharm, or PhD terminal degrees with engagement for case based education in the common pathway curriculum, and in the teaching of head and neck anatomy, dental anatomy, and behavioral sciences

Preclinical educators = 6 FTE

These faculty will hold DMD, BDS or DDS and have appropriate postdoctoral certificate or degree education in operative dentistry, prosthodontics, periodontology, pediatric dentistry or oral and maxillofacial surgery.

Clinical educators general dentistry = 12 FTE

These are general dentists holding the DMD or DDS or BDS who will serve as student preceptors, team leaders, in comprehensive care. Some will serve in discipline based faculty in special needs, emergency care, and oral diagnosis among others

Clinical educators dental specialties = 12 FTE

These are full time positions in dental specialties for board certified specialists holding the DMD, MD, or DDS including specialists in prosthodontics, periodontology, endodontology, pediatric dentistry, orthodontics, oral and maxillofacial pathology, oral and maxillofacial radiology, and oral and maxillofacial surgery

Part time clinical educators = 12 FTE

These are ½ to 1 day a week positions for general dentists and specialists holding the DMD or BDS or DDS degree for clinical or preclinical assignments as educators.

Volunteer Clinical Adjunct Faculty (no cost)

Faculty salaried by health entities with whom CNU has affiliation agreements for clinical education will be given faculty appointments to provide clinical education. These faculty will hold a terminal degree such as DMD, DDS, MD, PhD, and PharmD.

California Northstate University believes education is an ongoing experience – an experience that simply does not end after graduation. With this belief in mind and the involvement of well-trained and experienced instructors, we strive to offer our educators a faculty development program in which they can continue to learn about advancements in healthcare, research, and teaching.

Refer to Attachment V.A.7 Faculty CVs.pdf, Attachment V.A.7 Faculty Development Series 2018

- 8. If the program will be offered via distance education, describe the preparedness of faculty to support the modality of instruction. What faculty development opportunities are available? Include any faculty guidelines for online instruction.**

N/A

B. Student Support Services

- 1. Describe the support services available for doctoral-level students, such as financial aid, placement and research opportunities.**

California Northstate University has a variety of student services including advising programs, alumni and career services, disability accommodations, mental health counseling, leadership organizations, wellness committees, financial aid assistance, library services, and centers for research.

The Office of Student Affairs and Admissions manages programs that promote student health and wellness. Services include providing information regarding alcohol and drug awareness and prevention and assisting with referrals to local agencies, treatment facilities, and clinical professionals. The OSAA staff are available for confidential referral assistance on a walk-in basis or by appointment. The office also provides guest presentations from health practitioners, and referral information to assist students with healthy lifestyle practices throughout the year. Information regarding programming is sent via campus email to all students at least two weeks in advance or posted on the campus information boards. Examples of programming include time management skills, nutrition guidance, stress reduction strategies, and work/life balance practices. Brochures offering guidance and tips for managing and understanding student focused problems are available from the OSAA. Assessment and evaluation of offerings through surveys and usage statistics enables the OSA to adapt to current program demands and develop new initiatives to better serve students.

Any student requiring disability assistance may apply for services through the Dean of Student Affairs. The University is committed to promoting equal access to programs and facilities, thereby insuring that students with disabilities experience the opportunity to participate fully in all academic experiences. Specialized services and academic accommodations are provided to meet the individual needs of students with disabilities to help them achieve successful completion of their professional degree.

The information technology department provides computer, CANVAS, email, and system assistance to all faculty, staff, and students. CANVAS is the University's learning management system which contains course information, assignment grades, and class documents and assignments. An introductory session to CANVAS is provided to new students during orientation. All students are assigned a unique campus email address for use during the program. The IT department offers assistance to students who experience problems with their account during normal business hours.

The Career Services Coordinator directs professional career planning and career counseling services. Information about career opportunities at various companies can also be found in the Career Resource section of the library or on the CNU website. In-class and extracurricular workshops are conducted throughout the program to assist students in analyzing their strengths and weaknesses. A job exposition is hosted on campus during the Fall semester to provide students with direct contacts for obtaining part-time employment during the summer months and possible post-graduation opportunities. Students are also encouraged to attend seminars and workshops in writing resumes, developing interview skills, and preparing for career placement. The Career Services Coordinator, in collaboration with the Alumni Coordinator, also follows up with graduates for the first 5 years after graduation through phone interviews and surveys to monitor how graduates' careers are progressing, and to solicit solutions for improvement in their respective programs and in the University as a whole.

Licensed therapists provide personal counseling to students and are on campus every day of the week, with varying hours to accommodate students' schedules. These counselors do not teach classes nor evaluate students' academic performance. Along with individual therapy, the counselors have made available to students a variety of group sessions and workshops covering topics such as stress, depression, and healthy relationships. The counselors are also available for faculty consultations and behavioral assessments and have also been active participants in CNU events, including student orientation, club day, suicide awareness and prevention programs, wellness day, and time management events. Due to increasing usage of counseling services and attendance at counseling-developed workshops and events, counseling hours available to students have increased this year, and the number of counselors working with CNU students has increased from two to three. In the Fall 2018 term, there were 200 personal counseling sessions provided to CNU students. Attachment V.B.1 details the presenting issues that students utilize the counseling services for (see Counseling Usage doc).

CNU offers two installment options and two private education loan programs. They are available through the Financial Aid Office along with a list of scholarships, grants, and loan repayment programs.

Alumni Services maintain graduates' relationship with the faculty, staff, and student body at CNU by building lifelong connections with the alma mater community. They sponsor alumni social events, continuing education course information, career resources and services, fundraisers, speaking engagements, e-newsletters, news about what fellow classmates are doing, and the current faculty research.

Refer to Attachment V.B.1 Counseling Usage.pdf

2. Identify the ongoing advising and academic support systems for students in the program.

All students in the DMD program are assigned an academic advisor with whom they meet at least twice per semester. These sessions include discussions about progress towards their degree, academic performance, career questions, engagement with practicums, and any other matters of concern. At the end of the first year of study, the academic advisor makes a formal recommendation for the student's continued progression in the program. During the first semester of year five, the academic advisor will also review with the student their progression towards graduation and address any outstanding requirements. Students are assigned an academic advisor based in their career interests and faculty experience. First-year students will also meet with the Dean and Associate Deans individually to establish personal contact with the program administrators. The DDM faculty are expected to be available to students for academic advising during regularly scheduled office hours and through personal appointments.

Students who experience difficulty in any course will be urged to seek help and assistance from the course instructor or their academic advisor before the problem becomes unmanageable. If academic problems arise, school-funded tutoring services are available through the OSA. Students who require this assistance must be referred by the faculty of the course or their academic advisor. Additional tutoring is offered by students and these tutors typically post their contact information on campus bulletin boards. The OSA keeps a list of recommended tutors.

C. Information Literacy and Resources

1. Describe the information literacy competencies expected of graduates and how they will be evaluated.

Information literacy is an Institutional Learning Outcomes (ILO) for all CNU graduates. This ILO is adapted for the degree level of each program offered. While for the undergraduate programs, this learning outcome focuses on students' ability to identify and search relevant libraries of information and databases for relevant sources and use citation appropriately; students in the doctoral programs are expected to effectively integrate and synthesize vital information obtained from primary literature and engage in and produce doctoral-level research.

To assist students in developing competency, an information literacy session at the CNU library can be integrated into course offerings at the discretion of the instructor. Library faculty will assist with in-class instruction and are available for consultation with small groups and/or individuals needing library assistance. At the request of the course instructor, library staff will provide verbal and/or written instructional materials, directions, or guides as needed.

Information Literacy is assessed in the foundations of dental medicine and in dental medicine and medicine seminars course through a research assignment in which the students will use the peer-reviewed literature and evidence-based approaches to addressing a clinical problem with a basic science foundation.

2. Describe the staffing and instructional services that have been put in place, as well as the library and informational resources available to students and faculty in support of the new degree program.

The Learning Resource Center is available for students, faculty, and staff. It includes 800 square feet of space devoted to the following: the library facility and its collection, the computer lab, classroom resources, the interlibrary loan program, and the career resources center. Space is also provided for individual and group study. Library staff and schedules are addressed in C.5.

The Learning Resource Center also maintains an Electronic Learning Resources System. Its purpose is to provide library and learning resources to students, faculty, and staff, and serve as an entry point for all users to meet their academic and research needs. A designated area of the learning resource center is also dedicated as a computer lab. The computers in the lab are available to students, where they can access the electronic resources and library materials. Additionally, the lab provides students with general PC software, access to the internet, and the ability to print desired materials.

3. Describe the access to library systems (local, national, or global), electronic services, internet, information utilities, service providers, and document delivery services for both faculty and students.

The Learning Resource Center subscribes to approximately 1,000 scholarly electronic journals and uses an integrated library system, "Library World," that contains modules for acquisition, cataloging, circulation, and inventory of physical library resources such as print books, print journals, models, kits, assessment tools, etc. The library's webpage contains a link to the online public access catalog (OPAC) which links to the ILS catalog records. For accessing electronic material, the library provides six public access terminals and wireless internet throughout the facility. Using a single sign-on, university users can access the library's electronic databases. These currently include the journal databases ScienceDirect, LifeSciences, OVID journals, electronic book collections, AccessMedicine, the Cochrane Database. CNU is also a member of the National Network of Libraries of Medicine which allows students and faculty to obtain books and articles from numerous other universities.

The DMD program has budget lines for purchasing additional journals and assessment tools. This will include the purchase or rental of electronic texts by the students. The library currently supports the doctoral research of the MD and PharmD doctoral programs. In the proposed budget for DMD program, there is additional funding for library resources including assessment materials and yearly subscriptions to the principle peer reviewed journals of dental medicine including the Journal of the American Dental Association, the Journal of Dental Research, the Journal of Oral and Maxillofacial Surgery, the Journal of Pediatric Dentistry, the Journal of Prosthetic Dentistry, Periodontology, Oral Oncology, the British Journal of Dentistry, the Journal of Dental Public Health among others.

CNU is both a wired and wireless institution with computers and data ports available to students and faculty for access to the internet and academic portals.

4. Describe staff and services available to students and faculty for instruction on how to use, access, and support information resources, both on-site and remotely.

At the beginning of each semester, a Learning Resource Center orientation session is scheduled to accommodate all interested students and faculty. The attendance is mandatory for all first-year

students and optional for others. During this orientation, students are introduced to the learning resources available as well as the policies and procedures relevant to their usage. The library staff is also available to assist students in further instruction as needed.

5. Describe the availability of library staff to support research activity.

The CNU library is managed and operated by a combination of a full-time health sciences librarian and a part-time library assistant. An information technology specialist works with the librarian to update, maintain, and operate electronic systems in the resource center. The librarian is available from 9 a.m. to 5 p.m. Monday through Friday. The library assistant is available from 12:30 p.m. through 9 p.m. Monday through Thursday and 9 a.m. through 5 p.m. on Friday. Both may be contacted through email, in person, or by telephone.

6. Describe the impact on the maintenance of the institution's library in terms of library and research support appropriate for doctoral-level research. For joint programs, provide this information for each institution.

The library currently supports the doctoral research of the MD and PharmD doctoral programs. In the proposed budget for DMD program, there is additional funding for library resources including assessment materials and yearly subscriptions to the principle peer reviewed journals of dental medicine including the Journal of the American Dental Association, the Journal of Dental Research, the Journal of Oral and Maxillofacial Surgery, the Journal of Pediatric Dentistry, the Journal of Prosthetic Dentistry, Periodontology, Oral Oncology, the British Journal of Dentistry, the Journal of Dental Public Health among others.

7. Explain the need for additional cooperative agreements with other institutions to supplement resources for doctoral work. Copies of the agreements should be attached.

The resources currently available through the CNU library are sufficient to support doctoral level work as evidenced by the research performed by the MD and PharmD programs. Due to the robust capacity of interlibrary loan with the National Library of Medicine, no cooperative agreements to achieve materials for doctoral work is needed. We are currently planning to utilize VitalSource, which will provide interactive texts and resources.

D. Technology

1. Describe the institution's technological capacity to support teaching and learning in the proposed program. For joint programs, provide this information for each institution.

CNU's IT infrastructure includes fully networked classrooms, each having data and power ports. Many of the labs are outfitted with individual workstations. A state-of-the-art media center sends and receives signals throughout the campus.

There are currently faculty and staff training sessions hosted by the IT department to ensure proficiency with university applications, including Canvas, Examsoft, and Mediasite. In addition, the Director of IT

ensures that a software program specialist is available to provide continuous assistance to faculty and staff in their use of university applications.

The informational technology support for students and faculty includes a minimum of one help desk staff member on site between the hours of 8 a.m. though 5 p.m. The IT team includes an IT Director, Systems Administrator, Network Administrator, Academic and Special Projects Administrator, Help Desk Administrator, Database and Web Administrator, and a Systems and Server Room Administrator.

2. What level of technology proficiency is expected of students? How will students receive training on how to access required technology used in the program?

All students are expected to be familiar with basic office software including a word processing program, a presentation program, email familiarity, and internet usage. Training will be available through the library in conjunction with the IT department. Some psychological tests use electronic scoring programs and students will be trained in their use as part of their assessment training in individual courses by instructors.

If 50% or more of the program will be offered via distance education:

3. Describe the institution's provisions for students in the proposed program to gain full access to course materials. For joint programs, provide this information for each institution.

N/A

4. Describe how the institution will ensure business continuity during system failures (major or minor) or scheduled service interruptions. For joint programs, provide this information for each institution.

N/A

E. Physical Resources

1. Describe the physical resources provided to support the proposed program and the impact of the proposed change on the physical resource capacity of the institution. This includes, but is not limited to, the physical learning environment, such as classrooms, study spaces, student support areas.

The CNU campus currently encompasses more than 200,000 square feet and includes the Elk Grove and Rancho Cordova facilities. The DMD program will be housed in 2700 Maritime Drive as well, a building of 14,000 square feet to house the preclinical laboratories and the first teaching clinic of the college. There will be two dedicated classrooms additional CNU class space, two laboratories, a library, distributed study rooms in both Elk Grove buildings, a cafeteria, and various offices. With this addition, the physical impact of the additional students will be minimal.

All dental students will begin clinical training in their first year, utilizing the preclinical laboratory and clinical simulation labs that are planned to be built on campus as well as with initial clinical experiences as part of the care team in the clinic. The clinical labs will be located near the main campus at an acquired facility. Students will also be able to practice their clinical skills on the main College of Dental

Medicine campus. A classroom on the main campus will contain 40 dental simulation units where the students will be able to practice the skills taught within the classroom. The unit will contain instruments and configurations, compartments to store instruments, a torso with adumbrated arms and shoulders, height adjustment. The unit will be on wheels and have the ability to fit comfortably under workstations.

The main clinical practicum of the CNUCDM program will be in two clinics operated by the university. The first is under contract for construction in Elk Grove. Like other dental school based clinics, CNU's clinics will feature faculty and students working side by side and providing the highest level of clinical care while completing competency evaluations and gaining clinical experience for the DMD students.

Refer to Attachment V.E.1 Dental Building Plans

F. Financial Resources

1. Provide the total cost of the program for students, including tuition and any fees. How are students expected to finance their tuition?

Student tuition will be \$76,000+ per year for the four-year dental program (Total \$304,000/four years) with student fees approximating \$6,000.00 to \$11,000.00.

Students may finance their tuition in the following ways: 1) student loan programs (i.e. parent plus loan, private student loan such Sallie Mae, Ed South Loan, iHelp loan program), 2) family financial support, 3) academic scholarship program, 4) other forgivable programs that promote careers in health sciences, 5) community-based scholarship programs through minority outreach, foundations and philanthropic donations.

2. Provide a narrative describing all start-up costs for the institution and how the costs will be covered, including direct program cost and institutional indirect cost. Explain how the institution ensures that the impact of additional services and support for a new program will be adequately supported as the program grows (i.e., are indirect costs changed on a program basis). For distance education programs, costs for licensing, hardware, software, technical support, training for faculty and students, and instructional design should be included.

The major start-up costs for the dental program includes the following: 1) classroom space, 2) laboratory space, 3) instructional equipment and supplies, 4) technology including hardware and software 5) team operating expenses, and 6) development of clinical facilities in the college and in hospital and clinics. CNU is fully committed to the development of the dental program and all start-up costs will be supported through new sources of capital. CNU will provide institutional support for the Dean of the College of Dental Medicine to begin the faculty recruitment plan and prepare for new faculty, review new course syllabi, etc.

Refer to Attachment V.F.2 Start-Up and Continuing Cost Breakdown.pdf

3. Describe the financial impact of the new program on the institution, including evidence that the institution has the capacity to absorb start-up costs. If the institution has incurred a deficit in the past three years, supplemental information describing the financial capacity of the institution to start and sustain the new program is required.

The institution has the capacity and commitment to absorb the start-up costs for the dental medicine program. The University will maintain a balanced budget for the dental program. Funding has been obtained through new sources of capital and there will be no financial impact from the Dental Medicine program on other offerings at CNU.

4. Identify the minimum number of students necessary to make the program financially viable.

The minimum number of students necessary is 80 per cohort for the program to remain financially viable.

5. Provide a budget projection, for at least the first three years of the proposed program, based on the enrollment data in the market analysis and including projected revenues and costs. The budget should reflect anticipated attrition. The budget should include all budgetary assumptions.

The attached budget outlines the budgetary details for the first three years of the proposed program. Some key assumptions include the following: a tuition rate increase of 3% to 5% annually and a steady attrition rate of 2.5% annually.

Refer to Attachment V.F.5 Financials.pdf

6. If the institution has a joint doctorate in the same or similar disciplinary area and plans to continue to offer it, describe the availability of resources for both programs, and the basis for allocation of resources to support both the joint and the new programs.

N/A

Section VI: Teach-out

B. Plan for Teach-out Provisions

- 1. Attach a copy of the institution's approved teach-out or program discontinuation policy detailing how students begin this program will finish if the institution determines that the program is to be closed.**

In the event that the DMD program is closed, all current students would be given the opportunity to complete the program and meet all requirements for the doctorate. A general announcement would be made to the student body and a notification posted on the CNU website indicating that the DMD program is suspended and that no new students would be accepted into the program.

Current students would still be able to attend required classes as scheduled. In addition, academic advisors would notify their students in person that each course is being taught for the last time and ensure that they are on track for graduation.

See: Attachment VI.A.1 DMD Teach-Out Plan.pdf

- 2. For joint doctoral programs transitioning to independent doctoral programs, describe the nature of the teach-out plan between/among the partnering institutions, including how financial responsibility and expenses will be shared, students served and dissertations supported. Identify the timelines established for the teach-out and the notice to be given to all students enrolled in the program. Copies of formal agreements for teach-out between/among partnering institutions and the notice provided to students are to be submitted with the proposal. The formal agreement should be agreed upon by all partnering institutions. If the original MOU contains a detailed description of the teach-out responsibilities for each institution, this document may be submitted in lieu of a new formal teach-out agreement.**

N/A

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CALIFORNIA
NORTHSTATE
UNIVERSITY

Faculty Development

2017 Faculty Development Events

Department of

Professional Development and Continuing Education

CE Admin. Assistant: Michelle H. Ngo

Contact: michelle.ngo@cnsu.edu

2017 Faculty Development Series

Name	University/Institution	Title of Presentation	Date (2017)
• Merlin Lai, DDS		Dental Emergencies	January 9 th
• Zhuqiu (James) Jin, MSc PhD	CNU COP	An Intriguing Role of T cell S1P receptor 1 Signaling in Diabetes- Associated Cardiac Fibrosis	January 12 th
• Daniel Michel, PharmD	Lundbeck	The Evolving Psychopharmacology of Major Depressive Disorder	January 18 th
• Webinar	LCME	Connecting with the Secretariat Webinar- Organizing yourself for the Self-Study Process	January 19 th
• Forshing Lui, MD	CNU COM	LCME Self-Study Process	January 23 rd
• Sambandam Elango, MD	CNU COM	Curriculum Overview	January 23 rd
• Catherine Yang, PhD	CNU	LCME Provisional Site Visit Orientation	January 23 rd
• Kelly Elder		Environmental Health	January 25 th

2017 Faculty Development Series

Name	University/Institution	Title of Presentation	Date (2017)
• Multiple Speakers	CNU COM	LCME Prep Session for Students and Faculty	January 27 th
• Sally Rafie	Marin County Pharmacists Association	Hormonal Contraception: Protocol Basics and Common Issues	January 28 th
• Maria Elena	Marin County Pharmacists Association	The New Role of the Pharmacists: As Part of the Asthma Healthcare Team	January 28 th
• Aglaia Panos	Marin County Pharmacists Association	Opioid Overdose: Addressing an Unmet Medical Need	January 28 th
• Multiple Speakers	United Patients Group	Medical Cannabis Workshop: A Clinical Focus	January 29 th
• Dr. Barbara Lewis	DocCom	Optimizing DocCom Usage	February 6 th
• Chiang Wang	CNU	Faculty Retention	February 7 th
• Louise Glaser, MD	CNU COM	Our Leadership	February 7 th
• Catherine Yang, PhD	CNU	LCME Mock Debriefing	February 8 th

2017 Faculty Development Series

Name	University/Institution	Title of Presentation	Date (2017)
• Valerie Gerriets, PhD	CNU COM	Metabolic reprogramming in CD4 T cell subsets modulates inflammation and autoimmunity	February 9 th
• Dr. Samara Ginzberg	LCME	Connecting with the Secretariat Element 6.1 (program and learning objectives) Element 6.2 (required clinical experiences) Element 6.3 (self-directed and life-long learning)	February 9 th
• Hoa Huynh, Application Specialist	CNU	Canvas Training	February 14 th
• Peter Yip MD, MPH Michael Bradbury PhD	CNU COM	Faculty Orientation on Ranking and Promotion	February 15 th
• Rochelle Frank, MD	CNU COM	The Placebo Effect	February 16 th
• Multiple Speakers	CNU COM	Faculty Training on Advising Students, Career Advising, and Wellness	February 17 th

2017 Faculty Development Series

Name	University/Institution	Title of Presentation	Date (2017)
• Hoa Huynh, Applications Specialist	CNU	Canvas Q&A	February 21 st
• Hoa Huynh, Applications Specialist	CNU	Mediasite Training	February 22 nd
• Dr. Susan Buchbinder	Simply Speaking HIV	Living Longer, Living Better With HIV	March 8 th
• Ishwarlal Jialal, MBChB, MD	CNU COM	The Roles of Inflammation in the Metabolic Syndrome: A Conspiracy between Monocyte/Macrophages and Adipose Tissue	March 9 th
• Cheng Yuet, PharmD		PreEPing for HIV Prevention: Current Topics in Pre-Exposure Prophylaxis (PrEP)	March 11 th
• Bryan Donald, PharmD		Spotlight on Novel Antibiotics	March 11 th
• Edlen Wong, PharmD		Legislative Advocacy: Your Voice Matters!	March 11 th

2017 Faculty Development Series

Name	University/Institution	Title of Presentation	Date (2017)
• William Ofstad, PharmD		Keys to Safe, Effective, and Meaningful Care through Interprofessional Education and Practice	March 11 th
• Sukhvir Kaur, PharmD		What Pharmacists Need to Know on Pain Management	March 11 th
• Elizabeth Hudson, NP	BioFire Diagnostics	Rapid Molecular Syndrome Testing	March 15 th
• Tao Le, Editor in Chief of USMLE-Rx	USMLE-Rx	Faculty USMLE-Rx Administrator's Orientation, Questions and Answers	March 21 st
• Tao Le, Editor in Chief of USMLE-Rx	USMLE-Rx	Scholar-Rx Student Orientation	March 29 th
• Hoa Huynh, Applications Specialist	CNU	Canvas Q&A	March 15 th

2017 Faculty Development Series

Name	University/Institution	Title of Presentation	Date (2017)
• Students from the University of Rochester School of Medicine and Dentistry	University of Rochester School of Medicine and Dentistry	Connecting with the Secretariat Webinar - Independent Student Analysis	March 23 rd
• Michael Ibrahim, PhD, MD	CNU COM	In Quest for Individualized Medicine. What Roles Will Imaging Modalities Play?	April 13 th
• Tao Le, Editor in Chief of USMLE-Rx	USMLE-Rx	Faculty Q&A Session	April 20 th
• Dr. Barbara Aved		Community Health	April 24 th
• Eddie Cheung, MD	Simply Speaking-HIV	Best Practices for Achieving a Cure	April 25 th
• Michael Bradbury	CNU COM	My Journey Through Active Learning in Medical Education	April 27 th
• Guy DiSibio, PhD, MD	CNU COM	Assessing Risk for Mendelian Disorders Among Ethnic Groups from Bronx, New York	May 11 th

2017 Faculty Development Series

Name	University/Institution	Title of Presentation	Date (2017)
• Steven Chen, MD	PsychU	Optimizing Mental & Physical Health Outcomes Through Comprehensive Medication Management	May 16 th
• Toby Damron, MD and Jan Oakley, DNP	Novo Nordisk	Atherosclerotic Cardiovascular Disease and Diabetes	May 18 th
• Rochelle Frank, MD	CNU COM	Burnout	May 23 rd
• Scott Minor, CNU Director of Library and Learning Resources	CNU	Introduction to the New Library Request System	May 25 th
• Glenn McAlpine, Training Manager	Ovid	Ovid Platform Training Session for Faculty and Students	May 25 th
• Sukhvir Kaur, PharmD	CNU COP	Designing a Skills-Based Laboratory in Order to Prepare Students for Rotations	June 1 st
• Guy Ashley	3D 4 Medical	3D 4 Medical Anatomy Review	June 13 th
• COP, COM, CHS Faculty Members	CNU COP, COM, CHS	Innovations in Teaching Workshop	June 13 th

2017 Faculty Development Series

Name	University/Institution	Title of Presentation	Date (2017)
• CNU COM Faculty Members and President Alvin Cheung	CNU COM	CNU College of Medicine Preceptor Orientation	June 14 th
• Tracy Yarbrough, MD	CNU COM	Helping Students Build a Foundation of Critical Teaching and Assessment	June 15 th
• Ishwarlal Jialal, MD	CNU COM	Navigating the Changing Landscape of Diabetic Dyslipidemia	June 16 th
• Sambandam Elango, MD	CNU COM	Writing Learning Objectives	June 20 th
• CNU COM Faculty Members and President Alvin Cheung	CNU COM	CNU College of Medicine Preceptor Orientation	June 20 th
• Floyd Culler, MD	CNU COM	Type 1 Diabetes Past, Present and Future	June 22 nd

2017 Faculty Development Series

Name	University/Institution	Title of Presentation	Date (2017)
• Rachel House, ADInstrument Regional Representative	ADInstruments	ADInstruments Demonstration	June 22 nd
• Priscilla Hsue, MD	Expert Exchange	Stable Ischemic Heart Disease	July 11 th
• Vijay Balasubramanian, MD	Simply Speaking – Pulmonary Arterial Hypertension	Initial Therapy for PAH: Today's Multidisciplinary Approach	July 12 th
• Christopher Wostenberg, PhD	CNU CHS	An Overview of RNA Biochemistry and Technology	July 13 th
• Hoa Huynh	CNU	New Canvas and Turning Point Integration	July 14 th
• Cindy Cook	BioFire Diagnostics	Film Array	July 18 th
• Paul Wagstaffe and Scott Minor	CNU	Use of Copyrighted and Online Material for Teaching	July 19 th
• David Acosta, MD	LCME Webinar	Connecting with the Secretariat	July 20 th

2017 Faculty Development Series

Name	University/Institution	Title of Presentation	Date (2017)
• Hoa Huynh	CNU	Canvas and Turning Point Integration	July 21st
• Susan Ely, PhD	CNU COM	Problem-Based Learning	July 31 st
• Hoa Huynh	CNU	Turning Point Review Session	August 1 st
• Susan Ely, PhD	CNU COM	Problem-Based Learning	August 2 nd
• Susan Ely, PhD	CNU COM	Problem-Based Learning	August 4 th
• Susan Ely, PhD	CNU COM	Problem-Based Learning	August 7 th
• Suzanne Clark, PhD and Ruth Vinall, PhD	CNU COP	Team Based Learning Workshop	August 9 th
• Susan Ely, PhD	CNU COM	Problem-Based Learning	August 9 th
• Tracy Yarbrough, MD	CNU COM	Writing Letters of Recommendation	August 10 th
• David Beattie, MD	Theravance Biopharma	Drug Discovery and Development	August 10 th

2017 Faculty Development Series

Name	University/Institution	Title of Presentation	Date (2017)
• LCME	LCME	Connecting with the Secretariat	August 17 th
• Nicola Abate, MD		Metabolic Complications of Adipose Tissue Dysfunction	August 28 th
• Hugo Arias, PhD	CNU COM	Preclinical Studies of Novel Positive Allosteric Modulators of the A7 Nicotinic Receptor	August 28 th
• Heart Beat CPR Educators	Heart Beat CPR Educators	CPR Training	August 28 th
• Peter Yip, MD	CNU COM	MedHub/Clerkship Directors Meeting	August 29 th
• Louis Downs, PhD		Mental Health/Crisis Situations Q & A Conversation	August 30 th
• Tiffany Kreys, PharmD and Jason McDowell	CNU COP	WebAdmit/PharmCAS Training	September 5 th
• Jennifer Brown	Kaplan	Kaplan Step 1 Orientation Onboarding	September 5 th

2017 Faculty Development Series

Name	University/Institution	Title of Presentation	Date (2017)
• Tiffany Kreys, PharmD and Jason McDowell	CNU COP	WebAdmit/PharmCAS Training	September 6 th
• Heart Beat CPR Educators	Heart Beat CPR Educators	CPR Training	September 8 th
• Teresa De Marco, MD	Simply Speaking Pulmonary Arterial Hypertension	Practical Management of PAH: A Case-Based Approach	September 8 th
• Alvin Cheung, PharmD, MHSA and Heidi Herman	CNU	Performance Evaluation for Managers	September 9 th
• Heidi Herman and Paycom	CNU and Paycom	PAYCOM Training	September 12 th
• Heidi Herman and PAYCOM	CNU and PAYCOM	PAYCOM Training for Managers	September 12 th
• Heidi Herman and PAYCOM	CNU and PAYCOM	PAYCOM Training	September 14 th

2017 Faculty Development Series

Name	University/Institution	Title of Presentation	Date (2017)
• Heidi Herman and PAYCOM	CNU and PAYCOM	PAYCOM Training for Managers	September 14 th
• COM Faculty	CNU COM	COM Faculty Showcase Pt. 1	September 14 th
• Linh Ho, PharmD	CNU COP	Mitochondrial Sirtuin-3 and Aging Homeostasis	September 14 th
• Laura Hoffman, MD, PhD, FACP	CNU COM	Model for Student-run Metabolic Wellness Clinic	September 18 th
• Anji Khan	CNU COM	Faculty Interview Training Session	September 20 th
• LCME	LCME	Connecting with the Secretariat Webinar	September 21 st
• COM Faculty	CNU COM	COM Faculty Showcase Pt. 2	September 25 th
• Michael Bradbury, PhD	CNU COM	Self-Directed Learning & Highlights from 2017 IAMSE Conference	October 14 th
• Merlin Lai, DDS		Dental Emergencies	October 16 th

2017 Faculty Development Series

Name	University/Institution	Title of Presentation	Date (2017)
<ul style="list-style-type: none"> Alvin Cheung, PharmD, MHSA and Heidi Herman 	CNU	Performance Evaluation Training	October 20 th
<ul style="list-style-type: none"> Guan-Yuan Jin, MD 		Why is Treatment Possible? A Perspective of Systems Medicine	October 30 th
<ul style="list-style-type: none"> Nadine Ding, PhD 		An Ideal Stent Platform	November 6 th
<ul style="list-style-type: none"> Uyen Le, PharmD 	CNU COP	Liposome – Based Drug Delivery in Cancer Treatment	November 9 th
<ul style="list-style-type: none"> Raulo Frear, PharmD 	Merck Academy	Applying Evidence-Based Medicine to Clinical Practice	November 15 th
<ul style="list-style-type: none"> Jen Cavalari, MD and Alex Cavalari, PharmD 		SELF Presentation	November 16 th
<ul style="list-style-type: none"> Claudine Woo, 	PharmD		Amgen

November 29th

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A Brief Introduction to
Amgen

2017 Faculty Development Series

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2017 Faculty Development Series

Name

University/Institution

Title of Presentation

Date (2017)

Please occasionally check back. Additional presentations are frequently added!



CALIFORNIA NORTHSTATE UNIVERSITY

Institute of Teaching & Learning Excellence

DRAFT STRATEGIC PLAN

March 2019

*College of Medicine
College of Pharmacy
College of Psychology
College of Health Sciences
Masters in Pharmaceutical Sciences
College of Dental Medicine*



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CNU ITLE

Strategic Plan Cycle: AY 2019-2020, AY 2020-2021, AY 2021-2022

MISSION, VISION, AND VALUES

Proposal Revision II: **Institute for Teaching and Learning Excellence (ITLE)**

Academic Affairs, California Northstate University

9/17/2018

MISSION

The CNU Institute for Teaching and Learning Excellence (ITLE) seeks to study, develop and implement innovative, evidence-based approaches to teaching, with the goal of maximizing student engagement, critical thinking and information retention.

VISION

ITLE aims to unlock potential and transform the lives of individuals and the communities in which they live. We seek to ensure that CNU graduates are equipped and inspired to shape and respond to the opportunities and challenges of the twenty-first century. The Institute fosters dialogue, scholarship, innovation, and excellence in learner-centered teaching.

We see measurable excellence in the student experience and of student learning as the overall goals that frame our approaches to Learning and Teaching. ITLE is accordingly dedicated to ensuring that teaching and the learning environment are of the highest quality, and are enriched by scholarly research and the fruits of our clinical partnerships. Our approaches promote innovation and use technology that enhances learning and teaching.

VALUES

Our work in teaching and learning directly aligns with the values of the Strategic Plan at California Northstate University – **WE CARE**

- Working as a team
- Embracing diversity and workplace excellence
- Caring about our students, our staff, our faculty, and our profession
- Advancing our university, our goals, and our discipline
- Responding to challenges that may impede Mission
- Enhancing communication and partnership

STRATEGIES

To inspire and empower faculty to innovate and rejuvenate their teaching, the Institute is the platform to forge and nourish teaching relationship by engaging following but not limited to activities:

- Form faculty learning community
- Engage in a scholarly approach to teaching
- Use evidence-based teaching practices
- Engage all students in deep learning
- Effectively assess student learning and teaching innovations
- Reflect and share effective pedagogical practices and experiences with other faculty in the University teaching community
- Develop culturally responsive and evidence-based training for teaching
- Support the cultivation of inclusive curricula and classroom environments, where diverse perspectives are both respected and challenged
- Provide guidance on establishing and sustaining interdisciplinary approaches to education that lead to a convergence of knowledge and training
- Serve as a resource for developing, evaluating, and rewarding teaching excellence

WHO

CNUATLE consists of representative faculty and students from all colleges appointed by CNUATLE. *The CNUATLE assists any person involved with students in an instructional context but primarily faculty at any rank.* We collaborate closely with other units across campus, including Offices of Institutional Research, Quality & Assessment, Instructional Technology Services (IT), Library, Faculty Affairs and the Division of Student Affairs and Curriculum Committees from all colleges.

ATLE also has an Advisory Board with Deans from all colleges.

DELIVERABLES

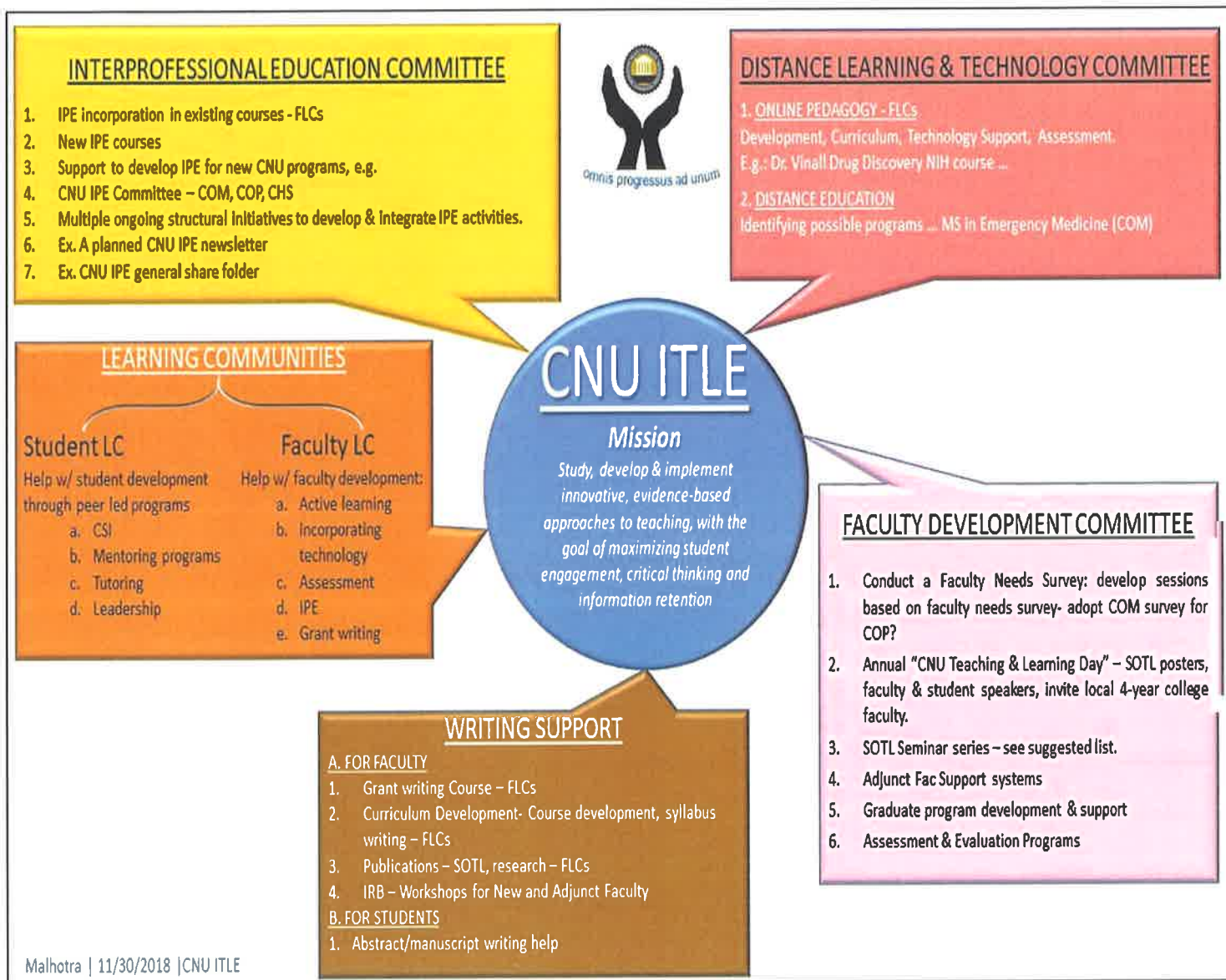
The CNUATLE serves the CNU teaching community in a number of ways, including:

- Teaching Forums
- Pedagogic presentations
- Workshops
- Formal and informal learning communities
- Provide foundational principles of inclusive teaching, learning, and best pedagogical practices through training and resource distribution
- Train and support new faculty as they establish their pedagogical practices
- Provide assistance in establishing college-based plans for advancing teaching
- Consult on college-based teaching development, evaluation, and reward infrastructure and resources

- Train faculty fellows who will facilitate teaching development cohorts within their college
- Mini-grants
- **Host Annual Conference on the research of teaching effectiveness exchanging ideas with peers from other universities**
- Individual consultations
- Online teaching resources
- Collaborations both on- and off-campus
- Teaching Awards

ITLE – AREAS OF FOCUS

Strategic Plan Cycle: AY 2019-2020, AY 2020-2021, AY 2021-2022



ITLE – AREAS OF FOCUS

Strategic Plan Cycle: AY 2019-2020, AY 2020-2021, AY 2021-2022

DESCRIPTION OF THE ITLE STRATEGIC PLAN

A. The need for an Institute of Teaching and Learning Excellence at CNU

Healthcare needs and delivery are changing at a rapid pace both worldwide and in the US. Examples of significant changes in the healthcare industry include transition to a patient-centered model, emphasis on an interprofessional team-based approach, adoption of skills-based curricula in medical, pharmacy and other healthcare education, increasing diversity of the student body with the accompanying need for the inclusion of cultural sensitivity in the classroom, and a transformation in the way cognitive and skills-based learning occurs within the groups of millennial and new generation learners. These factors have precipitated a need for a parallel evolution of the modalities of delivery of healthcare education. However, healthcare education has largely remained unchanged with variations of the Socratic Method dominating elements of didactic pedagogy. Thus, even with medical innovation being a multibillion dollar industry since the past decade per the Harvard Business Review, major challenges exist in the readiness of graduates to implement their learning, which has created an urgent need for interactive, collaborative, peer-based, affordable, equitable, and socially responsible healthcare education.

B. The framework of the CNU ITLE; Mission, Vision, and Values; & Strategic Planning.

The CNU ITLE was established in 2018 under the aegis of the Office of the Vice President of Academic Affairs. The purpose of the ITLE is to provide mechanisms, tools, and programs to develop, enhance, and support teaching and learning at CNU. We are committed to the development and provision of programs that herald a new age in healthcare education by building platforms that augment the learner experience through a university-wide collaborative, collegial, and goal-oriented Institute. An ITLE Mission, Vision, and Values statement was developed by the VP of Academic Affairs that laid the foundation for the structure and Focus Areas for the Institute (pages 3-5 of this document). Faculty from current CNU colleges were nominated as ITLE membership by their respective Deans. Following a national search, ITLE's Founding Director was appointed in October 2018. To communicate the commencement of the Institute, an Inauguration Ceremony was held on October 31, 2018, which was presided by the VP of Academic Affairs, Dr. Catherine Yang, and attended by the CNU President, senior leadership, Deans, faculty, staff, and students. The keynote speaker was Dr. Ronald Carter, Provost of Loma Linda University. In November 2018, the ITLE Director in consultation with the VP, proposed a **five-pronged Focus Areas Plan (FAP)** for the ITLE (please see 6). The FAP was discussed by the ITLE membership, modified, voted on, and adopted as an initial strategic plan, and work commenced in planning the steps needed to develop, operationalize, and implement FAP by the summer of 2019.

C. The ITLE Focused Areas Plan (FAP)

The ITLE is proposing a 3-year Strategic Plan (SP) and has adopted five Focus Areas for initial program development. The Focus Areas Plan (FAP) includes 1) Technology and Distance Learning, 2) Professional Learning Communities including Faculty and Student Learning Communities, 3) Interprofessional Education, 4) Faculty Development, and 5) Writing as the Focus Areas for ITLE in the first SP cycle. A brief description of each Focus Area and examples of initial work to either build or enhance initiatives in these areas follows. The SP on page 12 documents a phasic approach to building and operationalizing each Focus Area, categorized for each year of the 3-year SP cycle. Planned and phasic-implementation strategies for the ITLE Focus Areas are essential to optimize personnel, budgetary, and facility resource utilization to ensure measureable outcomes and success of the ITLE.

1. Technology and Distance Education

VP Yang communicated that the CNU President signaled an area for university wide growth and development was building strength in technology platforms and developing distance learning initiatives in the future. In AY 2018-2019, a faculty needs survey was conducted in the CNUCOM and results from this survey also identified areas where faculty requested support services and program development. The ITLE adopted Technology and Distance Education as a Focus Area in the current Strategic Plan cycle. The emphasis is on building, enhancing and enabling the development of technology

platforms to facilitate the learning and teaching experience at CNU. The ultimate goal is the creation of independent online, hybrid, and mixed-interface courses and programs for small and large volume consumption.

The ITLE will functionalize this objective through 1) the creation of policies and procedures that facilitate online and hybrid course and program development at CNU, 2) supporting and encouraging faculty from all CNU colleges to build and offer online and hybrid courses, 3) identifying content areas that may benefit from the use of this technology and distance education platforms, and 4) consultation with CNU Leadership to build online degree, certification, and competency-training programs in healthcare education. The ITLE has selected Dr. Tuan Tran from the CNUCOP from among its members to lead and coordinate efforts in this direction within the ITLE. Dr. Tran is a data mining expert. Please see page 19 for further information. Examples of initial work in this area include initiating pilot projects in the Focus Area of Technology and Distance Education such as developing and implementing online and hybrid courses at CNU, please see SP. The ITLE will operationalize this Focus Area through various mechanisms such as 1) training CNU faculty in the use of technology to enhance the CNU learner experience through Faculty Learning Communities (FLCs), 2) developing CNU wide programs through the technology-focused ITLE sub-committee described above, and 3) developing and integrating technology solutions in the operationalization and assessment of another key strategic area of Interprofessional Education.

2. Professional Learning Communities

Faculty and students constitute the driving force of a university. Large-sized and research-focused universities have attempted to harness the intellectual and creative power of faculty and students in building centers that support educational and research endeavors and birth innovation and progress. The ITLE seeks to establish Professional Learning Communities at CNU to facilitate growth and development and energize CNU stakeholders by participating in and contributing to the professional growth of their peers, creating an environment where self-directed lifelong learning is cherished, and where this noble objective may be achieved through collaborative and collegial community learning. The ITLE envisions that at CNU, Professional Learning Communities will be operationalized through faculty and student partnership, forming **Faculty Learning Communities (FLCs)** and **Student Learning Communities (SLCs)** respectively.

The goal of FLCs and SLCs will be to create optimum, community-based, peer-led learning platforms to enhance the development of faculty and students in selected areas. The ITLE will operationalize FLCs through faculty citizenship and SLCs through student governance and citizenship at the university. For the current SP cycle (please see SP), the ITLE proposes four FLCs (see Appendix D) to be operationalized over three years. The intent of the FLCs and SLCs will be to invite CNU or external faculty experts for the FLC, and students for the SLC, to lead peer-development activities in two-hour formats to train faculty or student teams in specific areas, for example, for faculty, the use of enhanced technology platforms in their respective areas of teaching. The difference between Professional Learning Communities and the ITLE Focus Area of Faculty Development is structural and operational. While the Faculty Development Focus Area will offer seminars and workshops in the more traditional learning structure and style, the Professional Learning Communities will encompass team-oriented, self-directed learning activities for the incorporation of techniques, ideas, and “how to” strategies being shared by faculty or students. For example, a central structural component of the Professional Learning Communities is integrated session time to actively incorporate the specific topic into the participating faculty’s courses; see Appendix C for an example of the “Technology-focused FLC” being developed for implementation in the spring-summer of 2019.

Examples of initial work priorities in this area include the creation of a “Technology-focused FLC” to be started in the spring and summer of 2019. The planned “Technology-focused FLC” is being led by Dr. Tracy Yarbrough of the CNUCOM and Dr. Ashim Malhotra of the CNUCOP.

For the FLC, the ITLE plans to seek help and guidance from the Advisory Dean’s Council to facilitate and enhance mechanisms for incentivizing faculty participation across the university. The ITLE membership has expended considerable time and effort in discussing ideas to incentivize faculty participation in developing ITLE programs. Support from CNU Colleges and Deans is quintessential for traction and ultimately for the success of the proposed ITLE plans. Specifically, for the FLCs, the ITLE suggests the following mechanisms to be discussed at the first Dean’s Advisory Council meeting scheduled for March 25th, 2019 (please see Process Flow Diagram for SP on page 11). The ITLE will discuss incentivizing faculty participation in FLCs by 1) linking CNU faculty participation in FLCs as recognized faculty development activities

during promotion and annual reviews of all full time, part time or adjunct faculty at CNU, 2) provision of certificates of completion of FLC, recognized during faculty annual and promotion reviews, 3) obtaining Continuing Education (CE) credits for participating faculty, 4) monetary support of faculty attending the FLCs as practiced by some public universities such as California State University at Sacramento, and 5) providing teaching credits for the lead/expert faculty who develop and teach in the FLCs and have CNU colleges agree to the recognition of such credit within their respective departments. At this time, the ITLE is open to additional suggestions from the Advisory Council regarding support for incentivizing CNU faculty participation in the Professional Learning Communities program.

3. Interprofessional Education

In 2010, the World Health Organization defined interprofessional education (IPE) as occurring when students from two or more professions learn about, from and with each other. Since then, the philosophy underlining an interprofessional approach in healthcare education has been widely accepted and expanded. In 2011, the Interprofessional Education Collaborative (IPEC) was formed, which defined IPE and articulated for the first time four IPE competencies desired in the healthcare graduate. Since then, IPEC has updated and further elaborated IPE Core Competencies, most recently in 2016. Additionally, healthcare accreditors responded to the need for consensus IPE definitions. For example, in February of this year, the Health Professions Accreditor's Collaborative (HPAC) adopted IPEC definitions and Core Competencies. It is interesting to note that the planning, development and implementation of an IPE curriculum at the California Northstate University (CNU) occurred in this backdrop, during the birth and incipient evolution of IPE, making CNU an early adopter of the IPE national movement.

Hieu T. Tran, Dean of the CNU College of Pharmacy, and Joseph Silva, Dean of the CNU College of Medicine, with foresight and innovation, developed and implemented IPE at CNU starting in 2015. Since then, the CNUCOP has built a comprehensive, integrated, multi-modal (CIM) IPE program that is vertically and horizontally aligned. For the CNUCOP, the CIM-IPE curriculum commences in the first-professional year with a didactic introduction to the principles of IPE and the IPEC Core Competencies. As Pharm.D. students progress to the second professional year, CNUCOP pharmacy and nursing students from the California State University at Sacramento School of Nursing are assigned to teams and develop interprofessional communication strategies as the teams undergo forming, storming, norming, and performing stages in team development. Over the next two years, our students will participate in a series of longitudinal IPE events that will increase in content and process complexity. The various teaching models employed in our curriculum include didactic IPE, high fidelity simulation with content emphasis, high fidelity simulation with process emphasis, interprofessional case conferences, and an innovative, national IPE-Hotspotting offered as an advanced elective to our third-professional year students. Thus, at CNU we strive to offer a diverse IPE curriculum taught through a variety of approaches to include meaningful, real-life simulations that have a positive impact on learners' growth and skills development.

The ITLE plans to further grow the CNU IPE effort per the SP (please see page 12) to include developing and new programs at CNU such as Psychology and Dental Medicine in establishing an integrated IPE platform for our students. Additional IPE projects include building a community impact initiative that utilizes CNU IP teams in advancing the Patient Care Process in the local communities and the larger Sacramento area. Possible practice areas for IP teams include student-led clinics operationalized through the CNUCOM and affiliated with the CNUCOP. The ITLE IPE Strategic Plan includes milestones for successful NIH, HRSA or private foundation funding for integrating IP teams in community settings for maximizing impact. In summary, expansion, funding development and practice implementation constitute the overall themes of the ITLE's effort in the IPE Focus Area. As programs develop, the ITLE will also commence the phasic implementation of a communication strategy regarding IPE to share IPE news with all stakeholders and the development of an IPE web page within the ITLE web portal.

The ITLE will further collaborate with the CNU IPE Committee, which is the primary university wide IPE Committee served by faculty, staff, students and administration, currently of the CNUOP and CNUCOM. It is planned to expand committee representation as CNU grows and adds more professional or healthcare programs. To ensure adequacy of informational exchange, the ITLE Director also serves as the Co-Chair of the CNU IPE Committee. Please see Appendix E for further information.

4. Faculty Development

Building and providing programs and opportunities for professional development is a traditional cornerstone in the history and mission of a university teaching and learning center. In line with this, the CNU ITLE is committed to providing opportunities to all CNU faculty for professional growth and development. The ITLE will operationalize this Focus Area via traditional seminars and workshops in faculty professional development but with emphasis in the area of Scholarship of Teaching and Learning (SOTL). The ITLE plans collaborative effort in partnership with existing college and university committees and efforts. For example, at the university level, professional healthcare seminars are featured regularly on a near weekly basis. To prevent duplication and faculty seminar fatigue and build on the existing structure, the ITLE proposes to work with the current personnel managing this seminar series (Ms. Michelle Ngo) and the Office of the VP of Academic Affairs to initially add speakers from within and outside the CNU community with expertise in SOTL to the existing seminar structure for SP Year 1. The ITLE also plans to offer workshops for professional development. An annual SOTL and healthcare pedagogy seminar is planned for SP Year 1.

Various mechanisms to incentivize faculty participation are listed in the SP (please see pages 13 and 14). Examples include organizing an annual SOTL Seminar to showcase CNU faculty and student efforts in SOTL and healthcare pedagogy. The ITLE proposes to create recognition processes such as award mechanisms in the form of the "SOTL Poster of the Year" and "SOTL Manuscript of the Year" certificates.

5. Writing

The intent of including a Writer Center within the ITLE is to create and provide programs for faculty and student professional development. The Writing Center will develop and implement faculty-centered and student-centered programs through the academic year. Faculty-centered writing and communication programs include initiatives focusing on 1) grant writing, 2) IRB application development, 3) manuscript development, 4) abstract and poster development, and 5) developing SOTL manuscripts. Typical examples of student-centered writing developmental programs that the ITLE will offer include 1) abstract and poster development, 2) manuscript and review articles development, 3) and other forms of academic writing. The ITLE will collaborate with existing structures such as seminars to functionalize this Focus Area.

The ITLE will use various mechanisms to operationalize the Writing Focus Area. These include the use of student-learning communities and faculty learning communities. The ITLE seeks advice from the Dean's Advisory Council regarding the creation of a half-time Grant Writer position to support the Writing Focus Area, with such hire, if approved, occurring in Year 2 of the Writing Focus Area SP.

Dr. Linda Buckley of the CNUCOP will lead the development of the Writing Focus Area at CNU. In this, she will be aided by Dr. Ashim Malhotra.

D. Closing Comments

In the current SP cycle, greater emphasis is placed on the development and implementation of Focus Areas 1-3. While Focus Areas 4 and 5 will be developed, to optimize resource utilization, the ITLE SP deliberately includes more expansive coverage in Focus Areas 1-3.

In addition to identifying Focus Areas for developing university-wide programs as discussed above, the ITLE has also developed an "Indicators of Success Rubric" to measure ITLE outcomes based on the presented Specific, Measurable, Achievable, Realistic and Time Bound (S.M.A.R.T.) objectives outlined above. This rubric is presented on page 17.

Finally, to ensure timely and adequate university wide communication, the ITLE developed a process flow strategy, presented in Appendix G on page 32.

CNU ITLE: PROCESS FLOW DIAGRAM FOR STRATEGIC PLANNING (March 2019)

Strategic Plan Cycle: AY 2019-2020, AY 2020-2021, AY 2021-2022

CNU ITLE LOGIC MODEL FOR DEVELOPMENT & FLOW OF DECISION MAKING PROCESS

PHASE 1



November 2018-
December 2018

- ❖ ITLE formed; Director appointed in November 2018; discussion of focused work initiated.
- ❖ ITLE membership tasked with the development of specific focus areas (see SP).
- ❖ 3 of 5 focus areas initiated
 - 1) Faculty Learning Communities with focus on technology
 - 2) Interprofessional Education
 - 3) Technology and distance education.
- ❖ ITLE website is created

PHASE 2



November 2018-
April 2019

- ❖ ITLE website redesigned & enhanced as the ITLE focus areas develop.
- ❖ ITLE Director develops a draft ITLE Strategic Plan (SP) and "Indicators of Success" rubric (ISR).
- ❖ SP & ISR shared with the VP of Academic Affairs. Edits to be incorporated.
- ❖ Edited SP & ISR shared with the ITLE Advisory Council of CNU Deans on March 25th, 2019. Edits will be incorporated.
- ❖ Revised SP & ISR presented at the President's Executive Council in mid-late April 2019.

PHASE 3



April 2019

- ❖ ITLE SP and ISR, and Mission, Vision, and Values are discussed at PEC.
- ❖ Following PEC's deliberations, drafts will be modified.
- ❖ Modified plan resent to PEC for final approval by President.
- ❖ Development and implementation phase begins.

PHASE 4

2019 - 2022

- ❖ Assessment starts and data are used to adjust and modify ITLE over the next 3 years.

CNU ITLE: DRAFT STRATEGIC PLAN (March 2019)

Strategic Plan Cycle: AY 2019-2020, AY 2020-2021, AY 2021-2022

GOAL	PROFESSIONAL LEARNING COMMUNITIES	FACULTY DEVELOPMENT	INTERPRPFESSIO NAL EDUCATION (IPE)	TECHNOLOGY AND DISTANCE LEARNING	WRITING
GOAL: Build programs to support attainment and maintenance of EXCELLENCE IN EDUCATION					
S.M.A.R.T objectives <u>SP Cycle</u> (AY 2019-2020, 2020-2021, 2021- 2022) Support faculty and students to achieve excellence in education by enhancing didactic and skills-based teaching through: 1. Development and implementatio n of technology- assisted online and hybrid course design strategies, beginning with piloting online projects in SP Year 1, with the aim to eventually offer university- wide distance education	<u>Faculty Learning Community (FLCs)</u> <u>YEAR 1</u> (AY 2019-2020) A. Develop and implement <i>professional learning communities</i> at CNU that offer opportunities to enhance faculty scholarship and teaching skills, especially in healthcare education through community- learning experiences structured and led by CNU and external faculty experts. <u>Task</u> <u>status:</u> started November 2018, FLCs being developed based on university President and leaderships' vision for CNU and select Faculty Needs Survey data, ex. for COM.	<u>FD YEAR 1</u> (AY 2019-2020) A. Working with college-level Faculty Orientation and Mentoring Committees , develop an "Orientation to CNU" workshop to be offered once in the fall and spring, in collaboratio n with HR resources. B. Develop and implement Introductor y Scholarship of Teaching and Learning (SOTL) workshop series for faculty in partnership with CNU colleges and senior faculty. B1. Can target new and senior faculty in	<u>IPE YEAR 1</u> (AY 2019-2020) A. Develop a comprehensiv e master list of CNU IPE efforts to map the current state of IPE at CNU; <u>Task</u> <u>status:</u> task completed, March 2019. B. Develop IPE Mission, Vision, and Values through the CNU IPE Committee; <u>Task status:</u> task near completion, March 2019. C. Centralize IPE assessment using 2016 IPEC Core Competencies and the 2019 HPAC guidelines; <u>Task status:</u> task accomplished for the COP. Assessment strategies shared at the CNU IPE Committee for possible	<u>TECH. & DE YEAR</u> <u>1</u> (AY 2019-2020) A. Develop a University- wide policy for developing and implementin g online courses. <u>Task</u> <u>status:</u> recently completed under PEC's guidance; policy adopted by ITLE, specifically by the ITLE Technology subcommitte e being led by Dr. Tuan Tran. B. Develop a university- wide protocol for developing hybrid courses. <u>Task</u> <u>status:</u> ongoing, March 2019. In charge personnel: Dr. Tuan Tran, ITLE Technology	<u>YEAR 1</u> A. Develop a university wide Writing Center to provide support to faculty and students in developing and submitting academic projects. B. Collaborate with existing programs and mechanisms to provide support for academic writing projects to faculty and students. C. Create FLCs to help enhance grant development , manuscript writing, IRB application and other academic writing skills for university faculty.

GOAL	PROFESSIONAL LEARNING COMMUNITIES	FACULTY DEVELOPMENT	INTERPROFESSIONAL EDUCATION (IPE)	TECHNOLOGY AND DISTANCE LEARNING	WRITING
courses and programs.	B. VP and ITLE membership selected “Technology-FLC” as launch vehicle for professional learning communities – technology is the President’s emphasis area for university development.	different workshops. B2. Merge efforts with ongoing CNU research presentations to conserve time, money, and effort. Plan to survey similar to the current process used for the faculty development seminars. Plan logistics with Michelle Ngo.	adoption by other CNU programs. Assessment strategies shared with Sac State Nursing.	subcommittee. C. Convene Dean’s Advisory Council and identify areas of need for online courses and/or programs within CNU colleges. Design and implement college-level online and hybrid courses and programs.	D. Create Student Learning Communities to peer-led support in developing writing and communication skills.
2. Development and implementation of Professional Learning Communities such as Faculty Learning Communities (FLCs) and Student Learning Communities (SLCs) at CNU	C. Action plan: targeted launch date for Technology-focused FLC in the summer of 2019. <u>Task status:</u> planning is ongoing, indicators suggest timely launch.	C. Develop an Annual SOTL Seminar to showcase the ongoing SOTL and healthcare pedagogy at CNU.	D. Develop an IPE strategic plan for the next 3-year cycle integrating new and developing CNU programs – Psychology and Dental Medicine. <i>Sub-aim D1:</i> discuss with CNU senior administration and leadership the future goals regarding expansion of the IPE program at CNU.	D. Discuss with senior administration and CNU leadership ideas for constructing a “ CNU Virtual Classroom ” facility equipped with cameras and computers for recording asynchronous course lectures to achieve online course abilities. Also, identify, purchase and implement software for small and large volume online	E. The ITLE plans to develop this Focus Area in Years 2 and 3 to optimize resource utilization.
3. Enhancing CNU Faculty Development programs in SOTL and pedagogy with emphasis on healthcare education – including leveraging existing resources and combining these under the single ITLE umbrella to centralize implementation and	<u>FLCs YEARS 2-3 (AY 2020-2021; 2021-2022)</u> D. Overall FLC plan in current ITLE Strategic Plan cycle (2019-2022): offer 1-2 FLCs in AY 2019-2020 – assess progress, logistics, impact, and the return to university. Use assessment data to plan further FLCs.	C1. Develop relationships with 4-year colleges in the Sacramento region, inviting colleges to participate in the Annual SOTL Seminar. C2. Invite prominent SOTL national experts, at least one each year, as a guest of honor at the Annual SOTL seminar. C3. Incentivize faculty and student participation in	<i>Actionable item:</i> target discussion for summer 2019 for starting one new IPE in Fall 2019; ex: Psychology program and pharmacy. E. Formulate a communication strategy for IPE within the university and with partners – planning		<u>YEARS 2 & 3</u> A. The ITLE will seek Advisory Council’s guidance regarding the creation of a part-time university position in grant writing to assist grant development at the university. B.

GOAL	PROFESSIONAL LEARNING COMMUNITIES	FACULTY DEVELOPMENT	INTERPROFESSIONAL EDUCATION (IPE)	TECHNOLOGY AND DISTANCE LEARNING	WRITING
management of efforts.	E. Scale-up FLCs in AYs 2 and 3. For example, develop and implement up to 2 FLCs in any given year.	the annual SOTL seminar through recognitions such as “SOTL Poster of the Year”, and “SOTL manuscript of the Year”.	started, please see F.	classrooms – Adobe Connect (Ashim has experience), or what else? <u>Task status:</u> Planning discussion and presentation to senior administration and leadership for summer 2019. In charge: Ashim.	
4. Augmenting, building and expanding CNU Interprofessional Education (CNU IPE) programs – for example through:	F. Formulate a 3-year strategic plan cycle for FLCs – seek administrative and leadership input and support – initial planning complete, see possible FLC topics for Years 1-3 for current SP cycle listed in H.		F. Functionalize the above mentioned IPE Communication Strategy – 1. Create an IPE web page detailing IPE curriculum, assessment, impact, and news/events – planned and ongoing. <u>Task status</u> – in development as component of the ITLE web page ; Target launch date – April 2019.	E. Pilot hybrid courses at CNU in Year 1. For ex, 1 hybrid course, ELC 762: Pharmacists in Public Health, enrolling 36 students started at CNUCOP in spring 2019. Uses Active Presenter based video recorded lectures. <u>Task status:</u> Started, awaiting assessment.	
4.1 Enhanced faculty, staff, and student training in IPE	G. Each FLC area should develop its own strategic plan for logistics, resources, outcomes, and assessment, see Technology-FLC appendix as example.		2. Create and implement a faculty citizenship style IPE communication instrument – task started – 1 st issue of the CNU IPE Newsletter , target launch – March 2019.	F. Other CNU examples of hybrid course technology: in the current ITLE SP cycle, the ITLE	
4.2 Establishing a university IPE Strategic Plan with time-bound goals and strategies for integration, communication, and assessment.	H. Consult with Advisory Board regarding faculty incentivizing mechanisms.		<u>IPE Years 2 and 3</u>		
	I. Adapt ITLE SP in years 2 and 3 to reflect university needs and assessment		A. Develop programs that		

GOAL	PROFESSIONAL LEARNING COMMUNITIES	FACULTY DEVELOPMENT	INTERPROFESSIONAL EDUCATION (IPE)	TECHNOLOGY AND DISTANCE LEARNING	WRITING
<p>Overall aims of Goal 1:</p> <p>1. Identify and provide resources</p> <p>2. Develop and implement programs</p> <p>3. Assess and evaluate impact</p>	<p>data from pilot FLCs.</p> <p>J. Possible FLC areas for first Strategic Plan Cycle (based loosely on COM Faculty Needs Survey and Leaderships' Vision for CNU growth)</p> <p>1. Technology & Distance Education – President's priority area for university (Year 1) ... Task status: planning stage, March 2019.</p> <p>2. Active Learning FLC (<u>YEAR 2</u>)</p> <p>3. Assessment Strategies FLC (<u>YEARS 2 AND 3</u>)</p> <p>4. IPE FLC (<u>YEARS 2 AND 3</u>)</p> <p>5. Please see attached Appendix for FLC</p>		<p>employ trained IP teams to improved community impact. For ex. By placement of IP teams of CNU medicine, pharmacy and other professions in real-life settings such as hospital, clinics and nursing homes.</p> <p>B. Pair CNU IP teams with social workers and local community partners to increase the healthcare footprint of CNU in the local communities we serve.</p> <p>C. Develop and apply for NIH, HRSA and private foundation funding, especially with the goal of developing programs to impact local communities through trained IP teams.</p>	<p>Director converted IPE courses at CNUOP to hybrid courses. <u>Task status:</u> completed as of March 2019 for 7 IPE events through first professional year to third professional year of the Doctor of Pharmacy program at CNUOP.</p> <p>G. Pilot online courses at CNU. An online course in Clinical Pharmacology from the NIH started by COP faculty, Dr. Ruth Vinall in spring of 2019. Course operationalized using current LMS, Canvas at CNU. Waiting for assessment data regarding logistics, communication with students, student outcomes, challenges and lessons learned in</p>	

GOAL	PROFESSIONAL LEARNING COMMUNITIES	FACULTY DEVELOPMENT	INTERPRPFESSIO NAL EDUCATION (IPE)	TECHNOLOGY AND DISTANCE LEARNING	WRITING
	descriptio ns.			<p>using Canvas to deliver completely online courses.</p> <p>H. Dr. Vinall will teach other faculty to use and implement Canvas in building online courses in the CNU Technology-focused FLC starting in 2019. Drs. Tran and Malhotra will also train CNU faculty in designing and delivering hybrid courses in the FLC. <u>Task status:</u> ongoing.</p>	

CNU ITLE: DRAFT INDICATORS OF SUCCESS RUBRIC (March 2019)

Strategic Plan Cycle: AY 2019-2020, AY 2020-2021, AY 2021-2022

INDICATORS	INITIAL	DEVELOPING	DEVELOPED	PROFICIENT
TECHNOLOGY AND DISTANCE EDUCATION	<ol style="list-style-type: none"> 1. Develop policy for online and hybrid courses. 2. Develop proposals for asynchronous online teaching. 3. Develop at least one hybrid course. 4. Develop at least one online course. 	<ol style="list-style-type: none"> 1. Develop and offer 2 CNU online courses per academic year. 2. Develop and offer 2 CNU hybrid courses per academic year. 3. Develop and implement technical capabilities for small volume online courses, including assessment. 	<ol style="list-style-type: none"> 1. Regularly offer online and hybrid courses throughout university colleges. 2. Have facilities to record lectures for asynchronous delivery. 3. Have software, LMS, and manpower resources along with policies to assist faculty in developing online courses. 4. Develop and Implement an online degree or certificate program in healthcare education. 	<ol style="list-style-type: none"> 1. Implement two or more online distance education degree and certificate programs. 2. Provide regular Instructional Design services to faculty interested in developing online courses and programs.
PROFESSIONAL LEARNING COMMUNITIES	<ol style="list-style-type: none"> 1. Develop and offer the first FLC in 2019 in the area of technology-focus. 2. Develop and implement one SLC, for example, in Writing Focus Area of the SP. 3. Develop assessment plans and measure the impact of the Learning Communities. 	<ol style="list-style-type: none"> 1. Develop and offer at least 2 FLCs during the AY. 2. Develop and implement at least one SLC regularly at CNU. 3. Survey faculty and students to assess impact, and such survey demonstrates greater than 70% respondent rate requesting continuation of FLCs and SLCs. 	<ol style="list-style-type: none"> 1. Regularly offer FLCs at CNU, at least 2 per AY. 2. Regularly offer SLCs at CNU, at least 2 per AY. 3. Faculty and student surveys show a greater than 80% satisfaction rate with Learning Communities. 	<ol style="list-style-type: none"> 1. CNU faculty and ITLE members provide advice and guidance to other university and at national platforms for developing and implementing Professional Learning Communities. 2. CNU Professional Learning Communities are offered in a wide variety of topics including the ITLE Focus Areas of IPE, Writing, and Technology and Distance Education.

INDICATORS	INITIAL	DEVELOPING	DEVELOPED	PROFICIENT
INTERPROFESSIONAL EDUCATION	<ol style="list-style-type: none"> 1. Develop and implement IPE courses at CNU including Pharmacy and Medicine students. 2. Create IPE student teams and add other professional programs such as nursing (external to CNU). 3. Begin assessment of IPE program and student learning outcomes. 	<ol style="list-style-type: none"> 1. Combine existing CNU IPE courses and programs under a single umbrella, the CNU IPE Committee, and build a continuous IPE educational program at CNU. 2. Begin to offer a central Core Curriculum and an elective courses menu for IPE for pharmacy, nursing and medical students. 3. Use IPEC 2016 guidelines to gauge student outcomes in the defined 4 competency areas. 	<ol style="list-style-type: none"> 1. Offer a core and elective program in IPE, including pharmacy, medical, psychology, and dental medicine students (internal) with nursing students (external). 2. Provide online, technology-supported platforms for asynchronous didactic introduction to IPE and the 2016 IPEC Core Competencies for the first professional year teams of all participating colleges. 3. IPE assessment data regularly collected from all participating programs and mapped to CNU PLOs and ILOs. 	<ol style="list-style-type: none"> 1. CNU IPE faculty regularly build IPE elements into healthcare professions courses. 2. The CNU IP teams practice in an environment where the impact of IPE can be measured. 3. IPE efforts at the university lead to funding from NIH, HRSA or private foundations. 4. CNU faculty are recognized externally by IPE think tanks. 5. Collaboration with the National Center for Interprofessional Education leads to the establishment of a CNU Nexus Hub to measure the impact of CNU IP teams in the general Sacramento region.
FACULTY DEVELOPMENT	<ol style="list-style-type: none"> 1. Develop and implement at least one faculty workshop in grant writing and manuscript development. 2. Start an Annual SOTL Seminar to showcase the SOTL work at CNU. 	<ol style="list-style-type: none"> 1. Implement 2 workshops and 4 seminars per AY regarding grant writing and manuscript development. 	<ol style="list-style-type: none"> 1. Regularly offer workshops in multiple faculty professional development areas. 2. Expand the Annual SOTL Seminar day to invite regional and local college faculty to participate. 	<ol style="list-style-type: none"> 1. Regularly offer a continuous series of workshops and seminars regarding more than 3 areas of faculty professional development. 2. Institute university wide recognition of faculty leaders who help with implementation of the Annual SOTL Seminar.
WRITING	<ol style="list-style-type: none"> 1. Develop and implement at least one faculty and one student learning community in academic writing. 	<ol style="list-style-type: none"> 1. Offer peer-led FLCs and/or SLCs in manuscript development, abstract and grant writing. 	<ol style="list-style-type: none"> 1. Regularly offer both FLCs and SLCs in at least three areas of academic writing. 2. Create a university position to hire a Grant Writer to assist faculty. 	<ol style="list-style-type: none"> 1. CNU faculty offer national programs in any one area of academic writing. 2. SOTL papers & grants increase by over 33% when compared to previous AYs.

APPENDIX A

CNU ITLE Faculty Members



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Mission: To advance the art and science of healthcare

Vision: To provide innovative education and healthcare delivery systems

Congratulations to CNUCOM Class of 2019 on the outstanding performance of USMLE Step 1. All the 57 students who registered for USMLE Step 1 passed the test. The class mean is 228

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[Strategies](#)

[Initiatives](#)

[Members](#)

[Events](#)

ITLE Members



Dr. Diane Coe, PharmD
Chair, Clinical and
Administrative Sciences
College
of Pharmacy Assistant Professor



Dr. Tuan Tran, PhD
College of Pharmacy Assistant
Professor
Date Mining Specialist



**Dr. Hongbin Wang, PharmBS,
MS, PhD**
College of Pharmacy / Master of
Pharmaceutical Sciences
Assistant Professor



Dr. Tracy Yarbrough, MD, PhD
Director, Center for Teaching
and Learning
College of Medicine
Associate Professor of
Physiology



Dr. Nripendra Dhillon, MBBS, MS
College of Medicine Associate
Professor of Anatomy



Dr. Craig Wetterer, PhD, JD
College of Psychology
Associate Professor



Dr. Damon Meyer, PhD
College of Health Sciences
Associate Professor



Frances Wise MA College
of Health Sciences
Lecturer

APPENDIX B

ITLE Membership Lead Responsibilities for Current SP Cycle

California Northstate University Institute for Teaching and Learning Excellence

Sub-committee Constitution

	Sub-committee Name	Chair	Co-Chair	Members	No. of Members
1	Distance Education	Tuan Tran, COP	Ashim Malhotra, COP	Diana Cao, COP Frances Wise, CHS Craig Wetterer, Psy	5
2a	Student Learning Communities	Nripendra Dhillon, COM	—	Damon Meyer, CHS	2
2b	Faculty Learning Communities	Tracy Yarbrough, COM Ashim Malhotra, COP	—	Damon Meyer, CHS	3
3	Faculty Development	TBD		Ashim Malhotra, COP	1
4	Interprofessional Education	Ashim Malhotra, COP	—	Linda Buckley, COP	2
5	Writing/Communication	Linda Buckley, COP	—	Hongbin Wang, COP Ashim Malhotra COP	2

APPENDIX C

CNU Institute of Teaching and Learning Excellence *Geared Toward Student Success*

2019 Faculty Learning Community Example

Spring-Summer 2019 FLC: Technology-assisted Teaching and Learning

FLC Facilitators

- Co-Facilitator: Tracy Yarbrough, MD, PhD, MAEd, Director, CNUCOM Center for Teaching and Learning
- Co-Facilitator: Ashim Malhotra, B.Pharm, MS, PhD, Director, Institute for Teaching and Learning Excellence

FLC Long-term Goals: The ITLE, by offering and facilitating faculty learning communities (FLCs) centered around topics relevant to faculty at all Colleges within the University, hopes to develop a community of practice that will engage educational scholars in identifying and implementing best practices across the educational continuum. Faculty enrolling in this and subsequent FLCs will be encouraged to participate in this community and provide feedback to the FLC program and ITLE regarding application and outcomes related to FLC topics.

FLC Focus – Technology-assisted Teaching and Learning

Offered by the CNU ITLE, this spring 2019 Faculty Learning Community will help build expertise in the use and assessment of technology-assisted teaching and/or distance learning techniques in existing courses at CNU. The two-hour FLC sessions will be led by CNU faculty with expertise in these areas and will be held five times spanning the spring and summer semesters. Faculty from different disciplines are encouraged to participate. The sessions are open to all CNU faculty, full time, part time and adjunct. We especially welcome new faculty members.

FLC Outcomes

Each participant will be able to:

1. Identify an area of technology-assisted or distance learning that they would like to incorporate into their teaching toolbox as a part of their courses at CNSU.
2. Examine the design, potential usage and steps to implementation of that technology platform in their teaching at CNSU.
3. Implement assessment strategies to validate student learning experiences and outcomes post-technology enhancement of their respective courses.

FLC Deliverables

1. Contribution to the University Strategic Plan for Area 1. Education through faculty development. At the end of the FLC, participants will evaluate their post-course knowledge and attitudes toward FLCs in general and the current FLC in particular.
2. Develop lesson plan including assessment strategy. Participants will present an example of the incorporation of an aspect of a technology-assisted intervention that will be used to enhance their current course, including an assessment plan to measure at least one defined learning outcome.
3. Develop a sustainability plan. At the time of the final presentation, participants will outline a brief plan to ensure sustainability of the use of the technology in their course.

Technology FLC Meetings Calendar

Date	FLC Session Topic	Faculty and Staff Leading Sessions	Main Learning Objectives
Mon, 4/29/19; 1-2pm	Orientation and introduction to FLCs and technology-assisted teaching and learning	Dr. Tracy Yarbrough (COM) & Dr. Ashim Malhotra (COP)	
Mon, 5/6/19; 1-3pm	Essential elements of hybrid course design	Dr. Ashim Malhotra & Hoa Huynh	
Mon, 5/20/19; 1-3pm	Building hybrid lessons using Active Presenter	Dr. Tuan Tran (COP)	
Mon, 6/10/19; 1-3pm	Lessons from establishing an online course at CNU	Dr. Ruth Vinall (COP)	
Mon, 7/1/19; 1-3pm	Strategies for communication with the online learner	Ms. Frances Wise (CHS)	(tentative date)
Mon, 7/22/19; 1-3pm	Class presentations and course evaluations	All participants and faculty	

Technology FLC Learning Plan

Meeting	Topic	Date	Deliverables/Homework
1	1. Introduction and welcome 2. Objectives of the technology FLC 3. FLC expectations, plan & definition of deliverables	4/29/19	1. <u>Pre-FLC</u> . Arrive to class having read the description of the learning objectives and overall intent of the FLC. Please be ready to suggest at least one way in which the FLC and the ITLE can help with the development/enhancement of your course. 2. <u>During FLC</u> . Discuss overall FLC goals and expectations, as well as currently CNU policies for online and hybrid teaching. 3. <u>Post-FLC</u> . None. See session 2 prep.
2	Essential Elements of hybrid course design	5/6/19	1. <u>Pre-FLC</u> . Arrive to class with at least one and at most two specific ideas about incorporating hybrid technology into your CNU course. 2. <u>During FLC</u> . Working with the facilitator on the day of the FLC to develop a plan to design and incorporate one technology tool into your course. 3. <u>Post-FLC</u> . Within a week after the class, write out a plan for how you will incorporate the technology, how will you assess its impact, and what resources will you need.
3	Building hybrid lessons using Active Presenter	5/20/19	1. <u>Pre-FLC</u> . 2. <u>During FLC</u> . 3. <u>Post-FLC</u> .
4	Lessons from establishing an online course at CNU	6/10/19	1. <u>Pre-FLC</u> . 2. <u>During FLC</u> . 3. <u>Post-FLC</u> .
5	Strategies for communication with the online learner	7/1/19	1. <u>Pre-FLC</u> . 2. <u>During FLC</u> .

			3. <u>Post-FLC</u> . Presentation at FLC Wrap-up event. Plan and construct a model course using your chosen technology tool and prepare for presentation at the end of the FLC. <u>Deliverables 1, 2, and 3 captured</u>
6	Presentations, course wrap-up & evaluation	7/22/19	1. <u>Pre-FLC</u> . 2. <u>During FLC</u> . Presentation and course evaluation. 3. <u>Post-FLC</u> . Provide updates to FLC facilitators regarding implementation of technology-assisted teaching in future courses/curricula.

Technology-Assisted FLC Assessment & Evaluation

Formative Feedback for Students: Faculty enrolled in the course will receive rubric-based formative feedback on their final course presentation by teaching faculty and FLC facilitators.

Course Evaluation: Faculty enrolled in the course and faculty teaching during the course will be asked to provide anonymous evaluations of the course at its conclusion.

APPENDIX D

FOCUS AREA: FACULTY LEARNING COMMUNITIES – OVERVIEW

FACULTY LEARNING COMMUNITIES PROPOSAL

Ashim Malhotra, December 19, 2018

Three to four tracks are proposed for FLCs in current ITLE SP cycle

- | | |
|--------------------------------|---|
| A: Online and Hybrid Courses | – AY 2019-2020 |
| B: Assessment | – AY 2019-2020 or AY 2020-2021 |
| C: Active Learning | – AY 2020-2021 |
| D: Interprofessional Education | – AY 2021-2022 (not tabled in this proposal, under development) |

CNU FLCs Track A: Online and Hybrid Courses

Meetings: Fridays

S19 dates: TBD

Faculty Lead: Tracy Yarbrough, COM and Ashim Malhotra, COP

Offered by the CNU ITLE, this spring 2019 Faculty Learning Community will help build expertise in the use and assessment of technology-assisted teaching and/or distance learning techniques in existing courses at CNU. The two-hour FLC sessions will be led by CNU faculty with expertise in these areas and will be held five times spanning the spring and summer semesters. Faculty from different disciplines are encouraged to participate. The sessions are open to all CNU faculty, full time, part time and adjunct. We especially welcome new faculty members.

Dates	FLC Session Topic	Lead Faculty
TBD	Essentials elements of hybrid course design	Ashim Malhotra & Hoa Hyunh (CNU IT)
	Building hybrid lessons using Active Presenter	Tuan Tran (COP)
	Lessons from establishing an online course at CNU	Ruth Vinall (COP)
	Use of Screen-cast to enhance the online classroom	Frances Wise (CHS)
	Class presentations	All participants

CNU FLCs Track B: Assessment

Meetings: Thursdays

S20 dates: TBD

Faculty Lead:

Offered by the CNU ITLE, this spring 2019 Faculty Learning Community will help build expertise in assessment. The two-hour FLC sessions will be led by CNU faculty with expertise in these areas and will be held five times in the spring semester. Faculty from different disciplines are encouraged to participate. The sessions are open to all CNU faculty, full time, part time and adjunct. We especially welcome new faculty members. Details of the full course can be accessed [here](#).

Date	FLC Session Topic	Lead Faculty
TBD	Item writing & Bloom's Taxonomy	TBD
	Item analysis using Examsoft	Uyen Le (COP)
	Using Examsoft for Skills-based assessment	Eugene Kreys (COP)
	Class presentations	All participants

CNU FLCs Track C: Active Learning

Meetings: Wednesdays

S21 dates: TBD

Faculty Lead: Tracy Yarbrough, College of Medicine

Offered by the CNU ITLE, this spring 2019 Faculty Learning Community will help build expertise in active learning strategies. The two-hour FLC sessions will be led by CNU faculty with expertise in these areas and will be held five times in the spring semester. Faculty from different disciplines are encouraged to participate. The sessions are open to all CNU faculty, full time, part time and adjunct. We especially welcome new faculty members.

Date	FLC Session Topic	Lead Faculty
TBD	TBD	Ruth Vinall (COP)
	TBD	Ashim Malhotra (COP)
	Team-based Learning	Suzanne Clark (COP)
	Student learning communities engagement	Nripendra Dhillon (COM)

APPENDIX E

THE CNU IPE COMMITTEE

Overview of the CNU IPE Committee.

The CNU Interprofessional Education (IPE) Committee has been in continuous function since 2015. Currently, the Committee is advised by the Dean of the COM and the Dean of the COP, the Vice President for Academic Affairs and Associate Dean of the COM, the Vice Chair of Clinical Sciences of the COM, and the Associate Dean of the COP. The Committee comprises faculty and staff from the colleges of Medicine, Pharmacy, and Health Sciences at CNU. Plans are underway to expand membership to the College of Psychology. The mission, vision and value of the CNU IPE Committee are aligned with those of the University, with an emphasis towards the creation of policy and procedures regarding IPE. The Committee oversees and advises the logistics, planning, curricular development, integration and delivery of IPE at the University. The Committee is led by a Co-Chair from the College of Medicine and a Co-Chair from the College of Pharmacy. The current Co-Chair of the College of Pharmacy also serves as the Director of the Institute of Teaching and Learning Excellence for CNU, thus providing continuity and overseeing alignment of IPE within colleges. The Committee disseminates IPE-related information and provides guidance to faculty by various mechanisms, including making available its operational procedures, agenda items, meeting minutes, newsletters and decisions through a folder accessible by all CNU faculty members and staff. The CNU IPE Committee works in tandem with the CNU ITLE. The Director of the CNU ITLE is appointed as the Co-Chair of the ITLE.

CNU IPE Committee Composition for AY 2018-2019.

The next page provides specific details about the composition of the CNU IPE Committee for the AY 2018-2019. Information regarding Committee constitution from previous years is also available by request to Dr. Malhotra.

Mission of IPE at CNU

Our mission is to prepare students to be practice ready who can seamlessly integrate with interprofessional healthcare teams for the provision of patient-centered care.

Vision of IPE at CNU

Our vision is to educate students in the appropriate choice of pharmacotherapy thereby improving patient outcomes by engaging interdisciplinary expertise and working as an integrated member of the healthcare team.

Vision of IPE at CNU (cleaned up)

Our vision is to educate students from various healthcare disciplines to improve patient outcomes by engaging interdisciplinary expertise through appropriate pharmacotherapy and integrated work as a member of the healthcare team.

Values

- Working as a team
- Embracing diversity and workplace excellence
- Caring about our students, our staff, our faculty, and our profession
- Advancing our university, our goals, and our discipline
- Responding to challenges that may impede Mission
- Enhancing communication and partnership

**CNU Interprofessional Education Committee
Committee Constitution
AY 2018-2019**

Meeting Date and Time:	Once every month, generally the 3 rd Wednesday of the Month	
Location:	COM Conference Room, generally from 12:00 to 1:30 PM	
Scribe: TBD	COMMITTEE CONSTITUTION	
	Faculty	Rudolph Holguin (Co-Chair, COM) Ashim Malhotra (Co-Chair, COP) Joseph Rogers (COM) Thura Al Khayat (COM) Claire Baranov (COM) Welly Mente (COP) [1 vote each]
	Administration	Joseph Silva (Dean, COM) Hieu Tran (Dean, COP) Linda Buckley (Assoc. Dean, COP) Catherine Yang (VP Academic Affairs, and Assoc. Dean, COM) [Non-voting]
	Students, COP, COM	TBD
	Staff	Nila Din (COM) [1 vote]

APPENDIX F

Representative Meeting Minutes from ITLE – Technology-based FLC Planning

Meeting Date and Time:	Wednesday 03/06/2019 12:00pm-1:00pm	
Location:	Executive Conference Room, 274 9700 W Taron Drive, CNU Elk Grove Campus, Second Floor	
Scribe: Samantha Carl	ITLE Constitution	
	Faculty	Ashim Malhotra, Director, ITLE CNUCOP: Diana Cao (Chair, CAS, COP), Tuan Tran MPS: Hongbin Wang CNUCOM: Tracy Yarbrough, Director, Center for Teaching and Learning, CNUCOM: Nripendra Dhillon CNU PsyD: Craig Wetterer, CNU CHS: Damon Meyer, Frances Wise
	Advisory Board	Catherine Yang, Vice President of Academic Affairs & Associate Dean, COM; Catherine Yang, Dean Graduate Programs Hieu Tran, Dean, CNUCOP Joseph Silva, Dean, CNUCOM Bret McLaughlin, Dean, CNUCOPsy Heather Brown, Dean, CNUCHS Leon Assael, Dean, CNU Dental Medicine
	Staff	Samantha Langlois
Attendance (03/06/2019)	Present	Catherine Yang, Ashim Malhotra, Diana Cao, Tuan Tran, Hongbin Wang, Tracy Yarbrough, Craig Wetterer, Damon Meyer
	Absent	Nripendra Dhillon, Frances Wise

AGENDA

Time	Facilitator	Topic and Goal	Minutes and Notes
5 min	Dr. Yang	Notes and general commentary	<ol style="list-style-type: none"> 1. COM just finished LCME Limited Survey 2. Dr. Yang mentioned to LCME team that the University has developed several initiatives (e.g. ITLE) 3. LCME team was very interested as it shows CNU is taking the initiative to improve and grow the culture through a cross-collegial institute 4. CNU is unique as it is a 'health-science' focused University and the colleges can work together on various platforms
2 min	Ashim	<ol style="list-style-type: none"> 1. Overview of today's (03/06) meeting 2. Any new introductions? 	<ol style="list-style-type: none"> 1. Getting ready for our Faculty Learning Communities 2. Moving forward with FLC that are focused in the area of 'Technology'

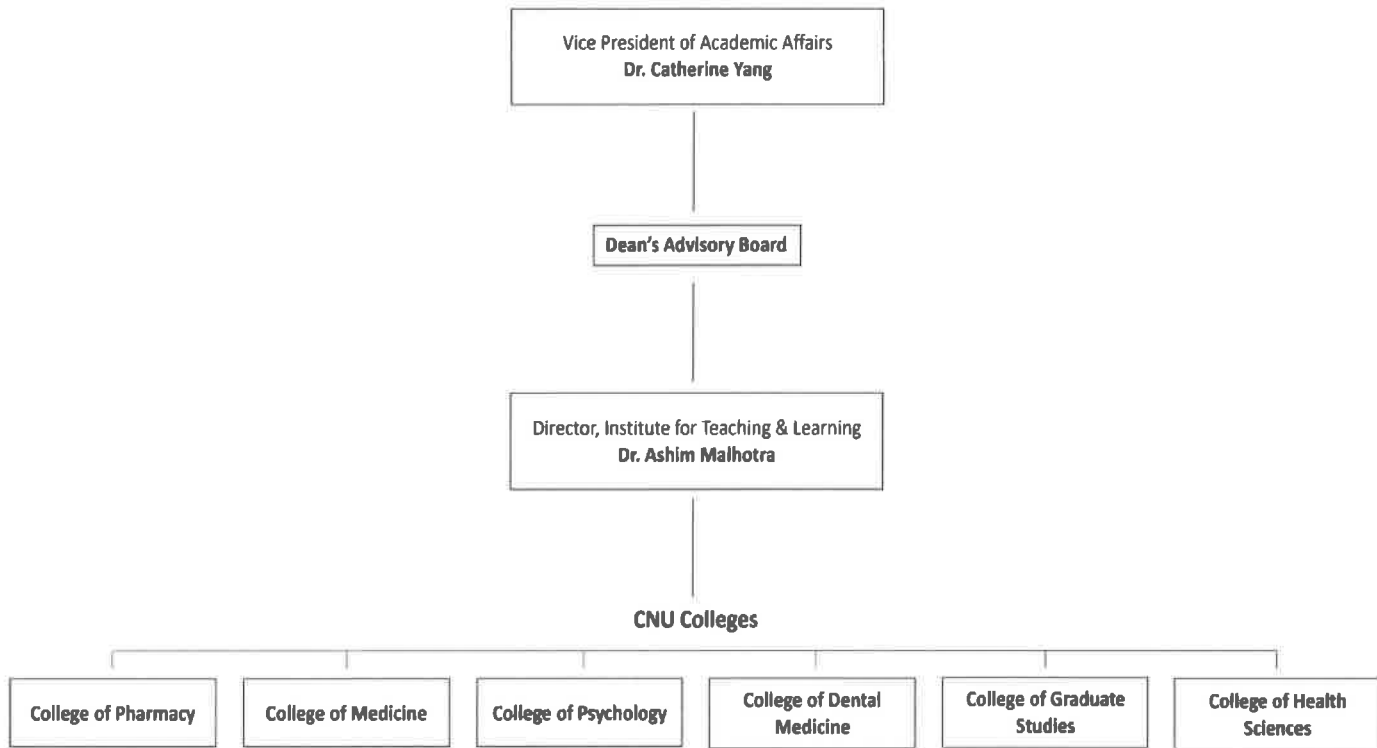
Time	Facilitator	Topic and Goal	Minutes and Notes
			<ol style="list-style-type: none"> 3. Dr. Malhotra spoke with representatives from each college; received positive feedback and support from all 4. Proposing a modified version of the Technology FLC per Dr. Malhotra & Dr. Yarbrough 5. Meeting is to discuss potential obstacles and innovative solutions to address said obstacles 6. ITLE has decided to move forward with the first FLC in April 7. Developing an initial strategic plan that will aid us in strategizing our initiatives and goals. Must go through an approval process before being presented to ITLE members. (Technology FLC results will be built into the strategic plan.) 8. <i>No questions</i>
53 min	Tracy / Ashim	Faculty learning Community in Technology Planning	<ol style="list-style-type: none"> 1. ITLE previously decided to launch with one FLC. This initial FLC will be Technology based. 2. Goal of FLC is to build a community of scholars around topic(s) of shared interest. 3. List of topics have changed slightly from the initial proposal. All involve faculty from 3 of the colleges; topics have been confirmed with presenters. (<i>Refer to document from Dr. Yarbrough</i>) 4. Structure: 1st Hour – Introduction/Instruction, 2nd Hour – Discussion on how to implement learning information 5. Last session of the series will be student-focused (“capstone” session) 6. Task Item: What will the learning objectives be of each session? (Determined by faculty presenters) 7. Task Item: What are the learning outcomes (deliverables)? 8. Task Item: What would you like to learn from the FLCs? 9. Faculty involved in the FLC will receive feedback on their ideas. ITLE will receive feedback from all faculty involved (presenting and learning) regarding their thoughts on the course.

Time	Facilitator	Topic and Goal	Minutes and Notes
	ITLE Members	Q&A	<p>Q: How do we determine the length of time of each session? More people could lead to a longer session.</p> <p>A: Session will have a minimum and maximum number of participants.</p> <p>Q: Will there be a distinction between the hybrid and online course sessions?</p> <p>A: Hybrid course is more about course design; the online course will be about implementation.</p> <p>Q: Meeting Structure:</p> <ul style="list-style-type: none"> -Course plan & content, course structure & instructional design, assessment. For each portion a tool will be discussed, how to implement and how this relates and aligns with the CNU policy. -Would be ideal to discuss policies in initial meeting. <p>Q: Online/Hybrid Courses:</p> <ul style="list-style-type: none"> -Designate a course developer who is responsible for developing the course; other faculty can teach said course. -Unsure of CNU's plan for a 'course designer' for online/hybrid courses. -FLC outline was developed using resources we currently have (e.g. IT department) -CNU currently has Canvas – Hoa can describe how this is used and how it can be implemented. -Interested shown by faculty after FLC will determine what needs to be given more attention to within the University. -Must develop a long-term plan of where we are going. This is a typically a faculty-driven initiative based on faculty interests and needs.

Time	Facilitator	Topic and Goal	Minutes and Notes
			<p>-Other Universities are developing online courses which people are arguing credits should be accepted towards degree.</p> <p>-Initial FLC is a 'pilot' which we can gather information from for what and how much of it we need to be included in our strategic plan.</p> <p>Q: What should be our communication strategy to advertise the FLC and gain excitement in the CNU community?</p> <p>A: Mass email, newsletter, seminar (similar to COM monthly seminars)</p> <p>A: Town Hall meeting in April</p> <p>A: Dean's circulate information within their colleges</p> <p>A: Promote incentives</p> <p>Q: How do we incentivize faculty to be involved?</p> <p>A: CE certification/promotion, teaching credits, pay faculty for participating</p> <p>A: Before we can require faculty to attend we should run the first FLC first to gain more information on how the course is run.</p> <p>Task Item: Propose incentives to dean's advisory meeting (3/25)</p> <p>Q: What is the number of people per FLC?</p> <p>A: 3-4 members per team, 3-5 teams</p> <p>Q: Time may be difficult for CHS as several are teaching and drive time to CNU main campus.</p> <p>A: Should develop online avenue or view course or record sessions.</p> <p>A: Faculty may be required to attend first and last session to receive incentive.</p>

APPENDIX G

CNU ITLE Process Flow Diagram



1/28/2019



California Northstate University
College of Dental Medicine

Volume 4
Appendices for Standard 2 (Part 1)



CNU IA Application – Predoctoral Dental Education Program
Submitted to the Commission on Dental Accreditation

May 2019

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**2018 – 2019 Academic Year
Hematology Course Syllabus
Course #: 526 and HS 511 (CDM)
Year: I
Semester: Fall**

Course Dates: 9/24/18 to 10/28/18

Credits Hours: 4 Credits

Course Director:

Nazila Hejazi, MD (Assistant Professor of Pathology)
CNU College of Medicine, Room 147

Office phone: 916-686-7824

nazila.hejazi@cnsu.edu

Coordinator: Samantha Ka Xiong

916-686-7300 ext 126

Samantha.Xiong@cnsu.edu

Every effort will be made to adhere to the contents of this syllabus. However, this document is subject to changes in the event of unforeseen, extenuating circumstances. Students will be notified as soon as possible if changes in the syllabus become necessary.

Course Teaching Faculty

Name/Degree	Rank/Title
Shiv Sudhakar, MD	Assistant Professor of Internal Medicine
Ghaith Aleyd MD, MSc, PhD	Associate Professor of Pathology
Scott Braley, MD	Associate Professor of Surgery, Oncology, Anatomy and Clinical Skills
Guy diSibio, MD, PhD	Associate Professor of Pathology, Hematopathology, Surgical Pathology, Molecular Genetics and Clinical Skills
Tim Grennan MD	Professor of Internal Medicine
Susan Ely, PhD	Professor of Molecular Biology, Immunology and Microbiology
Nehad El-Sawi PhD	Professor of Molecular Biology, Immunology and Microbiology.
Xiaodong Feng, PhD, PharmD	Professor of Pharmacology and Oncology
Valerie Gerriets, PhD	Assistant Professor of Pharmacology
Nazila Hejazi, MD	Assistant Professor of Pathology
Rudolph Holguin, MD	Associate Professor of Emergency Medicine
Michael Ibrahim, MD, PhD	Associate Professor of Biochemistry, Pharmacology, Physiology, Radiology/Imaging
Ishwarlal Jialal, MBChB, MD	Professor of Physiology, Metabolism, and Pathology
Kenneth Lee, MD	Professor of Internal Medicine, Infectious Disease, and Clinical Skills
For-Shing Lui, MD	Professor of Clinical Neurology and Neurology Clerkship Director Vice Chairman of Clinical Sciences
Jose Puglisi, PhD	Assistant Professor of Physiology, Biostatistics
Rajendra Ramsamooj, MD	Professor of Pathology, Surgical Pathology and Clinical Skills

Open Door Policy: Course faculty have an open door policy and encourage contact from students by e-mail and in person to share impressions, concerns and/or ideas at any time

Volunteer Community Faculty (if applicable)
Name/Degree
Karimireddy Reddy MD
Edward W. Hearn MD
Jesse Adams MD
Christopher J Gresens MD
Jonathan A Hughes MD

Communication with volunteer community faculty must be channeled through the course director.

Course Description:

This unit deals with components of the hematopoietic system – bone marrow, blood, and lymphoid tissues – emphasizing basic structures (of cells, tissues, organs) and functions (from molecular to tissue to whole organ level) in health and disease. 2 microscopy lab sessions provide students with the opportunity to practice their skills at blood film cell identification and interpretation. An interactive classroom session will provide students the opportunity to practice bone marrow cell identification and interpretation. Clinical presentations within the Hematology unit are focused on common situations and presentations that a primary care physician is most likely to experience, such as anemia, polycythemia, abnormal white cells, lymphadenopathy, abnormal bleeding (bleeding diathesis), and hypercoagulable states. Each week consists of 1 to 2 clinical presentations accompanied by algorithms and clinical cases with lists of learning objectives. Clinical faculty will introduce students to the scheme(s) for each clinical presentation, emphasizing critical decision points and setting the framework for integration of the basic and clinical sciences to each topic. Following the clinical presentation, faculty will present fundamental principles from the basic sciences (e.g. biochemistry, cell biology, genetics, immunology, microbiology, nutrition, pathology, pharmacology, physiology) which underlie understanding of the schematic algorithms and provide knowledge and skills required to arrive at a correct diagnosis. Basic science sessions will highlight normal/homeostatic structure and function, followed by examination of relevant disease states, including introduction to care and treatment options. Practice questions will be offered throughout the course, using Turning Point technology. One formative exams will be given. These exams will be composed of 30-50 NBME questions. Towards the middle of the course, a mid course exam of 50 NBME questions will be given and at the course conclusion, a summative exam of 100 NBME questions will be given.

Course Objectives:

By the conclusion of this course, the student will demonstrate the ability to:

#	Course Learning Objectives (CLOs)	Program Learning Objectives (PLOs)
1	Apply basic knowledge of anatomy (gross and histologic), embryology, biochemistry, cell biology, physiology, microbiology, nutrition, and pathology to understand hematolymphoid function in homeostasis and disease, including expected clinical findings, diagnostic approaches, morphologic changes, and natural history of disease.	PLO-2 (MSK1,MSK2)
2	Apply knowledge of molecular biology and genetics (molecular/chromosomal/population) to understand etiology and pathogenesis of hematolymphoid disorders, patterns of their inheritance, and targeted therapeutic strategies.	PLO-2 (MSK1, MSK2, MSK3)
3	Apply fundamental knowledge of the immune system to understand: normal hematolymphoid function; disease states involving hematopoiesis and lymphoid tissues (lymph nodes, spleen, and extranodal lymphoid tissue); and therapeutic modalities.	PLO-2 (MSK1, MSK2, MSK3)
4	Apply knowledge of pharmacology (pharmacokinetics, pharmacodynamics, mechanism of action), nutrition, and blood components (transfusion medicine) to select optimal therapy for effective and safe treatment of hematopoietic disorders (e.g., treatment of anemias, leukemia, lymphoma, hypercoagulable states).	PLO-2 (MSK1, MSK2, MSK3)
5	Apply principles and approaches of biostatistics and epidemiology to understand the role of ethnic, gender, age, geographic, socioeconomic, behavioral factors, and other significant variables in hematology and hematolymphoid disorders, such as for interpreting laboratory reference ranges, patient's laboratory results, disease incidence, risk factors, etiology, staging, therapeutic effectiveness, and clinical prognosis.	PLO-2 (MSK1, MSK2, MSK3,MSK4)
6	Demonstrate level-appropriate skills in communication, professionalism and medical/procedural related abilities in dealing with patients, and includes environmental, cultural and societal factors in clinical decision making.	PLO-1 (PC1, PC2, PC3, PC4, PC5, PC6, PC7); PLO-3 (C1, C2, C3); PLO-4 (P1, P2, P3)

Please Note: All session objectives listed in the individual sessions (by date and time) are mapped to the course objectives.

Key: PLO = Program Learning Objective (#1=Patient Care; #2=Medical & Scientific Knowledge; #3=Communication and Interpersonal Skills; #4=Professionalism; #5=Health Care Systems; #6=Reflective Practice and Personal Development)

Session Locations:

Two large lecture halls, each with a seating capacity of 180 students, will be used for the basic science sessions. Eight small classrooms/college rooms, each with a capacity for 25 students and the Simulation Center space are available for small group sessions. Microscopic lab sessions will be held at Interdisciplinary Laboratory (IDL) with a capacity for 50 students

Lecture/Session Duration: All lectures on the calendar as one hour sessions will be 50 minutes long with 10 minutes break at the end for questions and preparation for the next session. Any session/lecture longer than one hour will have 10 minutes break between every two hours.

Teaching/Learning Methodology:

- Case-Based instruction/Learning
- Demonstration
- Discussion, Large group (>12)
- Discussion, Small Group (<12)
- Independent Learning
- Laboratory
- Lecture
- Mentorship
- Patient Presentation – Faculty
- Patient Presentation – Learner
- Peer Teaching
- Self-Directed Learning
- Simulation
- Tutorial
- Workshops
- Games
- Peer Teaching
- Self-Directed Learning

Online Materials – Canvas: Canvas is California Northstate University's Learning Management System.) Use your CNU NETID and password.

Turning Point: Every Phase A student was given a Turning Point Clicker during Orientation. **Please bring the Clicker to class at all times.**

Library/Learning Resources

The CNUCOM Library and Learning Resource Center is available for students, faculty, and staff. This program includes an initial 4200 square feet of space and seating for 100 devoted to the following resources: Library Facility and Collection, Computer resources, CNUCOM Electronic Library, and Interlibrary Loan Program. CNUCOM Resource Center maintains an Electronic Learning Resources System to provide information resources to students, faculty, and staff, and serve as an entry point for all users to meet their academic and research needs.

Required Textbook(s), Material(s) and Equipment:

Subject	Author	Title
http://hematologyoutlines.com	Rashidi et al	Interactive online Atlas
Atlas	Lichtman et al	Lichtman's Atlas of Hematology 2016
Biochemistry	Lieberman	Marks' Basic Medical Biochemistry: A Clinical Approach 4e
Histology	Mescher	Junquiera's Basic Histology Text and Atlas 13e
Immunology	Perham	The Immune System, 4th Edition
Microbiology	Engleberg	Schaechter's Mechanisms of Microbial Disease, 5th Edition
Pathology	Kumar, Abbas and Aster	Robbins and Cotran Pathologic Basis of Disease 9e
Pathology Atlas	Klatt	Robbins and Cotran Atlas of Pathology 3 rd e
Pathology Review Book	Klatt and Kumar	Robbins and Cotran Review of Pathology, 4 th e
Pharmacology	Katzung and Trevor	Basic & Clinical Pharmacology 13e
Pharmacology	Brunton et al	Goodman & Gilman's: The Pharmacological Basis of Therapeutics, 12e
Statistics	Dawson and Trapp	Basic and Clinical Biostatistics, 4 th e
Transfusion Medicine		The Circular of Information for the Use of Human Blood and Blood Components https://www.aabb.org/tm/coi/Documents/coi1113.pdf

Recommended Textbook(s):

Subject	Author	Title
Anatomy	Gilroy, MacPherson and Ross	Atlas of Anatomy 2e
Embryology	Sadler, T.W.	Langman's Medical Embryology. 13 th e
Genetics	Nussbaum, McInnes and Willard	Thompson and Thompson Genetics in Medicine 8e
Pathophysiology of Blood Disorders	Bunn and Aster	<u>Pathophysiology of Blood Disorders</u> 2 nd e
Physiology	Hall	Guyton and Hall Textbook of Medical Physiology 13e

Attendance

Lecture/Learning Activity Attendance

Lecture attendance is highly suggested. Attendance at laboratory activities is mandatory. There are some lectures within the block where attendance is also mandatory. These will be clearly identified in the Course Calendar.

Sign-in sheets or electronic attendance will be provided at all mandatory activities. Students will be responsible for signing in themselves. The sign-in sheets or electronic tracking will be collected 5 minutes after the activity begins. Certain excused absences are allowed (please see Excused Absence Policy).

The following procedure(s) will be employed for breeches of these course requirements.

1. Administrative/Support staff will notify the course director(s) and Assistant Dean of Academic Affairs
2. A note will be placed in the student's file
3. Lapses in attendance fall under the COM's Professionalism Policy and are subject to inclusion in the student's MSPE.
4. Persistent lapses in attendance will require the student to appear before the Student Promotions Committee.

Exams and Grading/Assessment:

▪ **Formative**

- 1 in-class formative USMLE Step 1 format 30 to 50 questions multiple-choice examinations. This will be held on Monday mornings of week 2. Based on the way this course is designed and structured, attendance is mandatory in order for the student to get the most out of the course.
- Course directors (other than Medical Skills) will choose a pre-scheduled set of times (other than during lectures) during which quiz sessions will be held. The number of sessions and frequency will be at the discretion of the course director. The quiz format, including number of questions, will be at the discretion of the course director. Quizzes will not contribute points toward the overall course grade but will have educational value.

▪ **Summative**

- One mid-course examination USMLE Step 1 format; 50 multiple-choice questions on the 3rd week of the course
- One comprehensive summative exam USMLE Step 1 format 100 multiple-choice questions comprehensive final examination at the end of the course
- Clinical Cases : Clinical Cases : 4~2-hr sessions devoted to presentation and discussion of Clinical Cases will be offered; attendance at these sessions is mandatory. Students will work in group of five and student presentations will be graded using a rubric.
- The successful completion of the course is based on demonstrating high standards of ethical and profession behavior, as well as, passing each of the following components of the course with a grade of 70% or higher,
 - Clinical Cases
 - Comprehensive Summative Exam

Total Course Score:

The total numeric score for the course will be measured as follows, which translates to recording a passing grade if 70 or above, and an honors grade if 90 or above.

#	Components	%	Notes/Explanation
1	Mid-Course Summative NBME Exam	20	
2	End of Course Final Comprehensive NBME Summative Exam	70	Please note that re-take of final summative is offered during exam week (week 5). If students gain more than 70 in their re-take, they would still only be granted 70 for re-take exam.
3	Clinical Case Presentations (CC) Students are expected to successfully complete in order to pass the course.	0	Refer to description below
4	Microscopic Lab Sessions x2 (RBC on 9/26/18 and WBC on 10/2/18) Students are expected to participate and demonstrate professionalism (5%) and knowledge (5%) in both labs in order to gain the complete grading	10	Please submit your worksheets for each lab, directly to Canvas.
5	Nutrition Modules Students are expected to successfully complete assigned Nutrition in Medicine modules in order to pass the course. Students must register for nutrition in medicine via "nutritioninmedicine.org". (A guide to NIM Medical Student registration will be posted to CANVAS). Once registered, enter the access code "cnsu_nutr" in order to access all modules available to CNSU medical students.		For this course, you are expected to complete the following modules: Nutritional anemias part 1, and Nutritional anemias part 2. Provide Course Director with proof of completion with more than 70% score. Note: you need to only successfully complete the specific modules assigned for the course. Do not complete the other modules until told to do so in your other courses. Due date for completion of this assignment will be on 10/7/18. Please submit your certificate directly to Canvas.

Formative and summative NBME exams score reports will be available 3-days after the exam; it is the student responsibility to contact Course Director to obtain their individual score report.

Any additional (retesting) exams will be at the expense of the student.

The successful completion of the course is based on demonstrating high standards of ethical and professional behavior, as well as, passing both the Final Comprehensive Summative Exam **AND** the course with a grade of 70% or higher.

Grading percentages

Passing grade requires a total score of 70% or higher

Honors grade requires a total score of 90% or higher

Remediation

Students failing the course will be referred to the Student Promotion Committee (SPC) and a custom tailored remediation plan will be developed.

Description of Clinical Cases and Clinical Case Based Learning

Clinical Cases (CC's) and Clinical Case Based Learning (CCBL's) are designed to promote the development of teamwork, professionalism, and evidence-based patient management skills that integrate the basic and clinical sciences.

During the M1 year, following a faculty-led Clinical Presentation (CP) lecture, the students will receive a PowerPoint presentation that contains the subjective (including the Chief Complaint, History of Present Illness, and Past Medical History) and objective (including the Physical Examination) findings for a hypothetical patient who presents with a complaint aligned with the CP lecture. As they assimilate basic and clinical science content throughout the week's lectures, students will work in assigned groups to complete a series of template slides included in the PowerPoint presentation. At the end of the week, each student group will submit its final presentation for a grade. One group in each college (on a preassigned, rotating basis) will present the case to their College for discussion. Each group will submit their case presentation for grading using a defined rubric by a rotating faculty member. Grading will be Pass/Needs Improvement/Fail.

During the M2 year, the process will be similar except that during the CP, students will develop learning objectives based the case presented. At the end of the week, each group will present a SOAP note and their Learning Objective to their College. The College Master will be responsible for grading and feedback. Grading will be Pass/Needs Improvement/Fail.

Clinical Case-Based Learning (CCBL) is an integrated, Problem-Based Learning modality that affords student self-directed learning in the context of a clinical case setting. Each week-long case is sequentially revealed over the course of three two-hour sessions. Students work in groups of about nine. For each case, each student will provide at least one teaching presentation to the group – this should be a PowerPoint slide set that includes citations for all images used and an *annotated* list of references from textbooks and the primary literature. Students are expected to offer constructive feedback on these presentations. The group will devise their own session learning objectives on Day 1 of each week; these will be the topics presented orally on Day 2. CCBL group assignment will remain stable for an entire academic year, to allow longitudinal formative feedback from facilitators, and to foster periodic peer- and self-assessment. Case Learning Objectives comprise material that may be tested in NBME course exams. All sessions are mandatory and timely arrival is expected in order for students to earn a grade of PASS for this

component of a course; grading will be Pass/Fail. When feasible, CCBL sessions will occur at least once in each non-experiential course.

Student Evaluations of Course and Faculty

Student Evaluations of the Course and Faculty: Students are required to complete these evaluations during the assigned mandatory session on the course calendar. Course evaluations will be scheduled in the course calendar for the last Friday of instruction. The goal for course evaluations is 100% participation. In the event that there is less than 90% class participation, grades will be withheld, by both the Course Director and the Registrar, for the entire class until the 90% participation level is reached.

Students will be expected to comply with all CNU and COM policies

Weekly Course Calendars (on following pages)

Hematology						
Week 2: CP(s) Polycythemia, Abnormal WBCs, Lymphadenopathy and Splenomegaly						
	Monday	Tuesday	Wednesday	Thursday		Friday
	10/1/2018	10/2/2018	10/3/2018	10/4/2018		10/5/2018
8:00 AM	Formative Exam	Clinical Presentation: Abnormal WBCs (disibio)	Masters Colloquium	Possible Review Session		Self Study
8:30 AM		<u>Mandatory Attendance:</u> Laboratory Evaluation of White Blood Cells; WBC Differential Groups 1, 2 and 3 (Hejazi, Ramsamooj, diSibio, Aleyd, Adams & Hearn)		Myelodysplastic Syndromes and Chronic Myelomonocytic Leukemia (Hejazi)		Clinical Presentation: Lymphadenopathy and Splenomegaly (diSibio)
9:00 AM			Non-Neoplastic Disorders of Granulocytes, Monocytes, and Lymphocytes (diSibio)	Medical Skills	Self Study	Clinical Case (Adams)
9:30 AM						
10:00 AM			Clinical Presentation: Polycythemia (Hejazi)	Lunch and activities	Lunch and activities	Lunch and activities
10:30 AM						
11:00 AM	Lunch and activities	Lunch and activities	Lunch and activities	Lunch and activities	Lunch and activities	
11:30 AM						
12 noon	Transport of Oxygen & Carbon Dioxide by Hemoglobin (Yarbrough)	Bone Marrow Histology and Cytomorphology (Hejazi)	Introduction to Leukemias:Acute Myeloid Leukemias; Chronic Myelogenous Leukemia, and Myeloproliferative Disorders (Hejazi)	Medical Skills	Self Study	Lymph Nodes: Normal and Reactive Patterns (diSibio)
12:30 PM		Fetal Hematopoiesis and vasculogenesis and Immune Deficiencies in Lymphocyte Development (Ely)				
1:00 PM		<u>WORKSHOP:</u> Immunologic Diagnostics and Flow Cytometry (Ely)	Acute and Chronic Lymphoid Leukemias (Reddy)	Medical Skills	Self Study	Self Study
1:30 PM						
2:00 PM			Self Study	Self Study	Self Study	
2:30 PM						
3:00 PM	Self Study	Self Study	Self Study	Self Study		
3:30 PM						
4:00 PM		Self Study	Self Study	Self Study		
4:30 PM						

Hematology					
Week 5: Summative Exam, Tutoring, Review Sessions and others TBD					
	Monday	Tuesday	Wednesday	Thursday	Friday
	10/22/2018	10/23/2018	10/24/2018	10/25/2018	10/26/2018
8:00 AM	Summative Exam	Self Study	Self Study	Self Study	Self Study
8:30 AM					
9:00 AM					
9:30 AM				Medical Skills Formative Exam	
10:00 AM					
10:30 AM					
11:00 AM					
11:30 AM					
12 noon	Lunch and activities	Lunch and activities	Lunch and activities	Lunch and activities	Lunch and activities
12:30 PM	Self Study	Self Study	Self Study	Medical Skills Formative Exam	Self Study
1:00 PM					
1:30 PM					
2:00 PM					
2:30 PM					
3:00 PM					
3:30 PM					
4:00 PM					
4:30 PM					



**2018 – 2019 Academic Year
Neurosciences Course Syllabus
Course COM 551 and HS 512 (CDM)
Year: I
Semester: Spring**

Course Dates: January 7 – March 15, 2019

Credits Hours: 9

Course Director:

Forshing Lui MD;

Professor of Clinical Neurology, Chairman of Clinical Sciences

Office #135; Tel: (916) 686-7469;

e-mail: forshing.lui@cnsu.edu

Coordinator:

Samantha Xiong;

Tel: (916) 686-7351;

e-mail: Samantha.xiong@cnsu.edu

Disclaimer about changes in Syllabus and Course Calendar

Every effort will be made to adhere to the contents of this syllabus. However, this document is subject to changes in the event of unforeseen, extenuating circumstances. Students will be notified as soon as possible if changes in the syllabus become necessary.

Course Teaching Faculty

Forshing Lui MD	Alan Ernst PhD
Rochelle Frank MD	Scott Braley MD
Ghaith Aleyd MD	Valerie Gerriets, PhD
Tracy Yaborough MD PhD	Raj Ramsamooj MD
Susan Ely PhD	Ishwarlal Jialal MD
Randall Enstrom MD	Guy DiSibio MD
Nehad El-Sawi PhD	Nazila Hejazi MD
Jason Wong Pharm D	Xiaodong Feng Phram D
Nripendra Dhillon PhD	Leonard Ranasinghe MD, PhD
Jose Puglisi PhD	James Martel MD
<u>Sailabala Vanguri MD</u>	*Arthur Dublin MD
Michael Ibrahim MD, PhD	*John Bissell MD
Sheryl Krig PhD	
Darilyn Falck MD	*Ursula Anders MD

* Community Faculty

Open Door Policy: Course faculty have an open door policy and encourage contact from students by e-mail and in person to share impressions, concerns and/or ideas at any time

Communication with volunteer community faculty must be channeled through the course director.

Course Description:

The unit spans nine weeks and contains eighteen clinical presentations that reflect commonly encountered situations affecting the nervous system. The course is focused on providing students with a detailed understanding of normal structure, function and pathologic dysfunction of the nervous system and special senses. Depending on the week, 1 to 4 clinical presentations will be covered, each one of them accompanied by clinical algorithm and clinical reasoning guide. Clinical faculty will lead the students through the clinical reasoning guide emphasizing critical decision points and setting the framework for the integration of the basic and clinical sciences. Following the clinical presentation, basic science faculty will present the fundamental principles from the traditional basic sciences (e.g., anatomy, histology, embryology, biochemistry, immunology, microbiology, nutrition, pathology, pharmacology, and physiology) to ensure adequate knowledge and skills required to arrive at a correct diagnosis. These basic science lectures will highlight the normal structures and functions of the nervous system as a whole, including special senses, followed by presentations of various disease states including management and treatment options. In addition to the lectures, library resources, and other learning activities that support each clinical presentation, students will attend anatomy labs and perform appropriate cadaver dissection activities and review prosected materials to reinforce learning of structures and relationships described in lecture. Traditional X-rays, CT scans and MRIs will be presented to illustrate normal and abnormal structures related to disease processes

as well to illustrate some management techniques. In addition, students will participate in clinical cases sessions with clinical faculty and take part in a Medical Skills course that runs concurrently and supports content covered, emphasizing the skills that the students need to acquire to diagnose and for the management of different clinical cases.

Course Objectives:

By the conclusion of this course, the student will demonstrate the ability to:

#	Course Learning Objectives (CLOs)	Program Learning Objectives (PLOs)
1	Apply basic knowledge of anatomy and neuroanatomy, biochemistry, cellular/molecular biology, microbiology, pathology, and physiology to solve clinical problems involving the special senses, neurological and brain functions in homeostasis and disease, including expected clinical findings, diagnostic approaches, morphologic changes, and natural history of disease.	1,2
2	Explain how electrochemical communication and its components (e.g., neurotransmitters, receptors, and ion channels) relate to health and disease states of the nervous system.	2
3	Apply knowledge of molecular genetics to solve clinical problems involving etiology and pathogenesis of neurological disorders, patterns of their inheritance, and targeted therapeutic strategies.	1,2,3,4,5
4	Apply knowledge of pharmacokinetics and pharmacodynamics to select optimal drug therapy for effective and safe treatment of neurological disorders.	1,2,5
5	Apply principles and approaches of biostatistics and epidemiology to define the role of ethnicity, gender, age, geography, socioeconomic status, and behavioral factors, to establish incidence, risk factors, etiology, therapeutic effectiveness, and clinical prognosis of neurological disorders.	1,2,5,6

6	Demonstrate level-appropriate skills in communication, professionalism and medical/procedural related abilities in dealing with patients, and includes environmental, cultural and societal factors in clinical decision making.	3,4,5,6
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Please Note: All session objectives listed in the individual sessions (by date and time) are mapped to the course objectives.

Key: PLO = Program Learning Objective (#1=Patient Care; #2=Medical & Scientific Knowledge; #3=Communication and Interpersonal Skills; #4=Professionalism; #5=Health Care Systems; #6=Reflective Practice and Personal Development)

Session Locations:

Two large lecture halls, each with a seating capacity of 180 students, will be used for the basic science sessions. Eight small classrooms/college rooms, each with a capacity for 25 students and the Simulation Center space are available for small group sessions. A large gross anatomy laboratory with capacity for cadaver dissections, where a group of students will be assigned to each cadaver, is available for anatomy dissection.

Lecture/Session Duration: All lectures on the calendar as one hour sessions will be 50 minutes long with 10 minutes break at the end for questions and preparation for the next session. Any session/lecture longer than one hour will have 10 minutes break between every two hours.

Teaching/Learning Methodology:

- Case-Based instruction/Learning
- Demonstration
- Discussion, Large group (>12)
- Discussion, Small Group (<12)
- Independent Learning
- Laboratory
- Lecture
- Patient Presentation – Faculty
- Patient Presentation – Learner
- Peer Teaching
- Problem-Based Learning (PBL)
- Research
- Self-Directed Learning
- Simulation
- Tutorial

Online Materials – Canvas: Canvas is California Northstate University's Learning Management System.) Use your CNU NETID and password.

Turning Point: Every Phase A student was given a Turning Point Clicker during Orientation. **Please bring the Clicker to class at all times.**

Library/Learning Resources

The CNUCOM Library and Learning Resource Center is available for students, faculty, and staff. This program includes an initial 4200 square feet of space and seating for 100 devoted to the following resources: Library Facility and Collection, Computer resources, CNUCOM Electronic Library, and Interlibrary Loan Program. CNUCOM Resource Center maintains an Electronic Learning Resources System to provide information resources to students, faculty, and staff, and serve as an entry point for all users to meet their academic and research needs.

Required Textbook(s), Material(s) and Equipment:

Subject	Author	Title
Neurology	Roper, Samuels and Klein	Adams and Victor's Principles of Neurology, 10e
Anatomy	Blumenfeld	Neuroanatomy through Clinical Cases, 2e (OUP)
Interactive Brain Atlas	https://register.dashboard.oup.com/catalog?pagename=sylvius-4	Sylvius 4 Online: An Interactive Brain Atlas (OUP)

20% off of OUP course materials? Visit www.oup.com/us/he and enter discount code McGlew2018 (valid through 1-31-19).

Recommended Textbook(s):

Subject	Author	Title
Pharmacology	Katzung, Masters, and Trevor	Basic & Clinical Pharmacology 13e
Neuroscience	Purves & Augustine et al	Neuroscience, 6e (you get Sylvius 4 Online free)

Physiology	Hall	Guyton and Hall Textbook of Medical Physiology 13e
Immunology	Parham, Peter	The Immune System, 4e
Biochemistry	Lieberman	Marks' Basic Medical Biochemistry: A Clinical Approach 4e
Ethics	Lo	Resolving Ethical Dilemmas 5e

Attendance

Lecture/Learning Activity Attendance

Lecture attendance is highly recommended, and laboratory sessions are mandatory. Sessions labeled as mandatory on the course calendar are required.

Sign-in sheets or electronic attendance will be provided at all mandatory activities. Students will be responsible for signing in themselves. The sign-in sheets or electronic tracking will be collected 5 minutes after the activity begins. Certain excused absences are allowed (please see Excused Absence Policy).

The following procedure(s) will be employed for breeches of these course requirements.

5. Administrative/Support staff will notify the course director(s) and Assistant Dean of Academic Affairs
6. A note will be placed in the student's file
7. Lapses in attendance fall under the COM's Professionalism Policy and are subject to inclusion in the student's MSPE.
8. Persistent lapses in attendance will require the student to appear before the Student Promotions Committee.

Exams and Grading/Assessment:

▪ Formative

- One mid-course MCQ formative exam (50 questions)

▪ Summative

- One USMLE Step 1 format multiple-choice mid-course examination (50 questions)
- One 2.5-hour long USMLE Step 1 format multiple-choice final examination (100 questions)
- Two 1-hour long laboratory practical exam (identification of tagged structures on cadaver, models and radiographic images)
- **Special Student Assignments:**

- MOCA training and certification: 2 points (due date: Sunday 2/10/2018)

<http://www.mocatest.org/training-certification/>

- NIH Stroke Scale Training: 3 points (due date: Sunday 1/27/2018)

<https://secure.trainingcampus.net/uas/modules/trees/windex.aspx?rx=nihs-english.trainingcampus.net>

Total Course Score and Grading:

The total numeric score for the course will be measured as follows, which translates to recording a passing grade if 70 or above, and an honors grade if 90 or above.

	(A) Components	(B) Percentage	Notes/Explanations
1)	Summative exam: Multiple Choice Questions (MCQ's)	70	NBME Style Questions through NBME-CAS (20% for mid-course and 50% for final summative)
2)	Anatomy Laboratory	25	Two 1-hour long laboratory practical exam (mid-course and end-of-course)
3)	Professionalism (rubric)	P/F	If professionalism is failed (F), whole course is failed.
4)	Attendance	0	In Neuroscience, attendance is not mandatory for passive lectures. However, it is mandatory where active learning activities are developed (e.g., clinical cases and case conferences).
5)	Clinical Cases. Students are expected to successfully complete in order to pass the course.	0	P/F. Attendance is mandatory
6)	Clinical Case Based Learning (CCBL)	0	P/F. Attendance is mandatory

	Students are expected to successfully complete in order to pass the course.		
7)	NIH Stroke Scale Training and Certification on line	3	3 points will be awarded to students who got and submitted their NIHSS Certificate
8)	MoCA Testing	2	2 points will be awarded to students who completed and submitted testing on 2 persons

Formative and summative NBME exams score reports will be available 3-days after the exam; it is the student responsibility to contact Course Director to obtain their individual score report.

Any additional (retesting) exams will be at the expense of the student.

The successful completion of the course is based on demonstrating high standards of ethical and professional behavior, as well as, passing both the Final Comprehensive Summative Exam **AND** the course with a grade of 70% or higher.

Grading percentages

Passing grade requires a total score of 70% or higher

Honors grade requires a total score of 90% or higher

Remediation

- Failure on final summative examination: repeat USMLE Step 1-format multiple choice examination through NBME-CAS with remediation
- Anatomy lab remedial exam if lab exam score <70%

Students failing the course will be referred to the Student Promotion Committee (SPC) and a custom tailored remediation plan will be developed.

Description of Clinical Cases and Clinical Case Based Learning

Clinical Cases (CC's) and Clinical Case Based Learning (CCBL's) are designed to promote the development of teamwork, professionalism, and evidence-based patient management skills that integrate the basic and clinical sciences.

During the M1 year, following a faculty-led Clinical Presentation (CP) lecture, the students will receive a PowerPoint presentation that contains the subjective (including the Chief Complaint, History of Present Illness, and Past Medical History) and objective (including the Physical Examination) findings for a hypothetical patient who presents with a complaint aligned with the CP lecture. As they assimilate basic and clinical science content throughout the week's lectures, students will work in assigned groups to complete a series of template slides included in the PowerPoint presentation. At the end of the week, each student group will submit its final presentation for a grade. One group in each college (on a preassigned, rotating basis) will present the case to their College for discussion. Each group will submit their case presentation for grading using a defined rubric by a rotating faculty member. Grading will be Pass/Needs Improvement/Fail.

During the M2 year, the process will be similar except that during the CP, students will develop learning objectives based the case presented. At the end of the week, each group will present a SOAP note and their Learning Objective to their College. The College Master will be responsible for grading and feedback. Grading will be Pass/Needs Improvement/Fail.

Clinical Case-Based Learning (CCBL) is an integrated, Problem-Based Learning modality that affords student self-directed learning in the context of a clinical case setting. Each week-long case is sequentially revealed over the course of three two-hour sessions. Students work in groups of about nine. For each case, each student will provide at least one teaching presentation to the group – this should be a PowerPoint slide set that includes citations for all images used and an *annotated* list of references from textbooks and the primary literature. Students are expected to offer constructive feedback on these presentations. The group will devise their own session learning objectives on Day 1 of each week; these will be the topics presented orally on Day 2. CCBL group assignment will remain stable for an entire academic year, to allow longitudinal formative feedback from facilitators, and to foster periodic peer- and self-assessment. Case Learning Objectives comprise material that may be tested in NBME course exams. All sessions are mandatory and timely arrival is expected in order for students to earn a grade of PASS for this component of a course; grading will be Pass/Fail. When feasible, CCBL sessions will occur at least once in each non-experiential course.

Anatomy Laboratory Rules

An appreciation of the significance of the anatomical gift is important to ensure our continuing respect for the altruism of our donors. The UC Davis and UC San Francisco willed body programs foster a learning partnership with CNUCOM in creating an educational relationship between the donor, the teacher, and the student. Dissection is a privilege and an incredible gift from the donors who have chosen to give so that we may learn.

Some may feel uneasy and anxious at the prospect of first dealing with cadavers; this is a natural response inasmuch as dealing with death is not always easy. Talk about your feelings with the faculty. Share them with your peers. Generations of students have experienced similar emotions and conversation helps calm our apprehensions.

In compliance with State and Federal regulations, and in the interest of your personal safety, you are required to follow these rules of the anatomy lab:

1. The donors are to be treated with dignity and utmost respect at all times. Crude or inappropriate remarks could result in dismissal from the lab.
2. Similar to medical settings, the discussion of donors or lab practices outside of the lab is inappropriate unless it is for the express purpose of study or learning. The nature of the learning process within the lab can be upsetting to the general public, so always be mindful of who could be listening to conversations.
3. The anatomical materials from a donor are a precious resource, and a protected resource. Under no circumstances shall anatomical material be taken from the laboratory.
4. Each donor is sent with an identification tracking number and device. This number and/or device must remain affixed to the specimen throughout its use until its return to the willed body program. All information regarding the donor is confidential.
5. Fluid Disposal: There are containers in the room for fluid collection. If any are full, let the anatomy lab technician know.
6. Trash: Please dispose of any soiled gloves, paper towels, aprons, or other supplies in the RED trashcans. When you see the trash cans are near to being full, please let the anatomy lab technician know.
7. Dissected Tissue: Any bits of skin, fat or other human tissues must be disposed of in the WHITE buckets at your table. Please do not put any other items in these buckets. If this can is nearing capacity, please let the anatomy lab technician know. Such items from each donor are put in separate plastic bags with the ID# of the donor, kept in cold storage, and returned with other remains of the donor at the time of cremation.
8. The anatomy lab is under video surveillance, and is monitored for entry through identification badge scans. The person using the identification badge is responsible for all people who enter with them. Please request the identity of any person who is unknown to you.
9. All equipment and models within the anatomy lab are identified and monitored. No equipment or models are allowed to leave the anatomy lab without permission.
10. To protect the dignity and privacy of the donor, the face or any other identifying feature of the case shall never be publicly displayed. This includes display to students, staff, visitors and faculty not participating in the intended use of the material.
11. Horseplay within the lab is strictly prohibited.
12. The use of cell phones and photography by students is not allowed.
13. Universal precautions must be followed: Wear protective clothing/lab coat and gloves at all times while dissecting, and protective eyewear when there is a risk of splash.
14. If you use contacts, it is highly recommended that you wear glasses when in lab.

15. If you have a chemical sensitivity let a member of your faculty know; they will assist you in purchasing a respirator and will train you to use it.
16. No food, drink, or chewing gum or applying cosmetics is permitted in the laboratory.
17. No open toed shoes are allowed. Your shoes should protect your feet from accidental chemical drip and injury from falling sharps. Your shoes should provide sufficient traction for use in a lab where the floor has the possibility of being slippery. It is recommended that you have a pair of shoes for lab use only.
18. Shorts or skirts are not permitted (please see the Student Handbook Dress code policy for Anatomy Lab).
19. Students with long hair need to have it pulled back and tied.
20. Sharps Safety: Always use hemostats or a blade-removal tool to remove a scalpel blade from its handle. Used blades must be disposed in the provided sharps containers.
21. Dissection equipment: All the items you should need are provided for you. Please remember to wash and dry the instruments at the end of each session so they do not rust.
22. Prevent desiccation by using wet cheesecloth to cover your donors as needed. Remember to always use wetting solution to moisten dissected parts otherwise it will dry your dissection! Wetting solution contains chemicals that can cause irritation and burns. Use it with care.
23. When leaving the lab, please remember to properly wrap and moisten your cadaver. This is essential! The table covers should be closed, and the lab doors should be locked behind you.

For additional information, please contact:

Nripendra Dhillon, MBBS, MS: (707) 864-6362

Sailabala Vanguri, MD: (916) 686-7965

Student Evaluations of Course and Faculty

Student Evaluations of the Course and Faculty: Students are required to complete these evaluations during the assigned mandatory session on the course calendar. Course evaluations will be scheduled in the course calendar for the last Friday of instruction. The goal for course evaluations is 100% participation. In the event that there is less than 90% class participation, grades will be withheld, by both the Course Director and the Registrar, for the entire class until the 90% participation level is reached.

Students will be expected to comply with all CNU and COM policies

Weekly Course Calendars

Course: Neurosciences
Week 1 - CP: Numbness/Tingling (1/7 - 1/11/2019)

	Monday 1/7	Tuesday 1/8	Wednesday 1/9	Thursday 1/10	Friday 1/11
8:00 AM	Introduction to Neurosciences (Lui)	Somatosensory Physiology I (Frank)	Direct Synaptic Transmission (Puglisi)	Motor Systems Physiology I (Lui)	Cellular Pathology of the CNS (DiSibio)
8:30 AM					
9:00 AM	CP: Numbness/Tingling (Frank)	Anatomy Lab Group A Self Study Group B	Indirect Synaptic Transmission (Puglisi)	Motor System Physiology II (Lui)	Anatomy and Tracts of the Spinal Cord (Vanguri)
9:30 AM					
10:00 AM	Electrical Signaling and Action Potentials I (Puglisi)		Histology of the CNS I (Hejazi)	Medical Skills Self Study	Clinical Case
10:30 AM					
11:00 AM	Electrical Signaling and Action Potentials II (Puglisi)		Histology of the CNS II (Hejazi)		
11:30 AM					
12 Noon	Lunch and Activities	Lunch and Activities	Lunch and Activities	Lunch and Activities	Lunch and Activities
12:30 PM					
1:00 PM	Overview of the Brain (Ernst)	Somatosensory Physiology II (Frank)	Introduction to Research and Scientific Methods (Jialal)	Medical Skills Self Study	Admissions Interviews
1:30 PM					
2:00 PM	Meninges, Ventricles and CSF (Ernst)	Anatomy Lab Group B Self Study Group A	Biostats 101 for SDSSP (Puglisi)		
2:30 PM					
3:00 PM	Blood Supply of the Brain (Ernst)		Self Study	Medical Skills Self Study	Self Study
3:30 PM					
4:00 PM	Self Study				
4:30 PM					

Totals:
 CP/CC: 3
 CCBL: 18
 Lectures: 3
 Labs: 2
 Med. Skills: 2
 Master's: 14
 Reviews: 26
 Exams: 14
 Self Study: 14
 Contact: 26
 No Contact: 14

Course: Neurosciences
Week 2 - CP: Weakness/Paralysis (1/14 - 1/18/2019)

	Monday 1/14	Tuesday 1/15	Wednesday 1/16	Thursday 1/17	Friday 1/18
8:00 AM	CP:Weakness/Paralysis (Frank)	Motor System Physiology III (Lui)		Hereditary and Degenerative Diseases affecting Motor Neurons (Frank)	Demyelinating Diseases of the CN Clinical Aspects (Lui)
8:30 AM					
9:00 AM	Peripheral Neuropathy - Clinical Aspects (Frank)	Anatomy Lab Group B	Self Study Group A	Infectious Causes of Paralysis/Weakness (El-Sawi)	Pharmacologic Management of Multiple Sclerosis (Wong)
9:30 AM					
10:00 AM	Anatomy of the Brainstem and Cranial Nerves (Ernst)				
10:30 AM					
11:00 AM					
11:30 AM					
12 Noon	Lunch and Activities	Lunch and Activities	Lunch and Activities	Lunch and Activities	Lunch and Activities
12:30 PM					
1:00 PM	AnatomyCranial Nerves (Ernst)	EMG/NCV (Frank)	Autoimmune Diseases of the Nervous System (Ely)	Medical Skills	Self Study
1:30 PM	Spinal Cord Syndromes (Ernest)		Pathology of Neuropathy and Demyelinating Disorders (Al-Eyd)		
2:00 PM	Self Study	Anatomy Lab Group A	Self Study Group B	Medical Skills	Self Study
2:30 PM					
3:00 PM					
3:30 PM					
4:00 PM					
4:30 PM			Drug Development and Pharmaceuticals (Yang)		

Totals:
 CP/CC: 3
 CCBL: 16
 Lectures: 3
 Labs: 2
 Med. Skills: 2
 Master's: 2
 Reviews: 2
 Exams: 12
 Self Study: 26
 Contact: 26
 No Contact: 14

Course: Neurosciences
Week 3 - CP: Movement Disorders (1/21 - 1/25/2019)

	Monday 1/21	Tuesday 1/22	Wednesday 1/23	Thursday 1/24	Friday 1/25			
8:00 AM	MLK Day	CP: Movement Disorders (Lui)	Neuroanatomy of the Cerebellum (Ernst)	Pharmacologic Management of Movement Disorders (Wong)	Anatomy of the Cerebrum (Vanguri)			
8:30 AM		Anatomy Lab Group A	Self Study Group B	Anatomy of the Diencephalon (Ernst)	Cranial Nerve Disorders (Lui)	Autonomic Nervous System - Refresher (Ernst)		
9:00 AM				Neuroanatomy of the Basal Ganglia (Vanguri)	Medical Skills	Self Study	Clinical Case	
9:30 AM								Basal Ganglia Disorders (Lui)
10:00 AM								
10:30 AM				Lunch and Activities	Lunch and Activities	Lunch and Activities	Lunch and Activities	
11:00 AM								
11:30 AM		Neurochemistry of Dopamine and Glutamine (Krig)	Neurochemistry of GABA and Glycine (Krig)	Medical Skills	Self Study	Review		
12 Noon		Anatomy Lab Group B	Self Study Group A				Self Study	
12:30 PM								
1:00 PM								
1:30 PM								
2:00 PM								
2:30 PM								
3:00 PM	Self Study	Self Study	Self Study	Self Study				
3:30 PM								
4:00 PM								
4:30 PM								

Totals:
 CP/CC: 3
 CCBL: 3
 Lectures: 10
 Labs: 3
 Med. Skills: 2
 Master's: 2
 Reviews: 2
 Exams: 2
 Self Study: 12
 Contact: **18**
 No Contact: 14

Course: Neurosciences
Week 4 - CP: TIA/Stroke (1/28 - 2/1/2019)

	Monday 1/28	Tuesday 1/29	Wednesday 1/30	Thursday 1/31	Friday 2/1		
8:00 AM	Formative Exam	Pathology of Cerebrovascular Diseases I (Al-Eyd)	Master's Colloquium	Neuroimaging I - Normal CT/MRI of the CNS (Ibrahim/Enstrom)	Traumatic Injuries of the Spine & Brain (Lui)		
8:30 AM		Anatomy Lab Group B		Self Study Group A		Neuroimaging II - Normal CT/MRI of the CNS (Ibrahim/Enstrom)	
9:00 AM					Management of Acute Stroke (Lui)	Medical Skills	Self Study
9:30 AM			Secondary Stroke Prevention (Lui)				
10:00 AM							
10:30 AM	CP: Stroke/Transient Ischemic Attack (Lui)					Clinical Case	
11:00 AM	Lunch and Activities	Lunch and Activities	Lunch and Activities	Lunch and Activities	Lunch and Activities		
11:30 AM							
12 Noon	Cerebral Blood Flow, CSF, and Brain Metabolism (Jialal)	Pathology of Cerebrovascular Diseases II (Al-Eyd)	Cerebral Stroke Syndromes (Ernst)	Medical Skills	Self Study		
12:30 PM							
1:00 PM	Anatomy of the Hippocampus and Limbic System (Vanguri)	Anatomy Lab Group A	Brainstem Stroke Syndromes (Ernst)	Medical Skills	Self Study		
1:30 PM							
2:00 PM	Embryology of the CNS (Dhillon)	Anatomy Lab Group A	Self Study Group B	Medical Skills	Self Study		
2:30 PM							
3:00 PM							
3:30 PM							
4:00 PM							
4:30 PM					Anatomy Review (Dhillon)		

Totals:
 CP/CC: 3
 CCBL: 3
 Lectures: 14
 Labs: 3
 Med. Skills: 2
 Master's: 2
 Reviews: 4
 Exams: 3
 Self Study: 9
 Contact: **24**
 No Contact: 16

Course: Neurosciences
 Week 5 - CP: Headaches; Seizures (2/4 - 2/8/2019)

	Monday 2/4	Tuesday 2/5		Wednesday 2/6	Thursday 2/7		Friday 2/8	Totals:	
8:00 AM	CP: Headaches (Frank)	Self Study		EEG (Frank)	CNS Pathogens II & III (El-Sawi)		CNS Pathogens IV (El-Sawi)	CP/CC: 1	
8:30 AM									CCBL: 6
9:00 AM	Primary and Secondary Headaches (Frank)			Pharmacologic Management of Seizures I (Wong)				Pharmacologic Management of Meningitis & Encephalitis (Wong)	Lectures: 13
9:30 AM									Labs: 2
10:00 AM	Pharmacologic Management of Migraines (Wong)			Pharmacologic Management of Seizures II (Wong)	Medical Skills	Biostats Lab	CCBL	Med. Skills: 2	
10:30 AM									
11:00 AM	Seizure Disorders (Frank)			CNS Pathogens I (El-Sawi)				Reviews: 2	
11:30 AM								Exams: 2	
12 Noon	Lunch and Activities			Lunch and Activities	Lunch and Activities	Lunch and Activities	Lunch and Activities	Self Study: 14	
12:30 PM								Contact: <div>24</div>	
1:00 PM	CCBL	Anatomy Lab Mid-Course Summative Group A	CCBL	Medical Skills	Biostats Lab	Admissions Interviews	No Contact: 16		
1:30 PM		Self Study Group B							
2:00 PM									
2:30 PM									
3:00 PM	Self Study	Anatomy Lab Mid-Course Summative Group B	Self Study Group A	Anatomy of the Neck (Dhillon)	Medical Skills	Biostats Lab	Self Study		
3:30 PM									
4:00 PM									
4:30 PM									

CP: Seizure (Frank) - Moved to CCBL

Course: Neurosciences
Week 6 - CP: Dementia (2/11 - 2/15/2019)

	Monday 2/11	Tuesday 2/12	Wednesday 2/13	Thursday 2/14	Friday 2/15	Totals:
8:00 AM	Summative Mid-Course Exam	Neurotoxicology (Yip)	Master's Colloquium	Neurodevelopmental Disorders I (Lui)	Pharmacologic Management of Dementias (Wong)	CP/CC: 3
8:30 AM				Neurodevelopmental Disorders II (Lui)		CCBL: 13
9:00 AM		Anatomy Lab Group A		Self Study Group B	Medical Skills	Self Study
9:30 AM			Pathology of Neurodegenerative Disorders I (Al-Eyd)			
10:00 AM		Pathology of Neurodegenerative Disorders II (Al-Eyd)	Medical Skills	Self Study	Med. Skills: 2	
10:30 AM					CP: Dementia (Lui)	Master's: 2
11:00 AM	Lunch and Activities	Lunch and Activities	Lunch and Activities	Lunch and Activities	Reviews: 2	
11:30 AM					Lunch and Activities	Lunch and Activities
12 noon	Dementing Disorders - Clinical Aspects (Lui)	Neurochemistry of Acetylcholine (Krig)	Increased ICP and Herniation Syndromes (Lui)	Medical Skills		
12:30 PM					Dementing Disorders (Lui) CSF Analysis (Jialal)	Anatomy Lab Group B
1:00 PM	Self Study	Self Study	Self Study	Medical Skills		
1:30 PM					Self Study	Self Study
2:00 PM	Self Study	Self Study	Self Study	Medical Skills		
2:30 PM					Self Study	Self Study
3:00 PM	Self Study	Self Study	Self Study	Medical Skills		
3:30 PM					Self Study	Self Study
4:00 PM	Self Study	Self Study	Self Study	Medical Skills		
4:30 PM					Self Study	Self Study

Course: Neurosciences
Week 6 - CP: Dementia (2/11 - 2/15/2019)

	Monday 2/11	Tuesday 2/12	Wednesday 2/13	Thursday 2/14	Friday 2/15	Totals:			
8:00 AM	Summative Mid-Course Exam	Neurotoxicology (Yip)	Master's Colloquium	Neurodevelopmental Disorders I (Lui)	Pharmacologic Management of Dementias (Wong)	CP/CC: 3			
8:30 AM		Anatomy Lab Group A		Self Study Group B		Neurodevelopmental Disorders II (Lui)	CCBL: 13		
9:00 AM					Pathology of Neurodegenerative Disorders I (Al-Eyd)	Medical Skills	Self Study	Labs: 3	
9:30 AM			Pathology of Neurodegenerative Disorders II (Al-Eyd)					Self Study	Med. Skills: 2
10:00 AM									CP: Dementia (Lui)
10:30 AM			Lunch and Activities		Lunch and Activities	Lunch and Activities	Reviews: 2		
11:00 AM	Lunch and Activities	Lunch and Activities		Lunch and Activities			Exams: 3		
11:30 AM			Lunch and Activities		Lunch and Activities	Lunch and Activities	Self Study: 12		
12 noon	Lunch and Activities	Lunch and Activities		Lunch and Activities			Contact: <div>23</div>		
12:30 PM			Lunch and Activities		Lunch and Activities	Lunch and Activities	No Contact: 17		
1:00 PM	Dementing Disorders - Clinical Aspects (Lui)	Neurochemistry of Acetylcholine (Krig)		Increased ICP and Herniation Syndromes (Aliabadi)?			Medical Skills	Self Study	
1:30 PM	Dementing Disorders (Lui)	Anatomy Lab Group B	Self Study Group A	Tumors of the Nervous System I (Hejazi)	Review				
2:00 PM	CSF Analysis (Jialal)			Tumors of the Nervous System II (Hejazi)		Medical Skills	Self Study		
2:30 PM	Self Study			Tumors of the Nervous System II (Hejazi)	Medical Skills			Self Study	Self Study
3:00 PM						Self Study	Self Study		
3:30 PM				Self Study	Self Study				
4:00 PM		Self Study	Self Study						
4:30 PM	Self Study			Self Study					

Course: Neurosciences

Week 7 - CP: Altered Mental Status and Coma; Taste and Smell Disorders (2/19 - 2/22/2019)

	Monday 2/18	Tuesday 2/19	Wednesday 2/20	Thursday 2/21	Friday 2/22	Totals:		
8:00 AM	President's Day Holiday	CP: Altered Mental Status and Coma (Frank)	Reticular Formation and Ascending Reticular Activating System (Ernst)	CP: Taste & Smell Disorders (Lui)	Histology of the Eye, Olfactory and Gustatory Systems (Al-Eyd)	CP/CC: 4		
8:30 AM						CCBL: 8		
9:00 AM		Anatomy Lab Group B	Toxic and Systemic Causes of Altered Mental Status and Coma II (Frank)	Physiology of the Olfactory and Gustatory Systems (Yaborough)		Lectures: 8		
9:30 AM								Labs: 3
10:00 AM								Med. Skills: 2
10:30 AM								Master's: 2
11:00 AM		Self Study Group A	Inhalational Anesthetics (Wong)	Medical Skills	Self Study	Reviews: 2		
11:30 AM			IV Anesthetics (Wong)				Exams: 13	
12 Noon		Lunch and Activities		Lunch and Activities		Self Study: 17		
12:30 PM		Lunch and Activities		Lunch and Activities		Contact: 15		
1:00 PM		Toxic and Systemic Causes of Altered Mental Status and Coma I (Frank)		Medical Skills	Self Study	Clinical Case		
1:30 PM		Anatomy Lab Group A	Self Study Group B				Self Study	Self Study
2:00 PM								
2:30 PM								
3:00 PM								
3:30 PM								
4:00 PM			Medical Skills	Self Study	Review			
4:30 PM			Medical Skills	Self Study	Self Study			

Course: Neurosciences

Week 8 - CPs: Visual Loss; Pupillary Abnormalities; Diplopia; Eye Redness (2/25 - 3/1/2019) -- LCME Site Visit

	Monday 2/25/LCME	Tuesday 2/26/LCME	Wednesday 2/27/LCME	Thursday 2/28	Friday 3/1	Totals:						
8:00 AM	Physiology of the Retina (Yaborough)	Anatomy of the Face (Dhillon)		Master's Colloquium	Imaging of the Nervous System (Enstrom/Ibrahim)	Anatomy of the Auditory and Vestibular Systems (Ernst)	CP/CC: 6					
8:30 AM							CCBL: 14					
9:00 AM	Physiology of the Eye (Yarborough)	Anatomy Lab Group A	Self Study Group B				Pharmacologic Management of Glaucoma (Wong)	Medical Skills	Biostats Lab	Lectures: 14		
9:30 AM										Med. Skills: 5		
10:00 AM	Pathology of Vision Loss I (Martel & Ramsamooj)			Pharmacologic Management of Macular Degeneration (Wong)	Clinical Case	Master's: 2						
10:30 AM										Reviews: 2		
11:00 AM	Pathology of Vision Loss II (Martel & Ramsamooj)			Exams: 11								
11:30 AM						Self Study: 29						
12 Noon	Lunch and Activities			Lunch and Activities		Contact: 11						
12:30 PM	Lunch and Activities			Lunch and Activities		No Contact						
1:00 PM	CP: Visual Loss (Martel)	Eye Infections and Management (El-Sawi)		Embryology of the Head, Neck and Face (Dhillon)	Medical Skills	Biostats Lab	Admissions Interviews					
1:30 PM												
2:00 PM	CP: Pupillary Abnormalities (Martel)	Anatomy Lab Group B	Self Study Group A	Self Study	Medical Skills	Biostats Lab		Self Study				
2:30 PM												
3:00 PM	CP: Strabismus and Diplopia (Martel)						Self Study Group A		Self Study	Medical Skills	Biostats Lab	Self Study
3:30 PM												
4:00 PM	CP: Eye Redness (Martel)	Self Study Group B	Self Study	Self Study	Self Study	Self Study	Self Study					
4:30 PM												

LCME Site Visit: 2/25 – 2/26.

Week 9 - CPs: Dizziness/Vertigo; Hearing Loss; Ear Pain (3/4 - 3/8/2019)

	Monday 3/4	Tuesday 3/5		Wednesday 3/6	Thursday 3/7	Friday 3/8			
8:00 AM	CP: Dizziness/Vertigo (Lui)	Physiology of the Auditory and Vestibular Systems II (Puglisi)		Master's Colloquium	Pharmacologic Management of Ear Infections (Wong)		Comprehensive Neurosciences Review (Lui)		
8:30 AM					Pharmacologic Management of Dizziness/Vertigo (Wong)				
9:00 AM	CP: Hearing Loss and Tinnitus (Falck)	Anatomy Lab Group B	Self Study Group A	Disorders Causing Dizziness and Vertigo (Lui)	Medical Skills	Self Study		Clinical Case	
9:30 AM									
10:00 AM	CP: Ear Pain (Falck)				Physiology of the Auditory and Vestibular Systems I (Puglisi)	Medical Skills	Self Study		Course Evaluation
10:30 AM									
11:00 AM	Physiology of the Auditory and Vestibular Systems I (Puglisi)			Medical Skills	Self Study	Course Evaluation			
11:30 AM									
12 Noon	Lunch and Activities	Lunch and Activities	Lunch and Activities	Lunch and Activities	Lunch and Activities				
12:30 PM									
1:00 PM	Anatomy of the Infratemporal Fossa (Dhillon)	Embryology of the Eye, Ear and Olfactory Apparatus (Dhillon)		Ear infections (El-Sawi)	Medical Skills	Self Study	Comprehensive Neurosciences Review (Lui)		
1:30 PM									
2:00 PM		Self Study	Anatomy Lab Group A	Self Study Group B	Medical Skills	Self Study			
2:30 PM									
3:00 PM									
3:30 PM									
4:00 PM									
4:30 PM									

Totals:

CP/CC:	5
CCBL:	
Lectures:	10
Labs:	3
Med. Skills:	2
Master's:	2
Reviews:	6
Exams:	
Self Study:	12
Contact:	22
No Contact	18

Total contact hours: 209
Average: 23.2 vs 20.9/week

Course: Neurosciences
Week 10 - Exam Week (3/11 - 3/15/2019)

	Monday 3/11	Tuesday 3/12	Wednesday 3/13		Thursday 3/14	Friday 3/15						
8:00 AM	Summative Exam	Self Study	Self Study		MS Exam	Remedial and Tutorials						
8:30 AM												
9:00 AM												
9:30 AM												
10:00 AM												
10:30 AM												
11:00 AM	Self Study	Self Study	Self Study		MS Exam	Remedial and Tutorials						
11:30 AM												
12 Noon	Lunch and Activities						Lunch and Activities	Lunch and Activities		Lunch and Activities	Lunch and Activities	
12:30 PM	Self Study						Self Study	Anatomy Lab Final Summative Group B		Self Study Group A	MS Exam	Remedial and Tutorials
1:00 PM												
1:30 PM												
2:00 PM												
2:30 PM												
3:00 PM												
3:30 PM												
4:00 PM												
4:30 PM	Anatomy Lab Final Summative Group A	Self Study Group B										



2018 – 2019 Academic Year
Integumentary & Musculoskeletal Systems Course Syllabus
Course #: COM 511 and HS 521 (CDM)
Year: I
Semester: Fall

Course Dates: October 29, 2018 – December 21, 2018

Credits Hours: 7

Course Director:

Nripendra Dhillon, MBBS, MS

Associate Professor of Anatomy

CNU COM Department of Basic Sciences

Office: Room 144

Phone: (916) 686-7474

nripendra.dhillon@cnsu.edu

(Quickest response: Please contact through email. Thanks!)

Coordinator:

Samantha Xiong

samantha.xiong@cnsu.edu

Disclaimer about changes in Syllabus and Course Calendar:

Every effort will be made to adhere to the contents of this syllabus. However, this document is subject to change in the event of unforeseen, extenuating circumstances. Students will be notified as soon as possible if changes in the syllabus become necessary.

Course Teaching Faculty

Name/Degree	Rank/Title
Ghaith Al Eyd, MD	Associate Professor, Pathology
Nripendra Dhillon, MBBS, MS	Associate Professor, Anatomy
Guy diSibio, MD, PhD	Associate Professor, Pathology
Nehad El-Sawi, PhD	Professor, Microbiology and Immunology
Susan Ely, PhD	Professor, Microbiology and Immunology
Alan Ernst, PhD	Assistant Professor, Anatomy
Darilyn Falck, MD	Assistant Dean of Student Affairs
Rochelle Frank, MD	Associate Professor, Neurology
Valeri Gerriets, PhD	Assistant Professor, Pharmacology
Nazila Hejazi, MD	Assistant Professor, Pathology
Rudolph Holguin, MD	Associate Professor, Emergency Medicine
Michael Ibrahim, MD, PhD	Associate Professor, Biochemistry and Pharmacology
Kenny Jialal, MBChB, MD	Assistant Dean of Research
Sheryl Krig, PhD	Assistant Professor, Biochemistry
ForShing Lui, MD	Chair, Clinical Sciences
Joseph Puglisi, PhD	Assistant Professor, Biostatistics
Rajendra Ramsamooj, MD	Assistant Dean of Curriculum
Leonard Ranasinghe, MD, PhD	Professor, Emergency Medicine
Joseph Rogers, MD	Assistant Professor, Family Medicine
Joel Talsma, MS	Instructor, Anatomy
Sailabala Vanguri, MBBS, MD	Assistant Professor, Anatomy
Katherine Whitcome, PhD	Assistant Professor, Anatomy
Jason Wong, MD	Assistant Professor, Pharmacology
Tracy Yarbrough, MD, PhD	Associate Professor, Physiology

Open Door Policy: Course faculty have an open-door policy and encourage contact from students by e-mail and in person to share impressions, concerns and/or ideas at any time

Volunteer Community Faculty
Name/Degree
Jenny Boakes, MD; Shriners Orthopaedic Surgeon
Jasdeep Sharma, MD; Kaiser Dermatologist
Dana Miller-Blair, MD; Community Rheumatologist

Note: Communication with volunteer community faculty must be channeled through the course director.

Course Description

Each week consists of 1 to 2 clinical presentations that are accompanied by clinical algorithms, clinical reasoning guides, and objectives lists. Clinical faculty will walk the students through the clinical algorithm emphasizing critical decision points and setting the framework for the integration of the basic and clinical sciences. Following the clinical algorithm presentation by the clinical faculty, the basic science faculty will present fundamental principles from the traditional basic sciences (e.g. anatomy, biochemistry, cell biology, genetics, immunology, microbiology, nutrition, pathology, pharmacology, physiology, etc.) to ensure adequate knowledge and skills required to arrive at a correct diagnosis. These basic science lectures will highlight the normal structures and functions of the systems as a whole, followed by an examination of various disease states including care and treatment options. Students will participate in worked case example sessions, dissect in anatomy lab, and take part in a Medical Skills course and Masters Colloquium course that run concurrently.

Course Objectives

By the conclusion of this course, the student will demonstrate the ability to:

#	Course Learning Objectives (CLOs)	Program Learning Objectives (PLOs)
1	Identify and describe the common and unique molecular and structural components namely cells, tissues and organs that lead to the integrated functions of the integumentary system and musculoskeletal systems.	PLO-2 (MSK1,MSK2)
2	Describe the developmental origin, developmental bases of variations, congenital anomalies and normal and abnormal growth as well as aging of the integumentary and musculoskeletal structures.	PLO-2 (MSK1,MSK2)
3	Explain how genetic variations alter the structural and metabolic properties of the integumentary and musculoskeletal systems, and how this, in turn, influences health.	PLO-2 (MSK1,MSK2)
4	Apply knowledge of the cellular and molecular responses to injury and inflammation to diagnose disorders of the integumentary and musculoskeletal systems and assess therapeutic interventions.	PLO-2 (MSK1,MSK2)
5	Apply the principles of imaging and biomechanics to explain the risks, limitations, and appropriate use of diagnostic and therapeutic interventions.	PLO-1 (PC5); PLO-2 (MSK1,MSK2)
6	Describe factors that affect integumentary and musculoskeletal systems diseases and injury, considering gender, ethnicity, behavior, culture, occupation, and environment.	PLO-2 (MSK1,MSK2)
7	Apply knowledge of pharmacokinetics and pharmacodynamics to guide safe and effective treatments of integumentary and musculoskeletal systems diseases.	PLO-2 (MSK1, MSK2, MSK3)
8	Apply principles of biostatistics and epidemiology to the evaluation of disease prevalence, risk, etiology, diagnosis, management, prognosis, and prevention of diseases.	PLO-2 (MSK1, MSK2, MSK3,MSK4)
9	Demonstrate appropriate levels of skills in communication, professionalism and medical/procedure-related abilities in dealing with patients, and include environmental, cultural and societal factors in clinical decision making.	PLO-1 (PC1, PC2, PC3, PC4, PC5, PC6, PC7); PLO-3 (C1, C2, C3); PLO-4 (P1, P2, P3)

MSK: Medical & Scientific Knowledge; PC; Patient Care; C: Communication; P: Professionalism

Note: All session objectives listed in the individual sessions (by date and time) are mapped to the course objectives.

Key: PLO=Program Learning Objective (#1=Patient Care; #2=Medical & Scientific Knowledge; #3=Communication and Interpersonal Skills; #4=Professionalism; #5=Health Care Systems; #6=Reflective Practice and Personal Development)

Session Locations

Two large lecture halls, each with a seating capacity of 180 students, will be used for the basic science sessions. Eight small classrooms/college rooms, each with a capacity for 25 students and the Simulation Center space are available for small group sessions. A large gross anatomy laboratory with capacity for cadaver dissections, where a group of students will be assigned to each cadaver, is available for anatomy dissection.

Lecture/Session Duration

All lectures on the calendar as one-hour sessions will be 50 minutes long with 10 minutes break at the end for questions and preparation for the next session. Any session/lecture longer than one hour will have 10 minutes break between every two hours.

Teaching/Learning Methodology

- Case-Based instruction/Learning
- Demonstration
- Discussion, Large group (>12)
- Discussion, Small Group (<12)
- Independent Learning
- Laboratory
- Lecture
- Patient Presentation – Faculty
- Patient Presentation – Learner
- Peer Teaching
- Reflection
- Self-Directed Learning
- Team-Based Learning (TBL)

Online Materials – Canvas: Canvas is California Northstate University's Learning Management System.) Use your CNU NETID and password.

Turning Point: Every Phase A student was given a Turning Point Clicker during Orientation. **Please bring the Clicker to class at all times.**

Library/Learning Resources

The CNUCOM Library and Learning Resource Center is available for students, faculty, and staff. This program includes an initial 4200 square feet of space and seating for 100 devoted to the following resources: Library Facility and Collection, Computer resources, CNUCOM Electronic Library, and Interlibrary Loan Program. CNUCOM Resource Center maintains an Electronic Learning Resources System to provide information resources to students, faculty, and staff, and serve as an entry point for all users to meet their academic and research needs.

Required Textbook(s)

Subject	Author	Title
Biochemistry	Lieberman	Marks' Basic Medical Biochemistry: A Clinical Approach 4e
Genetics	Nussbaum, McInnes & Willard	Thompson & Thompson Genetics in Medicine 8e
Internal Medicine	Kasper, Fauci, Hauser, Longo, Jameson & Loscalzo	Harrison's Internal Medicine
Immunology	Paraham	The Immune System 4e
Microbiology	Engleberg	Schaechter's Mechanisms of Microbial Disease 5e
Pediatrics	Tintinalli, Stapczynski, Ma, Yealy, Meckler & Cline	Tintinalli's Emergency Medicine: A Comprehensive Study Guide, 8e; Chapter 128 "Diarrhea in Infants and Children"
Physiology	Hall	Guyton and Hall Textbook of Medical Physiology 13e

Recommended Textbook(s)

Subject	Author/ISBN	Title
Anatomy	Moore, Dalley & Augur	Clinically Oriented Anatomy 8e
Anatomy Lab	Patrick Tank	Grant's Dissector 15e
Anatomy Atlas (Pick any one that suits your learning style)	ISBN-13:978-1455704187	Netter's Atlas of Human Anatomy 6e
	ISBN-13:978-1626232525	Gilroy's Atlas of Anatomy 3e
	ISBN-13:978-1469890685	Grant's Atlas of Anatomy 14e
	ISBN-13:978-1451193183	Rohen and Yokochi's Anatomy: A Photographic Atlas 8e
Embryology	Moore and Persaud	The Developing Human: Clinically Oriented Embryology 10e
Histology	Mescher AL	Junqueira's Basic Histology 14e
	Ross MH & Pawlina W	Histology: A Text and Atlas 7e
	Young B	Wheater's Functional Histology: A Text and Colour Atlas 6e
Pathology	Kumar, Vinay, Abul Abbas & Aster	Robins & Cotran Pathologic Basis of Diseases 9e
Pharmacology	Bardal	Applied Pharmacology

Attendance

Lecture attendance is highly recommended, and laboratory sessions are mandatory. Sessions labeled as mandatory on the course calendar are required.

Sign-in sheets or electronic attendance will be provided at all mandatory activities. Students will be responsible for signing in themselves. The sign-in sheets or electronic tracking will be collected 5 minutes after the activity begins. Certain excused absences are allowed (please see Excused Absence Policy).

The following procedure(s) will be employed for breaches of these course requirements:

9. Administrative/Support staff will notify the course director(s) and Assistant Dean of Academic Affairs
10. A note will be placed in the student's file
11. Lapses in attendance fall under the COM's Professionalism Policy and are subject to inclusion in the student's MSPE
12. Persistent lapses in attendance will require the student to appear before the Student Promotions Committee

Exams and Grading/Assessment

▪ Formative Exams

- One formative USMLE Step 1 format multiple-choice examination; 50 questions
- One anatomy lab formative exam to give the students a feel for the nature and content in such a lab-based exam

▪ Summative Exams

- One USMLE Step 1 format mid-course examination; 100 multiple-choice questions
- One USMLE Step 1 format **comprehensive** final examination at the end of the course; 100 multiple-choice questions
- Two anatomy laboratory practical exams

Clinical Cases: Five 2-hour sessions devoted to presentation and discussion of Clinical Cases will be offered; attendance at these sessions is compulsory. Students will work in groups of five and student presentations will be assessed using a rubric

Clinical Case-Based Learning: Three sessions of 2-hours each devoted to self-directed learning following a problem-based learning format

Special Student Assignments:

During the course, there will be 1 special assignment – a reflective writing exercise that is due by 1:00 PM on 11/26/2018, the Monday after Thanksgiving. This is mandatory. It will not be scored but completing it adequately is required to receive a final course grade.

Total Course Score and Grading

The total numeric score for the course will be calculated as follows, which translates to recording a passing grade if 70 or above, and an honors grade if 90 or above.

Components	%	Notes/Explanation
Mid-course Summative Exam	25	NBME CAS 100 questions
End of Course Comprehensive Summative Exam	50	NBME CAS 100 questions
Anatomy Laboratory Practicals	25	2 x High Score + Low Score divided by 3 = 70% or more
Clinical Case Presentations (CC) Students are expected to successfully complete in order to pass the course.	0	Refer to description below
Clinical Case Based Learning (CCBL) Students are expected to successfully complete in order to pass the course.	0	Refer to description below
Reflective writing assignment	0	Completion is required

Formative and summative NBME exams score reports will be available 3-days after the exam; it is the student's responsibility to contact the course director to obtain their individual score report.

Any additional (retesting) exams will be at the expense of the student.

The successful completion of the course is based on demonstrating high standards of ethical and professional behavior, passing both the End-of-Course Comprehensive Summative Exam **AND** the Total Course with a score of 70% or higher, and passing the anatomy practical exams as computed ($2 \times \text{High score} + \text{Low score} / 3$) with a score of 70% or higher.

Grading percentages

Passing grade requires a total score of 70% or higher

Honors grade requires a total score of 90% or higher

Remediation

Students failing the course will be referred to the Student Promotion Committee (SPC) and a custom-tailored remediation plan will be developed.

Description of Clinical Cases and Clinical Case Based Learning

Clinical Cases (CCs) and Clinical Case Based Learning (CCBLs) are designed to promote the development of teamwork, professionalism, and evidence-based patient management skills that integrate the basic and clinical sciences.

During the M1 year, following a faculty-led Clinical Presentation (CP) lecture, the students will receive a PowerPoint presentation that contains the subjective (including the Chief Complaint, History of Present Illness, and Past Medical History) and objective (including the Physical Examination) findings for a hypothetical patient who presents with a complaint aligned with the CP lecture. As they assimilate basic and clinical science content throughout the week's lectures, students will work in assigned groups to complete a series of template slides included in the PowerPoint presentation. At the end of the week, each student group will submit its final presentation for a grade. One group in each college (on a preassigned, rotating basis) will present the case to their College for discussion. Each group will submit their case presentation for grading using a defined rubric by a rotating faculty member. Grading will be Pass/Needs Improvement/Fail.

During the M2 year, the process will be similar except that during the CP, students will develop learning objectives based the case presented. At the end of the week, each group will present a SOAP note and their Learning Objective to their College. The College Master will be responsible for grading and feedback. Grading will be Pass/Needs Improvement/Fail.

Clinical Case-Based Learning (CCBL) is an integrated, Problem-Based Learning modality that affords student self-directed learning in the context of a clinical case setting. Each week-long case is sequentially revealed over the course of three two-hour sessions. Students work in groups of about nine. For each case, each student will provide at least one teaching presentation to the group – this should be a PowerPoint slide set that includes citations for all images used and an *annotated* list of references from textbooks and the primary literature. Students are expected to offer constructive feedback on these presentations. The group will devise their own session learning objectives on Day 1 of each week; these will be the topics presented orally on Day 2. CCBL group assignment will remain stable for an entire academic year, to allow longitudinal formative feedback from facilitators, and to foster periodic peer- and self-assessment. Case Learning Objectives comprise material that may be tested in NBME course exams. All sessions are mandatory and timely arrival is expected in order for students to earn a grade of PASS for this component of a course; grading will be Pass/Fail. When feasible, CCBL sessions will occur at least once in each non-experiential course.

Anatomy Laboratory Rules

An appreciation of the significance of the anatomical gift is important to ensure our continuing respect for the altruism of our donors. The UC Davis and UC San Francisco willied body programs foster a learning partnership with CNUCOM in creating an educational relationship between the donor, the teacher, and the student. Dissection is a privilege and an incredible gift from the donors who have chosen to give so that we may learn.

Some may feel uneasy and anxious at the prospect of first dealing with cadavers; this is a natural response inasmuch as dealing with death is not always easy. Talk about your feelings with the faculty. Share them with your peers. Generations of students have experienced similar emotions and conversation helps calm our apprehensions.

In compliance with State and Federal regulations, and in the interest of your personal safety, you are required to follow these rules of the anatomy lab:

1. The donors are to be treated with dignity and utmost respect at all times. Crude or inappropriate remarks could result in dismissal from the lab.
2. Similar to medical settings, the discussion of donors or lab practices outside of the lab is inappropriate unless it is for the express purpose of study or learning. The nature of the learning process within the lab can be upsetting to the general public, so always be mindful of who could be listening to conversations.
3. The anatomical materials from a donor are a precious resource, and a protected resource. Under no circumstances shall anatomical material be taken from the laboratory.
4. Each donor is sent with an identification tracking number and device. This number and/or device must remain affixed to the specimen throughout its use until its return to the willied body program. All information regarding the donor is confidential.
5. Fluid Disposal: There are containers in the room for fluid collection. If any are full, let the anatomy lab manager know.
6. Trash: Please dispose of any soiled gloves, paper towels, aprons, or other supplies in the trash cans. When you see the trash cans are near to being full, please let the anatomy lab manager know.
7. Dissected Tissue: Any bits of skin, fat or other human tissues must be disposed of in the WHITE buckets at your table. Please do not put any other items in these buckets. If this can is nearing capacity, please let the anatomy lab manager know. Such items from each donor are put in separate plastic bags with the ID# of the donor, kept in cold storage, and returned with other remains of the donor at the time of cremation.

8. The anatomy lab is under video surveillance, and is monitored for entry through identification badge scans. The person using the identification badge is responsible for all people who enter with them. Please request the identity of any person who is unknown to you.
9. All equipment and models within the anatomy lab are identified and monitored. No equipment or models are allowed to leave the anatomy lab without permission.
10. To protect the dignity and privacy of the donor, the face or any other identifying feature of the case shall never be publicly displayed. This includes display to students, staff, visitors and faculty not participating in the intended use of the material.
11. Horseplay within the lab is strictly prohibited.
12. The use of cell phones and photography by students is not allowed.
13. Universal precautions must be followed. Wear protective clothing/lab coat and gloves at all times while dissecting, and protective eyewear when there is a risk of splash.
14. If you use contacts, it is highly recommended that you wear glasses when in lab.
15. If you have a chemical sensitivity let a member of your faculty know; they will assist you in purchasing a respirator and will train you to use it.
16. No food, drink, or chewing gum or applying cosmetics is permitted in the laboratory.
17. No open toed shoes are allowed. Your shoes should protect your feet from accidental chemical drips and injury from falling sharps. Your shoes should provide sufficient traction for use in a lab where the floor has the possibility of being slippery. It is recommended that you have a pair of shoes for lab use only.
18. Shorts or skirts are not permitted (please see the Student Handbook Dress code policy for Anatomy Lab).
19. Students with long hair need to have it pulled back and tied.
20. Sharps Safety: Always use hemostats or a blade-removal tool to remove a scalpel blade from its handle. Used blades must be disposed in the provided sharps containers.
21. Dissection equipment: All the items you should need are provided for you. Please remember to wash and dry the instruments at the end of each session so they do not rust.
22. Prevent desiccation by using wet cheesecloth to cover your donors as needed. Remember to always use wetting solution to moisten dissected parts otherwise it will dry your dissection! Wetting solution contains chemicals that can cause irritation and burns. Use it with care.
23. When leaving the lab, please remember to properly wrap and moisten your cadaver. This is essential! The table covers should be closed, and the lab doors should be locked behind you.

For additional information, please contact:

Nripendra Dhillon, MBBS, MS: (916) 686-7474

N El-Sawi Course syllabus template approved by Curriculum Committee on August 5, 2016; revised September 27, 2017;
July 30, 2018

Sailabala Vanguri, MD: (916) 686-7965

Student Evaluations of Course and Faculty

Students are required to complete these evaluations during the assigned mandatory session on the course calendar. Course evaluations will be scheduled in the course calendar for the last day of instruction. The goal for course evaluations is 100% participation. In the event that there is less than 90% class participation, grades will be withheld, by both the course director and the Registrar, for the entire class until the 90% participation level is reached.

Students will be expected to comply with all CNU and COM policies.

Weekly Course Calendars are on the Following Pages:

Integumentary & Musculoskeletal Systems										
Week 1 - CP: Muscle Weakness										
	Monday 10/29/2018	Tuesday 10/30/2018		Wednesday 10/31/2018	Thursday 11/1/2018	Friday 11/2/2018				
8:00 AM	Introduction to MSK and Anatomy Dhillon	Introduction to Imaging 1 Ibrahim		Imaging of the Vertebral Column Ibrahim	Clinical Aspects of NMJ and Muscle Disorders Frank	Self Study				
8:30 AM		Anatomy Lab Group A	Self Study	Neuromuscular Transmission & Excitation Yarbrough		Neuromuscular Blockers/Spasmolytics Gerriets				
9:00 AM				Biomechanics of Muscle Contraction Krig						
9:30 AM				Anatomy of the Pectoral Region and Arm Vanguri						
10:00 AM	Clinical Presentation: Muscle Weakness Frank			Medical Skills Group A	Self Study	Clinical Cases				
10:30 AM	Histology of Muscles and Joints Ramsamooj									
11:00 AM										
11:30 AM										
12:00 PM	Lunch and activities	Lunch and activities	Lunch and activities	Lunch and activities	Lunch and activities					
12:00 PM										
1:00 PM	Anatomy of the Vertebral Column Ernst	Introduction to Imaging 2 Ibrahim		Pathology of Muscle Diseases and the Neuromuscular Junction diSibio	Medical Skills Group B	Self Study				
1:30 PM	Muscles of the Back Ernst	Anatomy Lab Group B	Self Study							
2:00 PM					Medical Skills Group C	Self Study				
2:30 PM							Anatomy of the Scapular Region Vanguri			
3:00 PM	Anatomy Lab Safety MANDATORY SESSION Mara									
3:30 PM										
4:00 PM										
4:30 PM										

Integumentary & Musculoskeletal Systems														
Week 2 - CP: Shoulder Pain														
	Monday 11/5/2018		Tuesday 11/6/2018		Wednesday 11/7/2018		Thursday 11/8/2018		Friday 11/9/2018					
8:00 AM	Clinical Presentation: Shoulder Pain Holguin		Bone & Collagen Metabolism; the Extracellular Matrix Part 1 Krig		Master's Colloquium		p Values and Statistical Significance Puglisi		Pharmacologic Management of Pain Wong					
8:30 AM														
9:00 AM	Dynamics of Calcium & Vitamin D in MSK Krig		Anatomy Lab Group B Self Study				Bone Metabolic Disorders Hejazi							
9:30 AM														
10:00 AM	Brachial Plexus Dhillon				MSK Exercise Physiology Yarbrough		Medical Skills Groups TBA Self Study		Clinical cases					
10:30 AM														
11:00 AM														
11:30 AM														
12:00 PM	Lunch and activities		Lunch and activities		Lunch and activities		Lunch and activities		Lunch and activities					
12:30 PM														
1:00 PM	Pathogens of Musculoskeletal System/Skin - I El-Sawi		Bone & Collagen Metabolism; the Extracellular Matrix Part 2 Krig		Genetic Disorders of MSK Krig		Medical Skills Groups TBA Self Study		Anatomy Lab Formative Group A Self Study					
1:30 PM														
2:00 PM			Anatomy Lab Group A Self Study						Self Study		Medical Skills Groups TBA Self Study		Anatomy Lab Formative Group B Self Study	
2:30 PM														
3:00 PM														
3:30 PM														
4:00 PM	Self Study								Self Study					
4:30 PM														

Integumentary & Musculoskeletal Systems
Week 3 - CP: Neck & Back Pain

	Monday 11/12/2018	Tuesday 11/13/2018	Wednesday 11/14/2018	Thursday 11/15/2018	Friday 11/16/2018		
8:00 AM	Formative Exam	Type I and Type II Errors Puglisi	Seropositive Arthritis diSibio	Management of Infectious Diseases of the Musculoskeletal System 2 Ibrahim	Imaging of the Upper Limb Vanguri		
8:30 AM		Anatomy Lab Group A	Pathogens of Musculoskeletal System/Skin - II El-Sawi	Avascular Necrosis and Raynaud Syndrome Hejazi			
9:00 AM				Medical Skills Group A	CCBL		
9:30 AM			Management of Infectious Diseases of the Musculoskeletal System 1 Ibrahim				
10:00 AM			Self Study	Self Study			
10:30 AM							
11:00 AM	Clinical Presentation: Neck and Back Pain Rogers						
11:30 AM	Lunch and activities	Lunch and activities	Lunch and activities	Lunch and activities	Lunch and activities		
12:00 PM							
12:30 PM	Anatomy of the Forearm Vanguri	Anatomy of the Hand Vanguri	CCBL	Medical Skills Group B	Self Study		
1:00 PM		Anatomy Lab Group B		Self Study			
1:30 PM		Self Study	Medical Skills Group C				
2:00 PM							
2:30 PM		Self Study		Self Study		Self Study	
3:00 PM							
3:30 PM							
4:00 PM							
4:30 PM							

Integumentary & Musculoskeletal Systems															
Week 4 - CP: Fractures															
	Monday	Tuesday		Wednesday	Thursday	Friday									
	11/19/2018	11/20/2018		11/21/2018	11/22/2018	11/23/2018									
8:00 AM	Self Study	Pathology of Tuberculosis, Osteomyelitis, Seronegative Spondyloarthritis Hejazi		Midterm Summative Exam	THANKSGIVING HOLIDAY	THANKSGIVING HOLIDAY									
8:30 AM															
9:00 AM	Joints of the Upper Limb Vanguri	Anatomy Lab Group B	Self Study												
9:30 AM															
10:00 AM							Wound Healing Al Eyd								
10:30 AM				Self Study											
11:00 AM			Blood Supply of the Upper Limb Dhillon												
11:30 AM															
12:00 PM	Lunch and activities	Lunch and activities		Lunch and activities											
12:30 PM															
1:00 PM	Nerves, Dermatomes and Myotomes of the Upper Limb Dhillon	Clinical Presentation: Fractures Falck		Self Study											
1:30 PM		Anatomy Lab Group A	Self Study												
2:00 PM															
2:30 PM															
3:00 PM	Self Study														
3:30 PM															
4:00 PM															
4:30 PM															

Integumentary & Musculoskeletal Systems									
Week 5 - CP: Monoarticular & Polyarticular Joint Pain									
	Monday	Tuesday		Wednesday	Thursday	Friday			
	11/26/2018	11/27/2018		11/28/2018	11/29/2018	11/30/2018			
8:00 AM	Clinical Presentation: Monoarticular & Polyarticular Joint Pain Ramsamooj	Anatomy of the Anterior and Medial Thigh 1 Boakes		Master's Colloquium	Pathology of Benign Lumps and Masses Hejazi	Pharmacological Management of Gout and Pseudogout Jialal			
8:30 AM									
9:00 AM	Purine Metabolism: Gout & Pseudogout Krig	Anatomy Lab Group A	Self Study		Bone & Soft Tissue Tumors Hejazi	Pathology of Malignant Lumps and Masses diSibio	Local Anesthetics Wong		
9:30 AM									
10:00 AM	Immune Arthropathies Miller-Blair			Medical Skills Group C		Self Study	Clinical Cases		
10:30 AM									
11:00 AM									
11:30 AM									
12:00 PM	Lunch and activities			Lunch and activities		Lunch and activities		Lunch and activities	
12:30 PM									
1:00 PM	Tumor Immunology Ely	Anatomy of the Anterior and Medial Thigh 2 Boakes		Anatomy Lab Midterm Summative Group A	Self Study	Self Study			
1:30 PM									
2:00 PM	DMARDS Wong	Anatomy Lab Group B	Self Study				Anatomy Lab Midterm Summative Group B	Self Study	Self Study
2:30 PM									
3:00 PM									
3:30 PM									
4:00 PM	Self Study								
4:30 PM									

Integumentary & Musculoskeletal Systems
Week 6 - CP: Hip, Knee, Ankle, and Foot Pain

	Monday	Tuesday	Wednesday	Thursday	Friday			
	12/3/2018	12/4/2018	12/5/2018	12/6/2018	12/7/2018			
8:00 AM	Clinical Presentation: Hip, Knee, Ankle & Foot Pain Holguin	Self Study		Introduction to Pathology Lab Hejazi	Self Study			
8:30 AM								
9:00 AM	Introduction to Clinical Toxicology Ranasinghe	Anatomy Lab Group B	Self Study	Medical Skills Group C	Neoplastic and other Tumor-like Skin Lesions Part 2 diSibio			
9:30 AM								
10:00 AM								
10:30 AM								
11:00 AM	Limb Development Dhillon		Clinical Presentation: Skin Ulcers & Tumors Sharma	Pathology Lab Pathology Team Group B	Clinical Cases			
11:30 AM								
12:00 PM	Lunch and activities	Lunch and activities	Lunch and activities	Lunch and activities	Lunch and activities			
12:30 PM								
1:00 PM	Anatomy of the Gluteal Region and Posterior Thigh Boakes	Anatomy of the Leg and Foot 1 Boakes	Autoimmune Vasculitides Miller-Blair	Medical Skills Group A	Pathology Lab Pathology Team Group C			
1:30 PM								
2:00 PM						Self Study	Medical Skills Group B	Pathology Lab Pathology Team Group A
2:30 PM								
3:00 PM	Self Study	Anatomy Lab Group A	Skin Histology Hejazi					
3:30 PM								
4:00 PM			Neoplastic and other Tumor-like Skin Lesions Part 1 Hejazi					
4:30 PM								

Integumentary & Musculoskeletal Systems						
Week 7 - CP: Skin Rashes, Papules, and Macules; Skin Ulcers and Tumors						
	Monday 12/10/2018	Tuesday 12/11/2018		Wednesday 12/12/2018	Thursday 12/13/2018	Friday 12/14/2018
8:00 AM	Inflammatory and other Non-neoplastic Disorders of the Skin Hejazi	Treatment of Skin Cancer Sharma		Master's Colloquium	Clinical Cases	Research Day
8:30 AM						
9:00 AM						
9:30 AM						
10:00 AM	Anatomy of the Leg and Foot 2 Boakes	Anatomy Lab Group A	Self Study	Nerves, Dermatomes and Myotomes of the Lower Limb Dhillon	Medical Skills Group B	
10:30 AM						
11:00 AM						
11:30 AM	Blood Supply of the Lower Limb Dhillon					
12:00 PM	Lunch and activities	Lunch and activities		Lunch and activities	Lunch and activities	Lunch and activities
12:30 PM						
1:00 PM	Imaging of the Lower Limb 1 Ibrahim	Pharmacologic Treatment of Skin Disorders and Fungal Infections 1 Ibrahim		Pharmacologic Treatment of Skin Disorders and Fungal Infections 2 Ibrahim	Medical Skills Group C	Course Evaluation Al Eyd
1:30 PM						
2:00 PM	Pathogens of Musculoskeletal System/Skin - III El-Sawi	Anatomy Lab Group B	Self Study	Self Study	Medical Skills Group A	Self Study
2:30 PM						
3:00 PM						
3:30 PM						
4:00 PM	Imaging of the Lower Limb 2 Ibrahim					
4:30 PM						

Integumentary & Musculoskeletal Systems Week 8 - Exam Week						
	Monday 12/17/2018	Tuesday 12/18/2018	Wednesday 12/19/2018	Thursday 12/20/2018		Friday 12/21/2018
8:00 AM	Summative Exam	Self Study	Self Study	Medical Skills Summative Exam Groups TBA	Self Study	Potential Remediation/ Review Time
8:30 AM						
9:00 AM						
9:30 AM						
10:00 AM						
10:30 AM						
11:00 AM	Self Study			Medical Skills Summative Exam Groups TBA	Self Study	
11:30 AM						
12:00 PM	Lunch and activities	Lunch and activities	Lunch and activities	Lunch and activities		Lunch and activities
12:30 PM						
1:00 PM	Master's Colloquium Summative Exam	Self Study	Anatomy Lab Summative Group B	Self Study	Medical Skills Summative Exam Groups TBA	Self Study
1:30 PM						
2:00 PM	Self Study		Anatomy Lab Summative Group A	Self Study	Medical Skills Summative Exam Groups TBA	Self Study
2:30 PM						
3:00 PM						
3:30 PM						
4:00 PM						
4:30 PM						



2018 – 2019 Academic Year
Cardiovascular & Pulmonary Systems Course Syllabus
Course #: 531 and HS 522 (CDM)
Year: I
Semester: Spring

Course Dates: March 25, 2019 – May 31, 2019

Credits Hours: 09**Course Co-Director:****Darilyn Campbell Falck, MD FACEP**

Department of Medical Education, Office #124

Office: 916-686-7914; Mobile: 916-202-0213

Email: darilyn.falck@cnsu.edu**Course Co-Director:****Tracy L Yarbrough, PhD MD MAEd**

Department of Basic Science, Office #142

Office: 916-686-7610; Mobile: 703-517-5775

Email: tracy.yarbrough@cnsu.edu**Coordinator:****Samantha Xiong****Disclaimer about changes in Syllabus and Course Calendar:**

Every effort will be made to adhere to the contents of this syllabus. However, this document is subject to changes in the event of unforeseen, extenuating circumstances. Students will be notified as soon as possible if changes in the syllabus become necessary.

Course Teaching Faculty

Name/Degree	Rank/Title
Ghaith Al-Eyd, MBChB (MD), MSc, PhD, MIAC	Assistant Dean of Assessment; Associate Professor of Pathology
Scott Braley, MD	Associate Professor of Surgery, Oncology, Anatomy and Clinical Skills
Nripendra Dhillon, MBBS, MS	Associate Professor of Anatomy
Guy diSibio, MD, PhD	Associate Professor of Pathology, Hematopathology, Surgical Pathology, Molecular Genetics and Clinical Skills
Nehad El-Sawi, PhD	Professor of Molecular Biology, Immunology and Microbiology
Susan Ely, PhD	Professor of Molecular Biology, Immunology and Microbiology
Randall Enstrom, MD	Associate Professor of Radiology
Darilyn Campbell Falck, MD, FACEP	Assistant Dean of Student Affairs; Associate Professor of Emergency Medicine
Xiaodong Feng, PhD, PharmD	Associate Dean of Student Affairs, Admissions and Outreach; Professor of Pharmacology and Oncology
Valerie Gerriets, PhD	Assistant Professor of Pharmacology
Nazir Habib, MD	Associate Professor of Internal Medicine & Critical Care
Nazila Hejazi, MD	Assistant Professor of Pathology
Laura Hoffman, MD	Associate Professor of Endocrinology
Rudolph (Rudy) Holguin, MD	Associate Professor of Emergency Medicine
Michael Ibrahim, MD, PhD	Associate Professor of Biochemistry, Pharmacology, Physiology & Radiology/Imaging
Ishwarlal (Kenny) Jialal, MBChB, MD	Assistant Dean of Research; Professor of Physiology, Metabolism, and Pathology
Sheryl Krig, PhD	Assistant Professor of Biochemistry
Malcolm McHenry, MD	Associate Professor of Internal Medicine, Cardiology & Medical Skills
Jose Puglisi, PhD	Assistant Professor of Physiology & Biostatistics
Raj Ramsamooj, MD	Assistant Dean of Curriculum; Professor of Pathology, Surgical Pathology and Clinical Skills
Mark Sheffield, MD, PhD	Associate Professor of Physiology, Endocrinology, and Clinical Skills
Joseph Silva, MD	Dean; Professor of Internal Medicine and Infectious Diseases
Sailabala Vanguri, MBBS, MD	Assistant Professor of Anatomy
Jean-Claude Veille, MD	Professor of Obstetrics & Gynecology
Tracy Yarbrough, PhD, MD, MAEd	Associate Professor of Physiology
Peter Yip, MD, MPH	Senior Chairman of Clinical Sciences; Associate Professor of Internal Medicine & Occupational Medicine

Open Door Policy: Course faculty have an open door policy and encourage contact from students by e-mail and in person to share impressions, concerns and/or ideas at any time

N El-Sawi Course syllabus template approved by Curriculum Committee on August 5, 2016; revised September 27, 2017;
July 30, 2018

Volunteer Community Faculty (if applicable)
Name/Degree
Brian Bellucci, MD
Peter Miles, MD
Peter Murphy, MD, MRCP, FCCP
Vanessa Walker, MD

Communication with volunteer community faculty must be channeled through the course director.

Course Description:

This course covers the components of the cardiovascular and pulmonary systems, including the heart, major vessels, peripheral vascular system, lungs and its vessels and their integrated functions under normal and abnormal conditions. Teaching on the main components of the CVP systems will include content at the molecular, cellular, tissue and organ levels, which includes both healthy and diseased states, treatment and prophylactic strategies.

Course Objectives:

By the conclusion of this course, the student will demonstrate the ability to:

#	Course Learning Objectives (CLOs)	Program Learning Objectives (PLOs)
1	Describe expected clinical findings, diagnostic approaches, and natural history of cardiovascular and respiratory diseases based on the fundamental knowledge of anatomy (gross and histologic), biochemistry, cellular and molecular biology, and physiology.	PLO-2 (MSK1,MSK2)
2	Explore the roles of genetics and social determinants of health in cardiovascular and respiratory diseases, including epidemiology, risk, and outcomes.	PLO-2 (MSK1, MSK2, MSK3)
3	Describe expected clinical findings, diagnostic approaches, and natural history of cardiovascular and respiratory diseases based on the fundamental knowledge of immunology, microbiology, and pathology.	PLO-2 (MSK1, MSK2)
4	Apply the principles of pharmacology (absorption, distribution, mechanism of action, side effects) to prioritize selection of optimal drug therapy over non pharmacological therapeutics for the management of cardiovascular and respiratory diseases.	PLO-2 (MSK1, MSK2, MSK3)
5	Apply principles of scientific reasoning and biostatistics to the selection of best evidence, as relates to the study of cardiovascular and respiratory diseases.	PLO-2 (MSK1, MSK2, MSK3,MSK4)
6	Demonstrate professionalism and interpersonal and communication skills in the roles of learner, colleague, and healthcare team member.	PLO-1 (PC1, PC2, PC3, PC4, PC6, PC7); PLO-3 (C1, C2, C3); PLO-4 (P1, P2, P3)

Please Note: All session objectives listed in the individual sessions (by date and time) are mapped to the course objectives.

Key: PLO = Program Learning Objective (#1=Patient Care; #2=Medical & Scientific Knowledge; #3=Communication and Interpersonal Skills; #4=Professionalism; #5=Health Care Systems; #6=Reflective Practice and Personal Development)

Session Locations:

Two large lecture halls, each with a seating capacity of 180 students, will be used for the basic science sessions. Eight small classrooms/college rooms, each with a capacity for 25 students and the Simulation Center space are available for small group sessions. A large gross anatomy laboratory with capacity for cadaver dissections, where a group of students will be assigned to each cadaver, is available for anatomy dissection.

Lecture/Session Duration: All lectures on the calendar as one hour sessions will be 50 minutes long with 10 minutes break at the end for questions and preparation for the next session. Any session/lecture longer than one hour will have 10 minutes break between every two hours.

Teaching/Learning Methodology:

- Clinical Case-Based Learning (CCBL)
- Demonstration
- Discussion, Large group (>12)
- Discussion, Small Group (<12)
- Independent Learning
- Laboratory
- Lecture
- Patient Presentation – Faculty
- Patient Presentation – Learner
- Peer Teaching
- Problem-Based Learning (PBL)
- Research
- Self-Directed Learning (SDL)
- Simulation
- Team-Based Learning (TBL)

Online Materials – Canvas: Canvas is California Northstate University's Learning Management System.) Use your CNU NETID and password.

Turning Point: Every Phase A student was given a Turning Point Clicker during Orientation. **Please bring the Clicker to class at all times.**

Library/Learning Resources

The CNUCOM Library and Learning Resource Center is available for students, faculty, and staff. This program includes an initial 4200 square feet of space and seating for 100 devoted to the following resources: Library Facility and Collection, Computer resources, CNUCOM Electronic Library, and Interlibrary Loan Program. CNUCOM Resource Center maintains an Electronic Learning Resources System to provide information resources to students, faculty, and staff, and serve as an entry point for all users to meet their academic and research needs.

Required Textbook(s), Material(s) and Equipment

Subject	Author	Title
Cardiology	Dale Dubin	Rapid Interpretation of EKG's, 6 th Ed
Clinical Reasoning & Medicine	Dan Longo, et al.	Harrison's Principles of Internal Medicine, 19 th Ed
Medical Skills	Lynn Bickley	Bates' Guide to Physical Examination and History-Taking, 11 th Ed
Physiology	John Hall	Guyton and Hall Textbook of Medical Physiology, 13 th Ed

Recommended Textbook(s)

Subject	Author	Title
Pharmacology	Goodman & Gilman's	Goodman & Gilman's: The Pharmacological Basis of Therapeutics 12ed, 2011
Biochemistry	Thomas M. Devlin	Textbook of Biochemistry with Clinical Correlations, 7 th Ed

Attendance**Lecture/Learning Activity Attendance**

Attendance at all learning sessions is highly recommended, and Clinical Case and CCBL sessions are mandatory. Sessions declared as mandatory on the course calendar or during the introduction to the course are required.

Sign-in sheets or electronic attendance will be provided at all mandatory activities. Students will be responsible for signing in themselves. The sign-in sheets or electronic tracking will be collected 5 minutes after the activity begins. Certain excused absences are allowed (please see Excused Absence Policy).

The following procedure(s) will be employed for breeches of these course requirements.

13. Administrative/Support staff will notify the course director(s) and Assistant Dean of Student Affairs.
14. A note will be placed in the student's file.
15. Lapses in attendance fall under the COM's Professionalism Policy and are subject to inclusion in the student's MSPE.
16. Persistent/repeated lapses in timely attendance will require the student to appear before the Student Promotions Committee.
17. Any missed CCBL session, regardless of the nature of the absence, will result in a course grade of "Y" and mandatory make-up CCBL session in the summer. Once the CCBL has been completed, the grade will be updated to reflect the student's final course grade (H/P/F).

18. Make-up of any missed Clinical Case session, regardless of the nature of the absence, must be completed as specified by the Course Directors and Clinical Case thread director.

Exams and Grading/Assessment:

▪ Formative

- Course directors will specify pre-scheduled times (other than during lectures) during which quiz sessions will be held. The number of sessions, format and frequency will be at the discretion of the course director. The quiz format, including number of questions, will be at the discretion of the course director. Quizzes will not contribute points toward the overall course grade but will have educational value.
 - This course will have 4 in-class formative quizzes scheduled at 8AM-10AM on Monday 4/1/19, Monday 4/15/19, Monday 5/6/19 and Monday 5/20/19.

▪ Summative

- One hybrid mid-course NBME examination, 50 questions on Monday of week 5 of the course. This may be in the hybrid exam format, meaning an individual exam followed by a team effort on the same exam.
- One NBME comprehensive final examination, 100 questions on **Tuesday** of week 10 of the course (i.e., at the end of the course).
- One mid-course anatomy laboratory practical summative exam on Tuesday of week 4 of the course and one final anatomy laboratory practical summative exam on Wednesday of week 10 of the course.
- Clinical Cases: Eight (8) ~2-hr sessions devoted to presentation and discussion of Clinical Cases will be offered; attendance at these sessions is mandatory. Students will work in groups of five and student presentations will be graded using a rubric.
- Clinical Case-Based Learning: One series (three (3) sessions of 2 hours each) devoted to self-directed learning following the problem-based learning format; attendance at these sessions is mandatory.
- Scientific Method/Biostatistics Laboratory Sessions: Two ~2-hour workshop sessions with submitted assignments for each. Participation in these sessions and successful submission of these assignments will count towards the final course grade.
- Team-based Learning and Self-Directed Learning Sessions: Six ~2-hour sessions with submitted quizzes or assignments for each. Participation in these sessions and successful submission of quizzes and/or assignments will count towards the final course grade.

Total Course Score and Grading:

The total numeric score for the course will be measured as follows, which translates to recording a passing grade if 70 or above, and an honors grade if 90 or above.

#	Components	%	Notes/Explanation
1	Mid-Course (Hybrid) Summative NBME Exam	28	Overall score for this exam will be determined 75% by individual score and 25% by team score
2	End of Course Final Comprehensive Summative NBME Exam	45	---

3	Anatomy Laboratory Practical Summative Exams	13	6.5% each for mid-course and final exams
4	Clinical Cases (CC) -- Students are expected to successfully complete in order to pass the course.	0	Refer to description below
#	Components	%	Notes/Explanation
5	Clinical Case Based Learning (CCBL) -- Students are expected to successfully complete in order to pass the course.	0	Refer to description below
6	Nutrition Modules -- Students are expected to successfully complete assigned Nutrition in Medicine modules in order to pass the course. Students must register for nutrition in medicine via “nutritioninmedicine.org”. (A guide to NIM Medical Student registration will be posted to CANVAS). Once registered, enter the access code “cnsu_nutr” in order to access all modules available to CNSU medical students.	0	For this course, you are expected to complete the following modules: “CVD: Hypertension & Other Risk Factors” and “CVD: Lipoproteins” . Provide Course Director with proof of completion no later than 05:00 PM ET on Friday 4/26/19. <u>Those students submitting completion certificates submissions after this deadline will be required to submit an additional relevant assignment.</u> Note: You need to only successfully complete the specific modules assigned for the course. Do not complete the other modules until told to do so in your other courses.
7	Team-based Learning and Self-Directed Learning Sessions	12	2% for each of six (6) sessions
8	Scientific Method and Biostatistics Laboratory Assignments	2	1% for each of two (2) laboratory sessions

Formative and summative NBME exams score reports will be available ~3-days after the exam; it is the student’s responsibility to contact the Course Director to obtain their individual score report.

Any additional (retesting) exams will be at the expense of the student.

The successful completion of the course is based on demonstrating high standards of ethical and professional behavior, as well as passing both the Final Comprehensive Summative Exam **AND** the course with a grade of 70% or higher.

Grading percentages

Passing grade requires a total score of 70% or higher

Honors grade requires a total score of 90% or higher

Remediation

Students failing the course will be referred to the Student Promotion Committee (SPC) and a custom tailored remediation plan will be developed.

Description of Clinical Cases and Clinical Case Based Learning

Clinical Case (CC's) and Clinical Case Based Learning (CCBL's) sessions are designed to promote the development of teamwork, professionalism, and evidence-based patient management skills that integrate the basic and clinical sciences.

During the M1 year, following a faculty-led Clinical Presentation (CP) lecture, the students will receive a PowerPoint presentation that contains the subjective (including the Chief Complaint, History of Present Illness, and Past Medical History) and objective (including the Physical Examination) findings for a hypothetical patient who presents with a complaint aligned with the CP lecture. As they assimilate basic and clinical science content throughout the week's lectures, students will work in assigned groups to complete a series of template slides included in the PowerPoint presentation. At the end of the week, each student group will submit its final presentation for a grade. One group in each college (on a preassigned, rotating basis) will present the case to their College for discussion. Each group will submit their case presentation for grading using a defined rubric by a rotating faculty member. Grading will be Pass/Needs Improvement/Fail.

Clinical Case-Based Learning (CCBL) is an integrated, Problem-Based Learning modality that affords student self-directed learning in the context of a clinical case setting. Each week-long case is sequentially revealed over the course of three two-hour sessions. Students work in groups of about nine. For each case, each student will provide at least one teaching presentation to the group – this should be a PowerPoint slide set that includes citations for all images used and an *annotated* list of references from textbooks and the primary literature. Students are expected to offer constructive feedback on these presentations. The group will devise their own session learning objectives on Day 1 of each week; these will be the topics presented orally on Day 2. CCBL group assignment will remain stable for an entire academic year, to allow longitudinal formative feedback from facilitators, and to foster periodic peer- and self-assessment. Case Learning Objectives comprise material that may be tested in NBME course exams. All sessions are mandatory and timely arrival is expected in order for students to earn a grade of PASS for this component of a course; grading will be Pass/Fail. When feasible, CCBL sessions will occur at least once in each non-experiential course.

Anatomy Laboratory Rules

An appreciation of the significance of the anatomical gift is important to ensure our continuing respect for the altruism of our donors. The UC Davis and UC San Francisco willed body programs foster a learning partnership with CNUCOM in creating an educational relationship between the donor, the teacher, and the student. Dissection is a privilege and an incredible gift from the donors who have chosen to give so that we may learn.

Some may feel uneasy and anxious at the prospect of first dealing with cadavers; this is a natural response inasmuch as dealing with death is not always easy. Talk about your feelings with the faculty.

Share them with your peers. Generations of students have experienced similar emotions and conversation helps calm our apprehensions.

In compliance with State and Federal regulations, and in the interest of your personal safety, you are required to follow these rules of the anatomy lab:

1. The donors are to be treated with dignity and utmost respect at all times. Crude or inappropriate remarks could result in dismissal from the lab.
2. Similar to medical settings, the discussion of donors or lab practices outside of the lab is inappropriate unless it is for the express purpose of study or learning. The nature of the learning process within the lab can be upsetting to the general public, so always be mindful of who could be listening to conversations.
3. The anatomical materials from a donor are a precious resource, and a protected resource. Under no circumstances shall anatomical material be taken from the laboratory.
4. Each donor is sent with an identification tracking number and device. This number and/or device must remain affixed to the specimen throughout its use until its return to the willed body program. All information regarding the donor is confidential.
5. Fluid Disposal: There are containers in the room for fluid collection. If any are full, let the anatomy lab technician know.
6. Trash: Please dispose of any soiled gloves, paper towels, aprons, or other supplies in the RED trashcans. When you see the trash cans are near to being full, please let the anatomy lab technician know.
7. Dissected Tissue: Any bits of skin, fat or other human tissues must be disposed of in the WHITE buckets at your table. Please do not put any other items in these buckets. If this can is nearing capacity, please let the anatomy lab technician know. Such items from each donor are put in separate plastic bags with the ID# of the donor, kept in cold storage, and returned with other remains of the donor at the time of cremation.
8. The anatomy lab is under video surveillance, and is monitored for entry through identification badge scans. The person using the identification badge is responsible for all people who enter with them. Please request the identity of any person who is unknown to you.
9. All equipment and models within the anatomy lab are identified and monitored. No equipment or models are allowed to leave the anatomy lab without permission.
10. To protect the dignity and privacy of the donor, the face or any other identifying feature of the case shall never be publicly displayed. This includes display to students, staff, visitors and faculty not participating in the intended use of the material.
11. Horseplay within the lab is strictly prohibited.
12. The use of cell phones and photography by students is not allowed.
13. Universal precautions must be followed: Wear protective clothing/lab coat and gloves at all times while dissecting, and protective eyewear when there is a risk of splash.

14. If you use contacts, it is highly recommended that you wear glasses when in lab.
15. If you have a chemical sensitivity let a member of your faculty know; they will assist you in purchasing a respirator and will train you to use it.
16. No food, drink, or chewing gum or applying cosmetics is permitted in the laboratory.
17. No open toed shoes are allowed. Your shoes should protect your feet from accidental chemical drip and injury from falling sharps. Your shoes should provide sufficient traction for use in a lab where the floor has the possibility of being slippery. It is recommended that you have a pair of shoes for lab use only.
18. Shorts or skirts are not permitted (please see the Student Handbook Dress code policy for Anatomy Lab).
19. Students with long hair need to have it pulled back and tied.
20. Sharps Safety: Always use hemostats or a blade-removal tool to remove a scalpel blade from its handle. Used blades must be disposed in the provided sharps containers.
21. Dissection equipment: All the items you should need are provided for you. Please remember to wash and dry the instruments at the end of each session so they do not rust.
22. Prevent desiccation by using wet cheesecloth to cover your donors as needed. Remember to always use wetting solution to moisten dissected parts otherwise it will dry your dissection! Wetting solution contains chemicals that can cause irritation and burns. Use it with care.
23. When leaving the lab, please remember to properly wrap and moisten your cadaver. This is essential! The table covers should be closed, and the lab doors should be locked behind you.

For additional information, please contact:

Nripendra Dhillon, MBBS, MS: (707) 864-6362

Sailabala Vanguri, MD: (916) 686-7965

Student Evaluations of Course and Faculty

Student Evaluations of the Course and Faculty: Students are required to complete these evaluations during this assigned mandatory session on the course calendar. Course evaluations will be scheduled in the course calendar for the last Friday of instruction. The goal for course evaluations is 100% participation. In the event that there is less than 90% class participation, grades will be withheld, by both the Course Director and the Registrar, for the entire class until the 90% participation level is reached.

Students will be expected to comply with all CNU and COM policies.

Weekly Course Calendars

Cardiovascular and Pulmonary System					
Week 1 - CPs: Arrhythmia / Palpitation and Syncope					
	Monday	Tuesday	Wednesday	Thursday	Friday
	3/25/2019	3/26/2019	3/27/2019	3/28/2019	3/29/2019
8:00 AM	CVP Course Introduction Falck & Yarbrough	ECG Part I: Intro to EKG & Vectors McHenry/Falck	Masters Colloquium	Ventricular Arrhythmias Falck	SELF STUDY
8:30 AM	Introduction to Lecturio				
9:00 AM	Anatomy of Thoracic Wall & Heart Vanguri	Anatomy Lab: Thoracic Wall & Heart Group A Anatomy Faculty	Team Based Learning: EKG Interpretations Falck	Pharmacologic Management of Arrhythmias Part I Ibrahim	Pharmacologic Management of Arrhythmias Part II Ibrahim
9:30 AM					
10:00 AM				Medical Skills:	Clinical Cases Debrief: Peter Miles
10:30 AM				Histology Lab Aleyd	
11:00 AM	Clinical Presentation: Syncope & Arrhythmia Falck				
11:30 AM					
12 noon	Lunch and activities	Lunch and activities	Lunch and activities	Lunch and activities	Lunch and activities
12:30 PM					
1:00 PM	Rhythmic Excitation of the Heart Yarbrough/Puglisi	SELF STUDY	ANS Pharmacology Gerriets	Medical Skills:	TA Review Session
1:30 PM				Histology Lab Aleyd	
2:00 PM	Adrenergic & Cholinergic Receptors Physiology Yarbrough	Anatomy Lab: Thoracic Wall & Heart Group B Anatomy Faculty	Atrial Arrhythmias Falck		
2:30 PM					
3:00 PM	Diagnostic Imaging Part I Ibrahim		Overview of Adult Vasculature & Fetal Circulation Dhillon	Medical Skills:	Self Study
3:30 PM				SELF STUDY	
4:00 PM	SELF STUDY		SELF STUDY		
4:30 PM					

Cardiovascular and Pulmonary System						
Week 2 - CPs: Cyanosis & Murmurs / Abnormal Heart Sounds						
	Monday	Tuesday	Wednesday	Thursday	Friday	
	4/1/2019	4/2/2019	4/3/2019	4/4/2019	4/5/2019	
8:00 AM	Quiz 1 (20Q) & Faculty Review	SELF STUDY	Masters Colloquium	Physiology of Hypertension & Regulation of Blood Pressure Yarbrough	Pharmacologic Management of Hypertension Ibrahim	
8:30 AM				Essential Hypertension, Hypertensive Heart & Vascular Disease Hejazi	Application: Pharmacologic Management of Hypertension Yarbrough	
9:00 AM				Medical Skills:	Self Study	
9:30 AM						
10:00 AM	Heart as a Pump & Cardiac Cycle Yarbrough/Puglisi	Anatomy Lab: Group B Anatomy Faculty	Team Based Learning: Cardiac Physiology/Harvi Puglisi & Yarbrough	Medical Skills:	Self Study	
10:30 AM	Clinical Presentation: Murmurs & Abnormal Heart Sounds McHenry					
11:00 AM						
11:30 AM						
12 noon	Lunch and activities	Lunch and activities	Lunch and activities	Lunch and activities	Lunch and activities	
12:30 PM						
1:00 PM	Team Based Learning: Cardiovascular Physiology & Hemodynamics Yarbrough/Falck	Congenital Heart Disease, R to L Shunt, L to R Shunt McHenry	Origin of Heart Sounds and Systolic and Diastolic Murmurs Yip	Medical Skills:	Self Study	
1:30 PM			Congenital Obstructive Lesions, Coarctation of Aorta & Cardiac Tumors Hejazi			
2:00 PM		Anatomy Lab: Group A Anatomy Faculty	SELF STUDY	Medical Skills:	Self Study	
2:30 PM						
3:00 PM	Development of the Cardiovascular System, Part 1 Dhillon					
3:30 PM	Development of the Cardiovascular System, Part II Dhillon					
4:00 PM						
4:30 PM						

Cardiovascular and Pulmonary System							
Week 3 - CP: Chest Pain							
	Monday	Tuesday	Wednesday	Thursday		Friday	
	4/8/2019	4/9/2019	4/10/2019	4/11/2019		4/12/2019	
8:00 AM	Clinical Presentation: Chest Pain Holguin	Pathophysiology of Atherosclerosis & Dyslipidemia Al-Eyd	Masters Colloquium	Manifestations of Ischemia & the EKG McHenry/Falck		SELF STUDY	
8:30 AM						Pharmacologic Management of Dyslipidemia & Atherosclerosis Jialal	
9:00 AM	Anatomy of the Mediastinum Braley	Anatomy Lab: Mediastinum Group A Anatomy Faculty	Peripheral Vascular Disease Jialal	Medical Skills:	Self Study	Clinical Cases	
9:30 AM							
10:00 AM	Mediastinal Masses & Cardiac Tumors Braley		Systemic Arterial Disease, Aortic Aneurysm & Dissection Falck				
10:30 AM							
11:00 AM	Thymus: Gross Anatomy & Histology of the Thymus & Thymomas Hejazi						
11:30 AM							
12 noon	Lunch and activities	Lunch and activities	Lunch and activities	Lunch and activities		Lunch and activities	
12:30 PM							
1:00 PM	Autonomic Nervous System Dhillon	Pathophysiology of Ischemic Heart Disease/ACS McHenry/Ramsamooj	Pharmacological Management of Angina & ACS Gerriets	Medical Skills:	Self Study	TA & Peer Review Session	
1:30 PM							
2:00 PM			Cardiac Rehab/Alternative Medicine Yip				
2:30 PM							
3:00 PM	SELF STUDY	Anatomy Lab: Mediastinum Group B Anatomy Faculty	Self study: Review Dr. Miller-Blair lecture on Vasculitides 12/5 (MSK Course)	Medical Skills:	Self Study	SELF STUDY	
3:30 PM							
4:00 PM			SELF STUDY	SELF STUDY			
4:30 PM							

Cardiovascular and Pulmonary System						
Week: 4 - CP: Edema & Congestive Heart Failure (CHF)						
	Monday	Tuesday	Wednesday	Thursday		Friday
	4/15/2019	4/16/2019	4/17/2019	4/18/2019		4/19/2019
8:00 AM	Quiz 2 (35Q) & Faculty Review	SELF STUDY	Masters Colloquium	Myocarditis, Pericarditis and Pleuritis Ramsamooj		Basics of Heart Transplantation Ramsamooj
8:30 AM				Rheumatic Heart Disease and Endocarditis diSibio		Cardiovascular Adaptations & Disorders in Pregnancy Veille
9:00 AM						
9:30 AM						
10:00 AM	Clinical Presentation: Peripheral Edema & CHF Holguin			Diagnosis & Management of Congestive Heart Failure Jialal	Medical Skills:	Sci Method Lab: Non-Experimental Studies
10:30 AM	Pathophysiology of Cardiomyopathies McHenry	Pathology of Heart Failure Hejazi				
11:00 AM						
11:30 AM						
12 noon	Lunch and activities	Lunch and activities	Lunch and activities	Lunch and activities		Optional CV-Friendly Diets Lunch
12:30 PM						
1:00 PM	Physiology of Heart Failure Jialal	Anatomy Lab Midterm Summative Exam Group A: 1PM-3PM Group B: 3PM-5PM	Peripheral Edema & Venous Diseases diSibio	Medical Skills:	Sci Method Lab: Non-Experimental Studies	TA & Peer Review Session
1:30 PM	SELF STUDY		SELF STUDY			
2:00 PM						
2:30 PM						
3:00 PM						
3:30 PM						
4:00 PM	SELF STUDY		SELF STUDY	Medical Skills:	Sci Method Lab: Non-Experimental Studies	
4:30 PM						

Cardiovascular and Pulmonary System								
Week 5 - CPs: Cardiac Arrest & Shock								
	Monday	Tuesday	Wednesday	Thursday		Friday		
	4/22/2019	4/23/2019	4/24/2019	4/25/2019		4/26/2019		
8:00 AM	NBME Hybrid Summative Midterm Exam	Clinical Presentation: Shock Habib	CMA Legislative Advocacy Day	Pathophysiology of Shock Part II diSibio		SELF STUDY		
8:30 AM		Anatomy Lab: Lung & Pharynx (exterior) Group B Anatomy Faculty		Management of Shock Habib				
9:00 AM				Medical Skills: Simulation	Self Study		Clinical Cases Debrief: Bellucci	
9:30 AM								
10:00 AM								
10:30 AM								
11:00 AM								
11:30 AM								
12 noon	Lunch and activities	Lunch and activities		Lunch and activities		Lunch and activities		
12:30 PM	Clinical Presentation: Cardiac Arrest Holguin	Pathophysiology of Shock, Part I Braley		Medical Skills: Simulation	Self Study	COM Interviews		
1:00 PM	Anatomy of Lungs, Pleura, & Diaphragm Vanguri	Anatomy Lab: Lung & Pharynx (exterior) Group A Anatomy Faculty					Medical Skills: Simulation	Self Study
1:30 PM	Anatomy - Pharynx Dhillon							
2:00 PM								
2:30 PM								
3:00 PM								
3:30 PM								
4:00 PM								
4:30 PM								
					Nutrition Modules Certificates Due by 5pm			

Cardiovascular and Pulmonary System							
Week 6 - CPs: Wheezing, Asthma & COPD							
	Monday	Tuesday	Wednesday	Thursday		Friday	
	4/29/2019	4/30/2019	5/1/2019	5/2/2019		5/3/2019	
8:00 AM	CP: Wheezing Falck	Physiology of Asthma/COPD Hoffman	Microcirculation and Tissue Gas Exchange Yarbrough	Pharmacological Management of Asthma Feng		Impact of CVP Disease	
8:30 AM							
9:00 AM	Pulmonary Function Tests & Disordered Breathing Murphy	Anatomy Lab: Pharynx (interior), Nose & Larynx Group A Anatomy Faculty	Respiratory Tract Immunity Ely	Pharmacological Management of COPD Feng			Clinical Cases
9:30 AM							
10:00 AM	Team Based Learning Normal Lung Function & Respiratory Mechanics Yarbrough/Puglisi		Immune Mechanisms in Pathogenesis of Asthma diSibio	Medical Skills:	Self Study		
10:30 AM							
11:00 AM			COPD Hejazi				
11:30 AM							
12 noon	Lunch and activities	Lunch and activities	Lunch and activities	Lunch and activities		Lunch and activities	
12:30 PM							
1:00 PM	Anatomy of Nose & Larynx Dhillon	SELF STUDY	Cystic Fibrosis, Bronchiectesis Al-Eyd	Medical Skills:	Self Study	TA Review Session	
1:30 PM							
2:00 PM		Anatomy Lab: Pharynx (interior), Nose & Larynx Group B Anatomy Faculty	Anatomy - Pterygopalatine Fossa Dhillon				
2:30 PM							
3:00 PM	Self Study		SELF STUDY	Medical Skills:	Self Study	SELF STUDY	
3:30 PM							
4:00 PM							
4:30 PM							

Cardiovascular and Pulmonary System						
Week 7 - CPs: Hemoptysis/Pulmonary Nodule & Pleural Effusion						
	Monday	Tuesday	Wednesday	Thursday		Friday
	5/6/2019	5/7/2019	5/8/2019	5/9/2019		5/10/2019
8:00 AM	Quiz 3 (35Q) & Faculty Review	Pleural Diseases (Effusion & Mesothelioma) Al-Eyd	Masters Colloquium	Molecular Basis of Cancers Krig		SELF STUDY
8:30 AM		Anatomy Lab: Palate & Pterygopalatine Fossa Group B Anatomy Faculty		Granulomatous Lung Diseases & Sarcoidosis diSibio		Pharmacologic Management of Lung Tumors/Cancer Feng
9:00 AM						
9:30 AM						
10:00 AM	Clinical Presentation: Hemoptysis and Pulmonary Nodule Bellucci		Lung Tumors, Pulmonary Embolism, Goodpasture's and Causes of Massive Hemoptysis Ramsamooj	Medical Skills:	Sci Method Lab: Meta-analyses & Systematic Reviews	Clinical Cases Debrief: Walker
10:30 AM	Clinical Presentation: Pleural Effusion and Pleural Abnormalities Bellucci					
11:00 AM						
11:30 AM						
12 noon	Lunch and activities	Lunch and activities	Lunch and activities	Lunch and activities		Lunch and activities
12:30 PM	Self Directed Learning: Acid/Base-pH (Biochem) Sheffield & Krig	URT Pathology Hejazi	Anatomy of the Mouth Vanguri	Medical Skills:	Sci Method Lab: Meta-analyses & Systematic Reviews	COM Interviews
1:00 PM		Anatomy Lab: Palate & Pterygopalatine Fossa Group A Anatomy Faculty	SELF STUDY			
1:30 PM				Medical Skills:	Sci Method Lab: Meta-analyses & Systematic Reviews	
2:00 PM						
2:30 PM	Medical Skills:			Sci Method Lab: Meta-analyses & Systematic Reviews		
3:00 PM		Anatomy of the Palate Vanguri	SELF STUDY			
3:30 PM						
4:00 PM						
4:30 PM						

Cardiovascular and Pulmonary System									
Week 8 - CCBL: Cough									
	Monday	Tuesday	Wednesday	Thursday		Friday			
	5/13/2019	5/14/2019	5/15/2019	5/16/2019		5/17/2019			
8:00 AM	Microbiology & Pathology of Upper Respiratory Tract El-Sawi	Clinical Presentation: Cough	Masters Colloquium	Antibiotics & Other Pharmacology for Respiratory Infections Gerriets		Interstitial Lung Disease and Pulmonary Hypertension-Physiology Murphy			
8:30 AM							Pharm. Management of Pulmonary Artery Hypertension Gerriets		
9:00 AM	Microbiology & Pathology of Lower Respiratory Tract El-Sawi	Anatomy Lab: Mouth Group A Anatomy Faculty				CCBL	Medical Skills:	Self Study	CCBL
9:30 AM									
10:00 AM	Pulmonary Edema & Acute Respiratory Distress Syndrome Hejazi								
10:30 AM									
11:00 AM	Interstitial Lung Disease and Pulmonary Hypertension-Pathology Hejazi								
11:30 AM									
12 noon	Lunch and activities	Lunch and activities	Lunch and activities	Lunch and activities		Lunch and activities			
12:30 PM									
1:00 PM	CCBL	Embryology of Respiratory System Dhillon	Viral & Novel Respiratory Tract Infections diSibio/Silva	Medical Skills:	Self Study	Peer Review Session			
1:30 PM		Anatomy Lab: Mouth Group B Anatomy Faculty	Pharmacological Management of Respiratory Tract Infections Gerriets						
2:00 PM			SELF STUDY	SELF STUDY	Medical Skills:	Self Study	SELF STUDY		
2:30 PM									
3:00 PM									
3:30 PM									
4:00 PM									
4:30 PM									

Cardiovascular and Pulmonary System								
Week 9 - CP: Chronic Dyspnea								
	Monday	Tuesday	Wednesday	Thursday		Friday		
	5/20/2019	5/21/2019	5/22/2019	5/23/2019		5/24/2019		
8:00 AM	Quiz 4 (20Q) & Faculty Review	Team Based Learning: Exercise Physiology Yarbrough/Puglisi	Cyanosis Falck	SELF STUDY		Pulmonary Adaptations & Disorders in Pregnancy Veille		
8:30 AM			Acute Dyspnea in Newborns & Children Falck	Acute Dyspnea in Adults Walker		Students' CVP Course & Faculty Evaluations		
9:00 AM								
9:30 AM								
10:00 AM	Clinical Presentation: Chronic Dyspnea	Sleep Apnea: Cardiovascular & Pulmonary Implications Murphy	Diagnostic Imaging Part II Yarbrough & Falck	Medical Skills:	Self Study	Clinical Cases		
10:30 AM								
11:00 AM	Control of Breathing Yarbrough							
11:30 AM								
12 noon	Lunch and activities	Lunch and activities	Lunch and activities	Lunch and activities		Lunch and activities		
12:30 PM								
1:00 PM	SELF STUDY	Anatomy Lab Review For Lab Final Summative Anatomy Faculty	Peer & Faculty Review Session	Medical Skills:	Self Study	SELF STUDY		
1:30 PM								
2:00 PM			SELF STUDY	Medical Skills:	Self Study			
2:30 PM								
3:00 PM								
3:30 PM								
4:00 PM								
4:30 PM								

Cardiovascular and Pulmonary System						
Week 10 - Examinations						
	Monday	Tuesday	Wednesday	Thursday	Friday	
	5/27/2019	5/28/2019	5/29/2019	5/30/2019	5/31/2019	
8:00 AM	HOLIDAY: Memorial Day		SELF STUDY	Summative - OSCE	Retesting on Monday June 3rd	
8:30 AM		NBME Summative Exam				
9:00 AM						
9:30 AM						
10:00 AM						
10:30 AM						
11:00 AM		NBME Master's Colloquium Summative Exam				
11:30 AM						
12 noon		Lunch and activities	Lunch and activities	Lunch and activities	Lunch and activities	
12:30 PM						
1:00 PM		SELF STUDY		Anatomy Lab Summative Exam Group B: 1PM-3PM Group A: 3PM-5PM	Summative - OSCE	Retesting on Monday June 3rd
1:30 PM						
2:00 PM						
2:30 PM						
3:00 PM						
3:30 PM						
4:00 PM						
4:30 PM						



**2018 – 2019 Academic Year Urinary
(Renal) System Course Syllabus Course
#: 541 and HS 611 (CDM)
Year: II
Semester: Fall**

Course Dates: 6 August, 2018 – 14 September, 2018

Credits Hours: 5

Course Director:

Tracy L. Yarbrough, PhD, MD, MAEd

Associate Professor, Department of Basic Science; COM Room 142

916-686-7610; tracy.yarbrough@cnsu.edu

Coordinator:

Samantha Xiong

Disclaimer about changes in Syllabus and Course Calendar:

Every effort will be made to adhere to the contents of this syllabus. However, this document is subject to change in the event of unforeseen, extenuating circumstances. Students will be notified as soon as possible if changes in the syllabus become necessary.

Course Teaching Faculty:

Name/Degree	Rank/Title
Ghaith Aleyd, MD, MSC, PhD	Associate Professor of Pathology
Floyd Culler, MD	Professor of Pediatrics, Endocrinology and Medical Skills
Nripendra Dhillon, MBBS, MS	Associate Professor of Anatomy
Guy diSibio, MD, PhD	Associate Professor of Pathology, Hematopathology, Surgical Pathology, Molecular Genetics, and Medical Skills
Nehad El-Sawi, PhD	Professor of Microbiology, Immunology and Cell Biology
Susan Ely, PhD	Professor of Molecular Biology, Immunology and Microbiology
Darilyn Falck, MD, FACEP	Associate Professor of Emergency Medicine
Xiaodong Feng, PhD, PharmD	Associate Dean of Student Affairs, Admissions and Outreach; Professor of Pharmacology and Oncology
Valerie Gerriets, PhD	Assistant Professor of Pharmacology
Nazila Hejazi, MD	Assistant Professor of Pathology
Rudolph Holguin, MD	Associate Professor of Emergency Medicine
Ishwarlal Jialal, MD, MBChB	Professor of Physiology, Metabolism, and Pathology
ForShing Lui, MD	Professor of Clinical Neurology
Jose Puglisi, PhD	Assistant Professor of Physiology, Biostatistics
Rajendra Ramsamooj, MD	Professor of Pathology, Surgical Pathology and Clinical Skills
Mark Sheffield, MD, PhD	Associate Professor of Physiology, Endocrinology, and Medical Skills
Sailabala Vanguri, MD	Assistant Professor of Anatomy

Open Door Policy—Course faculty have an open door policy and encourage contact from students by e-mail and in person to share impressions, concerns and/or ideas at any time.

Volunteer Community Faculty (if applicable)
Name/Degree
Carolina Alvayay, MD
Muralikrishna Golconda, MD, MRCP (UK)
David Pai, MD
Michael Sim, MD

Communication with volunteer community faculty must be channeled through the course director.

Course Description:

The urinary system consists of the kidneys, ureters, bladder and urethra, and, along with responsibility for removing metabolic wastes and metabolites, it is primarily responsible for the regulation of fluid and electrolyte balance in the body. As such, it has a major effect on blood pressure regulation.

This course will cover the normal function of the system at all levels, from the molecular level to the organ level, as well as common and important abnormalities of both form and function. The diagnosis and treatment of urinary system disorders will be discussed as well.

Lastly, we will discuss ways in which the urinary system interacts with other major body systems, and how the environment influences the system.

Clinical presentations selected for their prevalence and their patient impact will frame the course, and include: fluid and electrolyte disturbances, acute kidney injury, flank pain/calculi, hematuria, proteinuria, generalized edema, frequency/dysuria/polyuria, acid-base disturbances, chronic kidney disease, and hypertension.

Course Objectives:

By the conclusion of this course, the student will demonstrate the ability to:

#	Course Learning Objectives (CLOs)	Program Learning Objectives (PLOs)
1	Relate the development, structure, and function of the urinary system to its fundamental roles in maintaining osmolar, electrolyte, nutrient/waste, acid-base and blood pressure balance; considering also the ways in which pathogens or genetic alterations affect these normal processes.	PLO-2 (MSK1,MSK2)
2	Apply knowledge of normal aging, pathophysiology, pharmacology, diagnostic tool characteristics and scientific reasoning to the development of evidence-based management plans, including the selection of appropriate diagnostic assessments, and safe and effective treatments for diseases of the urinary system.	PLO-1 (PC7, PC8); PLO-2 (MSK1,MSK2, MSK3)
3	Recognize the effects of systems-based factors (healthcare team, organization, and/or environment) and patient-based factors (culture, identity and/or other social determinants) on the care and well-being of patients with urinary system diseases.	PLO-1 (PC6); PLO-5 (HC1, HC2)
4	Illustrate the relationships between the urinary system and other organ systems in maintaining body homeostasis, and the pathophysiologic mechanisms and therapeutic management of disorders that disrupt these normal relationships.	PLO-2 (MSK1,MSK2, MSK3)

5	Demonstrate level-appropriate skills in written and oral communication, and professionalism in dealing with patients and colleagues.	PLO-1 (PC1, PC2, PC3, PC4, PC5, PC6, PC7); PLO-3 (C1, C2, C3); PLO-4 (P1, P2, P3)
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Please Note: All session objectives listed in the individual sessions (by date and time) are mapped to the course objectives.

Key: PLO = Program Learning Objective (#1=Patient Care; #2=Medical & Scientific Knowledge; #3=Communication and Interpersonal Skills; #4=Professionalism; #5=Health Care Systems; #6=Reflective Practice and Personal Development)

Session Locations:

Two large lecture halls, each with a seating capacity of 180 students, will be used for the basic science sessions. Eight small classrooms/college rooms, each with a capacity for 25 students and the Simulation Center space are available for small group sessions. A large gross anatomy laboratory with capacity for cadaver dissections, where a group of students will be assigned to each cadaver, is available for anatomy dissection.

Lecture/Session Duration:

All lectures on the calendar as one hour sessions will be 50 minutes long with a 10-minute break at the end for questions and preparation for the next session. Any session/lecture longer than one hour will have at least one 10-minute break every two hours.

Teaching/Learning Methodology:

- Case-Based instruction/Learning
- Concept Mapping
- Discussion, Large group (>12)
- Discussion, Small Group (<12)
- Independent Learning
- Journal Club
- Laboratory
- Lecture
- Mentorship
- Patient Presentation – Faculty
- Patient Presentation – Learner
- Peer Teaching
- Problem-Based Learning (PBL)
- Research
- Self-Directed Learning
- Team-Based Learning (TBL)
- Workshops

Turning Point:

Every Phase A student was given a Turning Point Clicker during Orientation. Please bring the clicker to class at all times.

Online Materials – Canvas:

Canvas is California Northstate University's Learning Management System.) Use your CNU NETID and password.

Library/Learning Resources:

The CNUCOM Library and Learning Resource Center is available for students, faculty, and staff. This resource includes 4200 square feet of space and seating for 100 devoted to the following resources: Library Facility and Collection, Computer resources, CNUCOM Electronic Library, and Interlibrary Loan Program. CNUCOM Resource Center maintains an Electronic Learning Resources System to provide information resources to students, faculty, and staff, and serve as an entry point for all users to meet their academic and research needs.

Required Textbooks, Materials and/or Equipment:

Subject	Author	Title
Anatomy	Moore	Clinically Oriented Anatomy, 7 th Ed.
Biochemistry	Lieberman	Marks' Basic Medical Biochemistry: A Clinical Approach, 4 th or 5 th Ed.
Biostatistics	Dawson & Trapp	Basic and Clinical Biostatistics, 4 th Ed.
Clinical Medicine (Adult)	Jameson, Fauci, Kasper, Hauser, Longo & Loscalzo	Harrison's Principles of Internal Medicine, 20 th Ed.
Embryology	Moore, Persaud & Torchia	Developing Human: Clinically Oriented Embryology (revised), 10 th Ed.
Ethics/ Professionalism	Lo	Resolving Ethical Dilemmas, 5 th Ed.
Histology	Mescher	Junquiera's Basic Histology, 15 th Ed.
Immunology	Parham	The Immune System, 4 th Ed.
Microbiology & Infectious Diseases	Engleberg	Schaechter's Mechanisms of Microbial Disease, 5 th Ed.
Pathology	Kuman, Abbas & Aster	Robbins & Cotran Pathologic Basis of Disease, 9 th Ed.
Pharmacology	Katzung	Basic & Clinical Pharmacology, 14 th Ed.
Physiology	Hall	Guyton & Hall Textbook of Medical Physiology, 13 th Ed.

Public Health	Schneider	Introduction to Public Health, 4 th Ed.
Physical Examination	Bickley	Bates' Guide to Physical Examination & History Taking, 12 th Ed.
Radiology/ Imaging	Chen, Pope & Ott	Basic Radiology, 2 nd Ed.

Recommended Textbook(s):

Subject	Author	Title
Anatomy	Weir & Abraham	Imaging Atlas of Human Anatomy, 5 th Ed.
Cardiology	Fuster, Harrington, Narula & Eapen	Hurst's The Heart, 14 th Ed.
Cell & Molecular Biology	Alberts, Bray, Hopkin, Johnson, Lewis, Raff, Rober	Essential Cell Biology, 4 th Ed.
Clinical Medicine (Adult)	Papadakis, McPhee & Rabow	Current Medical Diagnosis and Treatment 2018
Clinical Medicine (Pediatrics)	Kliegman & Stanton	Nelson Textbook of Pediatrics, 20 th Ed.
Endocrinology	Feldman, Christensen & Satterfield	Greenspan's Basic & Clinical Endocrinology, 10 th Ed.
Genetics	Thompson & Thompson	Genetics in Medicine, 8 th Ed.
Obstetrics & Gynecology	Hacker, Gambone & Hobel	Essentials of Obstetrics & Gynecology, 6 th Ed.

Online Resources:

For those who prefer online/multimedia resources, the following also frequently provide helpful material--

- UpToDate (available to you via AccessMedicine)
- Ovid (available to you via AccessMedicine)
- Khan Academy Medicine (available on YouTube)

Attendance:

Lecture/Learning Activity Attendance--

Learning session (lectures, large group discussions, etc.) attendance is highly recommended, and laboratory sessions are mandatory. Sessions labeled as mandatory on the course calendar are required.

Sign-in sheets or electronic attendance will be provided at all mandatory activities. Students will be responsible for signing in themselves. The sign-in sheets or electronic tracking will be collected 5 minutes after the activity begins. Certain excused absences are allowed (please see Excused Absence Policy).

The following procedure(s) will be employed for breeches of these course requirements.

1. Administrative/Support staff will notify the course director(s) and Assistant Dean of Academic Affairs.
2. A note will be placed in the student's file.
3. Lapses in attendance fall under the COM's Professionalism Policy and are subject to inclusion in the student's MSPE.
4. Persistent lapses in attendance will require the student to appear before the Student Promotions Committee.

Exams and Grading/Assessment:

▪ Formative--

- This course will have one (1) in-class 50-item exam on Monday, 20 August, 8-11AM.
- This course will have one (1) individual quiz and one (1) group quiz on Wednesday, 8 August, 8-10AM, as part of the Renal Tubular Function TBL.
- This course will have one (1) quiz on Friday, 17 August, 10AM-noon, as part of the Serum & Urine Evaluations of Renal Function Workshop.

▪ Summative--

- One (1) NBME 50-question mid-course examination on Monday of the fourth week of the course. This will be delivered in a hybrid exam format--an individual exam followed by a team effort on the same exam.
- One NBME 100-question comprehensive final examination on Monday of the final week of the course.
- Clinical Cases : Four (4) ~2-hr sessions devoted to presentation and discussion of Clinical Cases; attendance at these sessions is mandatory. Students will work in groups of five and student presentations will be graded using a provided rubric.
- Clinical Case-Based Learning: Three sessions of 2 hours each, devoted to self-directed learning following a problem-based learning format.
- **Special Student Assignments:**
 - During the course, there will be “special assignments” – assignments and seminars. These are mandatory and score on submitted work will count towards the final course grade.
 - Assignment based on Research Ethics (Big Data) Workshop in Week 2
 - Assignment/quiz based on Hypertension Workshop in Week 4

▪ Total Course Score and Grading--

The total numeric score for the course will be measured as follows, which translates to recording a passing grade if 70 or above, and an honors grade if 90 or above.

#	Components	%	Notes/Explanation
1	Mid-Course Summative NBME Exam; 8/27/18	30	50 Multiple Choice Questions (MCQs) – (<i>hybrid exam, weighted 75:25 individual score : team score</i>)
2	End of Course Final Comprehensive NBME Summative Exam; 9/10/18	62	100 MCQs (individual exam; <u>not</u> a hybrid exam).
3	Clinical Case Submissions (CC): Students are expected to successfully complete in order to pass the course.	0	Refer to description below
4	Clinical Case Based Learning (CCBL): Students are expected to successfully complete in order to pass the course.	0	Refer to description below
5	Nutrition Module: Students are expected to successfully complete assigned nutrition module at NIDDK online. Due 09/12/18 at 5:00PM PT —must be submitted in order to pass the course.	0	For this course, you are expected to review the online module and complete the assigned activities (see material posted to Canvas). You must provide the Course Director with proof of completion by 5:00:00 PM PT on Wednesday, 9/12/18, in order to pass the course.
6	Renal Tubular Function TBL; 08/08/2018	2	5-10 item individual and group quizzes in class
7	Serum & Urine Evaluations of Renal Function Workshop QUIZ; 08/17/2018	2	5-10 item quiz in class
8	Research Ethics (Big Data) Workshop; 08/21/2018	2	Graded assignment to be submitted at end of session
9	Hypertension Workshop; 08/28/2018	2	Graded assignment to be submitted at end of session
10	Think Tank(TT) Sessions; 08/10/18, 08/24/18, 08/31/18	0*	*Up to two (2) bonus points to be added to final grade for attendance and participation in all three (3) TT sessions.
11	Self- and Peer-Evaluations of Teamwork; week 4	0	Must be submitted to pass the course

Formative and summative NBME exams score reports will be available 3-days after the exam; it is the student's responsibility to contact Course Director to obtain their individual score report.

Any additional (retesting) exams will be at the expense of the student.

The successful completion of the course is based on demonstrating high standards of ethical and professional behavior, as well as passing both the Final Comprehensive NBME Summative Exam **AND** the course with a grade of 70% or higher.

- **Grading percentages--**

Passing grade requires a total score of 70% or higher

Honors grade requires a total score of 90% or higher

****If earned, bonus points from Think Tank sessions will be added to the overall course score to determine a final grade and will not be applied to the score on the summative exams or any other specific assessment.**

- **Remediation--**

Students failing the course will be referred to the Student Promotion Committee (SPC) and a custom tailored remediation plan will be developed.

Description of Clinical Cases and Clinical Case Based Learning:

Clinical Cases (CC's) and Clinical Case Based Learning (CCBL's) are designed to promote the development of teamwork, professionalism, and evidence-based patient management skills that integrate the basic and clinical sciences.

- **Clinical Cases--**During the M1 year, following a faculty-led Clinical Presentation (CP) lecture, the students will receive a PowerPoint presentation that contains the subjective (including the Chief Complaint, History of Present Illness, and Past Medical History) and objective (including the Physical Examination) findings for a hypothetical patient who presents with a complaint aligned with the CP lecture. As they assimilate basic and clinical science content throughout the week's lectures, students will work in assigned groups to complete a series of template slides included in the PowerPoint presentation. At the end of the week, each student group will submit its final presentation for a grade. One group in each college (on a preassigned, rotating basis) will present the case to their College for discussion. Each group will submit their case presentation for grading using a defined rubric by a rotating faculty member. Grading will be Pass/Needs Improvement/Fail.

During the M2 year, the process will be similar except that during/immediately after the CP, students will develop learning objectives based on the case presented. At the end of the week, groups will present a SOAP note and their Learning Objective to their College. The College Master will be responsible for grading and feedback. Grading will be Pass/Needs Improvement/Fail.

- **Clinical Case-Based Learning (CCBL)** is an integrated, Problem-Based Learning modality that affords student self-directed learning in the context of a clinical case setting. Each week-long case is sequentially revealed over the course of three two-hour sessions. Students work in groups of about nine. For each case, each student will provide at least one teaching presentation

to the group – this should be a PowerPoint slide set that includes citations for all images used and an *annotated* list of references from textbooks and the primary literature. Students are expected to offer constructive feedback on these presentations. The group will devise their own session learning objectives on Day 1 of each week; these will be the topics presented orally on Day 2. CCBL group assignment will remain stable for an entire academic year, to allow longitudinal formative feedback from facilitators, and to foster periodic peer- and self-assessment. Case Learning Objectives comprise material that may be tested in NBME course exams. All sessions are mandatory and timely arrival is expected in order for students to earn a grade of PASS for this component of a course; grading will be Pass/Fail. When feasible, CCBL sessions will occur at least once in each non-experiential course.

Anatomy Laboratory Rules:

**There are no gross anatomy labs in the 2018 Urinary System Course

Student Evaluations of Course and Faculty:

Students are required to complete these evaluations during the assigned mandatory session on the course calendar. Course evaluations will be scheduled in the course calendar for the last Friday of instruction. The goal for course evaluations is 100% participation. In the event that there is less than 90% class participation, grades will be withheld, by both the Course Director and the Registrar, for the entire class until the 90% participation level is reached.

Students will be expected to comply with all CNU and COM policies.

Weekly Course Calendars

Week 1

Renal (Urinary) System					
Week: 1 - CP(s): FI & Elect Imbalance; AKI, Sim					
	Monday	Tuesday	Wednesday	Thursday	Friday
	8/6/2018	8/7/2018	8/8/2018	8/9/2018	8/10/2018
8:00 AM	MANDATORY: M2 Orientation Refresh	CP: AKI, Sim		Self Study	Clinical Case
8:30 AM		Amino Acid Metab & Urea Cycle - Dr. Krig			
9:00 AM					
9:30 AM					
10:00 AM	Introduction to Renal (Urinary) System - Dr. Yarbrough	Medical	Masters Colloquium	Self Study	Think Tank 1: (Bonus Points) Dr. Yarbrough
10:30 AM	CP: FI & Elect Imbalance - Dr. Sheffield				
11:00 AM		Skills Group 1			
11:30 AM	CC Development - Dr. Sheffield				
12 noon					
	Lunch and activities	Lunch and activities	Lunch and activities	Lunch and activities	Lunch and activities
12:30 PM		Medical	CC Evolution	WORKSHOP: Urine Conc & Dil'n w/ Water Imbalance - Dr. Yarbrough & Sheffield	Self Study
1:00 PM	Urinary System Anatomy - Dr. Vanguri				
1:30 PM		Skills Group 2	Dr. Sim & Yarbrough		
2:00 PM	Urinary Histology LAB - Dr. Hejazi		FLIPPED: Pathophysiology of K+ Imbalance - Dr. Yarbrough		
2:30 PM					
3:00 PM					
3:30 PM	Renal Circulation & Glomerular Filtration - Dr. Yarbrough	Medical Skills Group 3	Self Study	Pathophysiology & Mgmt of AKI - Dr. Sim	
4:00 PM			Self Study		
4:30 PM					

Weekly Course Calendars

Week 2

Renal (Urinary) System						
Week: 2 - CP(s): Flank Pain; Hematuria						
	Monday	Tuesday		Wednesday	Thursday	Friday
	8/13/2018	8/14/2018		8/15/2018	8/16/2018	8/17/2018
8:00 AM	Self Study	Self Study		Self Study	Self Study	CCBL Session 3
8:30 AM						
9:00 AM						
9:30 AM						
10:00 AM	CP: Flank Pain - Dr. Holguin	Medical Skills Group 1	WORKSHOP	Choosing and Using Evidence - Dr. Yarbrough	Urinary Trauma and Imaging of the Urinary System - Dr. Alvayay & Yarbrough	WORKSHOP - QUIZ: Serum & Urine Evaluations of Renal Function - Dr. Jialal
10:30 AM			Intro to EBM & Translational Sci - Dr. Puglisi	Herbals - Dr. Gerriets		
11:00 AM						
11:30 AM	CP: Hematuria - Dr. Lui					
12 noon						
12:30 PM	Lunch and activities	Lunch and activities		Lunch and activities	Lunch and activities	Lunch and activities
1:00 PM	Urinary System Embryo - Dr. Dhillon	Medical Skills Group 2	WORKSHOP	Pathology of Renal Cysts and Masses - Dr. Hejazi	Pharm Mgmt of Renal Masses - Dr. Feng	CP: Edema - Dr. Jialal
1:30 PM			Intro to EBM & Translational Sci - Dr. Puglisi		Self Study	
2:00 PM						
2:30 PM						
3:00 PM	CCBL Session 1	Medical Skills Group 3	WORKSHOP	CCBL Session 2	Self Study	Self Study
3:30 PM			Intro to EBM & Translational Sci - Dr. Puglisi			
4:00 PM						
4:30 PM						

Weekly Course Calendars

Week 3

Renal (Urinary) System						
Week: 3 - CP(s): Proteinuria; Edema						
	Monday	Tuesday		Wednesday	Thursday	Friday
	8/20/2018	8/21/2018		8/22/2018	8/23/2018	8/24/2018
8:00 AM	In-Class Formative Exam	Self Study		Self Study	Self Study	Clinical Case
8:30 AM						
9:00 AM						
9:30 AM						
10:00 AM						
10:30 AM	CP: Proteinuria - Dr. Lui	Medical Skills Group 1	TX Science - Big Data Ethics - Dr. Puglisi	Masters Colloquium		Think Tank 2: Bonus Points Dr. Yarbrough
11:00 AM						
11:30 AM						
12 noon	Lunch and activities			Lunch and activities	Lunch and activities	Lunch and activities
12:30 PM						
1:00 PM	CC Development - Dr. Lui	Medical Skills Group 2	TX Science - Big Data Ethics - Dr. Puglisi	FLIPPED: CC Evolution - Dr. Yarbrough	Pathophysiology of Glomerular Dz #2 - Dr. Ramsamooj	Self Study
1:30 PM	Pathophysiology & Dx of Volume Disorders - Dr. Sheffield					
2:00 PM						
2:30 PM	Immunology of Glomerular Disorders - Dr. Ely	Medical Skills Group 3	TX Science - Big Data Ethics - Dr. Puglisi	FLIPPED: Pharm of Diuretics - Dr. Gerriets	Case-based, WORKSHOP: Pathophysiology of Nephrotic, Nephritic & Edema Syndromes - Dr. Lui	
3:00 PM						
3:30 PM						
4:00 PM						
4:30 PM	Self Study			Path and Pathophysiology of Glomerular Dz #1 - Dr. Ramsamooj	Self Study	

Weekly Course Calendars

Week 4

Renal (Urinary) System							
Week: 4 - CP(s): Polyuria/Dysuria							
	Monday	Tuesday		Wednesday	Thursday	Friday	
	8/27/2018	8/28/2018		8/29/2018	8/30/2018	8/31/2018	
8:00 AM	Self Study	Self Study		Self Study	Self Study	Clinical Case	
8:30 AM	HYBRID Mid-Course MCQ EXAM	CP: CP: Frequency / Dysuria - Dr. Falck					
9:00 AM		CC Development - Dr. Falck					
9:30 AM		Medical Skills Group 1	HTN WORKSHOP Dr. Gerriets & Yarbrough				
10:00 AM				Masters Colloquium	Non-neoplastic Bladder Pathology - Dr. Hejazi	Think Tank 3: Bonus Points - Dr. Sheffield & Culler	
10:30 AM					Collecting System & Bladder Tumors - Dr. Hejazi		
11:00 AM							
11:30 AM							
12 noon	Lunch and activities	Lunch and activities		Lunch and activities	Lunch and activities	Lunch and activities	
12:30 PM							
1:00 PM	Self Study	Medical Skills Group 2	HTN WORKSHOP Dr. Gerriets & Yarbrough	CC Evolution - Dr. Sim / Yarbrough	Management of Frequency & Dysuria - Dr. Falck	Self Study	
1:30 PM				Pathology of Renal Tubular Diseases - Dr. Al-eyd	Immunosuppressants - Dr. Gerriets		
2:00 PM		Medical Skills Group 3	HTN WORKSHOP Dr. Gerriets & Yarbrough				FLIPPED: UTI and Their Mgmt - Dr. Elsayi / Gerriets
2:30 PM							
3:00 PM							
3:30 PM							
4:00 PM		Self Study					
4:30 PM							

Weekly Course Calendars

Week 5

Renal (Urinary) System								
Week: 5 - CP(s): CKD								
	Monday	Tuesday	Wednesday	Thursday	Friday			
	9/3/2018	9/4/2018	9/5/2018	9/6/2018	9/7/2018			
8:00 AM	HOLIDAY: Labor Day!	Self Study	Self Study	Self Study	CC Evolution / Clinical Case			
8:30 AM		CP: CKD - Dr. Pai						
9:00 AM		CC Development - Dr. Pai			Renal Toxins - Dr. Lackey			
9:30 AM		Medical Skills Group 1	Masters Colloquium					
10:00 AM			Renal Diet Competition - Dr. Yarbrough					
10:30 AM		IPE Day						
11:00 AM		Lunch and activities	Lunch and activities	Lunch and activities	Lunch and activities			
11:30 AM								
12 noon		Medical	Renovascular Injury - Dr. Hejazi	Mgmt & Complications of	Course Eval and Review			
12:30 PM								
1:00 PM		Skills Group 2	Case-based Workshop: Pathophysiology of CKD - Dr. diSibio	CKD - Dr. Pai	Self Study			
1:30 PM								
2:00 PM		IPE Day	Pathology of Renal Transplants - Dr. Ramsamooj	Self Study				
2:30 PM		Medical Skills Group 3						
3:00 PM		Self Study						
3:30 PM								
4:00 PM								
4:30 PM								

Weekly Course Calendars

**Week
Week 5**

Renal (Urinary) System					
Week: 6 - EXAM					
	Monday	Tuesday	Wednesday	Thursday	Friday
	9/10/2018	9/11/2018	9/12/2018	9/13/2018	9/14/2018
8:00 AM	Summative MCQ EXAM				Final Exam Retest
8:30 AM					
9:00 AM					
9:30 AM					
10:00 AM					
10:30 AM					
11:00 AM					
11:30 AM					
12 noon	Lunch and activities	Lunch and activities	Lunch and activities	Lunch and activities	Lunch and activities
12:30 PM					
1:00 PM					Potential Remediation/Review Time
1:30 PM					
2:00 PM					
2:30 PM					
3:00 PM					
3:30 PM					
4:00 PM					
4:30 PM					



2018 – 2019 Academic Year
Gastrointestinal System Course Syllabus
Course #: 521 and HS 621 (CDM)
Phase: A
Year: II
Semester: Fall

Course Dates: September 17, 2018– November 2, 2018
Credits Hours: 5

Course Director:

Nehad El-Sawi, PhD

Professor of Microbiology, Immunology and Molecular Biology

Basic Sciences Department

Room 115,

Phone: (916) 686-7300 Ext. 129

nehad.elsawi@cnsu.edu

Phase A Year II Coordinator:

Samantha Xiong

Samantha.xiong@cnsu.edu

Disclaimer about changes in Syllabus and Course Calendar

Every effort will be made to adhere to the contents of this syllabus. However, this document is subject to changes in the event of unforeseen, extenuating circumstances. Students will be notified as soon as possible if changes in the syllabus become necessary.

Course Teaching Faculty**Week 5**

Name/Degree	Rank/Title
Ghaith Aleyd, MD, MSC, PhD	Associate Professor of Pathology
*Nripendra Dhillon, MD	Associate Professor of Anatomy
Guy diSibio, MD, PhD	Associate Professor of Pathology, Physiology, Genetics and Genomics
*Nehad El-Sawi, PhD	Professor of Microbiology, Immunology and Cell Biology
Louise Glaser, MD, FAAP	Clinical Associate Professor
Nazila Hejazi, MD	Assistant Professor of Pathology
*Susan Ely, PhD	Professor of Immunology, Microbiology and Molecular Biology
Alan Ernst, PhD	Assistant Professor of Anatomy
Darilyn Falck, MD, FACEP	Associate Professor of Emergency Medicine
*Valerie Gerriets, PhD	Assistant Professor of Pharmacology
Laura Hoffman, MD, PhD	Associate Professor of Endocrinology
Rudolph Holguin, MD	Associate Professor of Emergency Medicine
Ishwarlal Jialal, MD, MBCHB	Professor of Physiology, Metabolism and Pathology
Sheryl Krig, PhD	Assistant Professor of Biochemistry
Forshing Lui, MD	Professor of Clinical Neurology
*Rajendra Ramsamooj, MD	Professor of Pathology, Surgical Pathology and Clinical Skills
Leonard Ranasinghe, MD, PhD	Professor of Medical Education and Emergency Medicine
Joseph Rogers, MD, FAAP, BCCEM	Professor of Medicine
Joseph Silva, MD, MACP	Professor of Internal Medicine and Infectious Diseases
*Tracy L. Yarbrough, PhD, MD, MAED	Associate Professor of Physiology

***Course Committee**

Open Door Policy: Course faculty have an open door policy and encourage contact from students by e-mail and in person to share impressions, concerns and/or ideas at any time

Volunteer Community Faculty (if applicable)
Name/Degree
James Lee, MD
George Meyer, MD
Mary Pat Pauly, MD

Communication with volunteer community faculty must be channeled through the course director.

Course Description:

This unit will cover the structures and functions of the organs of the gastrointestinal tract, as well as the auxiliary organs critical for digestive processes including the pancreas and liver. The behavior of this complex system of organs will be considered in normal health and in a variety of GI, hepatic, and metabolic disorders. The clinical presentations (CPs) within the GI Unit will be focused on the following common situations and presentations that a primary care physician will experience:

- Dysphagia, Vomiting & Nausea
- Constipation/Stool Incontinence, Abdominal pain
- Diarrhea
- Abdominal Distension, Abdominal Mass, Abdominal Pain, GI bleeding
- Jaundice
- Abnormal Liver Functions

The clinical presentations are accompanied by a clinical algorithm, a clinical reasoning guide and objectives lists. Clinical faculty members will emphasize critical decision points, setting the framework for the integration of the basic sciences. Following the clinical presentation, basic science faculty members will introduce the foundational concepts in each of the traditional basic sciences. Four of the clinical presentations will conclude with an interactive session on differential diagnosis by a gastroenterologist. Students will participate in worked case example sessions at the end of three of the clinical presentations and one clinical case based learning.

Additionally, students will participate in the longitudinal courses of Medical Skills and Masters Colloquium that run concurrently with Gastrointestinal system course.

Course Objectives:

By the conclusion of this course, the student will demonstrate the ability to:

#	Course Learning Objectives (CLOs)	Program Learning Objectives (PLOs)
1	Identify the major organs, tissues, and cell types of the GI tract, including auxiliary organs and their basic functions in the process of digestion and absorption.	2
2	Explain the molecular and cellular bases of the physiological processes of motility, secretion, digestion and absorption.	2
3	Explain the endocrine and neural feedback control mechanisms that regulate motility-secretion, digestion and absorption.	2
4	Explain how genetic variations and diseases alter the structural properties of the GI tract.	2
5	Apply knowledge of diagnostic tools, normal and pathologic processes, infections, pharmacokinetics, and pharmacodynamics to guide the safe and effective treatment of GI disorders.	1 & 2
6	Describe the impact of gender, culture, occupation, physiological factors, environment, ethnic, behavioral considerations, systems and society on the treatment and prevention of GI disorders	3 & 5
7	Demonstrate level-appropriate abilities in communication, interpersonal skills and professionalism in clinical decision making.	3 & 4

Please Note: All session objectives listed ~~Week 5~~ individual sessions (by date and time) are mapped to the course objectives.

Key: PLO = Program Learning Objective (#1=Patient Care; #2=Medical & Scientific Knowledge; #3=Communication and Interpersonal Skills; #4=Professionalism; #5=Health Care Systems; #6=Reflective Practice and Personal Development)

Session Locations:

Two large lecture halls, each with a seating capacity of 180 students, will be used for the basic science sessions. Eight small classrooms/college rooms, each with a capacity for 25 students and the Simulation Center space are available for small group sessions. A large gross anatomy laboratory with capacity for cadaver dissections, where a group of students will be assigned to each cadaver, is available for anatomy dissection.

Lecture/Session Duration: All lectures on the calendar as one hour sessions will be 50 minutes long with 10 minutes break at the end for questions and preparation for the next session. Any session/lecture longer than one hour will have 10 minutes break between every two hours.

Teaching/Learning Methodology: Case-Based instruction/Learning

- Case-Based instruction/Learning
- Demonstration
- Discussion, Large group
- Discussion, Small Group
- Independent Learning
- Laboratory
- Lecture
- Patient Presentation – Faculty
- Patient Presentation – Learner
- Self-Directed Learning

Online Materials – Canvas: Canvas is California Northstate University's Learning Management System.) Use your CNU NETID and password.

Turning Point: Every Phase A student was given a Turning Point Clicker during Orientation. **Please bring the Clicker to class at all times.**

Library/Learning Resources

The CNUCOM Library and Learning Resource Center is available for students, faculty, and staff. This program includes an initial 4200 square feet of space and seating for 100 devoted to the following resources: Library Facility and Collection, Computer resources, CNUCOM Electronic Library, and Interlibrary Loan Program. CNUCOM Resource Center maintains an Electronic Learning Resources System to provide information resources to students, faculty, and staff, and serve as an entry point for all users to meet their academic and research needs.

Required Textbook(s), Material(s) and Equipment:

Subject	Author Week 5	Title
Anatomy	Moore, Dalley & Augur	Clinically Oriented Anatomy 8e
Biochemistry	Lieberman	Marks' Basic Medical Biochemistry: A Clinical Approach 4e
Genetics	Nussbaum, McInnes & Willard	Thompson & Thompson Genetics in Medicine 8e
Internal Medicine	Kasper, Fauci, Hauser, Longo, Jameson & Loscalzo	Harrison's Internal Medicine
Immunology	Paraham	The Immune System 4e
Microbiology	Engleberg	Schaechter's Mechanisms of Microbial Disease 5e
Physiology	Hall	Guyton and Hall Textbook of Medical Physiology 13e

Recommended Textbook(s):

Subject	Author	Title
Anatomy Atlas (Pick any one that suits your learning style)	ISBN-13:978-1455704187	Netter's Atlas of Human Anatomy 6 th e
	ISBN-13:978-1626232525	Gilroy's Atlas of Anatomy 3 rd e
	ISBN-13:978-1469890685	Grant's Atlas of Anatomy 14 th e
	ISBN-13:978-1451193183	Rohen and Yokochi's Anatomy: A Photographic Atlas 8 th e
Embryology	Moore and Persaud	The Developing Human: Clinically Oriented Embryology 10e
Genetics <i>Strongly recommended</i>	Nussbaum, McInnes & Willard	Thompson & Thompson Genetics in Medicine 8e
Histology	Mescher AL	Junqueira's Basic Histology 14e
	Ross MH & Pawlina W	Histology: A Text and Atlas 7e
	Young B	Wheater's Functional Histology: A Text and Colour Atlas 6e
Pathology	Kumar, Vinay, Abul Abbas & Aster	Robins & Cotran Pathologic Basis of Diseases 9e
Pharmacology	Bardal	Applied Pharmacology
	Katzung & Trevor	Basic & Clinical Pharmacology 13e

Attendance

Lecture attendance is highly recommended, and laboratory sessions are mandatory. Sessions labeled as mandatory on the course calendar are required.

Sign-in sheets or electronic attendance will be provided at all mandatory activities. Students will be responsible for signing in themselves. The sign-in sheets or electronic tracking will be collected 5 minutes after the activity begins. Certain excused absences are allowed (please see Excused Absence Policy).

The following procedure(s) will be employed for breeches of these course requirements.

Week 5

1. Administrative/Support staff will notify the course director(s) and Assistant Dean of Student Affairs
2. A note will be placed in the student's file
3. Lapses in attendance fall under the COM's Professionalism Policy and are subject to inclusion in the student's MSPE.
4. Persistent lapses in attendance will require the student to appear before the Student Promotions Committee.

Exams and Grading/Assessment:

▪ **Formative**

- One in-class formative USMLE Step 1; 50 questions multiple-choice examination. This will be held on Monday morning of week 3. NOTE: This exam will be administered in a *hybrid* format. Namely, students will take a 50-item exam and submit their answers individually first, and will then take a second 50-item exam in teams (only one set of responses will be submitted for each team, and all members of a team will receive the same grade).

▪ **Summative**

- One USMLE Step 1 format, 50 multiple-choice question, mid-course examination on the Monday of the fourth week of the course. NOTE: This exam will be administered in a *hybrid* format. Namely, students will take a 50-item exam and submit their answers individually first, and will then take a second 50-item exam in teams (only one set of responses will be submitted for each team, and all members of a team will receive the same grade).
- One USMLE Step 1 format, 100 multiple-choice question, comprehensive final examination at the end of the course (on Monday of exam week).
- An anatomy laboratory practical exam
- Clinical Cases : Three ~2-hr sessions devoted to presentation and discussion of Clinical Cases will be offered; attendance at these sessions is mandatory. Students will work in group of five and student presentations will be graded using a rubric.
- Clinical Case-Based Learning: Three sessions of 2-hours each devoted to self-directed learning following problem-based learning format.
- **Special Bonus Points Student Assignment:**
 - Completion of Centers for Disease Control and Prevention (CDC), Association of American Medical Colleges (AAMC) module on :Navigating a Foodborne Outbreak: Preparation for Interprofessional Practice

Week 5

Total Course Score and Grading:

The total numeric score for the course will be measured as follows, which translates to recording a passing grade if 70 or above, and an honors grade if 90 or above.

#	Components	%	Notes/Explanation
1	Mid-Course Summative NBME Exam	15	Hybrid exam individual score
		5	Hybrid exam team score
2	End of Course Final Comprehensive NBME Summative Exam	60	This is a traditional individual exam (<u>not</u> a hybrid exam)
3	Anatomy Laboratory Practical	20	
4	Clinical Case Presentations (CC) Students are expected to successfully complete in order to pass the course.	0	Refer to description below
5	Clinical Case Based Learning (CCBL) Students are expected to successfully complete in order to pass the course.	0	Refer to description below
6	CDC/AAMC bonus points online module on “Navigating a Foodborne Outbreak: Preparation for Interprofessional Practice” Log on to the module: a. navigatinganoutbreakmodule.org b. Register by clicking link to bottom of login box. c. Access the learning module by using your registered email address and password.	*0	* Three (3) bonus points to be added to final grade after submission of proof of completion to the Course Director by 5:00:00 PM PT on Wednesday, 10/31/18, in order to receive the bonus points. Refer to module description below

Formative and summative NBME exams score reports will be available 3-days after the exam; it is the student responsibility to contact Course Director to obtain their individual score report.

Any additional (retesting) exams will be at the expense of the student.

The successful completion of the course is based on demonstrating high standards of ethical and professional behavior, as well as, passing both the Final Comprehensive Summative Exam **AND** the course with a grade of 70% or higher.

Grading percentages

Passing grade requires a total score of 70% or higher

Honors grade requires a total score of 90% or higher

**** if earned, bonus points from CDC/AAMC online module will be added to the overall course score to determine a final grade and will not be applied to the score on the summative exams or any other specific assessment.**

Remediation

Students failing the course will be referred to the Student Promotion Committee (SPC) and a custom tailored remediation plan will be developed.

Description of Clinical Cases and Clinical Case Based Learning

Clinical Cases (CC's) and Clinical Case Based Learning (CCBL's) are designed to promote the development of teamwork, professionalism, and evidence-based patient management skills that integrate the basic and clinical sciences.

During the M1 year, following a faculty-led Clinical Presentation (CP) lecture, the students will receive a PowerPoint presentation that contains the subjective (including the Chief Complaint, History of Present Illness, and Past Medical History) and objective (including the Physical Examination) findings for a hypothetical patient who presents with a complaint aligned with the CP lecture. As they assimilate basic and clinical science content throughout the week's lectures, students will work in assigned groups to complete a series of template slides included in the PowerPoint presentation. At the end of the week, each student group will submit its final presentation for a grade. One group in each college (on a preassigned, rotating basis) will present the case to their College for discussion. Each group will submit their case presentation for grading using a defined rubric by a rotating faculty member. Grading will be Pass/Needs Improvement/Fail.

During the M2 year, the process will be similar except that during the CP, students will develop learning objectives based the case presented. At the end of the week, each group will present a SOAP note and their Learning Objective to their College. The College Master will be responsible for grading and feedback. Grading will be Pass/Needs Improvement/Fail.

Clinical Case-Based Learning (CCBL) is an integrated, Problem-Based Learning modality that affords student self-directed learning in the context of a clinical case setting. Each week-long case is sequentially revealed over the course of three two-hour sessions. Students work in groups of about nine. For each case, each student will provide at least one teaching presentation to the group – this should be a PowerPoint slide set that includes citations for all images used and an *annotated* list of references from textbooks and the primary literature. Students are expected to offer constructive feedback on these presentations. The group will devise their own session learning objectives on Day 1 of each week; these will be the topics presented orally on Day 2. CCBL group assignment will remain stable for an entire academic year, to allow longitudinal formative feedback from facilitators, and to foster periodic peer- and self-assessment. Case Learning Objectives comprise material that may be tested in NBME course exams. All sessions are mandatory and timely arrival is expected in order for students to earn a grade of PASS for this component of a course; grading will be Pass/Fail. When feasible, CCBL sessions will occur at least once in each non-experiential course.

Description of Navigating a Foodborne Outbreak: Preparation for Interprofessional Practice on-line module

Week 5

It is a self-paced, interactive learning module that demonstrates the importance of interprofessional practice among health professionals to improve and protect population health in the context of a foodborne outbreak.

The module will take approximately 90 minutes – two hours, depending on the level of previous exposure to the content and your interest in exploring the optional reference resources. You may choose to complete the module in one session or pause and return to the module, completing it in multiple sessions. The module is divided into three chapters – one set in an outpatient clinic, one at a local public health department, and one at a multidisciplinary meeting after the outbreak has resolved. The foodborne illness scenario is based on actual multi-state foodborne outbreak that occurred in 2015-16, but the details of the patients, clinicians, and the local health department are fictional. Any similarities to individuals or settings are coincidental.

You will take a preliminary quiz to assess your knowledge of the content before beginning the module and will complete a quiz after completing the module to evaluate what you have learned. You will receive a digital certificate upon completion of the module.

The module was developed collaboratively by the four national associations that comprise the Centers for Disease Control and Prevention's (CDC) Academic Partnerships to Improve Health (APIH) initiative with expertise, guidance, and funding provided by CDC. The APIH associations are: American Association of Colleges of Nursing; Association for Prevention Teaching and Research; Association of American Medical Colleges; and Association of Schools and Programs of Public Health.

Anatomy Laboratory Rules

An appreciation of the significance of the anatomical gift is important to ensure our continuing respect for the altruism of our donors. The UC Davis and UC San Francisco willed body programs foster a learning partnership with CNUCOM in creating an educational relationship between the donor, the teacher, and the student. Dissection is a privilege and an incredible gift from the donors who have chosen to give so that we may learn.

Some may feel uneasy and anxious at the prospect of first dealing with cadavers; this is a natural response inasmuch as dealing with death is not always easy. Talk about your feelings with the faculty. Share them with your peers. Generations of students have experienced similar emotions and conversation helps calm our apprehensions.

In compliance with State and Federal regulations, and in the interest of your personal safety, you are required to follow these rules of the anatomy lab:

1. The donors are to be treated with dignity and utmost respect at all times. Crude or inappropriate remarks could result in dismissal from the lab.
2. Similar to medical settings, the discussion of donors or lab practices outside of the lab is inappropriate unless it is for the express purpose of study or learning. The nature of the learning

process within the lab can be upsetting to the general public, so always be mindful of who could be listening to conversations.

Week 5

3. The anatomical materials from a donor are a precious resource, and a protected resource. Under no circumstances shall anatomical material be taken from the laboratory.
4. Each donor is sent with an identification tracking number and device. This number and/or device must remain affixed to the specimen throughout its use until its return to the willed body program. All information regarding the donor is confidential.
5. Fluid Disposal: There are containers in the room for fluid collection. If any are full, let the anatomy lab technician know.
6. Trash: Please dispose of any soiled gloves, paper towels, aprons, or other supplies in the RED trashcans. When you see the trash cans are near to being full, please let the anatomy lab technician know.
7. Dissected Tissue: Any bits of skin, fat or other human tissues must be disposed of in the WHITE buckets at your table. Please do not put any other items in these buckets. If this can is nearing capacity, please let the anatomy lab technician know. Such items from each donor are put in separate plastic bags with the ID# of the donor, kept in cold storage, and returned with other remains of the donor at the time of cremation.
8. The anatomy lab is under video surveillance, and is monitored for entry through identification badge scans. The person using the identification badge is responsible for all people who enter with them. Please request the identity of any person who is unknown to you.
9. All equipment and models within the anatomy lab are identified and monitored. No equipment or models are allowed to leave the anatomy lab without permission.
10. To protect the dignity and privacy of the donor, the face or any other identifying feature of the case shall never be publicly displayed. This includes display to students, staff, visitors and faculty not participating in the intended use of the material.
11. Horseplay within the lab is strictly prohibited.
12. The use of cell phones and photography by students is not allowed.
13. Universal precautions must be followed: Wear protective clothing/lab coat and gloves at all times while dissecting, and protective eyewear when there is a risk of splash.
14. If you use contacts, it is highly recommended that you wear glasses when in lab.
15. If you have a chemical sensitivity let a member of your faculty know; they will assist you in purchasing a respirator and will train you to use it.
16. No food, drink, or chewing gum or applying cosmetics is permitted in the laboratory.
17. No open toed shoes are allowed. Your shoes should protect your feet from accidental chemical drip and injury from falling sharps. Your shoes should provide sufficient traction for use in a lab

where the floor has the possibility of being slippery. It is recommended that you have a pair of shoes for lab use only.

Week 5

18. Shorts or skirts are not permitted (please see the Student Handbook Dress code policy for Anatomy Lab).

19. Students with long hair need to have it pulled back and tied.

20. Sharps Safety: Always use hemostats or a blade-removal tool to remove a scalpel blade from its handle. Used blades must be disposed in the provided sharps containers.

21. Dissection equipment: All the items you should need are provided for you. Please remember to wash and dry the instruments at the end of each session so they do not rust.

22. Prevent desiccation by using wet cheesecloth to cover your donors as needed. Remember to always use wetting solution to moisten dissected parts otherwise it will dry your dissection! Wetting solution contains chemicals that can cause irritation and burns. Use it with care.

23. When leaving the lab, please remember to properly wrap and moisten your cadaver. This is essential! The table covers should be closed, and the lab doors should be locked behind you.

For additional information, please contact:

Nripendra Dhillon, MBBS, MS: (707) 864-6362

Sailabala Vanguri, MD: (916) 686-7965

Student Evaluations of Course and Faculty

Student Evaluations of the Course and Faculty: Students are required to complete these evaluations during the assigned mandatory session on the course calendar. Course evaluations will be scheduled in the course calendar for the last Friday of instruction. The goal for course evaluations is 100% participation. In the event that there is less than 90% class participation, grades will be withheld, by both the Course Director and the Registrar, for the entire class until the 90% participation level is reached.

Students will be expected to comply with all CNU and COM policies

Week 5

Week 5

Gastrointestinal System

COM 521 - MS2 Fall 2018-19

9/17/18 - 11/2/18

11/8/2018

Weeks	Date	Time	Title	Faculty
Week 1				
	Monday, 9/17/18	8:00 - 12:00 pm	SELF STUDY	
	Monday, 9/17/18	12:00 - 1:00 pm	LUNCH	
	Monday, 9/17/18	1:00 - 1:30 pm	Introduction to the Gastrointestinal System	El-Sawi
	Monday, 9/17/18	1:30 - 2:30 pm	CP: Dysphagia	Holguin
	Monday, 9/17/18	2:30 - 3:30 pm	CP: Vomiting & Nausea	Holguin
	Monday, 9/17/18	3:30 - 4:30 pm	Mandatory: Clinical Case Development	Glaser
	Monday, 9/17/18	4:30 - 5:00 pm	SELF STUDY	
	Tuesday, 9/18/18	8:00 - 10:00 am	SELF STUDY	
	Tuesday, 9/18/18	10:00 - 12:00 pm	Medical Skills - Group 3	MS
	Tuesday, 9/18/18	12:00 - 1:00 pm	LUNCH	
	Tuesday, 9/18/18	1:00 - 3:00 pm	Medical Skills - Group 1	MS
	Tuesday, 9/18/18	3:00 - 5:00 pm	Medical Skills - Group 2	MS
	Wednesday, 9/19/18	8:00 - 10:00 am	SELF STUDY	
	Wednesday, 9/19/18	10:00 - 12:00 pm	Masters Colloquium	
	Wednesday, 9/19/18	12:00 - 1:00 pm	LUNCH	
	Wednesday, 9/19/18	1:00 - 3:00 pm	Neuronal & Humoral Regulation of GI Function	Rogers
	Wednesday, 9/19/18	3:00 - 4:00 pm	Salivary & Gastric Secretions	Rogers
	Wednesday, 9/19/18	4:00 - 5:00 pm	SELF STUDY	
	Thursday, 9/20/18	8:00 - 11:00 am	SELF STUDY	
	Thursday, 9/20/18	11:00 - 12:00 pm	Normal Upper GI Motility	Rogers
	Thursday, 9/20/18	12:00 - 1:00 pm	LUNCH	
	Thursday, 9/20/18	1:00 - 3:00 pm	Abnormal Motility of Oropharynx & Esophagus; Achalasia; Pathology of Oropharynx & Vomiting	diSibio
	Thursday, 9/20/18	3:00 - 4:00 pm	GERD, Barrett's Esophagus; Carcinoma	Ramsamooj
	Thursday, 9/20/18	4:00 - 5:00 pm	Pediatric Vomiting, Pyloric Stenosis	Ramsamooj
	Friday, 9/21/18	8:00 - 10:00 am	MANDATORY: Clinical Cases	
	Friday, 9/21/18	10:00 - 11:00 am	Mandatory: Differential Diagnosis of Dysphagia	

	Friday, 9/21/18	11:00 - 12:00 pm	SELF STUDY	
	Friday, 9/21/18	12:00 - 1:00 pm	LUNCH	
	Friday, 9/21/18	1:00 - 5:00 pm	SELF STUDY	
Week 2				
	Monday, 9/24/18	8:00 - 10:00 am	SELF STUDY	
	Monday, 9/24/18	10:00 - 11:00 am	CP: Constipation/Stool Incontinence	Ranasinghe
	Monday, 9/24/18	11:00 - 12:00 pm	Mandatory: CP: Abdominal Pain	James Lee
	Monday, 9/24/18	12:00 - 1:00 pm	LUNCH	
	Monday, 9/24/18	1:00 - 1:30 pm	Mandatory: Clinical Case Development	Glaser
	Monday, 9/24/18	1:30 - 2:30 pm	Small & Large Bowel Motility	Rogers
	Monday, 9/24/18	2:30 - 3:30 pm	GI Hormones, Neurotransmitters & Neuromodulators	Rogers
	Monday, 9/24/18	3:30 - 4:30 pm	Anterior Abdominal Wall	Dhillon
	Monday, 9/24/18	4:30 - 5:00 pm	SELF STUDY	
	Tuesday, 9/25/18	8:00 - 10:00 am	SELF STUDY	
	Tuesday, 9/25/18	10:00 - 12:00 pm	Medical Skills - Group 1 / Mandatory: Histology Lab: Stomach & Intestines	Ramsamooj
	Tuesday, 9/25/18	12:00 - 1:00 pm	LUNCH	
	Tuesday, 9/25/18	1:00 - 3:00 pm	Medical Skills - Group 2 / Mandatory: Histology Lab: Stomach & Intestines	Ramsamooj
	Tuesday, 9/25/18	3:00 - 5:00 pm	Medical Skills - Group 3 / Self Study	
	Wednesday, 9/26/18	8:00 - 10:00 am	SELF STUDY	
	Wednesday, 9/26/18	10:00 - 12:00 pm	Masters Colloquium	
	Wednesday, 9/26/18	12:00 - 1:00 pm	LUNCH	
	Wednesday, 9/26/18	1:00 - 3:00 pm	Pathology of Stomach including H pylori infection	Ramsamooj
	Wednesday, 9/26/18	3:00 - 4:00 pm	Pharmacologic Management of Peptic Ulcer and Gastritis	Gerriets
	Wednesday, 9/26/18	4:00 - 5:00 pm	Pharmacologic Management of Constipation	Gerriets
	Thursday, 9/27/18	8:00 - 9:00 am	Visceral Sensory Pathways, Referred Pain, Abdominal Pain	Lui
	Thursday, 9/27/18	9:00 - 12:00 pm	Mandatory: Anatomy Lab - Group A / Self Study	
	Thursday, 9/27/18	12:00 - 1:00 pm	LUNCH	
	Thursday, 9/27/18	1:00 - 2:00 pm	Digestion & Absorption	Krig
	Thursday, 9/27/18	2:00 - 5:00 pm	Mandatory: Anatomy Lab - Group B / Self Study	

	Friday, 9/28/18	8:00 - 10:00 am	MANDATORY: Clinical Cases	
	Friday, 9/28/18	10:00 - 11:00 am	Mandatory: Differential Diagnosis Abdominal Pain	Pauly
	Friday, 9/28/18	11:00 - 12:00 pm	SELF STUDY	
	Friday, 9/28/18	12:00 - 1:00 pm	LUNCH	
	Friday, 9/28/18	1:00 - 5:00 pm	SELF STUDY	
Week 3				
	Monday, 10/1/18	8:00 - 11:00 am	Mandatory: Formative MCQ Exam	
	Monday, 10/1/18	11:00 - 12:00 pm	SELF STUDY	
	Monday, 10/1/18	12:00 - 1:00 pm	LUNCH	
	Monday, 10/1/18	1:00 - 2:00 pm	CP: Diarrhea	James Lee
	Monday, 10/1/18	2:00 - 3:00 pm	Abnormalities of digestion or absorption: Malabsorption & Intolerance of Foods	Krig
	Monday, 10/1/18	3:00 - 4:00 pm	Peritoneal Cavity & Vasculature	Dhillon
	Monday, 10/1/18	4:00 - 5:00 pm	SELF STUDY	
	Tuesday, 10/2/18	8:00 - 10:00 am	SELF STUDY	
	Tuesday, 10/2/18	10:00 - 12:00 pm	Medical Skills - Group 2 / Self Study	
	Tuesday, 10/2/18	12:00 - 1:00 pm	LUNCH	
	Tuesday, 10/2/18	1:00 - 3:00 pm	Medical Skills - Group 3 / Self Study	
	Tuesday, 10/2/18	3:00 - 5:00 pm	Medical Skills - Group 1 / Self Study	
	Wednesday, 10/3/18	8:00 - 11:00 am	SELF STUDY	
	Wednesday, 10/3/18	11:00 - 12:00 pm	Fluid & Electrolyte Absorption; Secretory Diarrhea; toxins, Osmotic Diarrheas, Steatorrhea	Yarbrough
	Wednesday, 10/3/18	12:00 - 1:00 pm	LUNCH	
	Wednesday, 10/3/18	1:00 - 2:00 pm	Mucosal Immunity	Ely
	Wednesday, 10/3/18	2:00 - 4:00 pm	Infectious Causes of Nausea, Vomiting & Diarrhea I & II	El-Sawi
	Wednesday, 10/3/18	4:00 - 5:00 pm	Malabsorption; Irritable Bowel Syndrome	Ramsamooj
	Thursday, 10/4/18	8:00 - 9:00 am	Gastrointestinal Infections	Silva
	Thursday, 10/4/18	9:00 - 12:00 pm	Mandatory: Anatomy Lab - Group B / Self Study	
	Thursday, 10/4/18	12:00 - 1:00 pm	LUNCH	
	Thursday, 10/4/18	1:00 - 2:00 pm	Dysphagia, Xerostomia, Antiemetics & Prokinetics Pharmacology and Principles	Ibrahim
	Thursday, 10/4/18	2:00 - 5:00 pm	Mandatory: Anatomy Lab - Group A / Self Study	
	Friday, 10/5/18	8:00 - 9:00 am	Infectious Causes of Nausea, Vomiting & Diarrhea III	El-Sawi

	Friday, 10/5/18	9:00 - 11:00 am	Pharmacologic Management of Diarrhea: anti-inflammatory, immunosuppressive and antimicrobial & Antiparasitics	Gerriets
	Friday, 10/5/18	11:00 - 12:00 pm	Week 5 Mandatory: Differential Diagnosis of Diarrhea	George Meyer
	Friday, 10/5/18	12:00 - 1:00 pm	LUNCH	
	Friday, 10/5/18	1:00 - 5:00 pm	SELF STUDY	
Week 4				
	Monday, 10/8/18	8:00 - 12:00 pm	Hybrid Mid-Course MCQ Summative Exam	
	Monday, 10/8/18	12:00 - 1:00 pm	LUNCH	
	Monday, 10/8/18	1:00 - 2:00 pm	CP: Abdominal Distension (including abdominal mass)	Falck
	Monday, 10/8/18	2:00 - 3:00 pm	CP: GI Bleeding	Falck
	Monday, 10/8/18	3:00 - 3:30 pm	Mandatory: Clinical Case Development	Glaser
	Monday, 10/8/18	3:30 - 5:00 pm	Bowel Obstruction; Motility Disorders	Holguin
	Tuesday, 10/9/18	8:00 - 10:00 am	SELF STUDY	
	Tuesday, 10/9/18	10:00 - 12:00 pm	Medical Skills - Group 3 / Mandatory: Histology Lab: Liver, Gall Bladder, Clon, Pancrease - Group 1	Ramsamooj
	Tuesday, 10/9/18	12:00 - 1:00 pm	LUNCH	
	Tuesday, 10/9/18	1:00 - 3:00 pm	Medical Skills - Group 1 / Mandatory: Histology Lab: Liver, Gall Bladder, Clon, Pancrease - Group 2	Ramsamooj
	Tuesday, 10/9/18	3:00 - 5:00 pm	Medical Skills - Group 2 / Mandatory: Histology Lab: Liver, Gall Bladder, Clon, Pancrease - Group 3	Ramsamooj
	Wednesday, 10/10/18	8:00 - 10:00 am	SELF STUDY	
	Wednesday, 10/10/18	10:00 - 12:00 pm	Masters Colloquium	
	Wednesday, 10/10/18	12:00 - 1:00 pm	LUNCH	
	Wednesday, 10/10/18	1:00 - 2:00 pm	Upper GI Bleeding	Holguin
	Wednesday, 10/10/18	2:00 - 3:00 pm	Lower GI Bleeding	Holguin
	Wednesday, 10/10/18	3:00 - 4:00 pm	Molecular Genetics og GI Tract & Neoplasia I	diSibio
	Wednesday, 10/10/18	4:00 - 5:00 pm	Molecular Genetics oo GI Tract & Neoplasia II	diSibio
	Thursday, 10/11/18	8:00 - 9:00 am	SELF STUDY	
	Thursday, 10/11/18	9:00 - 12:00 pm	Mandatory: Anatomy Lab - Group B / Self Study	
	Thursday, 10/11/18	12:00 - 1:00 pm	LUNCH	
	Thursday, 10/11/18	1:00 - 2:00 pm	Venous Drainage & Porto-caval Anastomoses	Dhillon
	Thursday, 10/11/18	2:00 - 5:00 pm	Mandatory: Anatomy Lab - Group A / Self Study	

	Friday, 10/12/18	8:00 - 10:00 am	MANDATORY: Clinical Cases	
	Friday, 10/12/18	10:00 - 12:00 pm	Antineoplastic Therapy for GI Malignancies	Gerriets
	Friday, 10/12/18	12:00 - 1:00 pm	LUNCH	
	Friday, 10/12/18	1:00 - 5:00 pm	SELF STUDY	
Week 5				
	Monday, 10/15/18	8:00 - 10:00 am	SELF STUDY	
	Monday, 10/15/18	10:00 - 12:00 pm	Mandatory: CCBL Session 1	
	Monday, 10/15/18	12:00 - 1:00 pm	LUNCH	
	Monday, 10/15/18	1:00 - 2:00 pm	CP: Jaundice	Jialal
	Monday, 10/15/18	2:00 - 3:00 pm	Jaundice	Krig
	Monday, 10/15/18	3:00 - 4:00 pm	Exocrine Pancrease & Hepatobiliary secretions	Hoffman
	Monday, 10/15/18	4:00 - 5:00 pm	Liver and Posterior Abdominal Wall	Dhillon
	Tuesday, 10/16/18	8:00 - 10:00 am	SELF STUDY	
	Tuesday, 10/16/18	10:00 - 12:00 pm	Medical Skills - Group 3/ Self Study	
	Tuesday, 10/16/18	12:00 - 1:00 pm	LUNCH	
	Tuesday, 10/16/18	1:00 - 3:00 pm	Medical Skills - Group 1 / Self Study	
	Tuesday, 10/16/18	3:00 - 5:00 pm	Medical Skills - Group 2 / Self Study	
	Wednesday, 10/17/18	8:00 - 10:00 am	SELF STUDY	
	Wednesday, 10/17/18	10:00 - 12:00 pm	Mandatory: CCBL Session 2	
	Wednesday, 10/17/18	12:00 - 1:00 pm	LUNCH	
	Wednesday, 10/17/18	1:00 - 2:00 pm	Liver Metabolism	Krig
	Wednesday, 10/17/18	2:00 - 3:00 pm	Pathology of Pancrease & Pancreatic Disease I	Ramsamooj
	Wednesday, 10/17/18	3:00 - 4:00 pm	Pathology of Pancrease & Pancreatic Disease II	Ramsamooj
	Wednesday, 10/17/18	4:00 - 5:00 pm	SELF STUDY	
	Thursday, 10/18/18	8:00 - 9:00 am	Ascites and GI/Hepatic hemodynamics	Yarbrough
	Thursday, 10/18/18	9:00 - 12:00 pm	Mandatory: Anatomy Lab - Group A / Self Study	
	Thursday, 10/18/18	12:00 - 1:00 pm	LUNCH	
	Thursday, 10/18/18	1:00 - 2:00 pm	Non-Neoplastic Hepatic Pathology I	Aleyd
	Thursday, 10/18/18	2:00 - 5:00 pm	Mandatory: Anatomy Lab - Group B / Self Study	

	Friday, 10/19/18	8:00 - 10:00 am	Mandatory: CCBL Session 3	
	Friday, 10/19/18	10:00 - 12:00 pm	SELF STUDY	
	Friday, 10/19/18	12:00 - 1:00 pm	LUNCH	
	Friday, 10/19/18	1:00 - 5:00 pm	SELF STUDY	
Week 6				
	Monday, 10/22/18	8:00 - 12:00 pm	SELF STUDY	
	Monday, 10/22/18	12:00 - 1:00 pm	LUNCH	
	Monday, 10/22/18	1:00 - 2:00 pm	CP: Abnormal LFT's	Lui
	Monday, 10/22/18	2:00 - 3:00 pm	Non-Neoplastic Hepatic Pathology II	Aleyd
	Monday, 10/22/18	3:00 - 5:00 pm	Gallbladder & Neoplastic Hepatic Pathology	Ramsamooj
	Tuesday, 10/23/18	8:00 - 10:00 am	SELF STUDY	
	Tuesday, 10/23/18	10:00 - 12:00 pm	Medical Skills - Group 2 / Self Study	
	Tuesday, 10/23/18	12:00 - 1:00 pm	LUNCH	
	Tuesday, 10/23/18	1:00 - 3:00 pm	Medical Skills - Group 3 / Self Study	
	Tuesday, 10/23/18	3:00 - 5:00 pm	Medical Skills - Group 1 / Self Study	
	Wednesday, 10/24/18	8:00 - 10:00 am	SELF STUDY	
	Wednesday, 10/24/18	10:00 - 12:00 pm	Masters Colloquium	
	Wednesday, 10/24/18	12:00 - 1:00 pm	LUNCH	
	Wednesday, 10/24/18	1:00 - 2:00 pm	Toxic Effects of Drugs & Alcohol on liver	Gerriets
	Wednesday, 10/24/18	2:00 - 3:00 pm	Viral Hepatitis: Acute & Chronic	El-Sawi
	Wednesday, 10/24/18	3:00 - 4:00 pm	The Gut and the Microbiome	Ernst
	Wednesday, 10/24/18	4:00 - 5:00 pm	SELF STUDY	
	Thursday, 10/25/18	8:00 - 12:00 pm	SELF STUDY	
	Thursday, 10/25/18	12:00 - 1:00 pm	LUNCH	
	Thursday, 10/25/18	1:00 - 2:00 pm	Pharmacologic Management of Viral Hepatitis	Ibrahim
	Thursday, 10/25/18	2:00 - 3:00 pm	Mandatory: Differential Diagnosis of Abnormal Liver Functions	Pauly
	Thursday, 10/25/18	3:00 - 4:00 pm	Embryology Review	Dhillon
	Thursday, 10/25/18	4:00 - 5:00 pm	SELF STUDY	
	Friday, 10/26/18	8:00 - 10:00 am	SELF STUDY	
	Friday, 10/26/18	10:00 - 11:30 am	GI Course Review	Dhillon, Yarbrough, Ramsamooj, El-Sawi, Gerriets, diSibio

Week 5

Week 7				
	Monday, 10/29/18	8:00 - 12:00 pm	Comprehensive Summative EXAM - NBME - CAS	
	Monday, 10/29/18	12:00 - 1:00 pm	LUNCH	
	Monday, 10/29/18	1:00 - 2:00 pm	EXAM - NBME - CAS	
	Monday, 10/29/18	2:00 - 5:00 pm	SELF STUDY	
	Tuesday, 10/30/18	8:00 - 12:00 pm	Medical Skills Formative OSCE	
	Tuesday, 10/30/18	12:00 - 1:00 pm	LUNCH	
	Tuesday, 10/30/18	1:00 - 5:00 pm	Medical Skills Formative OSCE	

Week 5

**2018 – 2019 Academic Year
Endocrine Session Course Syllabus
Course #: 571 and HS 631 (CDM)
Year: II
Semester: Fall**

Course Dates: 11/6/2018 – 12/14/2018

Credits Hours: 4

Course Directors: Mark Sheffield, Jr M.D., PhD
Associate Professor of Clinical Medicine and Physiology
mark.sheffield@cnsu.edu

Floyd Culler, M.D.
Professor of Pediatrics, Endocrinology, and Medical Skills
floyd.culler@cnsu.edu

Every effort will be made to adhere to the contents of this syllabus. However, this document is subject to changes in the event of unforeseen, extenuating circumstances. Students will be notified as soon as possible if changes in the syllabus become necessary.

Course Teaching Faculty

Name/Degree	Rank/Title
Ghaith Al-Eyd, MD	Associate Professor of Pathology
Reem Al Olaby,	Assistant Professor of Biology & Biotechnology
Floyd Culler, MD	Professor of Pediatrics, Endocrinology and Medical Skills
Nripendra Dhillon, MBBS, MS	Associate Professor of Anatomy
Guy diSibio, MD, PhD	Associate Professor of Pathology, Hematopathology, Surgical Pathology, Molecular Genetics, and Medical Skills
Susan Ely, PhD	Professor of Molecular Biology, Immunology and Microbiology
Nazila Hejazi, MD	Assistant Professor of Pathology
Laura Hoffman, MD	Associate Professor of Endocrinology
Sheryl Krig, PhD	Assistant Professor of Biochemistry
Ishwarlal Jialal, MD, MBChB	Professor of Physiology, Metabolism, and Pathology
Rajendra Ramsamooj, MD	Professor of Pathology, Surgical Pathology and Clinical Skills
Mark Sheffield, MD PhD	Associate Professor of Physiology, Endocrinology, and Medical Skills
Sailabala Vanguri, MD	Assistant Professor of Anatomy
Jason Wong, Pharm. D.	Assistant Professor of Pharmacology
Tracy Yarbrough, MD, PhD	Associate Professor of Physiology

Open Door Policy: The course directors have an open door policy and encourages contact from students by e-mail, telephone/voicemail message, and in person, to share impressions, concerns and/or ideas at any time. Course faculty have an open door policy and encourage contact from students by e-mail and in person to share impressions, concerns and/or ideas at any time

Lecture/Session Duration: all lectures on the calendar as one hour sessions will be 50 minutes long with 10 minutes break at the end for questions and preparation for the next session. Any session/lecture longer than one hour will have 10 minutes break between every two hours.

Communication with volunteer community faculty must be channeled through the course director.

Course Description

The endocrine system acts to coordinate the body's activities using chemical messengers (hormones) that are transported by the circulatory system to influence every cell, organ, and function of our bodies. The foundations of this system are the glands and the hormones they produce. Hormones, as the body's chemical messengers, transfer information and instructions from one set of cells to another and are thereby instrumental in regulating mood, growth and development, cellular and tissue function, metabolism, sexual function and reproductive processes. The course covers the endocrine system and its hormonal products, including (a) the hormone producing cells, (b) synthesis, release and transport of the hormones, (c) the effects of hormones on target cells covering hormone receptors, signal transduction and the mechanisms of hormone action, (d) the intricacies of the hormonal and metabolic feedback regulatory mechanisms, (e) the effects of hormones on physiological processes as well as (f) the diseases caused by inappropriate hormone secretion and function.

The basic science structure of the course (covering anatomy, embryology, histology, biochemistry, genetics, microbiology, immunology, physiology, pathophysiology and pathology) is integrated with clinical correlates through the introduction of Clinical Presentations (CP's) that focus on common presenting clinical situations/complaints that primary care physicians will encounter in their daily practice (see list of CP's below). This format allows introduction of therapeutic principles used in treating endocrine disorders. The course schedule includes five instruction weeks and one week of review and exams. Each instructional week, specific endocrine glandular systems are introduced after a basic science foundation. The use of Clinical Presentations will supply the added context to real medical situations.

In addition, the use of a Clinical Case-Based Learning (CCBL) session will be used to allow further intensive study to a specific endocrine issue. These will consist of student-led small groups with a leader, scribe, and researcher selected. A non-content facilitator will also be present to help guide the session.

Finally, to further enhance student-based learning, some lectures will be presented as "Student Interactive Learning sessions (SILS) emphasizing student-led investigation and communication in place of conventional instructor-led lectures. The students are expected to attend and to take an active role in their small groups. Pre-assigned readings will be provided and a brief quiz will occur at the beginning of each 2 hr. SILS block.

Each week ends with review sessions including NBME-style practice questions. A Midterm exam will be given after two weeks of instruction and will be comprised of 50 NBME questions chosen to relate to material covered in first 2 weeks of the session. At the course conclusion, a comprehensive summative exam of 100 NBME questions will be given.

Course Learning Objectives:

By the conclusion of this course, the student will demonstrate the ability to:

#	Course Learning Objectives (CLOs)	Program Learning Objectives (PLOs)
1	Identify and describe the macroscopic and microscopic structures of endocrine glands and the embryologic abnormalities leading to disease states.	PLO-2 (MSK1, MSK2)
2	Identify water soluble versus lipid soluble hormones and relate the signaling mechanisms they utilize, especially the feedback control of hormone synthesis and release as well as the crosstalk between the nervous and endocrine systems.	PLO-2 (MSK1, MSK2)
3	Describe the result of over production and underproduction of specific hormones as it relates to health and disease including subtle physical findings.	PLO-2 (MSK1, MSK2, MSK3)
4	Apply knowledge of pharmacokinetics, pharmacodynamics and genetic variability to select optimal hormone and drug therapies for an effective and safe replacement or blockade treatment of hormone-related diseases and conditions.	PLO-2 (MSK1, MSK2, MSK3, MSK4)
5	Explain how gender, ethnic and behavioral considerations may affect risk, etiology, diagnosis, management, prognosis and prevention of endocrine diseases and disorders.	PLO-2 (MSK1, MSK2, MSK3, MSK4)
6	* Demonstrate level-appropriate skills in communication, professionalism and medical/procedural related abilities in dealing with patients, and includes environmental, cultural and societal factors in clinical decision making as it relates to endocrine pathologies.	PLO-1 (PC1, PC2, PC3, PC4, PC5, PC6, PC7); PLO-3 (C1, C2, C3), PLO-4 (P1, P2, P3)

** CLO 6 link to PLO1 will be through Clinical Cases sessions and CCBL sessions*

Please Note: All session objectives listed in the individual sessions (by date and time) are mapped to the course objectives.

Key: PLO = Program Learning Objective (#1=Patient Care; #2=Medical & Scientific Knowledge; #3=Communication and Interpersonal Skills; #4=Professionalism; #5=Health Care Systems; #6=Reflective Practice and Personal Development)

Session Locations:

Two large lecture halls, each with a seating capacity of 180 students, will be used for the basic science sessions. Eight small classrooms/college rooms, each with a capacity for 25 students and the Simulation Center space are available for small group sessions. A large gross anatomy laboratory with capacity for cadaver dissections, where a group of students will be assigned to each cadaver, is available for anatomy dissection.

Lecture/Session Duration: All lectures on the calendar as one hour sessions will be 50 minutes long with 10 minutes break at the end for questions and preparation for the next session. Any session/lecture longer than one hour will have 10 minutes break between every two hours.

Teaching/Learning Methodology:

- Case-Based instruction/Learning
- Concept Mapping
- Conference
- Demonstration
- Discussion, Large group (>12) and Small group (<12)
- Independent Learning
- Laboratory
- Lecture
- Mentorship
- Patient Presentation – Faculty
- Patient Presentation – Learner
- Peer Teaching
- Preceptorship
- Reflection
- Role Play Dramatization
- Self-Directed Learning
- Service Learning Activity
- Simulation
- Team-Based Learning (TBL) and Team Building
- Tutorial
- Workshops

Online Materials – Canvas: Canvas is California Northstate University's Learning Management System.). Use your CNU NETID and password.

Turning Point: Every Phase A student is given a Turning Point Clicker during Orientation.

Please bring the Clicker to class at all times.

Library/Learning Resources

The CNUCOM Library and Learning Resource Center is available for students, faculty, and staff. This program includes an initial 4200 square feet of space and seating for 100 devoted to the following resources: Library Facility and Collection, Computer resources, CNUCOM Electronic Library, and Interlibrary Loan Program. CNUCOM Resource Center maintains an Electronic

Learning Resources System to provide information resources to students, faculty, and staff, and serve as an entry point for all users to meet their academic and research needs.

Required Textbook(s), Material(s) and Equipment:

Subject	Author	Title
Anatomy	Moore, Dailey, & Agur	Clinically Oriented Anatomy
Biochemistry	Peet, Liebermann, Marks	Mark's Basic Medical Biochemistry
Embryology	Langman	Langman's Medical Embryology
Medicine	Harrison	Harrison's Principles of Internal Medicine
Pathology	Kumar, Abbas, Fausto, & Aster	Robbins and Cotran Pathological Basis of Disease
Pediatrics	Nelson	Nelson Textbook of Pediatrics
Pharmacology	DiPiro, Yee, Wells, Posey	Pharmacotherapy: A Pathophysiological Approach
Physiology	Guyton	Guyton & Hall Textbook of Physiology
Histology	Ross and Pawlina	Junqueira's Basic Histology
Clinical Endocrinology	Gardner and Shoback	Greenspan's Basic & Clinical Endocrinology

Recommended Textbook(s):

Mosby Endocrine and Reproductive Physiology
Kaplan's Med Essentials for USMLE Step 1
Principles of Pharmacology 2012
McGraw Hill's NAPLEX Review Guide 2001
USMLE 1 Physiology Lecture Notes
Kaplan Clinical Pediatric Endocrinology

Attendance

Lecture/Learning Activity Attendance

Lecture attendance is highly suggested; unless otherwise labelled as mandatory on course calendar.

Sign-in sheets or electronic attendance will be provided at all mandatory activities. Students will be responsible for signing in themselves. The sign-in sheets or electronic tracking will be collected 5 minutes after the activity begins. Certain excused absences are allowed (please see Excused Absence Policy).

The following procedure(s) will be employed for breeches of these course requirements.

1. Administrative/Support staff will notify the course director(s) and Assistant Dean of Academic Affairs
2. A note will be placed in the student's file
3. Lapses in attendance fall under the COM's Professionalism Policy and are subject to inclusion in the student's MSPE.
4. Persistent lapses in attendance will require the student to appear before the Student Promotions Committee.

Exams and Grading/Assessment:

- One mid-course examination NBME; 50 questions on the 3rd week of the course. It will be in a hybrid format where students take the exam individually, followed by the same exam in a small group. The grade distribution will be 75% individual score and 25% group score.
- One NBME 100 questions comprehensive final examination at the end of the course
- Clinical Cases : Three 2-hr sessions devoted to presentation and discussion of Clinical Cases will be offered; attendance at these sessions is mandatory. Students will work in group of five and student presentations will be graded using a rubric.
- Clinical Case-Based Learning: During Week 4, three 2-hr sessions devoted to self-directed learning following problem-based learning format will be presented.
- During the course, there will be special assignments to earn extra credit. This will involve submitting multiple choice Questions and Answers to be used in the weekly review session
- **Summative mid-course exam**
 - The in-class Summative mid-course exam will consist of 50 USMLE Step 1 format multiple choice questions. This exam will be held on the Monday morning of week 3. The exam will consist of information from the first two weeks of the Endocrine Systems course. Attendance is mandatory.
 - The **Summative mid-course exam will count for 20% of the total grade in the class.** Passing this exam is not a requirement for passing the course; therefore, no remediation process is necessary.
- **Clinical Case-Based Learning Sessions (CCBLs):**
 - During Week 4, there will be 3 two hour Student-led learning sessions; attendance at these sessions is compulsory.
 - Students will work in groups of 9. Student performance will be graded using a rubric.
 - **The CCBL grade will be Pass/Not Pass and will be based on: Rubric based on the rubric with the following: Attendance, Leadership, Participation, Organization, Research, and Presentation**

- **Student Interactive Learning Sessions (SILS)**
 - During Weeks 2-5 of the Endocrine course, there will be 1-2 two hour SILS that will replace the conventional lecture format.
 - SILS Methodology:
 - Approximately 2 hours class time to cover 2 related clinical medicine topics – with 1-2 endocrine course teaching faculty present for the entire session (Team Based Learning style)
 - Preassigned learning preparation introduced on CANVAS
 - **There will be pre-assigned reading and each SILS will begin with a quiz that accounts for 5% of the total grade**
- **Review/Formative**
 - The Endocrine System course will have additional Review/Formative sessions at each week's end to summarize key learning points and familiarize students with typical exam questions.
 - Review Sessions
 - End of:
 - Week 1 Practice Questions & Answers
 - Week 2 Practice Questions & Answers
 - Week 3 Practice Questions & Answers
 - Week 4 Practice Questions & Answers
 - Week 5 Practice Questions & Answers
 - All questions covered material of the week
- **Summative Final Examination**
 - One USMLE Step 1 format 100 multiple-choice questions final examination is given at the end of the course. The exam will be comprehensive, but will emphasize material from the last two weeks of the Endocrine Systems course.
 - **The Summative exam will count for 75% of the total grade in the class.**
 - Successful completion of the course is based on passing the different components of the Summative Examination with a grade of **70% or higher**, as well as demonstrating a high standard of ethical and professional behavior. Failure to reach the passing mark in the “summative examination” will result in a remedial examination.
 - **A score of at least 89.5 is necessary to achieve Honors in the overall course.**
- **Special Student Assignments:**
 - **Every week will conclude with a two hour review session of the previous week's material. Student will be able to achieve up to 4% extra credit for submitting multiple choice questions and answers to the review session**

Total Course Score and Grading:

- **Grading percentages**
 - Passing grade requires a total score of 70% or higher
 - Honors grade requires a total score of 90% or higher
 - Students failing the course will be referred to the Student Promotion Committee (SPC) and a custom tailored remediation plan will be developed.
- **Final Summative** **75% (2/3 post Midterm; 1/3 pre Midterm)**
- **Midterm Summative** **20%**
 - **Individual – 75%**
 - **Group/Hybrid – 25%**
- **Pre-SILS quizzes** **5%**
- **Clinical Case** **Pass/Not Pass**
- **CCBL** **Pass/Not Pass**
- **Contribution to Review session – up to 4% Extra Credit**
- **Course Evaluation** **To be completed by all students at final review session.**

Summative NBME exams score reports will be available 3-days after the exam; it is the student responsibility to contact Course Director to obtain their individual score report.

Any additional (retesting) exams will be at the expense of the student.

The successful completion of the course is based on demonstrating high standards of ethical and professional behavior, as well as, passing both the Final Comprehensive Summative Exam **AND** the course with a grade of 70% or higher.

Description of Clinical Cases and Clinical Case Based Learning

Clinical Cases (CCs) and Clinical Case Based Learning (CCBL) sessions are designed to promote the development of teamwork, professionalism, and evidence-based patient management skills that integrate the basic and clinical sciences. The students will be divided into groups within their Master's College and be presented a case at the end of the week. Each group will develop learning objectives and a SOAP note for the case presented. The College Master will be responsible for grading and feedback. Grading will be Pass/Needs Improvement/Fail.

Clinical Case-Based Learning is an integrated, Problem-Based Learning modality that affords student self-directed learning in the context of a clinical case setting. Each week-long case is sequentially revealed over the course of three two-hour sessions. Students work in groups of about nine. For each case, each student will provide at least one teaching presentation to the group – this should be a PowerPoint slide set that includes citations for all images used and an *annotated* list of references from textbooks and the primary literature. Students are expected to offer constructive feedback on these presentations. The group will devise their own session learning

objectives on Day 1 of each week; these will be the topics presented orally on Day 2. CCBL group assignment will remain stable for an entire academic year, to allow longitudinal formative feedback from facilitators, and to foster periodic peer- and self-assessment. Case Learning Objectives comprise material that may be tested in NBME course exams. All sessions are mandatory and timely arrival is expected in order for students to earn a grade of PASS for this component of a course; grading will be Pass/Fail.

Facilitator Rubric for CCBLs

Week 4	0	1	2	3
Attendance: All CCBL sessions are mandatory	Any unexcused absence	N/A	N/A	Attended all sessions on time
Leadership: Organization, barrier identification, feedback skills, enthusiasm, stim. of group progress, inspires involvement and success	Unorganized, does not provide feedback, unenthusiastic group participation	Adequately organized, sometimes assists group decision making, somewhat enthusiastic, provides sporadic feedback	Well organized, usually assists in group decisions, making, usually enthusiastic, usually provides specific feedback	Very well organized, consistently assists group decisions, always enthusiastic, regularly provides constructive feedback
Participation: Frequency of participation, quality of comments and listening skills	Does not initiate contribution, comments uninformative, does not listen, talks while others speak	Minimal contribution, comments not always relevant, occasional insight, but often too general or not useful	Often initiates contribution, comments usually insightful and constructive, rarely too general or irrelevant	Involved in most discussions, comments almost always insightful and constructive, listens attentively, makes comments that build on other's remarks
Critical Thinking: Problem posing, investigating, conceptualizing, empowering learning	Misinterprets evidence or statements, maintains views based on self-interest or preconceptions, does not explain reasons, exhibits closed mindedness	Beginning to use evidence to back ideas, responds to sources at a factual or literal level, thinking is uneven, seldom explains reasons	Basic ability to analyze, interpret and formulate inferences, briefly includes more than one perspective, usually explains reasons	Accurately interprets evidence, identifies salient arguments, generates alternative explanations, explains assumptions and reasons, makes sound judgements

Presentation Skills: Subject knowledge, eye contact, elocution, slides, reference resources, overall effectiveness	No grasp of information, cannot answer questions, no eye contact, mumbles, slides disorganized and hard to read with many mistakes, resources not given, overall poor	Uncomfortable with information, can answer only basic questions, little eye contact, reads report, slides poorly organized with minimal graphics, some mistakes, research resources not respected or of high quality, overall fair	At ease with expected questions, but fails to elaborate, voice is clear, most terms pronounced correctly, slides well organized, easily read and without mistakes, research resources of high quality, overall good	Demonstrates full knowledge by answering all questions skillfully, slides with excellent organization, graphics and readability, mistake free, research resources of excellent quality, overall excellent
Facilitator Signature:		Date:		

Disclaimer about changes in Syllabus and Course Calendar

Every effort will be made to adhere to the contents of this syllabus. However, this document is subject to change in the event of unforeseen, extenuating circumstances. Students will be notified as soon as possible if changes in the syllabus become necessary.

Student Evaluations of Course and Faculty

Student Evaluations of the Course and Faculty: Students are required to complete these evaluations during the assigned mandatory session on the course calendar. Course evaluations will be scheduled in the course calendar for the last Friday of instruction. **It is expected that a minimum of 90% of the class respond. In the event the 90% do not respond, grades for the entire class will not be distributed by the Course Director or Registrar.**

Relevant Policies:

1. Honor Code
2. Attendance Policy
3. Copyright Policy for Students
4. Dress Code Policy
5. Non-discrimination and Anti-Harassment Policy
6. Diversity and Inclusion Policy
7. Family Educational Rights and Privacy Act (FERPA)
8. Holiday Policy for MS1 and MS2 Students
9. Policy against Medical Student Mistreatment
10. Policy on Deficient Grades
11. Policy on Grade Submission
12. Policy on Grading
13. Policy on Stress and Fatigue Management
14. Immunization Policy

These policies are available in the Student Handbook and Online. The students are responsible for reviewing each policy and for knowing content and application (see Policy excerpts below). **Students will be expected to comply with all COM policies, including the policies on Student Progression, Grading and Remediation.**

Policy excerpts:

Honor Code

The Honor Code of California Northstate University College of Medicine (CNUCOM) is a formal code of conduct that emphasizes the four core principles of respect, honesty and integrity, legal and ethical behavior, and professionalism, to which all students, faculty, and staff are held responsible for maintaining. Any and all violations of the Honor Code are processed as appropriate through the Office of Student Affairs and Admissions and Outreach (College of Medicine), or the responsible governing body.

Attendance

- **All exams, medical skills training sessions, laboratory sessions, masters colloquium sessions and case presentation sessions are mandatory**
- **Attendance will be taken for all mandatory sessions**
- **Attendance sheets will be collected 15 minutes after the start of each mandatory session**
- **Late arrivals (after 15 minutes = tardy X3 or more) as well as multiple unexcused absences will be referred to the Office of Student Affairs and are subject to notation in the student's academic record**

Copyright Policy for Students

Students shall not transfer copyrighted material onto a computer for any use other than personal study. Some of the material provided to the student by CNUCOM via electronic means may be "printable" from student's personal computer for student's use only. Any charges of violation of the copyright policy will be brought before the Honor Council.

Dress Code Policy

As representatives of the medical profession, all medical students are expected to maintain an image that conveys credibility, trust, respect, and confidence in one's colleagues and patients. Appropriate dress is also essential to enhance patient safety in the clinical setting. When students are assigned to clinical activities in any of the College of Medicine's clinical settings, they should consider themselves as representatives of the CNU College of Medicine. Attire and behavior should promote a positive impression for the individual student, the specific course, and the institution. In addition, certain courses and some clinical affiliate institutions may require

alternative dress guidelines, which must be followed. These requirements will typically be included in written courses materials, but if any doubt exists, it is the responsibility of the student to inquire.

Non-Discrimination and Anti-Harassment Policy

California Northstate University prohibits discrimination, including harassment and retaliation, by University employees, students, contractors, or agents of the University and by anyone participating in a University sponsored activity against an individual based on a protected classification. Protected classification includes race, skin color, religion, sex, national origin, age, disability, veteran status, sexual orientation, gender identity, marital status or other protected category.

Diversity and Inclusion Policy

California Northstate University (CNU) considers diversity an integral part of the entire academic enterprise. Blending of different life and cultural experiences is of prime importance in the hiring of staff, faculty and administrators and in the selection of students and the education of future healthcare providers. CNU seeks to foster a broad and diverse community of students, faculty, staff, and administrators to enrich the educational environment and expand the knowledge base for our students. The value of this diversity emphasis for CNU educational programs and institutional environment will be realized by the production of culturally competent healthcare providers who can serve our nation's increasing diverse population.

Family Educational Rights and Privacy Act (FERPA)

Student education records are confidential. Records are kept on campus and only certain individuals with status of "right to know" are allowed access to them. California Northstate University, College of Medicine students have the right to inspect and review their own education records maintained by the school. Schools are not required to provide free copies of records, and may charge a fee for copies. Schools may disclose, without consent, "directory" information such as a student's name, address, telephone number, citizenship, honors and awards, and dates of attendance. Release of this "directory" information can be suppressed by the student.

Holiday Policy for Phase A Students

Official Holidays for Phase A include: President's Day, Spring Break, Memorial Day, Independence Day, Labor Day, Thanksgiving Holiday, Winter Break, and Martin Luther King Day

Policy against Medical Student Mistreatment

CNUCOM is committed to assuring a safe and supportive learning environment that reflects the institution's values of professionalism, respect for individual rights, appreciation of diversity and differences, altruism, compassion, and integrity. Mistreatment of medical students is prohibited. Students should use this Policy to address discriminatory, unfair, arbitrary or capricious treatment by faculty or staff. CNUCOM defines mistreatment as behavior that is inconsistent

with the values of the university and that unreasonably interferes with the learning process. Medical students who themselves experience or observe other students experiencing possible mistreatment are encouraged to discuss it with someone in a position to understand the context and address necessary action, and report the occurrence (file a formal report with the CNU Dean of Student Affairs and Admissions or file an anonymous report via the Portal contained on the CNUCOM website. Medical Students requesting complete anonymity should be made aware that doing so may interfere with the university's ability to investigate the concern and their ability to receive information about the follow-up investigation. No Retaliation: CNUCOM does not tolerate retaliation against individuals who report hateful, dishonest, illegal, unethical, unprofessional, or otherwise inappropriate acts that constitute student mistreatment. Individuals who believe they are experiencing retaliation are strongly encouraged to contact the Dean of Student Affairs and Admissions. Alleged retaliation will be subject to investigation and may result in disciplinary action up to and including termination or expulsion.

Policy on Deficient Grades

When a student receives a deficient grade in a course, it is a course director's responsibility to outline what will be expected to remediate the deficiency, as close to the time that the grade is given as possible. If you are on probation, receive, or have received other previous deficient grades, this remediation will require the approval of the Student Promotions Committee in order to proceed. The Student Promotions Committee considers performance across the entire curriculum in making recommendations for promotion or dismissal which may impact course-specific remediation.

Policy on Grade Submission

All required courses and clerkships must submit grades to the registrar's office (using the system specified by the registrar) within 21 days of the last day of the course or clerkship. This includes submission of an (I) Incomplete grade if all course or clerkship requirements have not been completed due to circumstance not under the control of the student (see definition of Incomplete grade). Submission of narratives along with grades is required of all clerkships and of all courses in which assessment of educational activities make this possible (e.g., small group activity, writing assignments, interaction with standardized patients, simulations, etc.)

Policy on Grading

The work of all students in any of the required courses for the MD degree is reported in terms of the following grades: H (Pass with Honors), P (Pass) or F (Fail), or as two provisional marks: I (incomplete but work of passing quality), or Y (provisional, requiring remediation). H is considered for the 20% of the students with the highest achievements. Some courses and electives may be graded P/F only. Students must score an average above 70% on summative examinations as well as pass requirements for written assignments and professionalism according the course specific rubrics. The Course Director must assign the final grade within 21 days of the end of the course or the remediation examination.

Policy on Stress and Fatigue Management

All students will be trained on stress, fatigue, and burnout. Any release from duty assignments due to stress/fatigue that exceeds the requirements for completion of educational objectives must be made up in order to meet curriculum requirements.

Student Handbook

The information in the student handbook serves as a student resource for policies and procedures of California Northstate University College of Medicine and is subject to change. Students should review the handbook at the beginning of each academic year and refer to the online version for the most current information.

Weekly Course Calendars

DESCRIPTION OF CLINICAL PRESENTATIONS

General Description

The clinical presentations (CP's) of the endocrine course are focused on common endocrine situations and presentations that a primary care physician will experience. There will be three (3) Clinical Presentations during the Endocrine Course that are accompanied by clinical algorithms, clinical reasoning guides, and objectives lists. Clinical faculty walk the students through the clinical algorithms emphasizing critical decision points and setting the framework for the integration of the basic and clinical sciences. Basic science principles are offered to ensure adequate knowledge and skills required to arrive at a correct diagnosis. Collectively, these presentations highlight the normal and abnormal structures and functions of the system as a whole. Each clinical presentation is related to various disease states including care and treatment options. Students formally participate in developing Learning Objectives and a SOAP note in worked case example sessions at the end each week. Students also take part in a Medical Skills and Masters Colloquium courses that run concurrently during the Endocrine course.

Clinical Presentations

Week 1 (Homeostasis)

Week 2 (Pituitary)

Week 3 (Hypocalcemia)

Week 4 (Thyroid)

Week 5 (Pancreas)

Lecture and Contact Hours

Endocrine Course 2018

- Endocrine Contact Hours = 71 hours

	Lecture	CP	CC	SILS	CCBL
• Week 1	15	1	2	0	0
• Week2	6	1	2	4	0
• Week 3	4	0	0	2	0
• Week4	6	0	0	4	6
• Week 5	11	1	2	4	0
	42	3	6	14	6 = 71

Endocrine Course 2018

- Total Contact Hours = 87 hours

	Endocrine	Med Skills	Masters Coli.
• Week 1	18	2	2
• Week 2	13	2	2
• Week 3	6	2	0
• Week4	16	2	2
• Week 5	18	2	0
	71	10	6 = 87

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Endocrine System							
Week: 2							
	11/12/2018	11/13/2018		11/14/2018	11/15/2018	11/16/2018	
	Monday	Tuesday		Wednesday	Thursday	Friday	
8:00 AM	SELF STUDY	SELF STUDY		SELF STUDY	SELF STUDY	Clinical Case	
8:30 AM							
9:00 AM	SELF STUDY	SELF STUDY		SELF STUDY	SELF STUDY		
9:30 AM							
10:00 AM	SELF STUDY	Medical Skills (Mandatory)	Self Study	Master Colloquium (Mandatory)	SELF STUDY		
10:30 AM							
11:00 AM	CP: Growth Culler				SELF STUDY		
11:30 AM							
12 noon	Lunch and activities	Lunch and activities		Lunch and activities	Lunch and activities	Lunch and activities	
12:30 PM							
1:00 PM	Tests of Endocrine Function Sheffield	Medical Skills (Mandatory)	Self Study	Pituitary Masses Hejazi	SILS: NonFn Pituitary Tumors & DI Sheffield	ENDOCRINE REVIEW	
1:30 PM				Hypopituitarism Jialal			
2:00 PM							
2:30 PM							
3:00 PM	SILS: Prolactinoma & MEN 1 Culler	Medical Skills (Mandatory)	Self Study	Hyponatremia & Hypernatremia Sheffield			
3:30 PM							
4:00 PM							
4:30 PM							

Endocrine System Week: 3

	11/19/2018	11/20/2018	11/21/2018	11/22/2018	11/23/2018	
	Monday	Tuesday	Wednesday	Thursday	Friday	
8:00 AM	SUMMATIVE MIDTERM EXAM	SELF STUDY	SELF STUDY	Holiday- Thanksgiving	Holiday - Thanksgiving	
8:30 AM		SELF STUDY	SELF STUDY			
9:00 AM						
9:30 AM		Medical Skills (Mandatory)	Self Study			SILS: Osteoporosis & Osteomalacia
10:00 AM						
10:30 AM	HYBRID					
11:00 AM	SELF STUDY					
11:30 AM			Culler			
12 noon	Lunch and activities	Lunch and activities	Lunch and activities			
12:30 PM						
1:00 PM	Calcium/Phosphorus Physiology	Medical Skills (Mandatory)	Self Study			SELF STUDY
1:30 PM	Hypercalcemia Sheffield					SELF STUDY
2:00 PM	CP: Hypocalcemia Culler					SELF STUDY
2:30 PM						
3:00 PM		Medical Skills (Mandatory)	Self Study			SELF STUDY
3:30 PM						
4:00 PM	Metabolic Bone Disease Ramsamooj		SELF STUDY			
4:30 PM						

Endocrine System											
Week: 4											
	11/26/2018	11/27/2018		11/28/2018	11/29/2018	11/30/2018					
	Monday	Tuesday		Wednesday	Thursday	Friday					
8:00 AM	SELF STUDY	SELF STUDY		SELF STUDY	SELF STUDY	Clinical Case-Based Learning Session (Mandatory)					
8:30 AM											
9:00 AM	SELF STUDY	SELF STUDY		SELF STUDY	SELF STUDY						
9:30 AM											
10:00 AM	SILS: Thyroid Nodules & Thyroid Cancer Sheffield	Medical Skills (Mandatory)	Self Study	Master Colloquium (Mandatory)	SELF STUDY	SELF STUDY					
10:30 AM					HTN & Catecholamine Excess Sheffield	SELF STUDY					
11:00 AM											
11:30 AM											
12 noon	Lunch and activities	Lunch and activities		Lunch and activities	Lunch and activities	Lunch and activities					
12:30 PM											
1:00 PM	CP: Patterns of Thyroid Hormone and Clinical Disease Culler	Medical Skills (Mandatory)	Self Study	Adrenal Masses Hejazi	MEN Syndromes Aleyd	ENDOCRINE REVIEW					
1:30 PM				CAH Culler	SILS: Hypoadrenal & Hyperadrenal Culler/Sheffield						
2:00 PM	Acquired Hypothyroidism Sheffield										
2:30 PM											
3:00 PM	Clinical Case-Based Learning Session (Mandatory)	Medical Skills (Mandatory)	Self Study	Clinical Case-Based Learning Session (Mandatory)	SELF STUDY						
3:30 PM											
4:00 PM											
4:30 PM											

Endocrine System						
		Week: 5				
	12/3/2018	12/4/2018	12/5/2018	12/6/2018	12/7/2018	
	Monday	Tuesday	Wednesday	Thursday	Friday	
8:00 AM	SELF STUDY	SELF STUDY	SELF STUDY	SELF STUDY	Clinical Case	
8:30 AM						
9:00 AM	SELF STUDY	SELF STUDY	SELF STUDY	SELF STUDY		
9:30 AM						
10:00 AM				Pharmacology of Type 1	Gestational Diabetes &	
	CP: Hypoglycemia Sheffield	Medical Skills (Mandatory)	Self Study	SELF STUDY	Diabetes Wong	
10:30 AM					Pharmacology of Type 2	Diabetes Wong
11:00 AM	Diabetes mellitus 1 Culler					
11:30 AM						
12 noon	Lunch and activities	Lunch and activities	Lunch and activities	Lunch and activities	Lunch and activities	
12:30 PM						
1:00 PM	GI-derived hormones Jialal	Medical Skills (Mandatory)	Self Study	Diabetes Complications Hoffman	Endocrinology of Obesity Jialal	
1:30 PM						
2:00 PM	DKA & Hyperosmotic states Culler			Menstrual Cycle & Female Hypogonadism Hoffman		ENDOCRINE REVIEW
2:30 PM						
3:00 PM	SILS:			Male Hypogonadism Sheffield		
				Endocrine Emergencies		
3:30 PM	Dm 2	Medical Skills (Mandatory)	Self Study	Disorders of Puberty	Sheffield	
4:00 PM	PCOD			Culler		
4:30 PM	Hoffman					

Endocrine System					
Week 6: Exam					
	12/10/2018	12/11/2018	12/12/2018	12/13/2018	12/14/2018
	Monday	Tuesday	Wednesday	Thursday	Friday
8:00 AM	Summative Exam	-	-	-	Possible Retest Exam
8:30 AM		-	-	-	-
9:00 AM		-	-	-	Possible Retest Exam
9:30 AM		-	-	-	-
10:00 AM		-	-	-	-
10:30 AM		-	-	-	-
11:00 AM		-	-	-	-
11:30 AM		-	-	-	-
12 noon	Lunch and activities	Lunch and activities	Lunch and activities	Lunch and activities	Lunch and activities
12:30 PM					
1:00 PM		-	-	-	-
1:30 PM		-	-	-	-
2:00 PM		-	-	-	-
2:30 PM		Medical Skills Summative Exam	-	-	-
3:00 PM			-	-	-
3:30 PM					
4:00 PM					
4:30 PM					



California Northstate University College of Dental Medicine

Foundations of Odontology Course Syllabus

Course #	Course Title	Credits	Year	Term
Odont 511	Foundations of Odontology <i>LAL, LAB and CLIN</i>	6	DS 1	Fall

Credit Hour Policy

For each 15-week semester, one (1) hour of credit is assigned per hour each week of classroom or direct faculty didactic instruction (that is, per hour of lecture or student in-class time) and a minimum of two (2) hours of out-of-class student work (homework). For practicum and internship time, one (1) hour of credit is assigned per three (3) hours each week of student time spent in this activity.

Maximum Enrollment: 80

Calendar of Important Dates:

Date	
August 12, 2020	First day of Fall term for all DMD 1 students
September 28, 2020	First quiz: patient intake
October 15, 2020	Submission of first Patient Case Study (PCS) performed on patient of record/Team activity
November 28, 2020	Submission of second PCS/Team activity
December 8, 2020	Second quiz: patient assessment
December 14, 2020	Final Clinical Evaluation: Practical
December 20, 2020	Final Examination: Didactic

Course Coordinator, Instructors and Contact Information

Kevin Keating DDS MS (course co-director)

Room:

E mail

kevin.keating@cnsu.edu

Office hours

Leon Assael DMD (course co-director)

Room:

E-mail: leon.assael@cnsu.edu

Office hours: Wednesdays 12:00pm-1:00pm, and 3:00pm-4:00pm (or by appointment)

Holly Jacobson BA (course administrator)

Room: xxx

E mail: holly.jacobson@cnsu.edu

Classroom and Meeting Times

Room: Classroom xxxx

Time: xxxx 2 hours per week

Laboratory and Meeting times

Room: xxxx type 1 dental laboratory

Time: xxxx 1 hours per week

Clinic and meeting times

Room: 2400 Maritime Drive CNUCDM clinic

Time: 3 hours per week

Course Description

This course will introduce students to infection control, the dental office and clinical care site, and provide initial skill in interaction with the patient and the patient's oral cavity. Students will enter the clinical setting with faculty and upper level students to provide limited aspects of oral care and join the oral health care team. Students will gain initial understanding of the clinical encounter including history of present illness, social history, family history, medical history. Students will perform oral examination. Students will gain initial understanding of the electronic health record.

Prerequisite Courses

None

Prerequisite Knowledge

None

Required Textbook(s) and Material(s)

1. *Bates guide to physical examination and history Taking- 11th edition, Bickley, Lynn, Wolters Kluwer*
2. *Cottone, Practical infection control in dentistry, Molinari J, Hare, J, 3rd edition, Wolters Kluwer*
3. Epic Wisdom dental module training: www.epic.com
4. Maryland Mighty Tooth: School based dental sealant training program
5. https://www.mightytoothcurriculum.com/module4/mod4_0.html
6. Infection Prevention and Control in Dental Settings, Centers for Disease Control and Prevention, Atlanta, GA, 2019 <https://www.cdc.gov/oralhealth/infectioncontrol/index.html>
7. Laheij, A, Kistler, J, Belibasakis G, Valimaa, H, de Soet JJ, Healthcare associated viral and bacterial infections in dentistry, J Oral Microbiol doi 10.3402/jom.v4i0.17659
8. Assael L, nosocomial infection and fomites in oral and maxillofacial surgery, J oral maxillofac surg 63: 889-890, 2005
9. UCSD Practical Guide to clinical medicine, <https://meded.ucsd.edu/clinicalmed/head.htm>

Optional Textbook(s) and Material(s)

- *Sturdevants Art and Science of Operative Dentistry*, Heymann, Swift, Ritter, Elsevier, 6th ed. (as a pre-read prior to DMD2 operative dentistry Odont 621)

Web Links

1. <https://bookshelf.vitalsource.com/#/>
2. www.Epic.com
3. https://www.mightytoothcurriculum.com/module4/mod4_0.html
4. <https://www.cdc.gov/oralhealth/infectioncontrol/index.html>
5. <https://meded.ucsd.edu/clinicalmed/head.htm>

Technology

- Computer-assisted instruction (Clickers) and SCANTRON Sheets
- Web-based course management (Canvas) and Examsoft
- Audio/Video recordings where applicable
- PowerPoint
- Epic electronic health record
- PACS, DICOM compatible imaging software
- Dental operatory

Evaluation Components

In keeping with the Team Based Learning (TBL) approach, grades will be determined as follows:

Individual Components	80%
First quiz	10%
Second Quiz	10%

Final exam	30%
Clinical evaluation practical	30%

Team Components	20%
Group PCS projects	10%
Peer Evaluation	10%

GRADING

All students must demonstrate minimal individual competency. Therefore, students earning less than 75% on the

Total individual component score will not have team component scores added to calculate their final course grade. During the course, students who score less than 75% on individual components may be subject to periodic course content review and may receive an Academic Alert.

In order to progress from one semester to the next, students must pass all courses with a letter a grade of C or higher and maintain a minimum cumulative grade point average (GPA) of 2.0. The breakdown for assignment of letter grades and grade points for each letter grade are as follows:

Percent	Letter Grade/Action
90.0 – 100%	A
80.0 – 89.9%	B
75.0 – 79.9%	C - Pass
60.0 – 74.9%	D – Requiring remediation (successful remediation recorded as C, unsuccessful remediation recorded as F)
Below 60.0%	F – Fail (course must be repeated)
Incomplete	I

Incomplete

During a semester, a student may not complete all required assignments and/or examinations due to extenuating circumstances, such as, but not limited to, an illness or a family emergency. In such a case, the course director may give a grade of Incomplete for the course. The course with the incomplete grade has to be completed successfully within the time frame as being defined by the student's academic plan, normally in the same academic year, otherwise a leave of absence would be required.

Core-Course Policies

All students are required to adhere to the Academic Policies that impact on student progression and conduct while attending the DMD program, including the following: Academic Progression Policy, Excused Absence Policy, Exam Policy, Course Grade Appeal Policy, Course Add/Drop Policy and Attendance Policy. Refer to the current Student Handbook for the detailed policies.

Course Specific Policies

1. Group PCS cases are to be submitted via CANVAS by 11:59pm PST on the deadline indicated. Only one group member should submit the assignment on behalf of the group. The course coordinator reserves the right to deduct points for late submission (20% of assignment grade for every 24 hours the assignment is turned in late). Presentation of PCS cases requires the active participation of each team member, preferably presenting the component of the case the student was responsible for developing.
2. Grade appeal for any individual assignments (including exams) should be submitted to the course coordinator in writing within 5 business days of grade release.
3. There will be no rounding of the final grade for this course.

Topics and Schedule

(Subject to change. Updates will be posted to CANVAS and announced by email)

All readings are in Vital Source, or as assigned and posted to CANVAS

Date	Topics	Readings*	Instructor	Notes
Week 1 didactic	CDC guidelines for infection control	CDC infection control in dentistry	Assael	
Week 1 lab	Barrier technique, dental operatory components	CDC infection control in dentistry	Keating	
Week 1 clinic	Apply clinician infection control protocols		Clinical faculty and staff	
Week 2 didactic	Nosocomial Infection in dental practice	Health care associate viral and bacterial infections Laheij Assael, nosocomial infection	Keating	
Week 2 lab	Demonstration of aerosol and surface contamination, water lines, handpieces		Keating	videos
Week 2 clinic	Performance of equipment infection control in the clinic		Clinic staff	
Week 3 didactic	Introduction to the patient: interviewing	Bates: Chapter 1	Assael	Project 1 PCS assignment to groups
Week 3 lab	OSCE interview		Clinical faculty	
Week 3 clinic	Clinical experience with patient interviews		Clinical faculty	
Week 4 didactic	History of Present Illness Dental history Family and social history, past medical history, review of systems	Bates chapter 3	Assael	
Week 4 lab	Eliciting the history Quiz 1		Clinical faculty	Quiz 1

Week 4 clinic	Clinical experience with patient history		Clinical faculty	
Week 5 didactic	Initial oral and head and neck examination	Bates chapter 2 UCSD practical guide to clinical medicine	Keating	
Week 5 lab	Oral head and neck exam		Clinical faculty	
Week 5 clinic	Clinical experience with patient exam		Clinical faculty	
Week 6 didactic	Project presentations		Keating Assael	PCS 1 presentations
Week 6 lab	Project presentations			
Week 6 clinic	Clinic participation			
Week 7 didactic	Sealants 1	Maryland manual	Chan	
Week 7 lab	Sealant 1 lab	Maryland manual	Clinical faculty)	
Week 7 clinic	Sealant 1 clinic	Maryland manual	Clinical faculty	
Week 8 didactic	Sealants 2		Chan	
Week 8 LAB	Sealant 2 lab		Clinical faculty	
Week 8 Clinic	Sealant 2 clinic		Clinical faculty	
Week 9 didactic	In depth: history of present illness, family history, Social history, PMH, ROS	Bates Ch 1	Assael	PCS 2 ASSIGNMENT
Week 9 lab	Practice Patient interviews in OSCE format		Clinical faculty	
Week 9 clinic	Patient intakes		Clinical faculty	

Week 10 didactic	The electronic health record, introduction	EPIC manual	Assael	
Week 10 lab	Using the electronic health record		Clinical faculty	
Week 10 clinic	Observing the electronic health record in clinic		Clinical faculty	
Week 11 didactic	Dental assisting	PPT only	Keating	
Week 11 lab	Dental assisting lab		Clinical faculty	
Week 11 clinic	Assist in clinic		Clinical faculty	
Week 12 didactic	PCS presentations		Class	Pcs 2 presentations
Week 12 lab	PCS presentations		Class	
Week 12 clinic	Clinical experience		Clinical faculty	
Week 13 didactic	The electronic health record: compliance and business issues	Epic manual	Keating	Quiz 2
Week 13 lab	Clinical billing simulation, case based compliance module		Keating	
Week 13 clinic	Business office		Clinical faculty and staff	
Week 14 didactic	Integrating intake history, exam, electronic record and initial clinical encounters		Assael Keating	
Week 14 lab	Clinical encounter simulations		Clinical faculty	
Week 14 didactic	Participate in team care in clinic		Clinical faculty	
Week 15 didactic	Final exam didactic		Assael Keating	
Week 15 lab	Final exam practical		Clinical faculty	
Week 15 clinic	General clinic experience in team care		Clinical faculty	

Course Learning Outcomes and links to Program Learning Outcomes (Appendix A) and Institutional Learning Outcomes (Appendix B)

No.	Course Learning Outcome	DMD PLO	DMD ILO	Learning Hierarchy ^b	Assessment Method
1	Develop an initial understanding and capability to participate in the patient encounter as a clinical team member	1,2,3,4,7,8	1,3,4,6	1,2, 3	Clinical evaluation Group projects
2	Thoroughly implement all infection control measures in the dental setting to meet CDC standards	1,2,3,5,6,7,8	1,4,	2, 3	Clinical assessment Quizzes Final exam
3	Demonstrate ability to complete and record a thorough medical and dental medicine patient history	1,2,3,5	1,2,4,6	1,2	Clinical assessment Quizzes Final exam
4	Perform initial oral examination, place dental sealants in pediatric patients. Assist in dental care as a member of the care team.	1,2,3,4	1,2,4,5	2,3	Clinical assessment Quizzes Final exam
5	Demonstrate professionalism/ development of a professional identity as a dentist while participating as a student dentist in the patient care team	1,3,4	1,2,4,6	1,2,	Clinical assessment Quizzes Final exam

^a plo's appendix A

^b Learning Hierarchy based on Bloom's Taxonomy with 1=Memorization and/or Comprehension; 2=Application and/or Analysis; 3=Synthesis and/or Evaluation.

Teaching/ Learning Methodology

1. Didactic: lectures, required readings
2. Learning Activities: laboratory practice, OSCE, laboratory assignments/exercises, group project

CLO Rubrics

CLO 1: Develop an initial understanding and capability to participate in the patient encounter as a clinical team member

Indicato	Initial	Developing	Developed	Proficient
Participates with understanding and capability at an initial encounter level in patient care	Unable participate in clinical care effectively.	Demonstrates rudimentary ability be a clinical team member but with evolving demonstration of understanding their own role and the role of others	Demonstrates detailed understanding of their role as a team member and is usually effective in that role	Consistently demonstrates the ability participate at the level of their knowledge and skill as a clinical team member.

CLO 2: Thoroughly implement all infection control measures in the dental setting to meet CDC standards

Indicators	Initial	Developing	Developed	Proficient
Implements all criteria for infection control according to CDC standards	Demonstrates no or limited knowledge of infection control in health care	Begins to exhibit knowledge of infection control and understands general principles of disease transmission and its prevention	Implements barrier, sterilization, clean surgical technique consistently in patient care with uncommon non critical errors	Demonstrates complete knowledge and skill in infection control, able to perform all infection control tasks without error and able to teach and lead the oral health

CLO 3: Demonstrates ability to complete and record a thorough medical and dental medicine patient history

Indicator	Initial	Developing	Developed	Proficient
Performs medical and dental medicine patient history to elicit information essential to completion of safe and effective clinical care.	Does not demonstrate an understanding of the patient history components or their importance.	Demonstrates a developing understanding of the patient history and its utility in guiding patient care	Demonstrates a comprehensive understanding of the role of the patient history and is able to capably elicit the history with few noncritical omissions	Consistently elicits, interprets and synthesizes the patient history as a guide to treatment decisions

CLO 4: Perform initial oral examination, place dental sealants in pediatric patients. Assist in dental care as a member of the care team

Indicators	Initial	Developing	Developed	Proficient
Performs exam for sealant placement and place sealants as a care team member.	Unable to assess the need for sealants, ability to place and skills to complete procedure.	Begins to develop skills in assigned tasks including assessment, isolation and use of materials.	Demonstrates adequate assessment, and placement of dental sealants with uncommon critical errors resulting in repeat	Consistently demonstrates thorough ability to assess and use sealants without error at the time of placement

CLO 5: Demonstrate professionalism/ development of a professional identity as a dentist while participating as a student dentist in the patient care team

Indicators	Initial	Developing	Developed	Proficient
Functions collaboratively & effectively as a member of	Unable to function collaboratively and effectively as a member of	Functions somewhat collaboratively and effectively as a member of the team.	Functions collaboratively and generally effectively as a member of the	Consistently functions collaboratively and effectively as a member of the team.
Understands and exhibits the proper role of the dentist in	Unable to ascertain the role of the dentist in patient care	Demonstrates a developing understanding of the role of the dentist in improving patient	Demonstrates strong understanding of the value of oral health care as led	Thoroughly can demonstrate and teach to the team the role of the dentist in health care
Demonstrates the highest level of ethics, empathy and cultural sensitivity in health care as a member of the team	Does not exhibit empathy, not guided by sound ethical principles and/or is not culturally sensitive	Demonstrates empathy and a developing understanding of the nuances of the ethical relationship between patient and doctor and has developing understanding of the role of culture and its role in improving health outcomes.	Demonstrates strong commitment to ethical patient care and strong motivation driven by empathy toward those afflicted with illness and those who need health care. Has cultural competence	Can consistently demonstrates understanding and exhibits all the features of medical ethics in the care of all patients. Can promote empathy in all team members and has a lifelong learning action plan implemented to address cultural and societal norms and expectations to

Appendix A

Program Learning Outcomes (PLOs) CNU College of Dental Medicine

1. Patient-Centered Care: Demonstrate understanding of healthcare disparities and cultural awareness in patient counseling and patient advocacy
2. Evidence-Based Care: Apply current, evidence-based oral healthcare within the scope of general dentistry
3. Culturally competent, empathic communication: Demonstrate patient centered, empathic, and culturally competent communication and interpersonal skills
4. Oral and Written Communication: Demonstrate sound oral and written communications in patient care
5. Critical Thinking: Utilize critical thinking, problem solving skills and systemic thinking in assessing and making reasoned, evidence-based decisions in patient care
6. Ethics and Professionalism: Demonstrate professionalism and ethical decision making
7. Biomedical Sciences Knowledge: Demonstrate an understanding of the fundamentals of biomedical sciences and apply them appropriately in oral healthcare
8. Practice Management: Apply legal, regulatory and business management concepts related to provision of oral healthcare services

DMD Program Learning Outcomes (PLOs) Proficiency Rubric

PLO 1: Patient-Centered Care

Demonstrate understanding of healthcare disparities and cultural awareness and capability in patient counseling and providing appropriate patient advocacy

Indicators	Initial	Developing	Developed	Proficient
1.1. Education. Demonstrates ability to educate all audiences through effectively communicating information and assessing learning	<ul style="list-style-type: none"> Does not appropriately counsel patients Does not check for understanding, ask questions, and/or asks inappropriate questions. 	<ul style="list-style-type: none"> Counsels patients but leaves out pertinent information needed by patient Communicates with basic level of clarity but does not always check for 	<ul style="list-style-type: none"> Generally demonstrates empathy, communicates accurate information clearly, checks for understanding Seeks to ensure understanding 	<ul style="list-style-type: none"> Consistently demonstrates empathy, communicates accurate information clearly, checks for understanding Ensures understanding

	<ul style="list-style-type: none"> Does not demonstrate the ability to find and utilize appropriate resources and references necessary for providing accurate counseling, consultation and education 	<p>understanding or rephrase when confusion occurs.</p> <ul style="list-style-type: none"> Demonstrates the ability to find a one or two resources, yet the resources are not the best or most appropriate for providing accurate counseling, consultation and education 	<p>and generally asks questions.</p> <ul style="list-style-type: none"> Frequently demonstrates the ability to find and utilize appropriate resources and references necessary for providing accurate counseling, consultation and education 	<p>and asks appropriate questions.</p> <ul style="list-style-type: none"> Consistently demonstrates the ability to find and utilize appropriate resources and references for providing accurate patient counseling, consultation and education
1.2. Patient advocacy. Represents the patient's best interests	<ul style="list-style-type: none"> Does not demonstrate the ability represent a patient's best interest 	<ul style="list-style-type: none"> Demonstrates awareness of issues that impact a patient Demonstrates minimal ability to articulate these issues but does not demonstrate ability to sufficiently advocate on a patient's behalf 	<ul style="list-style-type: none"> Demonstrates sufficient awareness of issues that impact a patient Demonstrates ability to articulate these issues Demonstrates ability to sufficiently advocate on a patient's behalf 	<ul style="list-style-type: none"> Demonstrates full awareness of the most important issues that impact a patient Demonstrates ability to clearly and effectively articulate these issues Demonstrates ability to effectively advocate on a patient's behalf

PLO 2: Evidence-Based Care.

Apply sound, current, and evidence-based oral healthcare within the scope of general dentistry

Indicators	Initial	Developing	Developed	Proficient
2.1. Patient-centered care. Demonstrates ability to provide patient-centered care as the medication expert (collect and interpret evidence, prioritize,	<ul style="list-style-type: none"> Does not demonstrate ability to provide patient-centered care at the medication expert level; e.g., demonstrates ability to collect but not 	<ul style="list-style-type: none"> Demonstrates ability to provide patient-centered care as the medication expert in some, but not all, areas as follows: collect and interpret evidence, 	<ul style="list-style-type: none"> Demonstrates ability to provide patient-centered care as the medication expert (generally demonstrates ability to collect and interpret evidence, 	<ul style="list-style-type: none"> Demonstrates ability to provide sufficient patient-centered care as the expert (collects and interprets evidence, prioritizes, formulates

formulate assessments and recommendations, implement, monitor and adjust plans, and document activities)	sufficiently interpret evidence, does not prioritize, formulates basic assessments and recommendations, does not sufficiently monitor and adjust plans nor document activities.	prioritize, formulate assessments and recommendations, implement, monitor and adjust plans, and document activities	prioritize, formulate assessments and recommendations, implement, monitor and adjust plans, and document activities)	assessments and recommendations, implements, monitors and adjusts plans, and documents activities)
2.2. Systems management. Demonstrates ability to manage patient healthcare needs using human, financial, technological, and physical resources to optimize the safety and efficacy of medication use systems	<ul style="list-style-type: none"> • Does not demonstrate understanding of oral healthcare delivery systems parts • Does not demonstrate understanding of the forces that influence components of the oral healthcare delivery system, including their connection to patient care • Does not demonstrate understanding of any challenges to systems that affect oral healthcare delivery Does not demonstrate understanding of how to work with different subsystems to deliver oral healthcare 	<ul style="list-style-type: none"> • Demonstrates understanding of some parts of oral healthcare delivery systems but does not identify how they are related to each other • Demonstrates understanding of some forces that influence the parts of healthcare delivery systems, but demonstrate minimal understanding of their connection to patient care • Demonstrates understanding of some challenges that can affect delivery of oral healthcare • Demonstrates some understanding of how to work with different subsystems and how they function to deliver oral healthcare, but 	<ul style="list-style-type: none"> • Demonstrates understanding of most major components of oral healthcare systems and their respective relationships • Demonstrates understanding of the forces that influence the components of healthcare delivery systems, and demonstrate some understanding of their influence on the quality of patient care • Demonstrates understanding of most challenges that can affect delivery of oral healthcare, but does not demonstrate complete comprehension of the effects Demonstrates basic understanding of how to work with 	<ul style="list-style-type: none"> • Demonstrates understanding of the major components of oral healthcare systems, their respective relationships, and their functions related to patient care • Demonstrates thorough understanding of the forces that influence components of healthcare delivery systems and demonstrate full understanding of their influence and implications on the quality of patient care • Demonstrates understanding of pertinent challenges to specific aspects of healthcare delivery by demonstrating abilities to thoroughly discuss the

		demonstrate minimal awareness or understanding of one's own role within the oral healthcare delivery system	different subsystems and how they function to deliver oral healthcare and demonstrate some understanding of one's role within the oral healthcare delivery system, but does not necessarily demonstrate application of knowledge in a manner that maximizes the quality of oral healthcare	implications for the appropriate parts of oral health care delivery systems Demonstrates excellent understanding of how to work with different subsystems involved while also demonstrating understanding of one's role within the subsystems, and demonstrate appropriate application of knowledge in a manner that maximizes the quality of oral healthcare
2.3. Health and wellness. Designs prevention, intervention, and educational strategies for individuals and communities to manage chronic disease and improve oral health and wellness	<ul style="list-style-type: none"> Does not demonstrate understanding of how the arts can be utilized to optimize patients' well-being 	<ul style="list-style-type: none"> Demonstrates knowledge of some of the ways that the arts can be utilized to optimize patients' well-being 	<ul style="list-style-type: none"> Demonstrates sufficient knowledge of multiple ways that the arts can be utilized to optimize patients' well-being 	<ul style="list-style-type: none"> Demonstrates thorough knowledge of the ways that the arts can be utilized to optimize patients' well-being and creatively applies this knowledge to improve well-being and the practice and delivery of oral healthcare
2.4. Population-based care. Demonstrates understanding of how population-	<ul style="list-style-type: none"> Does not demonstrate awareness of population-based care. 	<ul style="list-style-type: none"> Demonstrates minimal understanding of population-based care and how it 	<ul style="list-style-type: none"> Demonstrates sufficient understanding of population-based care and how it 	<ul style="list-style-type: none"> Demonstrates superb understanding of population-based care and how it

based care influences patient-centered care and the development of practice guidelines and evidence-based best practices		influences patient-centered care • Does not demonstrate awareness of how these notions influence the development of practice guidelines	influences patient-centered care • Demonstrates sufficient understanding of how population-based care influences the development of practice guidelines and best practices for patient care	influences patient-centered care • Demonstrates superb understanding of how population-based care influences the development of practice guidelines and demonstrates knowledge of best practices for patient care
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PLO 3: Culturally Competent, Empathic Communication.

Demonstrate patient centered, empathic and culturally competent communication and interpersonal skills

Indicators	Initial	Developing	Developed	Proficient
3.1. Empathy. Demonstrates the ability to communicate with the patient empathically.	<ul style="list-style-type: none"> Does not demonstrate the ability to communicate with the patient empathically. 	<ul style="list-style-type: none"> Demonstrates some ability, but experiences lapses in the ability to communicate empathically 	<ul style="list-style-type: none"> Demonstrates the ability to communicate empathically, with few lapses. 	<ul style="list-style-type: none"> Demonstrates an advanced ability, and never experiences lapses in communicating empathically.
3.2. Cultural competence. Demonstrates the ability to engage in communication with the patient that is culturally aware and accepting.	<ul style="list-style-type: none"> Does not demonstrate communication and interactions that convey respect or concern for patients and the community. Does not demonstrate an awareness of customs, beliefs, or perspectives in diverse patients Does not demonstrate awareness of cultural and linguistic needs of patients in order to communicate health information 	<ul style="list-style-type: none"> Demonstrates communication and interactions characteristic of a minimal level of respect, and little concern for patients and the community is apparent through use of some appropriate communication, but student does not employ follow-up questions for clarification, when necessary, and student provides inappropriate detail in responses Demonstrates a minimal level of awareness of customs, beliefs, or perspectives in diverse patients Demonstrates minimal awareness of cultural and linguistic needs of 	<ul style="list-style-type: none"> Demonstrates appropriate communication and interactions that are characteristic of a basic level of respect, and concern for patients and the community is apparent through use of appropriate communication, where student uses some clear, but not necessarily relevant or detailed, follow-up questions and responses Demonstrates awareness of customs and beliefs, but may not clarify with patients about personal perspectives Demonstrates awareness of the cultural and linguistic needs 	<ul style="list-style-type: none"> Demonstrates professional communication and interactions by showing empathy, respect, and concern for patients and the community through use of appropriate communication where follow-up questions (as needed) and responses are clear, relevant, and detailed Demonstrates awareness of customs, beliefs, or perspectives in diverse patients; ask appropriate questions to clarify perspectives and perceptions in diverse patients Demonstrates full awareness of and responsiveness to cultural and linguistic needs of diverse patients

		patients; either does not or only attempt to adapt behaviors, but does so ineffectively, to communicate health information	of diverse patients, and adapt behaviors to communicate health information, but communication may not be effective	by adapting behaviors appropriately in order to effectively communicate health information
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PLO 4: Oral and Written Communication.

Demonstrate sound oral and written communications in patient care

Indicators	Initial	Developing	Developed	Proficient
4.1. Oral communication. Demonstrate sound oral communication in patient care.	<ul style="list-style-type: none"> Does not demonstrate logical reasoning in oral communications in patient care. Does not demonstrate the ability to cite sound evidence that support ideas within presentations or discussions. 	<ul style="list-style-type: none"> Demonstrates some logical reasoning in oral communications in patient care but demonstrates some lapses. Demonstrates some ability to cite sound evidence that support ideas within presentations or discussions, but demonstrates some lapses. 	<ul style="list-style-type: none"> Generally demonstrates logical reasoning in oral communications in patient care. Generally demonstrates the ability to cite sound evidence that support ideas within presentations or discussions. 	<ul style="list-style-type: none"> Consistently demonstrates logical reasoning in oral communications in patient care. Consistently demonstrates the ability to cite sound evidence that support ideas within presentations or discussions.
4.2. Written communication. Demonstrate sound written communication in patient care.	<ul style="list-style-type: none"> Does not demonstrate logical reasoning in written communications in patient care. Does not demonstrate the written ability to cite sound evidence that support ideas. 	<ul style="list-style-type: none"> Demonstrates some logical reasoning in written communications in patient care but demonstrates some lapses. Demonstrates some written ability to cite sound evidence that support ideas, but demonstrates some lapses. 	<ul style="list-style-type: none"> Generally logical reasoning in written communications in patient care. Generally demonstrates the written ability to cite sound evidence that support ideas. 	<ul style="list-style-type: none"> Consistently demonstrates logical reasoning in written communications in patient care. Consistently demonstrates the written ability to cite sound evidence that support ideas.

PLO 5: Critical Thinking.

Utilize critical thinking, problem solving skills and systemic thinking in assessing and making reasoned, evidence-based decisions in patient care

Indicators	Initial	Developing	Developed	Proficient
5.1. Problem solving. Identifies problems; explore and prioritize potential strategies; and designs, implements, and evaluates viable solutions	<ul style="list-style-type: none"> Is not able to correctly identify the problem or issue being considered. Does not identify appropriate resources. Includes extraneous information or inappropriate or insufficient resources. Does not demonstrate understanding of the content of materials reviewed. Makes inappropriate inferences. Does not evaluate possible alternatives or generates ideas that are illogical or extraneous to issue at hand. Does not propose a solution or does not articulate decision. Does not adequately provide rationale for selected alternative or decision 	<ul style="list-style-type: none"> Identifies the problem or issue but does not demonstrate awareness of all the factors associated with the problem or issues that impact decision making. Identifies a few, but not all, resources needed for decision making. Demonstrates ability to interpret some information and data but not all. Does not fully or effectively evaluate alternative solutions. Proposes a decision with many apparent weaknesses (i.e., not feasible, lack of regard for consequences, lack of supporting evidence, illogical, irrelevant to issue at hand, etc.). Provides rationale for selected 	<ul style="list-style-type: none"> Correctly identifies problem or issue being considered and demonstrates adequate awareness of the factors associated with this problem or issue that impact decision making. Identifies most of the resources needed. Demonstrates ability to interpret most information and data. Considers and evaluates possible solutions in a way that generally leads to a logical decision or course of action. Proposes a solution that does not contain apparent weaknesses that may or may not be the obvious clear choice. Solutions chosen demonstrate consideration of most of the strengths, 	<ul style="list-style-type: none"> Consistently correctly identifies the problem or issue being considered and all of the primary factors associated with this problem or issue that impact decision making. Articulates the importance of these factors. Identifies all appropriate resources. Demonstrates ability to correctly interpret information and data needed for appropriate decision making. Demonstrates awareness of importance of these data in decision-making process. Considers and evaluates possible solutions effectively and thoroughly. Evaluation leads to sound, logical, and “best” decision or course of action.

		<p>alternative or decision but does not build a solid position with supporting evidence. Is unable to defend decision or course of action.</p>	<p>weaknesses, feasibility, effects, consequences, relevance, etc.). Provides rationale for selected alternative or decision which includes some solid supporting evidence. Is able to defend decision or course of action at a basic level.</p>	<ul style="list-style-type: none"> Proposes a solution that is entirely appropriate to the situation at hand. Solutions chosen demonstrate consideration of all of the important and relevant strengths, weaknesses, feasibility, effects, consequences, etc.). Provides rationale for selected alternative or decision and builds a solid position with appropriate and relevant supporting evidence. Effectively defends decision or course of action.
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PLO 6: Ethics and Professionalism.

Demonstrating professionalism and ethical decision making

Indicators	Initial	Developing	Developed	Proficient
6.1. Professionalism. Demonstrates behaviors and values that are consistent with the trust given to the profession by patients, other healthcare providers, and society	<ul style="list-style-type: none"> Does not consistently demonstrate professional attitudes and behaviors (altruism, excellence, duty, accountability, honesty, and integrity) Demonstrates frequent lapses in accountability or quality of work 	<ul style="list-style-type: none"> Demonstrates some professional attitudes and behaviors yet there is inconsistency that may impede on the quality of work or treatment of patients and other healthcare team members (altruism, excellence, duty, accountability, honesty, and integrity) 	<ul style="list-style-type: none"> Generally demonstrates most of the professional attitudes and behaviors (altruism, excellence, duty, accountability, honesty, and integrity) that are required in the profession Demonstrates ability to use these behaviors and values to improve healthcare 	<ul style="list-style-type: none"> Consistently demonstrates the professional attitudes and behaviors that uphold the integrity and competence of the work and the treatment of patients and other healthcare team professionals (altruism, excellence, duty, accountability, honesty, and integrity) Consistently uses these behaviors and values to improve healthcare
6.2. Ethics. Demonstrates the ability to make decisions consistent with the values of practitioners and scholars of oral healthcare.	<ul style="list-style-type: none"> Does not make ethical decisions consistent with the values of practitioners and scholars of oral healthcare. 	<ul style="list-style-type: none"> Demonstrates the ability to exercise ethical decision making, and a rudimentary knowledge of ethics within oral healthcare. 	<ul style="list-style-type: none"> Demonstrates the ability to exercise clear and ethical decision making, and a sufficient knowledge of ethics within oral healthcare. 	Demonstrates the ability to exercise clear and ethical decision making, and an advanced knowledge of ethics within oral healthcare.

PLO 7: Biomedical Sciences Knowledge.

Demonstrate an understanding of the fundamentals of biomedical sciences and apply them appropriately in oral healthcare

Indicators	Initial	Developing	Developed	Proficient
7.1. Diagnostic and pharmacologic. Demonstrates the ability to describe how to deliver patient assessments, knowledge of medicines, and delivering diagnoses.	<ul style="list-style-type: none"> Does not demonstrate the ability to describe diagnostic and pharmacologic knowledge related to oral health. 	<ul style="list-style-type: none"> Demonstrates a rudimentary ability to describe diagnostic and pharmacologic knowledge related to oral health. 	<ul style="list-style-type: none"> Demonstrates a sufficient ability to describe diagnostic and pharmacologic knowledge related to oral health. 	<ul style="list-style-type: none"> Demonstrates an advanced ability to describe diagnostic and pharmacologic knowledge related to oral health.
7.2. Orofacial pain/temporomandibular/ Sleep disorder. Demonstrates the ability to describe the anatomical, physiological, and neurological basis; classification, epidemiology, and etiology; and assessments and treatments of orofacial pain, temporomandibular joint disease, and sleep disorders.	<ul style="list-style-type: none"> Does not demonstrate the ability to describe scientific or assessment knowledge related to OFP/TMJ disease and sleep disorders. 	<ul style="list-style-type: none"> Demonstrates a rudimentary ability to describe scientific or assessment knowledge related to OFP/TMJ disease and sleep disorders. 	<ul style="list-style-type: none"> Demonstrates a sufficient ability to describe scientific or assessment knowledge related to OFP/TMJ disease and sleep disorders. 	<ul style="list-style-type: none"> Demonstrates an advanced ability to describe scientific or assessment knowledge related to OFP/TMJ disease and sleep disorders.
7.3. Maxillofacial pathology Demonstrates the ability to describe the scientific aspects of head and neck diseases, as well as knowledge of assessment and diagnosis.	<ul style="list-style-type: none"> Does not demonstrate the ability to describe the scientific or assessment knowledge related to head and neck diseases. 	<ul style="list-style-type: none"> Demonstrates a rudimentary ability to describe the scientific or assessment knowledge related to head and neck diseases. 	<ul style="list-style-type: none"> Demonstrates a sufficient ability to describe the scientific or assessment knowledge related to head and neck diseases. 	<ul style="list-style-type: none"> Demonstrates an advanced ability to describe the scientific or assessment knowledge related to head and neck diseases.

PLO 8: Practice Management.

Apply legal, regulatory, and business management concepts related to the provision of oral healthcare services

Indicators	Initial	Developing	Developed	Proficient
8.1. Legal aspects Applies legal and regulatory concepts related to the provision of oral healthcare services.	<ul style="list-style-type: none"> Does not demonstrate an understanding or the ability to apply legal and regulatory concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates a rudimentary understanding and ability to apply legal and regulatory concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates a sound understanding and ability to apply legal and regulatory concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates an advanced understanding and ability to apply legal and regulatory concepts related to the provision of oral healthcare sciences.
8.2. Business management Applies business management concepts to the provision of oral healthcare services.	<ul style="list-style-type: none"> Does not demonstrate an understanding or the ability to apply business management concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates a rudimentary understanding and ability to apply business management concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates a sound understanding and ability to apply business management concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates an advanced understanding and ability to apply business management concepts related to the provision of oral healthcare sciences.

Appendix B

California Northstate University Institutional Learning Objectives

ILO 1: Critical thinking: Exercise reasoned judgment to assess technical information and make well-informed decisions using evidence-based approaches

ILO 2: Written communication. Demonstrate the ability to write coherent, supported, and logically structured prose

ILO 3: Oral communication: Demonstrates oral communication skills

ILO 4: Professionalism. Interact with respect, empathy, diplomacy, and cultural competence

ILO 5: Quantitative reasoning: Demonstrate ability to use mathematics and statistics in problem solving

ILO 6: Information literacy: Identify and search relevant libraries of information and databases; synthesize information obtained from primary literature using properly referenced citations

DMD Institutional Learning Outcomes (ILOs) Proficiency Rubric

ILO 1: Critical thinking: Exercise reasoned judgment to assess technical information and make well-informed decisions using evidence-based approaches

Indicator	Initial	Developing	Developed	Proficient
1.1. Demonstrates identification of problem or issues	<ul style="list-style-type: none"> Does not correctly identify the problem or issue being considered Does not demonstrate understanding of the psychological factors that contribute to current patient state 	<ul style="list-style-type: none"> Identifies the problem or issue but does not demonstrate awareness of all the factors impacting decision making Demonstrates understanding of some possible psychological factors that contribute to current patient state 	<ul style="list-style-type: none"> Correctly identifies the problem or issue but does not demonstrate awareness of all factors impacting decision making Demonstrates understanding of most psychological factors that contribute to the current patient state 	<ul style="list-style-type: none"> Correctly identifies all of the primary factors associated with problem or issue impacting decision making Demonstrates thorough understanding of all possible psychological factors that contribute to the current patient state

1.2. Demonstrates identification of resources	<ul style="list-style-type: none"> Does not identify appropriate resources 	<ul style="list-style-type: none"> Identifies a few resources needed 	<ul style="list-style-type: none"> Identifies most of the resources needed 	<ul style="list-style-type: none"> Correctly identifies all appropriate resources
1.3. Finds and interprets data needed for critical thinking and decision making	<ul style="list-style-type: none"> Does not demonstrate understanding of the data needed for critical thinking and decision making 	<ul style="list-style-type: none"> Demonstrates ability to interpret some data but not all 	<ul style="list-style-type: none"> Demonstrates ability to interpret most data 	<ul style="list-style-type: none"> Demonstrates ability to correctly interpret data needed for decision making
1.4. Demonstrates knowledge of alternatives when evaluating for possible solutions	<ul style="list-style-type: none"> Does not evaluate possible alternatives for treatment or diagnosis 	<ul style="list-style-type: none"> Does not effectively evaluate alternative treatment or diagnostic solutions 	<ul style="list-style-type: none"> Evaluates possible treatment and diagnostic solutions leading to a logical decision 	<ul style="list-style-type: none"> Effectively and thoroughly considers and evaluates possible diagnostic and treatment solutions
1.5. Proposes and selects appropriate solutions	<ul style="list-style-type: none"> Does not propose solutions to the client's needs 	<ul style="list-style-type: none"> Proposes solutions without consideration of alternatives 	<ul style="list-style-type: none"> Solutions chosen demonstrate consideration of most of the strengths, weaknesses, and consequences of the decision 	<ul style="list-style-type: none"> Proposes solutions that are appropriate to the situation and demonstrate consideration of all relevant strengths, weaknesses, and consequences
1.6. Presents rationale for course of action	<ul style="list-style-type: none"> Does not adequately provide rationale for treatment decision 	<ul style="list-style-type: none"> Provides rationale for decision but does not integrate into mental health treatment plan 	<ul style="list-style-type: none"> Provides rationale for decision with solid supporting evidence from available psychological literature and/or case factors 	<ul style="list-style-type: none"> Provides rationale for decision and with appropriate and relevant supporting case evidence and integrates findings into treatment plan

ILO 2: Written communication. Demonstrate the ability to write coherent, supported, and logically structured prose

Indicators	Initial	Developing	Developed	Proficient
2.1. Demonstrates knowledge and awareness of intended audience	<ul style="list-style-type: none"> Does not demonstrate knowledge or awareness of audience for which the document is intended 	<ul style="list-style-type: none"> Demonstrates some ability to craft a document appropriate for its audience 	<ul style="list-style-type: none"> Demonstrates ability to craft a document appropriate for its audience 	<ul style="list-style-type: none"> Consistently demonstrates ability to craft documents appropriate for the audience
2.2. Demonstrates clear and logical thought	<ul style="list-style-type: none"> Does not demonstrate clear or logical thought 	<ul style="list-style-type: none"> Writing does not sufficiently conceptualize case variables or 	<ul style="list-style-type: none"> Demonstrates general clear or logical thought in 	<ul style="list-style-type: none"> Research and clinical documentation demonstrates clear

	in their documentation	analyze subject under discussion	their documentation	and focused thinking
2.3. Demonstrates support for and development of ideas	<ul style="list-style-type: none"> Does not explain or develop ideas 	<ul style="list-style-type: none"> Demonstrates minimal support for ideas 	<ul style="list-style-type: none"> Writing contains examples that generally support ideas 	<ul style="list-style-type: none"> Supports ideas with relevant, clear, impactful examples
2.4. Demonstrates appropriate use of evidence to support arguments	<ul style="list-style-type: none"> Demonstrates an attempt to use proper citations to support ideas 	<ul style="list-style-type: none"> Uses credible and relevant sources to support ideas appropriate in the study of psychology 	<ul style="list-style-type: none"> Consistently uses credible and relevant sources to support ideas 	<ul style="list-style-type: none"> Demonstrates skillful use of credible and relevant sources to develop and support ideas
2.5. Demonstrates appropriate use of language, syntax, and mechanics	<ul style="list-style-type: none"> Has excessive or severe errors in language usage 	<ul style="list-style-type: none"> Generally conveys meaning to readers with clarity, though writing may include some errors 	<ul style="list-style-type: none"> Language conveys meaning to readers and writing contains very few errors 	<ul style="list-style-type: none"> Uses language effectively and skillfully to communicate meaning to readers

ILO 3: Oral communication: Demonstrates oral communication skills

Indicators	Initial	Developing	Developed	Proficient
3.1. Demonstrates knowledge and awareness of intended audience	<ul style="list-style-type: none"> Does not demonstrate knowledge or awareness of audience for which the communication is intended 	<ul style="list-style-type: none"> Demonstrates some ability to communicate in a manner appropriate to the audience 	<ul style="list-style-type: none"> Demonstrates ability to communicate appropriate to the audience 	<ul style="list-style-type: none"> Consistently demonstrates ability to communicate in a manner appropriate to the audience
3.2. Demonstrates clear and logical thought	<ul style="list-style-type: none"> Does not demonstrate clear or logical thought in their communication 	<ul style="list-style-type: none"> Communication does not sufficiently conceptualize case variables or analyze subject under discussion 	<ul style="list-style-type: none"> Demonstrates general clear or logical thought in their communication 	<ul style="list-style-type: none"> Communication demonstrates clear and focused thinking
3.3. Demonstrates effective use of language in their communication	<ul style="list-style-type: none"> Does not know professional psychological language or uses jargon Does not know the proper technical language regarding mental health treatment 	<ul style="list-style-type: none"> Demonstrates inaccurate use of psychological language or uses jargon in professional communications Utilizes scientific language that is incomprehensible to patients 	<ul style="list-style-type: none"> Demonstrates appropriate use of professional language and minimal jargon Utilizes generalized language to interact with patients 	<ul style="list-style-type: none"> Demonstrates use of appropriate, professional language Utilizes generalized language to interact with patients

3.4. Demonstrates appropriate active listening techniques when addressing questions	<ul style="list-style-type: none"> • Does not acknowledge other viewpoints • Has great difficulty answering questions 	<ul style="list-style-type: none"> • Demonstrates little attempt to recognize other viewpoints • Answers are simplistic and lack intellectual depth 	<ul style="list-style-type: none"> • Recognizes other viewpoints but has difficulty incorporating them into case conceptualization • Adequately answers patient questions 	<ul style="list-style-type: none"> • Listens to questions with a consideration of alternative viewpoints • Answers questions thoughtfully referencing evidence
3.5. Orally communicates meaning to audience	<ul style="list-style-type: none"> • Vocal delivery is too soft or too fast • Long, unintended silences and/or speech disruptions frequently distract audience • Speaker makes no attempt to engage audience 	<ul style="list-style-type: none"> • Vocal delivery is audible • Speech rate or volume disruptions occasionally distract from comprehension • Attempts to engage audience 	<ul style="list-style-type: none"> • Vocal delivery is varied and dynamic • Speech rate, volume, and tone enhance listener interest and facilitate understanding • Generally engages audience 	<ul style="list-style-type: none"> • Vocal delivery is varied and dynamic • Speech rate, volume, and tone enhance listener interest and facilitate understanding • Thoroughly engages audience
3.6. Utilizes non-verbal means to enhance message	<ul style="list-style-type: none"> • Eye contact, body language, and facial expressions are inappropriate 	<ul style="list-style-type: none"> • Eye contact, body language, and facial expressions neither enhance nor hinder oral effectiveness 	<ul style="list-style-type: none"> • Use of eye contact, body language, and facial expressions are mostly consistent with the verbal message 	<ul style="list-style-type: none"> • Use of eye contact, body language, and facial expressions that are consistent with the verbal message

ILO 4: Professionalism. Interact with respect, empathy, diplomacy, and cultural competence

Indicators	Initial	Developing	Developed	Proficient
4.1. Demonstrates professional attitudes and behaviors	<ul style="list-style-type: none"> • Does not generally demonstrate professional attitudes or behaviors expected from a dentist 	<ul style="list-style-type: none"> • Demonstrates some attitudes and behaviors that may be characteristic of a dentist 	<ul style="list-style-type: none"> • Generally demonstrates attitudes and behaviors expected from a dentist 	<ul style="list-style-type: none"> • Consistently demonstrates attitudes and behaviors expected from a dentist
4.2. Demonstrates personal responsibility and accountability	<ul style="list-style-type: none"> • Does not demonstrate personal accountability or responsibility for work completed 	<ul style="list-style-type: none"> • Demonstrates minimal personal accountability and responsibility for work completed 	<ul style="list-style-type: none"> • Demonstrates personal accountability and responsibility for the work completed 	<ul style="list-style-type: none"> • Consistently demonstrates personal accountability and responsibility for work completed

4.3. Demonstrates respectful and sensitive behaviors to the cultural and linguistic needs of diverse patients	<ul style="list-style-type: none"> • Does not demonstrate an awareness of patients' customs, beliefs, or perspectives • Does not demonstrate awareness of linguistic needs of patients 	<ul style="list-style-type: none"> • Demonstrates a minimal level of awareness of customs, beliefs, or perspectives of patients • Demonstrates minimal awareness of cultural and linguistic needs of patients 	<ul style="list-style-type: none"> • Demonstrates awareness of customs and beliefs • Demonstrates awareness of the cultural and linguistic needs of patients 	<ul style="list-style-type: none"> • Demonstrates awareness of customs, beliefs, or perspectives in patients • Demonstrates full awareness and responds to the cultural and linguistic needs of patients
4.4. Demonstrates professional demeanor	<ul style="list-style-type: none"> • Appears inattentive and impatient • Uses inappropriate body language • Dresses in attire that is inappropriate 	<ul style="list-style-type: none"> • Appears unfocused and distracted • Uses acceptable body language • Dresses in attire that is not offensive 	<ul style="list-style-type: none"> • Appears composed and focused • Uses appropriate body language • Dresses in attire that is professional 	<ul style="list-style-type: none"> • Uses articulate, tactful, and diplomatic speech • Uses professional body language • Dresses in attire that is professional, and well-suited for the environment

ILO 5: Quantitative reasoning: Demonstrate ability to use mathematics and statistics in problem solving

Indicators	Initial	Developing	Developed	Proficient
5.1. Demonstrates ability to perform calculations and apply mathematical principles to solve problems	<ul style="list-style-type: none"> • Does not demonstrate ability to apply statistical or psychometric principles 	<ul style="list-style-type: none"> • Demonstrates ability to perform basic statistical calculations but does not know how to apply psychometric principles to solve problems 	<ul style="list-style-type: none"> • Demonstrates ability to perform most statistical calculations accurately and to apply psychometric principles to solve problems 	<ul style="list-style-type: none"> • Consistently demonstrates ability to perform statistical calculations accurately and to appropriately apply psychometric principles to solve problems
5.2. Demonstrates understanding of experimental designs and methodology	<ul style="list-style-type: none"> • Displays difficulty proposing a basic experiment or research project 	<ul style="list-style-type: none"> • Comprehends basic experiments designed by others 	<ul style="list-style-type: none"> • Evaluates research, method, and protocol to review valid and reliable research 	<ul style="list-style-type: none"> • Proposes appropriate and innovative designs to address a new hypothesis and research question
5.3. Demonstrates logical and appropriate interpretation of data	<ul style="list-style-type: none"> • Demonstrates a limited ability to interpret scientific data 	<ul style="list-style-type: none"> • Attempts to interpret scientific data 	<ul style="list-style-type: none"> • Demonstrates the ability to interpret scientific data 	<ul style="list-style-type: none"> • Interprets data in the context of current scientific knowledge
5.4. Demonstrates logical thought patterns in	<ul style="list-style-type: none"> • Does not generate conclusions based on current 	<ul style="list-style-type: none"> • Generates conclusions that may be based on 	<ul style="list-style-type: none"> • Generates conclusions using 	<ul style="list-style-type: none"> • Accurately generates conclusions using

generating conclusions	scientific data and statistics	current scientific data and statistics	scientific and statistical data	appropriate scientific and mathematical data
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ILO 6: Information literacy: Identify and search relevant libraries of information and databases; synthesize information obtained from primary literature using properly referenced citations

Indicators	Initial	Developing	Developed	Proficient
6.1. Demonstrates appropriate ability search and acquire resources	<ul style="list-style-type: none"> Does not identify or solicit help in obtaining external resources to support topic 	<ul style="list-style-type: none"> Identified resources may not be sufficient in quality and infrequently solicits guidance from library personnel 	<ul style="list-style-type: none"> Identifies resources appropriate for scientific inquiry and solicits guidance from library personnel 	<ul style="list-style-type: none"> Identifies a variety of relevant sources and regularly seeks guidance from library personnel
6.2. Demonstrates appropriate incorporation of references	<ul style="list-style-type: none"> Does not incorporate references 	<ul style="list-style-type: none"> Incorporates references from psychological sources that do not clearly support ideas 	<ul style="list-style-type: none"> Incorporates relevant references that generally supports ideas 	<ul style="list-style-type: none"> Incorporates relevant references from respected psychological sources
6.3. Demonstrates appropriate citation of references	<ul style="list-style-type: none"> Does not use citations 	<ul style="list-style-type: none"> Uses citations but they are not formatted in APA style 	<ul style="list-style-type: none"> Demonstrates use of appropriate citations in context 	<ul style="list-style-type: none"> Uses properly cited references and includes all necessary information in reference list



California Northstate University College of Dental Medicine

Dental Anatomy Course Syllabus

Course #	Course Title	Credits	Year	Term
Odont 521	Dental Anatomy <i>LAL and LAB</i>	6	DS 1	Fall

Credit Hour Policy

For each 15-week semester, one (1) hour of credit is assigned per hour each week of classroom or direct faculty didactic instruction (that is, per hour of lecture or student in-class time) and a minimum of two (2) hours of out-of-class student work (homework). For practicum and internship time, one (1) hour of credit is assigned per three (3) hours each week of student time spent in this activity.

Maximum Enrollment: 80

Calendar of Important Dates:

Date	
August 12, 2020	First day of term for all DMD 1 students
September 21, 2020	First quiz
October 1, 2020	Submission of first laboratory project
November 15, 2020	Submission of first CMPS (Correlated Medical Problem Solving) project
December 1, 2020	Second quiz
December 12, 2020	Final examination (practical)
December 14, 2020	Final examination (didactic)

Course Coordinator, Instructors and Contact Information

Richard Simonsen DDS (course co-director)

Room:

E-mail:

Office hours:

Leon Assael DMD (Course co-director)

Room:

E-mail: leon.assael@cnsu.edu

Office hours: Wednesdays 12:00pm-1:00pm, and 3:00pm-4:00pm (or by appointment)

Holly Jacobson BA (course administrator)

Room:

E-mail: holly.jacobson@cnsu.edu

Classroom and Meeting Times

Room: Classroom xxxx

Time: xxxx 3 hours per week

Laboratory and Meeting times

Room: xxxx type 1 dental laboratory

Time: xxxx 3 hours per week

Course Description

The course is designed to teach student dentists the development, histology, functional anatomy of the primary teeth succedaneous teeth and associated structures. The laboratory will enhance understanding of three dimensional structure of teeth and associated structures that is relevant in understanding oral physiology, pathobiology of oral structures. The course will utilize lecture, small group project, individual psychomotor laboratory exercises, and computer based modeling learning. Malformations and pathology of dental anatomic structures will be used to illustrate structure and function in an active learning project format.

Prerequisite Courses

None

Prerequisite Knowledge

None

Required Textbook(s) and Material(s)

10. *Wheeler's Dental Anatomy and Occlusion*, 75th anniversary edition, Stanley Nelson, Vital Source, 2019
11. *Woelfel's Dental Anatomy*, Rickne Scheid, Gabriela Weiss, Wolters Kluwer, 9th edition 2018

Optional Textbook(s) and Material(s)

1. The Visible Human Project, the Virtual Microscope, online
2. Primal Pictures online

Web Links

6. <https://bookshelf.vitalsource.com/#/>
7. https://www.nlm.nih.gov/research/visible/visible_human.html
8. <https://primalpictures.com/>

Technology

1. Computer-assisted instruction (Clickers) and SCANTRON Sheets
2. Web-based course management (Canvas) and Examsoft
3. Audio/Video recordings where applicable
4. PowerPoint
5. Three dimensional virtual models from Vital Source and NLM Visible Human project

Evaluation Components

In keeping with the Team Based Learning (TBL) approach, grades will be determined as follows:

Individual Components	80%
First Quiz	10%
Second Quiz	10%
Final Exam	40%
Laboratory Exercises	20%

Team Components	20%
Group CMPS Project	10%
Peer Evaluation	10%

GRADING

All students must demonstrate minimal individual competency. Therefore, students earning less than 75% on the total Individual component score will not have team component scores added to calculate their final course grade. During the course, students who score less than 75% on individual components may be subject to periodic course content review and may receive an Academic Alert.

In order to progress from one semester to the next, students must pass all courses with a letter grade of C or higher and maintain a minimum cumulative grade point average (GPA) of 2.0. The breakdown for assignment of letter grades and grade points for each letter grade are as follows:

Percent	Letter Grade/Action
90.0 – 100%	A
80.0 – 89.9%	B
75.0 – 79.9%	C - Pass
60.0 – 74.9%	D – Requiring remediation (successful remediation recorded as C, unsuccessful remediation recorded as F)
Below 60.0%	F – Fail (course must be repeated)
Incomplete	I

Incomplete

During a semester, a student may not complete all required assignments and/or examinations due to extenuating circumstances, such as, but not limited to, an illness or a family emergency. In such a case, the course director may give a grade of Incomplete for the course. The course with the incomplete grade has to be completed successfully within the time frame as being defined by the student's academic plan, normally in the same academic year, otherwise a leave of absence would be required.

Core-Course Policies

All students are required to adhere to the Academic Policies that impact on student progression and conduct while attending the DMD program, including the following: Academic Progression Policy, Excused Absence Policy, Exam Policy, Course Grade Appeal Policy, Course Add/Drop Policy and Attendance Policy. Refer to the current Student Handbook for the detailed policies.

Course Specific Policies

1. Group CMPS cases are to be submitted via CANVAS by 11:59pm PST on the deadline indicated. Only one group member should submit the assignment on behalf of the group. The course coordinator reserves the right to deduct points for late submission (20% of assignment grade for every 24 hours the assignment is turned in late). Presentation of CMPS cases requires the active participation of each team member, preferably presenting the component of the case the student was responsible for developing.
2. Grade appeal for any individual assignments (including exams) should be submitted to the course coordinator in writing within 5 business days of grade release.
3. There will be no rounding of the final grade for this course.

Topics and Schedule

(Subject to change. Updates will be posted to CANVAS and announced by email)

All readings are in Vital Source, or as assigned and posted to CANVAS

Date	Topics	Readings*	Instructor	Notes
Week 1	Syllabus/Assignment Overview introduction to dental anatomy	Wheeler Chapters 1	Assael	
Week 1 lab	Overview of equipment and learning materials, Histology of dental structures	Visible human project Virtual microscope	Assael	
Week 2 lecture	Development and eruption of the teeth	Wheeler chapter 2	Simonsen	
Week 2 lab	The viscerocranium and dental structures during growth and	Wheeler chapter 5	Kapila (ortho)	
Week 3	The primary dentition	Wheeler Chapter 3	Le (peds)	Team Case for Comprehensive Medication Review
Week 3 lab	Primary dentition anatomy lab	Woelfel Chapter 6	Le (peds)	
Week 4	The periodontium	Primal pictures Visible human Woelfel chapter	Nagy (perio)	Additional assigned reading
Week 4	Periodontium lab	Primal pictures Visible human	Nagy (perio)	
Week 5	The incisors	Woelfels, chapter 1,2	Simonsen	
Week 5 lab	Incisors lab	Woelfel, chapter 1,2	Simonsen	
Week 6	Canines	Woelfel chapter 3	Assael	Presentation of group project by Assael
Week 6 lab	Canines	Woelfel chapter 3	Keating	
Week 7	Premolars, Quiz 1	Woelfel Chapter 4	Keating	Quiz 1

Week 7 lab	Premolars	Woelfel Chapter 4	Keating	Lab quiz 1
Week 8	Molars	Woelfel Chapter 5	Simons en	
Week 8 lab	Molars	Woelfel chapter 5	Simons en	
Week 9	Occlusion	Wheeler chapter 15	Pros faculty	
Week 9 lab	Occlusion lab	Wheeler chapter 15	Pros faculty	
Week 10	Dental neuroanatomy and pulp anatomy Part 1 Blood vessels and nerves	Wheeler chapter 14		
Week 10 lab	Dental neuroanatomy pulp anatomy, Part 1	Wheeler Chapter 14		
Week 11	Dental pulp morphology	Wheeler , chapter 13		
Week 11 lab	Dental pulp morphology	Wheeler , chapter 13		
Week 12	Temporomandibular joints, airway and myology, Quiz 2	Wheeler, chapter 15		Quiz 2
Week 12 lab	Temporomandibular joints, airway, and myology	Wheeler, chapter 15		Lab Quiz 2
Week 13	Clin. Correl. for dental anatomy: caries, pulp, airway, PD, occlusion, TMD	PPTs		
Week 13 lab	Clinical correlates for dental anatomy	Models, visuals and radiographs		
Week 14	Student case presentations of CMPS (correlated medical problem solving occl	Occlusion, TMD, pulp disease, caries, PD	Assael/Simons en	
Week 14 lab	Student visual presentations of CMPS	Clinical case presentaton	Simons en/Assael	
Week 15	FINAL Didactic exam		faculty	Exam week
Week 15 lab	FINAL Practical anatomy exam	Schedule will be posted.	faculty	Exam week

Course Learning Outcomes and links to Program Learning Outcomes (Appendix A) and Institutional Learning Outcomes (Appendix B)

No.	Course Learning Outcome	DMD PLO	DMD ILO	Learning Hierarchy ^b	Assessment Method
1	Develop a comprehensive detailed understanding of the morphology of primary and succedaneous teeth	1,2,7,8	1,3,4,6	1,2, 3	Quizzes, final exam
2	Demonstrate an understanding of how individual tooth morphology is incorporated into overall masticatory and maxillofacial function including occlusion airway	1,2,7,8	1,3,4,6	2, 3	Quizzes, final exam, group project
3	Demonstrate how dental anatomy is impacted in health and common disease states.	1,2,3,4,7,8	1,3,4,6	2, 3	Group project, final exam
4	Demonstrate professionalism/ development of a professional identity as a dentist with the detailed knowledge of dental anatomy as a vehicle in case presentations	1,2,3,7,8	4	3	Group project

^a plo's appendix A

^b Learning Hierarchy based on Bloom's Taxonomy with 1=Memorization and/or Comprehension; 2=Application and/or Analysis; 3=Synthesis and/or Evaluation.

Teaching/ Learning Methodology

1. Didactic: lectures, required readings
2. Learning Activities: laboratory practice, laboratory assignments/exercises, group project

[Type here]

CLO Rubrics

CLO 1: Develop a comprehensive detailed understanding of the morphology of primary and succedaneous teeth

Indicators	Initial	Developing	Developed	Proficient
Recognizes and describes normal morphology of primary and succedaneous teeth	Unable to recognize and describe normal morphology of primary and succedaneous teeth.	Demonstrates rudimentary ability to describe dental anatomy structures including nomenclature and location but not detailed ultrastructure	Demonstrates detailed understanding of normal morphology of primary and succedaneous teeth. Can describe normal structure and recognize it visually	Consistently demonstrates the ability to describe and recognize normal morphology and deviations from normal structure at the ultrastructural level.
Produces structures in analog model and digital environment demonstrating understanding of dental morphology	Unable to demonstrate the ability to produce anatomical models digitally or manually.	Shows the ability to develop elements of normal dental morphology across the primary and succedaneous dentition.	Can produce structures that closely resemble normal dental anatomy with only modest deviations from measureable norms.	Consistently demonstrates the ability to produce clinical normal structures in the digital and analog setting and detect deviations from norms..

[Type here]

CLO 2: Demonstrates understanding of how individual tooth morphology is incorporated into overall masticatory and maxillofacial function including occlusion airway and TMJ function

Indicators	Initial	Developing	Developed	Proficient
Demonstrates understanding of the integration of individual tooth morphology into the masticatory system	Cannot correlate the anatomy of teeth into the associated structures of joint, muscle, bone, airway	Begins to demonstrate how tooth morphology location and association are necessary to understanding the structure and function of the masticatory system	Shows how individual tooth morphology is an essential component linked precisely morphologically to the masticatory system.	Demonstrates an understanding and synthesizes the morphology of the dentition with occlusion, mastication, airway and swallowing.
Creates with their project team a presentation that demonstrates the broad functional aspects of dental anatomy	Unable to demonstrate the ability to deliver a professional presentation to their colleagues.	Shows the team members project components under development and understands project development gaps	Demonstrates the ability to present their component of the group project effectively.	Consistently demonstrates the ability to deliver a professional presentation to their colleagues and integrates it appropriately with the other team members presentations.

[Type here]

CLO 3: Demonstrate how dental anatomy is impacted in health and common disease states.

Indicator	Initial	Developing	Developed	Proficient
Uses developing understanding of pathology of the dental and maxillofacial structures and their impact on the structure and function of the teeth	Does not demonstrate an understanding of the relationship between dental anatomy structure and function and the pathology of maxillofacial structures.	Demonstrates a developing understanding of the reciprocal effects of regional pathology and the structure and function of the teeth	Demonstrates a comprehensive understanding of the role of occlusion, dental structures, airway and supporting structures on the development of and progression of pathology of the region.	Consistently demonstrates ability to hypothesize and synthesize the role that dental anatomy plays in the initiation and progression of oral diseases such as caries, periodontal disease, TMD, movement disorders, and airway disorders

CLO 4: Demonstrate professionalism/ development of a professional identity as a dentist with the detailed knowledge of dental anatomy as a vehicle in case presentations

Indicators	Initial	Developing	Developed	Proficient
Demonstrates purpose, context, and audience awareness.	Unable to demonstrate attention to purpose, context, and audience awareness in the assigned tasks.	Occasionally demonstrates attention to purpose, context, and audience awareness in the assigned tasks.	Often demonstrates adequate consideration of purpose, context, and audience awareness in the assigned tasks.	Consistently demonstrates adequate consideration of purpose, context, and audience awareness in the assigned tasks
Demonstrates logical analysis and clarity of thought	Unable to demonstrate logical analysis and clarity of thought in the assigned tasks.	Occasionally demonstrates logical analysis and clarity of	Often demonstrates logical analysis and clarity of	Consistently demonstrates logical analysis and clarity of

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		thought in the assigned tasks.	thought in the assigned tasks.	thought in the assigned tasks.
Demonstrates clear, focused, coherent organization and development of ideas.	Unable to demonstrate clear, focused, coherent organization and development of ideas.	Occasionally demonstrates clear, focused, coherent organization and development of ideas.	Often demonstrates clear, focused, coherent organization and development of ideas.	Consistently demonstrates clear, focused, coherent organization and development of ideas.
Demonstrates appropriate use of sources and evidence.	Unable to demonstrate appropriate use of sources and evidence in assigned tasks.	Occasionally demonstrates an attempt to use credible and/or relevant sources to support ideas that are appropriate for the discipline and genre in assigned tasks.	Often demonstrates an attempt to use credible and/or relevant sources to support ideas that are appropriate for the discipline and genre in assigned tasks.	Consistently demonstrates an attempt to use credible and/or relevant sources to support ideas that are appropriate for the discipline and genre in assigned tasks.
Delivery (when applicable)	Eye contact, body language, and facial expressions are inappropriate and significantly distracting. Vocal delivery is too soft or too fast. Long, unintended silences and/or speech disruptions frequently distract the audience.	Eye contact, body language, and facial expressions neither enhance nor hinder effectiveness significantly. Vocal delivery is audible. Speech rate or volume disruptions occasionally distract from comprehension.	Some, but not all, of the following apply: Eye contact, body language, and facial expressions enhance presentation. Vocal delivery is varied and dynamic. Speech rate, volume, and tone enhance listener interest and facilitate understanding.	Most, or all, of the following apply: Eye contact, body language, and facial expressions enhance the presentation. Vocal delivery is varied and dynamic. Speech rate, volume, and tone enhance listener interest and facilitate understanding.
Functions collaboratively and effectively as a member of the team of DMD 1 learners and faculty.	Unable to function collaboratively and effectively as a member of the team.	Occasionally functions collaboratively and effectively as a member of the team.	Often functions collaboratively and effectively as a member of the team.	Consistently functions collaboratively and effectively as a member of the team.

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Appendix A: Program Learning Outcomes (PLOs) CNU College of Dental Medicine

9. Patient-Centered Care: Demonstrate understanding of healthcare disparities and cultural awareness in patient counseling and patient advocacy
10. Evidence-Based Care: Apply current, evidence-based oral healthcare within the scope of general dentistry
11. Culturally competent, empathic communication: Demonstrate patient centered, empathic, and culturally competent communication and interpersonal skills
12. Oral and Written Communication: Demonstrate sound oral and written communications in patient care
13. Critical Thinking: Utilize critical thinking, problem solving skills and systemic thinking in assessing and making reasoned, evidence-based decisions in patient care
14. Ethics and Professionalism: Demonstrate professionalism and ethical decision making
15. Biomedical Sciences Knowledge: Demonstrate an understanding of the fundamentals of biomedical sciences and apply them appropriately in oral healthcare
16. Practice Management: Apply legal, regulatory and business management concepts related to provision of oral healthcare services

DMD Program Learning Outcomes (PLOs)

PLO 1: Patient-Centered Care

Demonstrate understanding of healthcare disparities and cultural awareness and capability in patient counseling and providing appropriate patient advocacy

Indicators	Initial	Developing	Developed	Proficient
1.1. Education. Demonstrates ability to educate all audiences through effectively communicating information and assessing learning	<ul style="list-style-type: none"> Does not appropriately counsel patients Does not check for understanding, ask questions, and/or asks inappropriate questions. Does not demonstrate the ability to find and utilize appropriate resources and 	<ul style="list-style-type: none"> Counsels patients but leaves out pertinent information needed by patient Communicates with basic level of clarity but does not always check for understanding or rephrase when confusion occurs. 	<ul style="list-style-type: none"> Generally demonstrates empathy, communicates accurate information clearly, checks for understanding Seeks to ensure understanding and generally asks questions. 	<ul style="list-style-type: none"> Consistently demonstrates empathy, communicates accurate information clearly, checks for understanding Ensures understanding and asks appropriate questions.

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	references necessary for providing accurate counseling, consultation and education	<ul style="list-style-type: none"> • Demonstrates the ability to find a one or two resources, yet the resources are not the best or most appropriate for providing accurate counseling, consultation and education 	<ul style="list-style-type: none"> • Frequently demonstrates the ability to find and utilize appropriate resources and references necessary for providing accurate counseling, consultation and education 	<ul style="list-style-type: none"> • Consistently demonstrates the ability to find and utilize appropriate resources and references for providing accurate patient counseling, consultation and education
1.2. Patient advocacy. Represents the patient's best interests	<ul style="list-style-type: none"> • Does not demonstrate the ability represent a patient's best interest 	<ul style="list-style-type: none"> • Demonstrates awareness of issues that impact a patient • Demonstrates minimal ability to articulate these issues but does not demonstrate ability to sufficiently advocate on a patient's behalf 	<ul style="list-style-type: none"> • Demonstrates sufficient awareness of issues that impact a patient • Demonstrates ability to articulate these issues • Demonstrates ability to sufficiently advocate on a patient's behalf 	<ul style="list-style-type: none"> • Demonstrates full awareness of the most important issues that impact a patient • Demonstrates ability to clearly and effectively articulate these issues • Demonstrates ability to effectively advocate on a patient's behalf

PLO 2: Evidence-Based Care.

Apply sound, current, and evidence-based oral healthcare within the scope of general dentistry

Indicators	Initial	Developing	Developed	Proficient
2.1. Patient-centered care. Demonstrates ability to provide patient-centered care as the medication expert (collect and interpret evidence, prioritize, formulate assessments and recommendations, implement, monitor and adjust plans, and document activities)	<ul style="list-style-type: none"> • Does not demonstrate ability to provide patient-centered care at the medication expert level; e.g., demonstrates ability to collect but not sufficiently interpret evidence, does not prioritize, formulates basic assessments and recommendations, does not sufficiently monitor and adjust 	<ul style="list-style-type: none"> • Demonstrates ability to provide patient-centered care as the medication expert in some, but not all, areas as follows: collect and interpret evidence, prioritize, formulate assessments and recommendations, implement, monitor and adjust plans, and document activities 	<ul style="list-style-type: none"> • Demonstrates ability to provide patient-centered care as the medication expert (generally demonstrates ability to collect and interpret evidence, prioritize, formulate assessments and recommendations, implement, monitor and adjust plans, and document activities) 	<ul style="list-style-type: none"> • Demonstrates ability to provide sufficient patient-centered care as the expert (collects and interprets evidence, prioritizes, formulates assessments and recommendations, implements, monitors and adjusts plans, and documents activities)

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	plans nor document activities.			
2.2. Systems management. Demonstrates ability to manage patient healthcare needs using human, financial, technological, and physical resources to optimize the safety and efficacy of medication use systems	<ul style="list-style-type: none"> • Does not demonstrate understanding of oral healthcare delivery systems parts • Does not demonstrate understanding of the forces that influence components of the oral healthcare delivery system, including their connection to patient care • Does not demonstrate understanding of any challenges to systems that affect oral healthcare delivery Does not demonstrate understanding of how to work with different subsystems to deliver oral healthcare 	<ul style="list-style-type: none"> • Demonstrates understanding of some parts of oral healthcare delivery systems but does not identify how they are related to each other • Demonstrates understanding of some forces that influence the parts of healthcare delivery systems, but demonstrate minimal understanding of their connection to patient care • Demonstrates understanding of some challenges that can affect delivery of oral healthcare • Demonstrates some understanding of how to work with different subsystems and how they function to deliver oral healthcare, but demonstrate minimal awareness or understanding of one's own role within the oral healthcare delivery system 	<ul style="list-style-type: none"> • Demonstrates understanding of most major components of oral healthcare systems and their respective relationships • Demonstrates understanding of the forces that influence the components of healthcare delivery systems, and demonstrate some understanding of their influence on the quality of patient care • Demonstrates understanding of most challenges that can affect delivery of oral healthcare, but does not demonstrate complete comprehension of the effects Demonstrates basic understanding of how to work with different subsystems and how they function to deliver oral healthcare and demonstrate some understanding of one's role within the oral healthcare delivery system, but does not necessarily demonstrate application of knowledge in a manner that maximizes the 	<ul style="list-style-type: none"> • Demonstrates understanding of the major components of oral healthcare systems, their respective relationships, and their functions related to patient care • Demonstrates thorough understanding of the forces that influence components of healthcare delivery systems and demonstrate full understanding of their influence and implications on the quality of patient care • Demonstrates understanding of pertinent challenges to specific aspects of healthcare delivery by demonstrating abilities to thoroughly discuss the implications for the appropriate parts of oral health care delivery systems Demonstrates excellent understanding of how to work with different subsystems involved while also demonstrating understanding of one's role within the subsystems, and demonstrate

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			quality of oral healthcare	appropriate application of knowledge in a manner that maximizes the quality of oral healthcare
2.3. Health and wellness. Designs prevention, intervention, and educational strategies for individuals and communities to manage chronic disease and improve oral health and wellness	<ul style="list-style-type: none"> Does not demonstrate understanding of how the arts can be utilized to optimize patients' well-being 	<ul style="list-style-type: none"> Demonstrates knowledge of some of the ways that the arts can be utilized to optimize patients' well-being 	<ul style="list-style-type: none"> Demonstrates sufficient knowledge of multiple ways that the arts can be utilized to optimize patients' well-being 	<ul style="list-style-type: none"> Demonstrates thorough knowledge of the ways that the arts can be utilized to optimize patients' well-being and creatively applies this knowledge to improve well-being and the practice and delivery of oral healthcare
2.4. Population-based care. Demonstrates understanding of how population-based care influences patient-centered care and the development of practice guidelines and evidence-based best practices	<ul style="list-style-type: none"> Does not demonstrate awareness of population-based care. 	<ul style="list-style-type: none"> Demonstrates minimal understanding of population-based care and how it influences patient-centered care Does not demonstrate awareness of how these notions influence the development of practice guidelines 	<ul style="list-style-type: none"> Demonstrates sufficient understanding of population-based care and how it influences patient-centered care Demonstrates sufficient understanding of how population-based care influences the development of practice guidelines and best practices for patient care 	<ul style="list-style-type: none"> Demonstrates superb understanding of population-based care and how it influences patient-centered care Demonstrates superb understanding of how population-based care influences the development of practice guidelines and demonstrates knowledge of best practices for patient care

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PLO 3: Culturally Competent, Empathic Communication.

Demonstrate patient centered, empathic and culturally competent communication and interpersonal skills

Indicators	Initial	Developing	Developed	Proficient
3.1. Empathy. Demonstrates the ability to communicate with the patient empathically.	<ul style="list-style-type: none"> Does not demonstrate the ability to communicate with the patient empathically. 	<ul style="list-style-type: none"> Demonstrates some ability, but experiences lapses in the ability to communicate empathically 	<ul style="list-style-type: none"> Demonstrates the ability to communicate empathically, with few lapses. 	<ul style="list-style-type: none"> Demonstrates an advanced ability, and never experiences lapses in communicating empathically.
3.2. Cultural competence. Demonstrates the ability to engage in communication with the patient that is culturally aware and accepting.	<ul style="list-style-type: none"> Does not demonstrate communication and interactions that convey respect or concern for patients and the community. Does not demonstrate an awareness of customs, beliefs, or perspectives in diverse patients Does not demonstrate awareness of cultural and linguistic needs of patients in order to communicate health information 	<ul style="list-style-type: none"> Demonstrates communication and interactions characteristic of a minimal level of respect, and little concern for patients and the community is apparent through use of some appropriate communication, but student does not employ follow-up questions for clarification, when necessary, and student provides inappropriate detail in responses Demonstrates a minimal level of awareness of customs, beliefs, or perspectives in diverse patients Demonstrates minimal awareness of cultural and linguistic needs of patients; either does not or only attempt to adapt behaviors, but does so ineffectively, to communicate health information 	<ul style="list-style-type: none"> Demonstrates appropriate communication and interactions that are characteristic of a basic level of respect, and concern for patients and the community is apparent through use of appropriate communication, where student uses some clear, but not necessarily relevant or detailed, follow-up questions and responses Demonstrates awareness of customs and beliefs, but may not clarify with patients about personal perspectives Demonstrates awareness of the cultural and linguistic needs of diverse patients, and adapt behaviors to communicate health information, but 	<ul style="list-style-type: none"> Demonstrates professional communication and interactions by showing empathy, respect, and concern for patients and the community through use of appropriate communication where follow-up questions (as needed) and responses are clear, relevant, and detailed Demonstrates awareness of customs, beliefs, or perspectives in diverse patients; ask appropriate questions to clarify perspectives and perceptions in diverse patients Demonstrates full awareness of and responsiveness to cultural and linguistic needs of diverse patients by adapting behaviors appropriately in order to effectively communicate health information

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			communication may not be effective	
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PLO 4: Oral and Written Communication.

Demonstrate sound oral and written communications in patient care

Indicators	Initial	Developing	Developed	Proficient
4.1. Oral communication. Demonstrate sound oral communication in patient care.	<ul style="list-style-type: none"> Does not demonstrate logical reasoning in oral communications in patient care. Does not demonstrate the ability to cite sound evidence that support ideas within presentations or discussions. 	<ul style="list-style-type: none"> Demonstrates some logical reasoning in oral communications in patient care but demonstrates some lapses. Demonstrates some ability to cite sound evidence that support ideas within presentations or discussions, but demonstrates some lapses. 	<ul style="list-style-type: none"> Generally demonstrates logical reasoning in oral communications in patient care. Generally demonstrates the ability to cite sound evidence that support ideas within presentations or discussions. 	<ul style="list-style-type: none"> Consistently demonstrates logical reasoning in oral communications in patient care. Consistently demonstrates the ability to cite sound evidence that support ideas within presentations or discussions.
4.2. Written communication. Demonstrate sound written communication in patient care.	<ul style="list-style-type: none"> Does not demonstrate logical reasoning in written communications in patient care. Does not demonstrate the written ability to cite sound evidence that support ideas. 	<ul style="list-style-type: none"> Demonstrates some logical reasoning in written communications in patient care but demonstrates some lapses. Demonstrates some written ability to cite sound evidence that support ideas, but demonstrates some lapses. 	<ul style="list-style-type: none"> Generally logical reasoning in written communications in patient care. Generally demonstrates the written ability to cite sound evidence that support ideas. 	<ul style="list-style-type: none"> Consistently demonstrates logical reasoning in written communications in patient care. Consistently demonstrates the written ability to cite sound evidence that support ideas.

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PLO 5: Critical Thinking.

Utilize critical thinking, problem solving skills and systemic thinking in assessing and making reasoned, evidence-based decisions in patient care

Indicators	Initial	Developing	Developed	Proficient
5.1. Problem solving. Identifies problems; explore and prioritize potential strategies; and designs, implements, and evaluates viable solutions	<ul style="list-style-type: none"> • Is not able to correctly identify the problem or issue being considered. • Does not identify appropriate resources. Includes extraneous information or inappropriate or insufficient resources. • Does not demonstrate understanding of the content of materials reviewed. Makes inappropriate inferences. • Does not evaluate possible alternatives or generates ideas that are illogical or extraneous to issue at hand. • Does not propose a solution or does not articulate decision. Does not adequately provide rationale for selected alternative or decision 	<ul style="list-style-type: none"> • Identifies the problem or issue but does not demonstrate awareness of all the factors associated with the problem or issues that impact decision making. • Identifies a few, but not all, resources needed for decision making. • Demonstrates ability to interpret some information and data but not all. • Does not fully or effectively evaluate alternative solutions. • Proposes a decision with many apparent weaknesses (i.e., not feasible, lack of regard for consequences, lack of supporting evidence, illogical, irrelevant to issue at hand, etc.). Provides rationale for selected alternative or decision but does not build a solid position with supporting evidence. Is unable 	<ul style="list-style-type: none"> • Correctly identifies problem or issue being considered and demonstrates adequate awareness of the factors associated with this problem or issue that impact decision making. • Identifies most of the resources needed. • Demonstrates ability to interpret most information and data. • Considers and evaluates possible solutions in a way that generally leads to a logical decision or course of action. • Proposes a solution that does not contain apparent weaknesses that may or may not be the obvious clear choice. Solutions chosen demonstrate consideration of most of the strengths, weaknesses, feasibility, effects, consequences, relevance, etc.). Provides rationale for selected alternative or decision which includes some 	<ul style="list-style-type: none"> • Consistently correctly identifies the problem or issue being considered and all of the primary factors associated with this problem or issue that impact decision making. Articulates the importance of these factors. • Identifies all appropriate resources. • Demonstrates ability to correctly interpret information and data needed for appropriate decision making. Demonstrates awareness of importance of these data in decision-making process. • Considers and evaluates possible solutions effectively and thoroughly. Evaluation leads to sound, logical, and “best” decision or course of action. • Proposes a solution that is entirely appropriate to the situation at hand. Solutions chosen demonstrate consideration of all

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		to defend decision or course of action.	solid supporting evidence. Is able to defend decision or course of action at a basic level.	of the important and relevant strengths, weaknesses, feasibility, effects, consequences, etc.). Provides rationale for selected alternative or decision and builds a solid position with appropriate and relevant supporting evidence. Effectively defends decision or course of action.
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PLO 6: Ethics and Professionalism.

Demonstrating professionalism and ethical decision making

Indicators	Initial	Developing	Developed	Proficient
6.1. Professionalism. Demonstrates behaviors and values that are consistent with the trust given to the profession by patients, other healthcare providers, and society	<ul style="list-style-type: none"> Does not consistently demonstrate professional attitudes and behaviors (altruism, excellence, duty, accountability, honesty, and integrity) Demonstrates frequent lapses in accountability or quality of work 	<ul style="list-style-type: none"> Demonstrates some professional attitudes and behaviors yet there is inconsistency that may impede on the quality of work or treatment of patients and other healthcare team members (altruism, excellence, duty, accountability, honesty, and integrity) 	<ul style="list-style-type: none"> Generally demonstrates most of the professional attitudes and behaviors (altruism, excellence, duty, accountability, honesty, and integrity) that are required in the profession Demonstrates ability to use these behaviors and values to improve healthcare 	<ul style="list-style-type: none"> Consistently demonstrates the professional attitudes and behaviors that uphold the integrity and competence of the work and the treatment of patients and other healthcare team professionals (altruism, excellence, duty, accountability, honesty, and integrity) Consistently uses these behaviors and values to improve healthcare
6.2. Ethics. Demonstrates the ability to make decisions consistent with the values of practitioners and scholars of oral healthcare.	<ul style="list-style-type: none"> Does not make ethical decisions consistent with the values of practitioners and scholars of oral healthcare. 	<ul style="list-style-type: none"> Demonstrates the ability to exercise ethical decision making, and a rudimentary knowledge of ethics within oral healthcare. 	<ul style="list-style-type: none"> Demonstrates the ability to exercise clear and ethical decision making, and a sufficient knowledge of ethics within oral healthcare. 	Demonstrates the ability to exercise clear and ethical decision making, and an advanced knowledge of ethics within oral healthcare.

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PLO 7: Biomedical Sciences Knowledge.

Demonstrate an understanding of the fundamentals of biomedical sciences and apply them appropriately in oral healthcare

Indicators	Initial	Developing	Developed	Proficient
7.1. Diagnostic and pharmacologic. Demonstrates the ability to describe how to deliver patient assessments, knowledge of medicines, and delivering diagnoses.	<ul style="list-style-type: none"> Does not demonstrate the ability to describe diagnostic and pharmacologic knowledge related to oral health. 	<ul style="list-style-type: none"> Demonstrates a rudimentary ability to describe diagnostic and pharmacologic knowledge related to oral health. 	<ul style="list-style-type: none"> Demonstrates a sufficient ability to describe diagnostic and pharmacologic knowledge related to oral health. 	<ul style="list-style-type: none"> Demonstrates an advanced ability to describe diagnostic and pharmacologic knowledge related to oral health.
7.2. Orofacial pain/temporomandibular/ Sleep disorder. Demonstrates the ability to describe the anatomical, physiological, and neurological basis; classification, epidemiology, and etiology; and assessments and treatments of orofacial pain, temporomandibular joint disease, and sleep disorders.	<ul style="list-style-type: none"> Does not demonstrate the ability to describe scientific or assessment knowledge related to OFP/TMJ disease and sleep disorders. 	<ul style="list-style-type: none"> Demonstrates a rudimentary ability to describe scientific or assessment knowledge related to OFP/TMJ disease and sleep disorders. 	<ul style="list-style-type: none"> Demonstrates a sufficient ability to describe scientific or assessment knowledge related to OFP/TMJ disease and sleep disorders. 	<ul style="list-style-type: none"> Demonstrates an advanced ability to describe scientific or assessment knowledge related to OFP/TMJ disease and sleep disorders.
7.3. Maxillofacial pathology Demonstrates the ability to describe the scientific aspects of head and neck diseases, as well as knowledge of assessment and diagnosis.	<ul style="list-style-type: none"> Does not demonstrate the ability to describe the scientific or assessment knowledge related to head and neck diseases. 	<ul style="list-style-type: none"> Demonstrates a rudimentary ability to describe the scientific or assessment knowledge related to head and neck diseases. 	<ul style="list-style-type: none"> Demonstrates a sufficient ability to describe the scientific or assessment knowledge related to head and neck diseases. 	<ul style="list-style-type: none"> Demonstrates an advanced ability to describe the scientific or assessment knowledge related to head and neck diseases.

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PLO 8: Practice Management.

Apply legal, regulatory, and business management concepts related to the provision of oral healthcare services

Indicators	Initial	Developing	Developed	Proficient
8.1. Legal aspects Applies legal and regulatory concepts related to the provision of oral healthcare services.	<ul style="list-style-type: none"> Does not demonstrate an understanding or the ability to apply legal and regulatory concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates a rudimentary understanding and ability to apply legal and regulatory concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates a sound understanding and ability to apply legal and regulatory concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates an advanced understanding and ability to apply legal and regulatory concepts related to the provision of oral healthcare sciences.
8.2. Business management Applies business management concepts to the provision of oral healthcare services.	<ul style="list-style-type: none"> Does not demonstrate an understanding or the ability to apply business management concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates a rudimentary understanding and ability to apply business management concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates a sound understanding and ability to apply business management concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates an advanced understanding and ability to apply business management concepts related to the provision of oral healthcare sciences.

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Appendix B

California Northstate University Institutional Learning Objectives

ILO 1: Critical thinking: Exercise reasoned judgment to assess technical information and make well-informed decisions using evidence-based approaches

ILO 2: Written communication. Demonstrate the ability to write coherent, supported, and logically structured prose

ILO 3: Oral communication: Demonstrates oral communication skills

ILO 4: Professionalism. Interact with respect, empathy, diplomacy, and cultural competence

ILO 5: Quantitative reasoning: Demonstrate ability to use mathematics and statistics in problem solving

ILO 6: Information literacy: Identify and search relevant libraries of information and databases; synthesize information obtained from primary literature using properly referenced citations

DMD Institutional Learning Outcomes (ILOs)

ILO 1: Critical thinking: Exercise reasoned judgment to assess technical information and make well-informed decisions using evidence-based approaches

Indicator	Initial	Developing	Developed	Proficient
1.1. Demonstrates identification of problem or issues	<ul style="list-style-type: none"> Does not correctly identify the problem or issue being considered Does not demonstrate understanding of the psychological factors that contribute to current patient state 	<ul style="list-style-type: none"> Identifies the problem or issue but does not demonstrate awareness of all the factors impacting decision making Demonstrates understanding of some possible psychological factors that contribute to current patient state 	<ul style="list-style-type: none"> Correctly identifies the problem or issue but does not demonstrate awareness of all factors impacting decision making Demonstrates understanding of most psychological factors that contribute to the current patient state 	<ul style="list-style-type: none"> Correctly identifies all of the primary factors associated with problem or issue impacting decision making Demonstrates thorough understanding of all possible psychological factors that contribute to the current patient state

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1.2. Demonstrates identification of resources	<ul style="list-style-type: none"> • Does not identify appropriate resources 	<ul style="list-style-type: none"> • Identifies a few resources needed 	<ul style="list-style-type: none"> • Identifies most of the resources needed 	<ul style="list-style-type: none"> • Correctly identifies all appropriate resources
1.3. Finds and interprets data needed for critical thinking and decision making	<ul style="list-style-type: none"> • Does not demonstrate understanding of the data needed for critical thinking and decision making 	<ul style="list-style-type: none"> • Demonstrates ability to interpret some data but not all 	<ul style="list-style-type: none"> • Demonstrates ability to interpret most data 	<ul style="list-style-type: none"> • Demonstrates ability to correctly interpret data needed for decision making
1.4. Demonstrates knowledge of alternatives when evaluating for possible solutions	<ul style="list-style-type: none"> • Does not evaluate possible alternatives for treatment or diagnosis 	<ul style="list-style-type: none"> • Does not effectively evaluate alternative treatment or diagnostic solutions 	<ul style="list-style-type: none"> • Evaluates possible treatment and diagnostic solutions leading to a logical decision 	<ul style="list-style-type: none"> • Effectively and thoroughly considers and evaluates possible diagnostic and treatment solutions
1.5. Proposes and selects appropriate solutions	<ul style="list-style-type: none"> • Does not propose solutions to the client's needs 	<ul style="list-style-type: none"> • Proposes solutions without consideration of alternatives 	<ul style="list-style-type: none"> • Solutions chosen demonstrate consideration of most of the strengths, weaknesses, and consequences of the decision 	<ul style="list-style-type: none"> • Proposes solutions that are appropriate to the situation and demonstrate consideration of all relevant strengths, weaknesses, and consequences
1.6. Presents rationale for course of action	<ul style="list-style-type: none"> • Does not adequately provide rationale for treatment decision 	<ul style="list-style-type: none"> • Provides rationale for decision but does not integrate into mental health treatment plan 	<ul style="list-style-type: none"> • Provides rationale for decision with solid supporting evidence from available psychological literature and/or case factors 	<ul style="list-style-type: none"> • Provides rationale for decision and with appropriate and relevant supporting case evidence and integrates findings into treatment plan

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ILO 2: Written communication. Demonstrate the ability to write coherent, supported, and logically structured prose

Indicators	Initial	Developing	Developed	Proficient
2.1. Demonstrates knowledge and awareness of intended audience	•Does not demonstrate knowledge or awareness of audience for which the document is intended	•Demonstrates some ability to craft a document appropriate for its audience	•Demonstrates ability to craft a document appropriate for its audience	•Consistently demonstrates ability to craft documents appropriate for the audience
2.2. Demonstrates clear and logical thought	•Does not demonstrate clear or logical thought in their documentation	•Writing does not sufficiently conceptualize case variables or analyze subject under discussion	•Demonstrates general clear or logical thought in their documentation	•Research and clinical documentation demonstrates clear and focused thinking
2.3. Demonstrates support for and development of ideas	•Does not explain or develop ideas	•Demonstrates minimal support for ideas	•Writing contains examples that generally support ideas	•Supports ideas with relevant, clear, impactful examples
2.4. Demonstrates appropriate use of evidence to support arguments	•Demonstrates an attempt to use proper citations to support ideas	•Uses credible and relevant sources to support ideas appropriate in the study of psychology	•Consistently uses credible and relevant sources to support ideas	•Demonstrates skillful use of credible and relevant sources to develop and support ideas
2.5. Demonstrates appropriate use of language, syntax, and mechanics	•Has excessive or severe errors in language usage	•Generally conveys meaning to readers with clarity, though writing may include some errors	•Language conveys meaning to readers and writing contains very few errors	•Uses language effectively and skillfully to communicate meaning to readers

ILO 3: Oral communication: Demonstrates oral communication skills

Indicators	Initial	Developing	Developed	Proficient
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3.1. Demonstrates knowledge and awareness of intended audience	<ul style="list-style-type: none"> • Does not demonstrate knowledge or awareness of audience for which the communication is intended 	<ul style="list-style-type: none"> • Demonstrates some ability to communicate in a manner appropriate to the audience 	<ul style="list-style-type: none"> • Demonstrates ability to communicate appropriate to the audience 	<ul style="list-style-type: none"> • Consistently demonstrates ability to communicate in a manner appropriate to the audience
3.2. Demonstrates clear and logical thought	<ul style="list-style-type: none"> • Does not demonstrate clear or logical thought in their communication 	<ul style="list-style-type: none"> • Communication does not sufficiently conceptualize case variables or analyze subject under discussion 	<ul style="list-style-type: none"> • Demonstrates general clear or logical thought in their communication 	<ul style="list-style-type: none"> • Communication demonstrates clear and focused thinking
3.3. Demonstrates effective use of language in their communication	<ul style="list-style-type: none"> • Does not know professional psychological language or uses jargon • Does not know the proper technical language regarding mental health treatment 	<ul style="list-style-type: none"> • Demonstrates inaccurate use of psychological language or uses jargon in professional communications • Utilizes scientific language that is incomprehensible to patients 	<ul style="list-style-type: none"> • Demonstrates appropriate use of professional language and minimal jargon • Utilizes generalized language to interact with patients 	<ul style="list-style-type: none"> • Demonstrates use of appropriate, professional language • Utilizes generalized language to interact with patients
3.4. Demonstrates appropriate active listening techniques when addressing questions	<ul style="list-style-type: none"> • Does not acknowledge other viewpoints • Has great difficulty answering questions 	<ul style="list-style-type: none"> • Demonstrates little attempt to recognize other viewpoints • Answers are simplistic and lack intellectual depth 	<ul style="list-style-type: none"> • Recognizes other viewpoints but has difficulty incorporating them into case conceptualization • Adequately answers patient questions 	<ul style="list-style-type: none"> • Listens to questions with a consideration of alternative viewpoints • Answers questions thoughtfully referencing evidence
3.5. Orally communicates meaning to audience	<ul style="list-style-type: none"> • Vocal delivery is too soft or too fast • Long, unintended silences and/or speech 	<ul style="list-style-type: none"> • Vocal delivery is audible • Speech rate or volume disruptions occasionally 	<ul style="list-style-type: none"> • Vocal delivery is varied and dynamic • Speech rate, volume, and tone enhance listener interest 	<ul style="list-style-type: none"> • Vocal delivery is varied and dynamic • Speech rate, volume, and tone enhance listener interest

[Type here]

	<p>disruptions frequently distract audience</p> <ul style="list-style-type: none"> • Speaker makes no attempt to engage audience 	<p>distract from comprehension</p> <ul style="list-style-type: none"> • Attempts to engage audience 	<p>and facilitate understanding</p> <ul style="list-style-type: none"> • Generally engages audience 	<p>and facilitate understanding</p> <ul style="list-style-type: none"> • Thoroughly engages audience
3.6. Utilizes non-verbal means to enhance message	<ul style="list-style-type: none"> • Eye contact, body language, and facial expressions are inappropriate 	<ul style="list-style-type: none"> • Eye contact, body language, and facial expressions neither enhance nor hinder oral effectiveness 	<ul style="list-style-type: none"> • Use of eye contact, body language, and facial expressions are mostly consistent with the verbal message 	<ul style="list-style-type: none"> • Use of eye contact, body language, and facial expressions that are consistent with the verbal message

ILO 4: Professionalism. Interact with respect, empathy, diplomacy, and cultural competence

Indicators	Initial	Developing	Developed	Proficient
4.1. Demonstrates professional attitudes and behaviors	<ul style="list-style-type: none"> Does not generally demonstrate professional attitudes or behaviors expected from a dentist 	<ul style="list-style-type: none"> Demonstrates some attitudes and behaviors that may be characteristic of a dentist 	<ul style="list-style-type: none"> Generally demonstrates attitudes and behaviors expected from a dentist 	<ul style="list-style-type: none"> Consistently demonstrates attitudes and behaviors expected from a dentist
4.2. Demonstrates personal responsibility and accountability	<ul style="list-style-type: none"> Does not demonstrate personal accountability or responsibility for work completed 	<ul style="list-style-type: none"> Demonstrates minimal personal accountability and responsibility for work completed 	<ul style="list-style-type: none"> Demonstrates personal accountability and responsibility for the work completed 	<ul style="list-style-type: none"> Consistently demonstrates personal accountability and responsibility for work completed
4.3. Demonstrates respectful and sensitive behaviors to the cultural and linguistic needs of diverse patients	<ul style="list-style-type: none"> Does not demonstrate an awareness of patients' customs, beliefs, or perspectives Does not demonstrate awareness of linguistic needs of patients 	<ul style="list-style-type: none"> Demonstrates a minimal level of awareness of customs, beliefs, or perspectives of patients Demonstrates minimal awareness of cultural and linguistic needs of patients 	<ul style="list-style-type: none"> Demonstrates awareness of customs and beliefs Demonstrates awareness of the cultural and linguistic needs of patients 	<ul style="list-style-type: none"> Demonstrates awareness of customs, beliefs, or perspectives in patients Demonstrates full awareness and responds to the cultural and linguistic needs of patients
4.4. Demonstrates professional demeanor	<ul style="list-style-type: none"> Appears inattentive and impatient Uses inappropriate body language Dresses in attire that is inappropriate 	<ul style="list-style-type: none"> Appears unfocused and distracted Uses acceptable body language Dresses in attire that is not offensive 	<ul style="list-style-type: none"> Appears composed and focused Uses appropriate body language Dresses in attire that is professional 	<ul style="list-style-type: none"> Uses articulate, tactful, and diplomatic speech Uses professional body language Dresses in attire that is professional, and well-suited for the environment

[Type here]

ILO 5: Quantitative reasoning: Demonstrate ability to use mathematics and statistics in problem solving

Indicators	Initial	Developing	Developed	Proficient
5.1. Demonstrates ability to perform calculations and apply mathematical principles to solve problems	<ul style="list-style-type: none"> Does not demonstrate ability to apply statistical or psychometric principles 	<ul style="list-style-type: none"> Demonstrates ability to perform basic statistical calculations but does not know how to apply psychometric principles to solve problems 	<ul style="list-style-type: none"> Demonstrates ability to perform most statistical calculations accurately and to apply psychometric principles to solve problems 	<ul style="list-style-type: none"> Consistently demonstrates ability to perform statistical calculations accurately and to appropriately apply psychometric principles to solve problems
5.2. Demonstrates understanding of experimental designs and methodology	<ul style="list-style-type: none"> Displays difficulty proposing a basic experiment or research project 	<ul style="list-style-type: none"> Comprehends basic experiments designed by others 	<ul style="list-style-type: none"> Evaluates research, method, and protocol to review valid and reliable research 	<ul style="list-style-type: none"> Proposes appropriate and innovative designs to address a new hypothesis and research question
5.3. Demonstrates logical and appropriate interpretation of data	<ul style="list-style-type: none"> Demonstrates a limited ability to interpret scientific data 	<ul style="list-style-type: none"> Attempts to interpret scientific data 	<ul style="list-style-type: none"> Demonstrates the ability to interpret scientific data 	<ul style="list-style-type: none"> Interprets data in the context of current scientific knowledge
5.4. Demonstrates logical thought patterns in generating conclusions	<ul style="list-style-type: none"> Does not generate conclusions based on current scientific data and statistics 	<ul style="list-style-type: none"> Generates conclusions that may be based on current scientific data and statistics 	<ul style="list-style-type: none"> Generates conclusions using scientific and statistical data 	<ul style="list-style-type: none"> Accurately generates conclusions using appropriate scientific and mathematical data

ILO 6: Information literacy: Identify and search relevant libraries of information and databases; synthesize information obtained from primary literature using properly referenced citations

Indicators	Initial	Developing	Developed	Proficient
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[Type here]

6.1. Demonstrates appropriate ability search and acquire resources	<ul style="list-style-type: none"> • Does not identify or solicit help in obtaining external resources to support topic 	<ul style="list-style-type: none"> • Identified resources may not be sufficient in quality and infrequently solicits guidance from library personnel 	<ul style="list-style-type: none"> • Identifies resources appropriate for scientific inquiry and solicits guidance from library personnel 	<ul style="list-style-type: none"> • Identifies a variety of relevant sources and regularly seeks guidance from library personnel
6.2. Demonstrates appropriate incorporation of references	<ul style="list-style-type: none"> • Does not incorporate references 	<ul style="list-style-type: none"> • Incorporates references from psychological sources that do not clearly support ideas 	<ul style="list-style-type: none"> • Incorporates relevant references that generally supports ideas 	<ul style="list-style-type: none"> • Incorporates relevant references from respected psychological sources
6.3. Demonstrates appropriate citation of references	<ul style="list-style-type: none"> • Does not use citations 	<ul style="list-style-type: none"> • Uses citations but they are not formatted in APA style 	<ul style="list-style-type: none"> • Demonstrates use of appropriate citations in context 	<ul style="list-style-type: none"> • Uses properly cited references and includes all necessary information in reference list

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**2018 – 2019 Academic Year
Stages of Life Course Syllabus
Course #: COM 591
Year: 2
Semester: Spring**

Course Dates: 3/25/19 to 5/3/19

Credits Hours: 5 credits

Course Director:

Dr. Louise Glaser, MD, Associate Clinical Professor
Louise.Glaser@cnsu.edu

Coordinator:

Ms. Samantha Xiong

Disclaimer about changes in Syllabus and Course Calendar

Every effort will be made to adhere to the contents of this syllabus. However, this document is subject to changes in the event of unforeseen, extenuating circumstances. Students will be notified as soon as possible if changes in the syllabus become necessary.

Course Teaching Faculty

Name/Degree	Rank/Title
Louise Glaser, MD	Associate Clinical Professor
Guy DiSibio, MD	Associate Professor of Pathology and Medical Genetics
Martin Rubin, MD	Associate Professor of Psychiatry
Susan Ely, PhD	Professor of Molecular Biology, Immunology and Microbiology
Valerie Gerriets, PhD	Assistant Professor of Pharmacology
Floyd Culler, MD	Professor of Pediatrics, Endocrinology and Clinical Skills
Nazila Hejazi, MD	Assistant Professor of Pathology
Rudolph Holguin, MD	Associate Professor of Emergency Medicine
Jason Wong	PharmD
Peter Yip, MD	Associate Professor of Internal Medicine & Occupational Medicine
Nehad El-Sawi, PhD	Professor of Molecular Biology, Immunology and Microbiology
Ishwarlal Jialal, MD, PhD	Professor of Physiology, Metabolism and Pathology
Claire Baranov, MD	Assistant Professor of Medical Skills
Thura AlKhayat, MD	Assistant Professor of OBGYN and Medical Skills
Ghaith Aleyd, MD, PhD	Associate Professor Pathology

Open Door Policy: Course faculty have an open door policy and encourage contact from students by e-mail and in person to share impressions, concerns and/or ideas at any time

Volunteer Community Faculty Name/Degree
Victoria Akins, MD PhD, Pediatrics
Schery Mitchell, MD, Pediatrics
John Belko, MD, Pediatric Infectious Disease
Billur Moghaddam, MD, Pediatric Genetics
Thomas Russell, MD, Emergency Medicine
Nichole Tyson, MD, Obstetrics and Gynecology, Adolescent
Michael Sim, MD, Nephology
Anne Hsii, MD, Pediatrics, Adolescent fellowship
Howard Slyter, MD, Neurology, Ethics and Medicolegal
Michael Gunther-Maher, MD, Geriatrics, Palliative Care
Jean Struthers, MD, Pediatric Developmental Specialist

Communication with volunteer community faculty must be channeled through the course director.

Course Description:

- This course spans the human life cycle beginning with birth and infancy and concluding with the dying patient and elders. We will discuss normal growth and development at each stage as well as common challenges.
- Course Content is intended to be high yield both for important basic science and medicine of the first two years of medical school as well for entering clerkships and caring for patients. Material will be presented via a variety of formats including but not limited to: Clinical presentations, Clinical cases, CCBLs, faculty – student interactive sessions, and small and large group activities.
- The Stages of Life contains clinical case sessions focused on the most frequently encountered clinical presentations for an emergency room or primary care physician.
 - **Clinical Presentations/Clinical Cases - weeks 2 and 4**
Students will be introduced to the age of the week in the **Clinical Presentation session**. **Clinical Case sessions** on Friday, from 8-10 am, are required. Students will meet in their colleges to go through and discuss the case for the week. Each small group will review the case following the standard format including pertinent history information, labs, differential diagnosis, and case management. Each student will write a Case Summary and several students will be asked to present their summary orally to the group. Each student will email a written summary to their college master. **We will convene together in Classroom 1 B at 920 to review possible differential diagnoses for the case.**
 - **Clinical Case Based Learning CCBLs – weeks 1, 3, and 5**
These cases feature a complex patient, consistent with the age for the week, and will include both clinical and basic science. Students work in small groups, with a facilitator, and go through the case together during the 3 sessions in the week. Students will also have an opportunity to practice their oral presentations of a patient on Wednesdays and Fridays. **All of these sessions are Mandatory.**
 - **Basic scientific concepts** are interwoven within each CCBL/CC and CP providing the necessary basis for understanding relationships and causal entities. Clinical relevance and appropriate application of basic scientific knowledge is reinforced with these case examples.
- **Medical Skills** runs concurrently and will be coordinated as much as possible with the course content. Sessions will be engaging and valuable to students.

Course Objectives: By the conclusion of this course, the student will demonstrate the ability to

#	Course Learning Objectives (CLOs)	Program Learning Objectives (PLOs)
1	Distinguish normal growth and development throughout the different stages of life, from birth to death, including common challenges, changes and concerns at the physical, emotional, and behavioral levels in each stage.	PLO-2 (MSK1, MSK2)
2	Explain how exogenous (e.g., infections and nutrition) and endogenous (e.g., hormonal and immunological) factors may affect growth as well as pediatric and geriatric diseases, and how early immunization and adequate nutrition may prevent some of these problems.	PLO-2 (MSK1, MSK2)
3	Explain how genetic and teratogenic mechanisms may alter normal growth and produce physical and chemical abnormalities including tumors, dysmorphic features, developmental delay, and neurochemical imbalances.	PLO-2 (MSK1, MSK2)
4	Integrate the etiopathogenesis in the diagnosis and management of growth and developmental diseases and those associated with aging to predict their risks and prognoses, and identify appropriate preventive strategies.	PLO-2 (MSK1, MSK2, MSK3, MSK4)
5	Apply knowledge of non-pharmacological and pharmacological principles to tailor safe and effective treatments for pediatric and geriatric diseases in addition to palliative care of the dying patient	PLO-1 (PC5, PC7, PC8); PLO-2 (MSK1, MSK2, MSK3)
6	Demonstrate level-appropriate skills in communication, professionalism and medical/procedural related abilities in dealing with patients, and includes environmental, cultural and societal factors in clinical decision making.	PLO-1 (PC1, PC2, PC3, PC4, PC5, PC6, PC7); PLO-3 (C1, C2, C3); PLO-4 (P1, P2, P3)

Please Note: All session objectives listed in the individual sessions (by date and time) are mapped to the course objectives.

Key: PLO = Program Learning Objective (#1=Patient Care; #2=Medical & Scientific Knowledge; #3=Communication and Interpersonal Skills; #4=Professionalism; #5=Health Care Systems; #6=Reflective Practice and Personal Development)

Session Locations:

One large lecture hall with a seating capacity of 100 students, will be used for the most sessions. CCBLs (MWF), Clinical Cases sessions (Fridays), and Group Summative Midterm sessions will be held in colleges rooms.

Lecture/Session Duration: All lectures on the calendar as one hour sessions will be 50 minutes long with 10 minutes break at the end for questions and preparation for the next session. Any session/lecture longer than one hour will have 10 minutes break between every two hours.

Course special assignments: Details to follow during the course.

Teaching/Learning Methodology:

- Case-Based instruction/Learning
- Discussion, Large group (>12)
- Discussion, Small Group (<12)
- Independent Learning
- Lecture
- Patient Presentation – Faculty
- Patient Presentation – Learner
- Peer Teaching
- Reflection
- Self-Directed Learning

Online Materials – Canvas: Canvas is California Northstate University's Learning Management System.). Use your CNU NETID and password.

Turning Point: Every Phase A student was given a Turning Point Clicker during Orientation. Please bring the Clicker to class at all times.

Library/Learning Resources

The CNUCOM Library and Learning Resource Center is available for students, faculty, and staff. This program includes an initial 4200 square feet of space and seating for 100 devoted to the following resources: Library Facility and Collection, Computer resources, CNUCOM Electronic Library, and Interlibrary Loan Program. CNUCOM Resource Center maintains an Electronic Learning Resources System to provide information resources to students, faculty, and staff, and serve as an entry point for all users to meet their academic and research needs.

Recommend Textbook(s), Material(s) and Equipment:

Subject	Author	Title
Geriatric Medicine	Jeffrey B. Halter, Joseph G Ouslander, et al	Hazzard's Geriatric Medicine and Gerontology
Geriatrics Medicine	Robert L. Kane, Joseph G. Ouslander, et al.	Essentials of Clinical Geriatrics
Pediatric Medicine	William W. Hay Jr., Myron J. Levin, Robin R Deterding, Mark J Abzug	Current Diagnosis and Treatment: Pediatrics
Microbiology	Engleberg	Schaechter's Mechanisms of Microbial Disease 5e
Pharmacology	Trevor, Anthony J., et al	Basic & Clinical Pharmacology, 12th Edition
Genetics	Lynn B. Jorde, John C. Carey, Michael J. Bamshad	Medical Genetics: 5th Edition

Lecture/Learning Activity Attendance:

Mandatory sessions include: Course Introduction, CCBL sessions, Clinical Case sessions, Medical Skills/Stat Lab, Masters Colloquium sessions, Exams, and CBSE

NOTE: **Week 1 Masters is split into 2 sessions** (half in week1 and half in week 2)

Week 5 Masters Colloquium Session is on Thursday

All Lectures/Sessions are recommended to attend. We have designed them intentionally to be high yield for your Step1 exam and or for your third year rotations and future practice.

Sign-in sheets will be provided at all mandatory activities. Students will be responsible for signing in themselves. The sign-in sheets will be collected 5 minutes after the activity begins. Only certain excused absences are allowed (please see Student Affairs Absence Policy).

The following procedure(s) will be employed for breeches of these course requirements.

1. Administrative/Support staff will notify the course director(s) and Assistant Dean of Academic Affairs
2. A note will be placed in the student's file
3. Lapses in attendance fall under the COM's Professionalism Policy and are subject to inclusion in the student's MSPE.

4. Persistent lapses in attendance will require the student to appear before the Student Promotions Committee.

Exams and Grading/Assessment:

The successful completion of the course is based on a total course score of 70% or higher including a final exam score of 70% or higher, successful completion of 2 Nutrition modules and an Elders assignment, full attendance and participation in CC and CCBL sessions as well as demonstrating a high standard of ethical and professional behavior.

Failure to reach the passing mark in the final exam will result in a retake examination on Friday of exam week.

▪ Total Course Score:

The total numeric score for the course will be measured as follows, which translates to recording a **passing grade of 70% or above**, and **an honors grade if 90% or above**.

#	Components	%	Notes/Explanation
1	Midterm Hybrid Summative Exam	30 (75% individual and 25% group)	50 NBME questions
2	Final Summative exam	65	100 NBME questions
3	Clinical-Case-Based Learning	n/a	Full attendance and participation required
4	Clinical Cases	n/a	Full attendance and participation required
5	Nutrition Modules (2)	n/a	Completion required to pass
6	Elder Interview (2)	5 (2.5% each)	Completion required to pass
7	Formative Weekly Quiz or online module	n/a	Formative

- **Hybrid Summative Midterm Exam (mandatory)**
 - One USMLE Step 1 format exam, comprised of 50 multiple-choice questions will be held on **Monday** morning of week 4, **April 15, 2019**.
 - The first two hours will be an individual test in classroom 1B.
 - The second two hours will be a group test in smaller rooms to be announced prior to the exam.
 - The Hybrid exam will comprise 30% of the course grade (75% individual and 25% group score)
- **Summative Final Exam (mandatory)**
 - One USMLE Step 1 format exam, 100 multiple-choice question final examination at the end of the course. This will be held Week 6 on **Monday April 29, 2019**.
 - The Final Exam grade will comprise 65% of the course grade.

- **Clinical Cases:** Week 2 and 4, with review and discussion of the week's Clinical Case. **Attendance, satisfactory individual work and contribution to group work at these Friday sessions is required/mandatory.**
- **Clinical Case Based Learning CCBLs – Weeks 1, 3, and 5**
Full attendance and participation is required/mandatory at all sessions.
- **Elders Interview** (Content related to Week 5 Masters Colloquium Session)
Graded Complete/Incomplete, 2.5% value each, **completion required to pass course**
- **Nutrition Online Modules:**
Students are expected to **successfully complete** 2 assigned Nutrition in Medicine modules in order **to pass the course**. Students must register for nutrition in medicine via "nutritioninmedicine.org".
 1. "Nutrition during infancy"
 2. "Nutrition and aging: chronic disease"
- **Weekly Modules/Quizzes (Formative):** Designed to support students in confirming/expanding knowledge from the week's content. These will be posted in Canvas by 5 pm Wednesday and due Friday at noon.
- **Student Evaluations of Course and Faculty**

I highly value your feedback and take it seriously. Students are required to complete these evaluations during their last Clinical Case Based Learning activity. Your CCBL small group faculty facilitator will monitor compliance. Please provide your thoughtful and constructive comments here. Thank you.

Remediation:

- Failure of the midterm summative exam will be addressed by offering optional individual and/or group review/tutoring sessions
- Failure of the final summative examination will result in a retest, on Friday of exam week.
- Students who miss mandatory sessions are required to make up the session. Make up options/assignments vary by type of session missed. Specifics to be determined by the course director.

Students will be expected to comply with all CNU and COM policies. Please refer to student handbook.

Weekly Course Calendars to follow

Stages of Life						
Week 1: Infant						
	Monday	Tuesday	Wednesday	Thursday	Friday	
	3/25/2019	3/26/2019	3/27/2019	3/28/2019	3/29/2019	
8:00 AM	SELF STUDY	SELF STUDY	SELF STUDY	CBSE MANDATORY	CCBL	
8:30 AM						
9:00 AM						
9:30 AM						
10:00 AM						
10:30 AM	Immunodeficiencies related to Lymphoid Organ Function <i>Ely</i>	Medical Skills	Master Colloquium Part 1 <i>Dr. Pan</i>	CBSE MANDATORY	Genetic/Congenital Syndromes <i>Moghaddam</i>	
11:00 AM	Immunodeficiencies Affecting Peripheral Immune System <i>Ely</i>					
11:30 AM	ADA-SCID, SCID-X1 and Gene Therapy <i>Ely</i>					
12 noon	Lunch and activities	Lunch and activities	Lunch and activities			
12:30 PM	MANDATORY: Stages of Life Introduction <i>Glaser</i>	Medical Skills	Pediatric Tumors and Other Pathology <i>Hejazi</i>	CBSE MANDATORY	Lunch and activities	
1:00 PM						
1:30 PM						
2:00 PM	Clinical Presentation: Normal Neonate <i>Akins</i>	Self Study	Newborn Screening <i>diSibio</i>			
2:30 PM						
3:00 PM						
3:30 PM	CCBL	Medical Skills	CCBL	SELF STUDY		
4:00 PM						
4:30 PM						

Stages of Life							
Week 2: Child							
	Monday	Tuesday		Wednesday	Thursday	Friday	
	4/1/2019	4/2/2019		4/3/2019	4/4/2019	4/5/2019	
8:00 AM	SELF STUDY	SELF STUDY		SELF STUDY	SELF STUDY	Clinical Case and Differential Diagnosis	
8:30 AM							
9:00 AM							
9:30 AM							
10:00 AM		Medical Skills	Self Study	Masters Colloquium Palma		Masters Colloquium Part II Dr. R. Pan	
10:30 AM							
11:00 AM						SELF STUDY	
11:30 AM							
12 noon	Lunch and activities	Lunch and activities		Lunch and activities	Lunch and activities	Lunch and activities	
12:30 PM							
1:00 PM	Clinical Presentation Glaser	Medical Skills	Self Study	Neonatal Infectious Disease Belko	Common Childhood injuries Russell	Neuroscience review Lui	
1:30 PM	Inborns Error of Metabolism Gerriets			Childhood Infectious Disease Belko	Environmental Injuries Russell		
2:00 PM	Developmental Pediatrics Struthers						
2:30 PM	Development Birth - 6 years Glaser & Mitchell	Medical Skills	Self Study	GrowthCharts and Common Growth Concerns Culler	Immunizations Gerriets		
3:00 PM				SELF STUDY	SELF STUDY		
3:30 PM							
4:00 PM							
4:30 PM							

Stages of Life					
Week 3: Adolescent					
	Monday	Tuesday	Wednesday	Thursday	Friday
	4/8/2019	4/9/2019	4/10/2019	4/11/2019	4/12/2019
8:00 AM	SELF STUDY	SELF STUDY	SELF STUDY	SELF STUDY	CCBL
8:30 AM					
9:00 AM					
9:30 AM					
10:00 AM					
10:30 AM	Clinical Presentation Teen Psycho-social Development	Medical Skills	Masters Colloquium Slyter	SELF STUDY	Grief and Loss Sim
11:00 AM					
11:30 AM	Lunch and activities	Lunch and activities	Lunch and activities	Lunch and activities	Lunch and activities
12 noon					
12:30 PM					
1:00 PM	LGBTQ+ Tyson	Medical Skills	Brain Death Slyter	Pharmacology Review HIV, parasitics, etc Gerriets	Neuroscience review Lui
1:30 PM					
2:00 PM					
2:30 PM					
3:00 PM					
3:30 PM					
4:00 PM	CCBL	Medical Skills	SELF STUDY	SELF STUDY	
4:30 PM		Self Study			

Stages of Life								
Week 4: Adult								
	Monday	Tuesday		Wednesday	Thursday	Friday		
	4/15/2019	4/16/2019		4/17/2019	4/18/2019	4/19/2019		
8:00 AM	Hybrid Summative Midterm Individual	SELF STUDY		SELF STUDY	SELF STUDY	Clinical Case and Differential Diagnosis		
8:30 AM								
9:00 AM								
9:30 AM								
10:00 AM	Hybrid Summative Midterm Group portion	Medical Skills IP SIM	Self Study	Masters Colloquium Glaser	SELF STUDY	High Yield Anatomy and Neuro review Ernst		
10:30 AM								
11:00 AM								
11:30 AM								
12 noon	Lunch and activities	Lunch and activities		Lunch and activities	Lunch and activities	LUNCH / High Yield Anatomy and Neuro review - Ernst		
12:30 PM								
1:00 PM	Clinical Presentation - Yip	Medical Skills IP SIM	Self Study	Geriatric Syndromes Jialal	Pain Management/Narcotics Yip	SELF STUDY		
1:30 PM	Physiologic Changes in Aging/Geriatrics Holguin			Multimorbidity / Polypharmacy J Wong	Infections of Immunocompromised Host El-Sawi			
2:00 PM							Movie - Stumped (pending)	
2:30 PM								
3:00 PM	SELF STUDY	Medical Skills IP SIM	Self Study	Clinical Symptoms and treatment of sexual dysfunction and BPH J Wong	SELF STUDY			
3:30 PM								
4:00 PM								
4:30 PM								

Stages of Life								
Week 5: Elder								
	Monday	Tuesday		Wednesday	Thursday	Friday		
	4/22/2019	4/23/2019		4/24/2019	4/25/2019	4/26/2019		
8:00 AM	SELF STUDY	SELF STUDY		Self Study or AMA Advocacy Day or Patient Advocacy Day	SELF STUDY	CCBL Course Survey with small group at end of this session		
8:30 AM								
9:00 AM					Geriatric Psychiatry Rubin			
9:30 AM								
10:00 AM		Medical Skills	Stat Lab Screening		Masters Colloquium **** Bell	End of Life Care Gunther Maher		
10:30 AM								
11:00 AM								
11:30 AM								
12 noon	Lunch and activities	Lunch and activities		Lunch and activities	Lunch and activities	Lunch and activities		
12:30 PM								
1:00 PM	Clinical Presentation	Medical Skills	Stat Lab Screening	Self Study or AMA Advocacy Day or Patient Advocacy Day	DNR, Death Certificates, Advanced Directives GuntherMaher	SELF STUDY		
1:30 PM								
2:00 PM	Caregiver Dynamics Gunther-Maher							
2:30 PM								
3:00 PM	TBD							
3:30 PM								
4:00 PM								
4:30 PM								
		Medical Skills	Stat Lab Screening		Palliative Care GuntherMaher			
					SELF STUDY			

Stages of Life					
Week 6: Exam					
	Monday	Tuesday	Wednesday	Thursday	Friday
	4/29/2019	4/30/2019	5/1/2019	5/2/2019	5/3/2019
8:00 AM	FINAL Summative Exam (NBME - CAS)	SELF STUDY	SELF STUDY	SELF STUDY	SOL Exam retake
8:30 AM					
9:00 AM					
9:30 AM					
10:00 AM					
10:30 AM					
11:00 AM					
11:30 AM					
12 noon	Lunch and activities	Lunch and activities	Lunch and activities	Lunch and activities	Lunch and activities
12:30 PM					
1:00 PM	Masters Colloquium Exam	Medical Skills Exam	SELF STUDY	SELF STUDY	SELF STUDY
1:30 PM					
2:00 PM					
2:30 PM					
3:00 PM	SELF STUDY				
3:30 PM					
4:00 PM					
4:30 PM					



California Northstate College of Dental Medicine

Managing Student Life Course Syllabus

Course #	Course Title	Credits	Year	Term
BSS 501	Managing Student Life	1	DS 1	Fall

Credit Hour Policy

For each 15-week semester, one (1) hour of credit is assigned per hour each week of classroom or direct faculty didactic instruction (that is, per hour of lecture or student in-class time) and a minimum of two (2) hours of out-of-class student work (homework). For practicum and internship time, one (1) hour of credit is assigned per three (3) hours each week of student time spent in this activity.

Maximum Enrollment: 80

Calendar of Important Dates:

Date	
August 12, 2020	First day of Fall term for all DMD 1 students
September 30, 2020	Group project selection: one for each college of 20 students
December 1, 2020	Group projects, groups 1 and 2
December 8, 2020	Group projects, groups 3 and 4
December 15	Final reflective essay exam

Course Coordinator, Instructors and Contact Information

Richard Simonsen DDS (course co-director)

Room:

E mail

Office hours

Leon Assael DMD (Course co-director)

Room:

E-mail: leon.assael@cnsu.edu

Office hours: Wednesdays 12:00pm-1:00pm, and 3:00pm-4:00pm (or by appointment)

Holly Jacobson BA (course administrator)

Room: xxx

E mail: holly.jacobson@cnsu.edu

Classroom LAL and Meeting Times

Room: Classroom xxxx

Time: xxxx 1 hours per week

Course description

Resilience, sustainability as a student and future health professional will be presented. Each session will provide a mix of lecture and small group discussions. Managing student debt, stress management, effects of social media, interpersonal relationships, and ethics in student practice will be discussed. The problems of drug and alcohol abuse will be shown. Respect in the University including cultural, gender, and sexual conduct issues will be presented. Students will be made aware of resources to promote student wellbeing.

Prerequisite Courses

None

Prerequisite Knowledge

None

Required Textbook(s) and Material(s)

12. *ASDA managing student debt* <https://www.asdanet.org/index/get-involved/advocate/issues-and-legislative-priorities/Dental-Student-Debt>
13. *Dangers and opportunities for social media in medicine*
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3863578/>
14. Assael, L and McCormick, SS, *Ethical Decision Making in Dentistry*
<https://books.google.com/books?id=6dItAwAAQBAJ&pg=PR6&dq=dental+ethics+suzanne+mccormick&hl=en&sa=X&ved=0ahUKEwjflqan2bnhAhWEop4KHbSKBqwQ6AEIKDAA#v=onepage&q=dental%20ethics%20suzanne%20mccormick&f=false>

Technology

1. Computer-assisted instruction (Clickers) and SCANTRON Sheets
2. Web-based course management (Canvas) and Examsoft
3. Audio/Video recordings where applicable
4. PowerPoint
5. Epic electronic health record
6. PACS, DICOM compatible imaging software
7. Dental operator

Evaluation Components

In keeping with the Team Based Learning (TBL) approach, grades will be determined as follows:

Individual Components	50%
Reflective essay exam	50%

Team Components	50%
Group PCS projects X1	40%
Peer Evaluation	10%

GRADING

All students must demonstrate minimal individual competency. Therefore, students earning less than 75% on the total Individual component score will not have team component scores added to calculate their final course grade. During the course, students who score less than 75% on individual components may be subject to periodic course content review and may receive an Academic Alert.

In order to progress from one semester to the next, students must pass all courses with a letter grade of C or higher and maintain a minimum cumulative grade point average (GPA) of 2.0. The breakdown for assignment of letter grades and grade points for each letter grade are as follows:

Percent	Letter Grade/Action
90.0 – 100%	A
80.0 – 89.9%	B
75.0 – 79.9%	C - Pass
60.0 – 74.9%	D – Requiring remediation (successful remediation recorded as C, unsuccessful remediation recorded as F)
Below 60.0%	F – Fail (course must be repeated)
Incomplete	I

Incomplete

During a semester, a student may not complete all required assignments and/or examinations due to extenuating circumstances, such as, but not limited to, an illness or a family emergency. In such

a case, the course director may give a grade of Incomplete for the course. The course with the incomplete grade has to be completed successfully within the time frame as being defined by the student's academic plan, normally in the same academic year, otherwise a leave of absence would be required.

Core-Course Policies

All students are required to adhere to the Academic Policies that impact on student progression and conduct while attending the DMD program, including the following: Academic Progression Policy, Excused Absence Policy, Exam Policy, Course Grade Appeal Policy, Course Add/Drop Policy and Attendance Policy. Refer to the current Student Handbook for the detailed policies.

Course Specific Policies

1. Group Projects cases are to be submitted via CANVAS by 11:59pm PST on the deadline indicated. Only one group member should submit the assignment on behalf of the group. The course coordinator reserves the right to deduct points for late submission (20% of assignment grade for every 24 hours the assignment is turned in late). Presentation of PCS cases requires the active participation of each team member, preferably presenting the component of the case the student was responsible for developing. The teams will each have 30 minutes for presentation which is ample time for participation of each member
2. Grade appeal for any individual assignments (including exams) should be submitted to the course coordinator in writing within 5 business days of grade release.
3. There will be no rounding of the final grade for this course.

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Topics and Schedule*(Subject to change. Updates will be posted to CANVAS and announced by email)*

All readings are in Vital Source, or as assigned and posted to CANVAS

Date	Topics	Readings*	Instructor	Notes
Week 1 LAL	Axioms of success in dental school		Simonsen	
Week 2 LAL	Academic success in dental school		Wu	
Week 3 LAL	Managing student debt		Feng	
Week 4 LAL	Time management, exercise and wellness in dental school		Simonsen	
Week 5 LAL	Drug abuse in health professionals		Keating	videos
Week 6 LAL	Ethical and life affirming activity during the clinical practicum	McCormick/Assael	Assael	
Week 7 LAL	Cultural and gender boundaries in professional life		Simonsen	
Week 8 LAL	OSCE interview		Clinical faculty	
Week 9 LAL	Resiliency in didactic and clinical education		Dental faculty	
Week 10 LAL	The public health “gene”. How to apply it in your education		Glassman	
Week 11 LAL	Applying axioms of success in your education and practice		Simonsen	
Week 12 LAL	Clinical experience with patient history		Clinical faculty	

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Week 13 LAL	Project presentations group 1 and 2		Dental faculty	
Week 14 LAL	Project presentations group 3 and 4		Dental faculty	
Week 15 LAL	Final reflective essay exam		Simonsen	

Course Learning Outcomes and links to Program Learning Outcomes (Appendix A) and Institutional Learning Outcomes (Appendix B)

No.	Course Learning Outcome	DMD PLO	DMD ILO	Learning Hierarchy ^b	Assessment Method
1	Develop an initial understanding of the parameters and the capability to succeed in dental school	1,2,3,4,7,8	1,3,4,6	1,2, 3	Group projects
2	Understand the impact of external forces of patient care, faculty inputs, debt and work life balance on individual dental education success	1,2,3,5,6,7,8	1,4,	2, 3	Final exam Reflective essay

^a plo's appendix A

^b Learning Hierarchy based on Bloom's Taxonomy with 1=Memorization and/or Comprehension; 2=Application and/or Analysis; 3=Synthesis and/or Evaluation.

Teaching/ Learning Methodology

1. LAL: Lecture and active learning

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CLO Rubrics

CLO 1: Develop an initial understanding of the parameters and the capability to succeed in dental school

Indicators	Initial	Developing	Developed	Proficient
Demonstrates an understanding of the parameters and the capability to succeed in dental school	Does not understand managing student debt, stress management, effects of social media, interpersonal relationships, and ethics in student practice drug and alcohol abuse, respect in the University including cultural, gender, and sexual conduct issues or resources to promote student wellbeing.	Demonstrates rudimentary understanding of these domains but with evolving demonstration this knowledge	Has detailed understanding of their role as a successful dental student	Consistently demonstrates the ability participate at the level of their knowledge and skill as a dental student and can assist other students in these domains

CLO 2: Understand the impact of external forces of patient care, faculty inputs, debt and work life balance on individual dental education success

Indicators	Initial	Developing	Developed	Proficient
Understands the impact of external forces of patient care, faculty inputs, debt and work life balance on individual dental education success	Has no or limited knowledge of the effectors of student life and curriculum on success in dental school	Begins to exhibit knowledge of these domains and applies this knowledge in their student life	Is capable of managing the impact of these domains to effectively navigate student life	Is an exemplar and a mentor to others in understanding the external forces that must be adapted to in student life to promote success

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Appendix A: Program Learning Outcomes (PLOs) CNU College of Dental Medicine

17. Patient-Centered Care: Demonstrate understanding of healthcare disparities and cultural awareness in patient counseling and patient advocacy
18. Evidence-Based Care: Apply current, evidence-based oral healthcare within the scope of general dentistry
19. Culturally competent, empathic communication: Demonstrate patient centered, empathic, and culturally competent communication and interpersonal skills
20. Oral and Written Communication: Demonstrate sound oral and written communications in patient care
21. Critical Thinking: Utilize critical thinking, problem solving skills and systemic thinking in assessing and making reasoned, evidence-based decisions in patient care
22. Ethics and Professionalism: Demonstrate professionalism and ethical decision making
23. Biomedical Sciences Knowledge: Demonstrate an understanding of the fundamentals of biomedical sciences and apply them appropriately in oral healthcare
24. Practice Management: Apply legal, regulatory and business management concepts related to provision of oral healthcare services

DMD Program Learning Outcomes (PLOs) Proficiency Rubric

PLO 1: Patient-Centered Care

Demonstrate understanding of healthcare disparities and cultural awareness and capability in patient counseling and providing appropriate patient advocacy

Indicators	Initial	Developing	Developed	Proficient
1.1. Education. Demonstrates ability to educate all audiences through effectively communicating information and assessing learning	<ul style="list-style-type: none"> Does not appropriately counsel patients Does not check for understanding, ask questions, and/or asks inappropriate questions. Does not demonstrate the ability to find and utilize appropriate resources and references necessary for providing accurate counseling, 	<ul style="list-style-type: none"> Counsels patients but leaves out pertinent information needed by patient Communicates with basic level of clarity but does not always check for understanding or rephrase when confusion occurs. Demonstrates the ability to find a one or two resources, yet the resources are not the best or most appropriate 	<ul style="list-style-type: none"> Generally demonstrates empathy, communicates accurate information clearly, checks for understanding Seeks to ensure understanding and generally asks questions. Frequently demonstrates the ability to find and utilize appropriate resources and references 	<ul style="list-style-type: none"> Consistently demonstrates empathy, communicates accurate information clearly, checks for understanding Ensures understanding and asks appropriate questions. Consistently demonstrates the ability to find and utilize appropriate resources and references for

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	consultation and education	for providing accurate counseling, consultation and education	necessary for providing accurate counseling, consultation and education	providing accurate patient counseling, consultation and education
1.2. Patient advocacy. Represents the patient's best interests	<ul style="list-style-type: none"> Does not demonstrate the ability represent a patient's best interest 	<ul style="list-style-type: none"> Demonstrates awareness of issues that impact a patient Demonstrates minimal ability to articulate these issues but does not demonstrate ability to sufficiently advocate on a patient's behalf 	<ul style="list-style-type: none"> Demonstrates sufficient awareness of issues that impact a patient Demonstrates ability to articulate these issues Demonstrates ability to sufficiently advocate on a patient's behalf 	<ul style="list-style-type: none"> Demonstrates full awareness of the most important issues that impact a patient Demonstrates ability to clearly and effectively articulate these issues Demonstrates ability to effectively advocate on a patient's behalf

PLO 2: Evidence-Based Care.

Apply sound, current, and evidence-based oral healthcare within the scope of general dentistry

Indicators	Initial	Developing	Developed	Proficient
2.1. Patient-centered care. Demonstrates ability to provide patient-centered care as the medication expert (collect and interpret evidence, prioritize, formulate assessments and recommendations, implement, monitor and adjust plans, and document activities)	<ul style="list-style-type: none"> Does not demonstrate ability to provide patient-centered care at the medication expert level; e.g., demonstrates ability to collect but not sufficiently interpret evidence, does not prioritize, formulates basic assessments and recommendations, does not sufficiently monitor and adjust plans nor document activities. 	<ul style="list-style-type: none"> Demonstrates ability to provide patient-centered care as the medication expert in some, but not all, areas as follows: collect and interpret evidence, prioritize, formulate assessments and recommendations, implement, monitor and adjust plans, and document activities 	<ul style="list-style-type: none"> Demonstrates ability to provide patient-centered care as the medication expert (generally demonstrates ability to collect and interpret evidence, prioritize, formulate assessments and recommendations, implement, monitor and adjust plans, and document activities) 	<ul style="list-style-type: none"> Demonstrates ability to provide sufficient patient-centered care as the expert (collects and interprets evidence, prioritizes, formulates assessments and recommendations, implements, monitors and adjusts plans, and documents activities)
2.2. Systems management. Demonstrates ability to manage patient healthcare needs using human, financial,	<ul style="list-style-type: none"> Does not demonstrate understanding of oral healthcare delivery systems parts Does not demonstrate 	<ul style="list-style-type: none"> Demonstrates understanding of some parts of oral healthcare delivery systems but does not identify how they are related to each other 	<ul style="list-style-type: none"> Demonstrates understanding of most major components of oral healthcare systems and their respective relationships 	<ul style="list-style-type: none"> Demonstrates understanding of the major components of oral healthcare systems, their respective relationships, and their functions

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technological, and physical resources to optimize the safety and efficacy of medication use systems	<p>understanding of the forces that influence components of the oral healthcare delivery system, including their connection to patient care</p> <ul style="list-style-type: none"> • Does not demonstrate understanding of any challenges to systems that affect oral healthcare delivery Does not demonstrate understanding of how to work with different subsystems to deliver oral healthcare 	<ul style="list-style-type: none"> • Demonstrates understanding of some forces that influence the parts of healthcare delivery systems, but demonstrate minimal understanding of their connection to patient care • Demonstrates understanding of some challenges that can affect delivery of oral healthcare • Demonstrates some understanding of how to work with different subsystems and how they function to deliver oral healthcare, but demonstrate minimal awareness or understanding of one's own role within the oral healthcare delivery system 	<ul style="list-style-type: none"> • Demonstrates understanding of the forces that influence the components of healthcare delivery systems, and demonstrate some understanding of their influence on the quality of patient care • Demonstrates understanding of most challenges that can affect delivery of oral healthcare, but does not demonstrate complete comprehension of the effects Demonstrates basic understanding of how to work with different subsystems and how they function to deliver oral healthcare and demonstrate some understanding of one's role within the oral healthcare delivery system, but does not necessarily demonstrate application of knowledge in a manner that maximizes the quality of oral healthcare 	<p>related to patient care</p> <ul style="list-style-type: none"> • Demonstrates thorough understanding of the forces that influence components of healthcare delivery systems and demonstrate full understanding of their influence and implications on the quality of patient care • Demonstrates understanding of pertinent challenges to specific aspects of healthcare delivery by demonstrating abilities to thoroughly discuss the implications for the appropriate parts of oral health care delivery systems Demonstrates excellent understanding of how to work with different subsystems involved while also demonstrating understanding of one's role within the subsystems, and demonstrate appropriate application of knowledge in a manner that maximizes the quality of oral healthcare
2.3. Health and wellness.	• Does not demonstrate	• Demonstrates knowledge of some	• Demonstrates sufficient	• Demonstrates thorough

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Designs prevention, intervention, and educational strategies for individuals and communities to manage chronic disease and improve oral health and wellness	understanding of how the arts can be utilized to optimize patients' well-being	of the ways that the arts can be utilized to optimize patients' well-being	knowledge of multiple ways that the arts can be utilized to optimize patients' well-being	knowledge of the ways that the arts can be utilized to optimize patients' well-being and creatively applies this knowledge to improve well-being and the practice and delivery of oral healthcare
2.4. Population-based care. Demonstrates understanding of how population-based care influences patient-centered care and the development of practice guidelines and evidence-based best practices	<ul style="list-style-type: none"> • Does not demonstrate awareness of population-based care. 	<ul style="list-style-type: none"> • Demonstrates minimal understanding of population-based care and how it influences patient-centered care • Does not demonstrate awareness of how these notions influence the development of practice guidelines 	<ul style="list-style-type: none"> • Demonstrates sufficient understanding of population-based care and how it influences patient-centered care • Demonstrates sufficient understanding of how population-based care influences the development of practice guidelines and best practices for patient care 	<ul style="list-style-type: none"> • Demonstrates superb understanding of population-based care and how it influences patient-centered care • Demonstrates superb understanding of how population-based care influences the development of practice guidelines and demonstrates knowledge of best practices for patient care

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PLO 3: Culturally Competent, Empathic Communication.

Demonstrate patient centered, empathic and culturally competent communication and interpersonal skills

Indicators	Initial	Developing	Developed	Proficient
3.1. Empathy. Demonstrates the ability to communicate with the patient empathically.	<ul style="list-style-type: none"> Does not demonstrate the ability to communicate with the patient empathically. 	<ul style="list-style-type: none"> Demonstrates some ability, but experiences lapses in the ability to communicate empathically 	<ul style="list-style-type: none"> Demonstrates the ability to communicate empathically, with few lapses. 	<ul style="list-style-type: none"> Demonstrates an advanced ability, and never experiences lapses in communicating empathically.
3.2. Cultural competence. Demonstrates the ability to engage in communication with the patient that is culturally aware and accepting.	<ul style="list-style-type: none"> Does not demonstrate communication and interactions that convey respect or concern for patients and the community. Does not demonstrate an awareness of customs, beliefs, or perspectives in diverse patients Does not demonstrate awareness of cultural and linguistic needs of patients in order to communicate health information 	<ul style="list-style-type: none"> Demonstrates communication and interactions characteristic of a minimal level of respect, and little concern for patients and the community is apparent through use of some appropriate communication, but student does not employ follow-up questions for clarification, when necessary, and student provides inappropriate detail in responses Demonstrates a minimal level of awareness of customs, beliefs, or perspectives in diverse patients Demonstrates minimal awareness of cultural and linguistic needs of patients; either does not or only attempt to adapt behaviors, but does so ineffectively, to communicate health information 	<ul style="list-style-type: none"> Demonstrates appropriate communication and interactions that are characteristic of a basic level of respect, and concern for patients and the community is apparent through use of appropriate communication, where student uses some clear, but not necessarily relevant or detailed, follow-up questions and responses Demonstrates awareness of customs and beliefs, but may not clarify with patients about personal perspectives Demonstrates awareness of the cultural and linguistic needs of diverse patients, and adapt behaviors to communicate health information, but communication 	<ul style="list-style-type: none"> Demonstrates professional communication and interactions by showing empathy, respect, and concern for patients and the community through use of appropriate communication where follow-up questions (as needed) and responses are clear, relevant, and detailed Demonstrates awareness of customs, beliefs, or perspectives in diverse patients; ask appropriate questions to clarify perspectives and perceptions in diverse patients Demonstrates full awareness of and responsiveness to cultural and linguistic needs of diverse patients by adapting behaviors appropriately in order to effectively communicate health information

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PLO 4: Oral and Written Communication.

Demonstrate sound oral and written communications in patient care

Indicators	Initial	Developing	Developed	Proficient
4.1. Oral communication. Demonstrate sound oral communication in patient care.	<ul style="list-style-type: none"> Does not demonstrate logical reasoning in oral communications in patient care. Does not demonstrate the ability to cite sound evidence that support ideas within presentations or discussions. 	<ul style="list-style-type: none"> Demonstrates some logical reasoning in oral communications in patient care but demonstrates some lapses. Demonstrates some ability to cite sound evidence that support ideas within presentations or discussions, but demonstrates some lapses. 	<ul style="list-style-type: none"> Generally demonstrates logical reasoning in oral communications in patient care. Generally demonstrates the ability to cite sound evidence that support ideas within presentations or discussions. 	<ul style="list-style-type: none"> Consistently demonstrates logical reasoning in oral communications in patient care. Consistently demonstrates the ability to cite sound evidence that support ideas within presentations or discussions.
4.2. Written communication. Demonstrate sound written communication in patient care.	<ul style="list-style-type: none"> Does not demonstrate logical reasoning in written communications in patient care. Does not demonstrate the written ability to cite sound evidence that support ideas. 	<ul style="list-style-type: none"> Demonstrates some logical reasoning in written communications in patient care but demonstrates some lapses. Demonstrates some written ability to cite sound evidence that support ideas, but demonstrates some lapses. 	<ul style="list-style-type: none"> Generally logical reasoning in written communications in patient care. Generally demonstrates the written ability to cite sound evidence that support ideas. 	<ul style="list-style-type: none"> Consistently demonstrates logical reasoning in written communications in patient care. Consistently demonstrates the written ability to cite sound evidence that support ideas.

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PLO 5: Critical Thinking.

Utilize critical thinking, problem solving skills and systemic thinking in assessing and making reasoned, evidence-based decisions in patient care

Indicators	Initial	Developing	Developed	Proficient
5.1. Problem solving. Identifies problems; explore and prioritize potential strategies; and designs, implements, and evaluates viable solutions	<ul style="list-style-type: none"> • Is not able to correctly identify the problem or issue being considered. • Does not identify appropriate resources. Includes extraneous information or inappropriate or insufficient resources. • Does not demonstrate understanding of the content of materials reviewed. Makes inappropriate inferences. • Does not evaluate possible alternatives or generates ideas that are illogical or extraneous to issue at hand. • Does not propose a solution or does not articulate decision. Does not adequately provide rationale for selected alternative or decision 	<ul style="list-style-type: none"> • Identifies the problem or issue but does not demonstrate awareness of all the factors associated with the problem or issues that impact decision making. • Identifies a few, but not all, resources needed for decision making. • Demonstrates ability to interpret some information and data but not all. • Does not fully or effectively evaluate alternative solutions. • Proposes a decision with many apparent weaknesses (i.e., not feasible, lack of regard for consequences, lack of supporting evidence, illogical, irrelevant to issue at hand, etc.). Provides rationale for selected alternative or decision but does not build a solid position with supporting evidence. Is unable to defend decision or course of action. 	<ul style="list-style-type: none"> • Correctly identifies problem or issue being considered and demonstrates adequate awareness of the factors associated with this problem or issue that impact decision making. • Identifies most of the resources needed. • Demonstrates ability to interpret most information and data. • Considers and evaluates possible solutions in a way that generally leads to a logical decision or course of action. • Proposes a solution that does not contain apparent weaknesses that may or may not be the obvious clear choice. Solutions chosen demonstrate consideration of most of the strengths, weaknesses, feasibility, effects, consequences, relevance, etc.). Provides rationale for selected alternative or decision which includes some solid supporting 	<ul style="list-style-type: none"> • Consistently correctly identifies the problem or issue being considered and all of the primary factors associated with this problem or issue that impact decision making. Articulates the importance of these factors. • Identifies all appropriate resources. • Demonstrates ability to correctly interpret information and data needed for appropriate decision making. Demonstrates awareness of importance of these data in decision-making process. • Considers and evaluates possible solutions effectively and thoroughly. Evaluation leads to sound, logical, and “best” decision or course of action. • Proposes a solution that is entirely appropriate to the situation at hand. Solutions chosen demonstrate consideration of all of the important

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			evidence. Is able to defend decision or course of action at a basic level.	and relevant strengths, weaknesses, feasibility, effects, consequences, etc.). Provides rationale for selected alternative or decision and builds a solid position with appropriate and relevant supporting evidence. Effectively defends decision or course of action.
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PLO 6: Ethics and Professionalism.

Demonstrating professionalism and ethical decision making

Indicators	Initial	Developing	Developed	Proficient
6.1. Professionalism. Demonstrates behaviors and values that are consistent with the trust given to the profession by patients, other healthcare providers, and society	<ul style="list-style-type: none"> • Does not consistently demonstrate professional attitudes and behaviors (altruism, excellence, duty, accountability, honesty, and integrity) • Demonstrates frequent lapses in accountability or quality of work 	<ul style="list-style-type: none"> • Demonstrates some professional attitudes and behaviors yet there is inconsistency that may impede on the quality of work or treatment of patients and other healthcare team members (altruism, excellence, duty, accountability, honesty, and integrity) 	<ul style="list-style-type: none"> • Generally demonstrates most of the professional attitudes and behaviors (altruism, excellence, duty, accountability, honesty, and integrity) that are required in the profession • Demonstrates ability to use these behaviors and values to improve healthcare 	<ul style="list-style-type: none"> • Consistently demonstrates the professional attitudes and behaviors that uphold the integrity and competence of the work and the treatment of patients and other healthcare team professionals (altruism, excellence, duty, accountability, honesty, and integrity) • Consistently uses these behaviors and values to improve healthcare
6.2. Ethics. Demonstrates the ability to make decisions consistent with the values of practitioners and scholars of oral healthcare.	<ul style="list-style-type: none"> • Does not make ethical decisions consistent with the values of practitioners and scholars of oral healthcare. 	<ul style="list-style-type: none"> • Demonstrates the ability to exercise ethical decision making, and a rudimentary knowledge of ethics within oral healthcare. 	<ul style="list-style-type: none"> • Demonstrates the ability to exercise clear and ethical decision making, and a sufficient knowledge of ethics within oral healthcare. 	Demonstrates the ability to exercise clear and ethical decision making, and an advanced knowledge of ethics within oral healthcare.

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PLO 7: Biomedical Sciences Knowledge.

Demonstrate an understanding of the fundamentals of biomedical sciences and apply them appropriately in oral healthcare

Indicators	Initial	Developing	Developed	Proficient
7.1. Diagnostic and pharmacologic. Demonstrates the ability to describe how to deliver patient assessments, knowledge of medicines, and delivering diagnoses.	<ul style="list-style-type: none"> Does not demonstrate the ability to describe diagnostic and pharmacologic knowledge related to oral health. 	<ul style="list-style-type: none"> Demonstrates a rudimentary ability to describe diagnostic and pharmacologic knowledge related to oral health. 	<ul style="list-style-type: none"> Demonstrates a sufficient ability to describe diagnostic and pharmacologic knowledge related to oral health. 	<ul style="list-style-type: none"> Demonstrates an advanced ability to describe diagnostic and pharmacologic knowledge related to oral health.
7.2. Orofacial pain/temporomandibular/ Sleep disorder. Demonstrates the ability to describe the anatomical, physiological, and neurological basis; classification, epidemiology, and etiology; and assessments and treatments of orofacial pain, temporomandibular joint disease, and sleep disorders.	<ul style="list-style-type: none"> Does not demonstrate the ability to describe scientific or assessment knowledge related to OFP/TMJ disease and sleep disorders. 	<ul style="list-style-type: none"> Demonstrates a rudimentary ability to describe scientific or assessment knowledge related to OFP/TMJ disease and sleep disorders. 	<ul style="list-style-type: none"> Demonstrates a sufficient ability to describe scientific or assessment knowledge related to OFP/TMJ disease and sleep disorders. 	<ul style="list-style-type: none"> Demonstrates an advanced ability to describe scientific or assessment knowledge related to OFP/TMJ disease and sleep disorders.
7.3. Maxillofacial pathology Demonstrates the ability to describe the scientific aspects of head and neck diseases, as well as knowledge of assessment and diagnosis.	<ul style="list-style-type: none"> Does not demonstrate the ability to describe the scientific or assessment knowledge related to head and neck diseases. 	<ul style="list-style-type: none"> Demonstrates a rudimentary ability to describe the scientific or assessment knowledge related to head and neck diseases. 	<ul style="list-style-type: none"> Demonstrates a sufficient ability to describe the scientific or assessment knowledge related to head and neck diseases. 	<ul style="list-style-type: none"> Demonstrates an advanced ability to describe the scientific or assessment knowledge related to head and neck diseases.

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PLO 8: Practice Management.

Apply legal, regulatory, and business management concepts related to the provision of oral healthcare services

Indicators	Initial	Developing	Developed	Proficient
8.1. Legal aspects Applies legal and regulatory concepts related to the provision of oral healthcare services.	<ul style="list-style-type: none"> Does not demonstrate an understanding or the ability to apply legal and regulatory concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates a rudimentary understanding and ability to apply legal and regulatory concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates a sound understanding and ability to apply legal and regulatory concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates an advanced understanding and ability to apply legal and regulatory concepts related to the provision of oral healthcare sciences.
8.2. Business management Applies business management concepts to the provision of oral healthcare services.	<ul style="list-style-type: none"> Does not demonstrate an understanding or the ability to apply business management concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates a rudimentary understanding and ability to apply business management concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates a sound understanding and ability to apply business management concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates an advanced understanding and ability to apply business management concepts related to the provision of oral healthcare sciences.

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Appendix B**California Northstate University Institutional Learning Objectives**

ILO 1: Critical thinking: Exercise reasoned judgment to assess technical information and make well-informed decisions using evidence-based approaches

ILO 2: Written communication. Demonstrate the ability to write coherent, supported, and logically structured prose

ILO 3: Oral communication: Demonstrates oral communication skills

ILO 4: Professionalism. Interact with respect, empathy, diplomacy, and cultural competence

ILO 5: Quantitative reasoning: Demonstrate ability to use mathematics and statistics in problem solving

ILO 6: Information literacy: Identify and search relevant libraries of information and databases; synthesize information obtained from primary literature using properly referenced citations

DMD Institutional Learning Outcomes (ILOs) Proficiency Rubric

ILO 1: Critical thinking: Exercise reasoned judgment to assess technical information and make well-informed decisions using evidence-based approaches

Indicator	Initial	Developing	Developed	Proficient
1.1. Demonstrates identification of problem or issues	<ul style="list-style-type: none"> Does not correctly identify the problem or issue being considered Does not demonstrate understanding of the psychological factors that contribute to current patient state 	<ul style="list-style-type: none"> Identifies the problem or issue but does not demonstrate awareness of all the factors impacting decision making Demonstrates understanding of some possible psychological factors that contribute to current patient state 	<ul style="list-style-type: none"> Correctly identifies the problem or issue but does not demonstrate awareness of all factors impacting decision making Demonstrates understanding of most psychological factors that contribute to the current patient state 	<ul style="list-style-type: none"> Correctly identifies all of the primary factors associated with problem or issue impacting decision making Demonstrates thorough understanding of all possible psychological factors that contribute to the current patient state
1.2. Demonstrates identification of resources	<ul style="list-style-type: none"> Does not identify appropriate resources 	<ul style="list-style-type: none"> Identifies a few resources needed 	<ul style="list-style-type: none"> Identifies most of the resources needed 	<ul style="list-style-type: none"> Correctly identifies all appropriate resources

[Type here]

1.3. Finds and interprets data needed for critical thinking and decision making	<ul style="list-style-type: none"> Does not demonstrate understanding of the data needed for critical thinking and decision making 	<ul style="list-style-type: none"> Demonstrates ability to interpret some data but not all 	<ul style="list-style-type: none"> Demonstrates ability to interpret most data 	<ul style="list-style-type: none"> Demonstrates ability to correctly interpret data needed for decision making
1.4. Demonstrates knowledge of alternatives when evaluating for possible solutions	<ul style="list-style-type: none"> Does not evaluate possible alternatives for treatment or diagnosis 	<ul style="list-style-type: none"> Does not effectively evaluate alternative treatment or diagnostic solutions 	<ul style="list-style-type: none"> Evaluates possible treatment and diagnostic solutions leading to a logical decision 	<ul style="list-style-type: none"> Effectively and thoroughly considers and evaluates possible diagnostic and treatment solutions
1.5. Proposes and selects appropriate solutions	<ul style="list-style-type: none"> Does not propose solutions to the client's needs 	<ul style="list-style-type: none"> Proposes solutions without consideration of alternatives 	<ul style="list-style-type: none"> Solutions chosen demonstrate consideration of most of the strengths, weaknesses, and consequences of the decision 	<ul style="list-style-type: none"> Proposes solutions that are appropriate to the situation and demonstrate consideration of all relevant strengths, weaknesses, and consequences
1.6. Presents rationale for course of action	<ul style="list-style-type: none"> Does not adequately provide rationale for treatment decision 	<ul style="list-style-type: none"> Provides rationale for decision but does not integrate into mental health treatment plan 	<ul style="list-style-type: none"> Provides rationale for decision with solid supporting evidence from available psychological literature and/or case factors 	<ul style="list-style-type: none"> Provides rationale for decision and with appropriate and relevant supporting case evidence and integrates findings into treatment plan

ILO 2: Written communication. Demonstrate the ability to write coherent, supported, and logically structured prose

Indicators	Initial	Developing	Developed	Proficient
2.1. Demonstrates knowledge and awareness of intended audience	<ul style="list-style-type: none"> Does not demonstrate knowledge or awareness of audience for which the document is intended 	<ul style="list-style-type: none"> Demonstrates some ability to craft a document appropriate for its audience 	<ul style="list-style-type: none"> Demonstrates ability to craft a document appropriate for its audience 	<ul style="list-style-type: none"> Consistently demonstrates ability to craft documents appropriate for the audience
2.2. Demonstrates clear and logical thought	<ul style="list-style-type: none"> Does not demonstrate clear or logical thought in their documentation 	<ul style="list-style-type: none"> Writing does not sufficiently conceptualize case variables or analyze subject under discussion 	<ul style="list-style-type: none"> Demonstrates general clear or logical thought in their documentation 	<ul style="list-style-type: none"> Research and clinical documentation demonstrates clear and focused thinking
2.3. Demonstrates support for and development of ideas	<ul style="list-style-type: none"> Does not explain or develop ideas 	<ul style="list-style-type: none"> Demonstrates minimal support for ideas 	<ul style="list-style-type: none"> Writing contains examples that generally support ideas 	<ul style="list-style-type: none"> Supports ideas with relevant, clear, impactful examples

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2.4. Demonstrates appropriate use of evidence to support arguments	<ul style="list-style-type: none"> • Demonstrates an attempt to use proper citations to support ideas 	<ul style="list-style-type: none"> • Uses credible and relevant sources to support ideas appropriate in the study of psychology 	<ul style="list-style-type: none"> • Consistently uses credible and relevant sources to support ideas 	<ul style="list-style-type: none"> • Demonstrates skillful use of credible and relevant sources to develop and support ideas
2.5. Demonstrates appropriate use of language, syntax, and mechanics	<ul style="list-style-type: none"> • Has excessive or severe errors in language usage 	<ul style="list-style-type: none"> • Generally conveys meaning to readers with clarity, though writing may include some errors 	<ul style="list-style-type: none"> • Language conveys meaning to readers and writing contains very few errors 	<ul style="list-style-type: none"> • Uses language effectively and skillfully to communicate meaning to readers

ILO 3: Oral communication: Demonstrates oral communication skills

Indicators	Initial	Developing	Developed	Proficient
3.1. Demonstrates knowledge and awareness of intended audience	<ul style="list-style-type: none"> • Does not demonstrate knowledge or awareness of audience for which the communication is intended 	<ul style="list-style-type: none"> • Demonstrates some ability to communicate in a manner appropriate to the audience 	<ul style="list-style-type: none"> • Demonstrates ability to communicate appropriate to the audience 	<ul style="list-style-type: none"> • Consistently demonstrates ability to communicate in a manner appropriate to the audience
3.2. Demonstrates clear and logical thought	<ul style="list-style-type: none"> • Does not demonstrate clear or logical thought in their communication 	<ul style="list-style-type: none"> • Communication does not sufficiently conceptualize case variables or analyze subject under discussion 	<ul style="list-style-type: none"> • Demonstrates general clear or logical thought in their communication 	<ul style="list-style-type: none"> • Communication demonstrates clear and focused thinking
3.3. Demonstrates effective use of language in their communication	<ul style="list-style-type: none"> • Does not know professional psychological language or uses jargon • Does not know the proper technical language regarding mental health treatment 	<ul style="list-style-type: none"> • Demonstrates inaccurate use of psychological language or uses jargon in professional communications • Utilizes scientific language that is incomprehensible to patients 	<ul style="list-style-type: none"> • Demonstrates appropriate use of professional language and minimal jargon • Utilizes generalized language to interact with patients 	<ul style="list-style-type: none"> • Demonstrates use of appropriate, professional language • Utilizes generalized language to interact with patients
3.4. Demonstrates appropriate active listening techniques when addressing questions	<ul style="list-style-type: none"> • Does not acknowledge other viewpoints • Has great difficulty answering questions 	<ul style="list-style-type: none"> • Demonstrates little attempt to recognize other viewpoints • Answers are simplistic and lack intellectual depth 	<ul style="list-style-type: none"> • Recognizes other viewpoints but has difficulty incorporating them into case conceptualization • Adequately answers patient questions 	<ul style="list-style-type: none"> • Listens to questions with a consideration of alternative viewpoints • Answers questions thoughtfully referencing evidence

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3.5. Orally communicates meaning to audience	<ul style="list-style-type: none"> • Vocal delivery is too soft or too fast • Long, unintended silences and/or speech disruptions frequently distract audience • Speaker makes no attempt to engage audience 	<ul style="list-style-type: none"> • Vocal delivery is audible • Speech rate or volume disruptions occasionally distract from comprehension • Attempts to engage audience 	<ul style="list-style-type: none"> • Vocal delivery is varied and dynamic • Speech rate, volume, and tone enhance listener interest and facilitate understanding • Generally engages audience 	<ul style="list-style-type: none"> • Vocal delivery is varied and dynamic • Speech rate, volume, and tone enhance listener interest and facilitate understanding • Thoroughly engages audience
3.6. Utilizes non-verbal means to enhance message	<ul style="list-style-type: none"> • Eye contact, body language, and facial expressions are inappropriate 	<ul style="list-style-type: none"> • Eye contact, body language, and facial expressions neither enhance nor hinder oral effectiveness 	<ul style="list-style-type: none"> • Use of eye contact, body language, and facial expressions are mostly consistent with the verbal message 	<ul style="list-style-type: none"> • Use of eye contact, body language, and facial expressions that are consistent with the verbal message

ILO 4: Professionalism. Interact with respect, empathy, diplomacy, and cultural competence

Indicators	Initial	Developing	Developed	Proficient
4.1. Demonstrates professional attitudes and behaviors	<ul style="list-style-type: none"> • Does not generally demonstrate professional attitudes or behaviors expected from a dentist 	<ul style="list-style-type: none"> • Demonstrates some attitudes and behaviors that may be characteristic of a dentist 	<ul style="list-style-type: none"> • Generally demonstrates attitudes and behaviors expected from a dentist 	<ul style="list-style-type: none"> • Consistently demonstrates attitudes and behaviors expected from a dentist
4.2. Demonstrates personal responsibility and accountability	<ul style="list-style-type: none"> • Does not demonstrate personal accountability or responsibility for work completed 	<ul style="list-style-type: none"> • Demonstrates minimal personal accountability and responsibility for work completed 	<ul style="list-style-type: none"> • Demonstrates personal accountability and responsibility for the work completed 	<ul style="list-style-type: none"> • Consistently demonstrates personal accountability and responsibility for work completed
4.3. Demonstrates respectful and sensitive behaviors to the cultural and linguistic needs of diverse patients	<ul style="list-style-type: none"> • Does not demonstrate an awareness of patients' customs, beliefs, or perspectives • Does not demonstrate awareness of linguistic needs of patients 	<ul style="list-style-type: none"> • Demonstrates a minimal level of awareness of customs, beliefs, or perspectives of patients • Demonstrates minimal awareness of cultural and linguistic needs of patients 	<ul style="list-style-type: none"> • Demonstrates awareness of customs and beliefs • Demonstrates awareness of the cultural and linguistic needs of patients 	<ul style="list-style-type: none"> • Demonstrates awareness of customs, beliefs, or perspectives in patients • Demonstrates full awareness and responds to the cultural and linguistic needs of patients
4.4. Demonstrates professional demeanor	<ul style="list-style-type: none"> • Appears inattentive and impatient • Uses inappropriate body language • Dresses in attire that is inappropriate 	<ul style="list-style-type: none"> • Appears unfocused and distracted • Uses acceptable body language • Dresses in attire that is not offensive 	<ul style="list-style-type: none"> • Appears composed and focused • Uses appropriate body language • Dresses in attire that is professional 	<ul style="list-style-type: none"> • Uses articulate, tactful, and diplomatic speech • Uses professional body language • Dresses in attire that is professional, and well-suited for the environment

ILO 5: Quantitative reasoning: Demonstrate ability to use mathematics and statistics in problem solving

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Indicators	Initial	Developing	Developed	Proficient
5.1. Demonstrates ability to perform calculations and apply mathematical principles to solve problems	<ul style="list-style-type: none"> Does not demonstrate ability to apply statistical or psychometric principles 	<ul style="list-style-type: none"> Demonstrates ability to perform basic statistical calculations but does not know how to apply psychometric principles to solve problems 	<ul style="list-style-type: none"> Demonstrates ability to perform most statistical calculations accurately and to apply psychometric principles to solve problems 	<ul style="list-style-type: none"> Consistently demonstrates ability to perform statistical calculations accurately and to appropriately apply psychometric principles to solve problems
5.2. Demonstrates understanding of experimental designs and methodology	<ul style="list-style-type: none"> Displays difficulty proposing a basic experiment or research project 	<ul style="list-style-type: none"> Comprehends basic experiments designed by others 	<ul style="list-style-type: none"> Evaluates research, method, and protocol to review valid and reliable research 	<ul style="list-style-type: none"> Proposes appropriate and innovative designs to address a new hypothesis and research question
5.3. Demonstrates logical and appropriate interpretation of data	<ul style="list-style-type: none"> Demonstrates a limited ability to interpret scientific data 	<ul style="list-style-type: none"> Attempts to interpret scientific data 	<ul style="list-style-type: none"> Demonstrates the ability to interpret scientific data 	<ul style="list-style-type: none"> Interprets data in the context of current scientific knowledge
5.4. Demonstrates logical thought patterns in generating conclusions	<ul style="list-style-type: none"> Does not generate conclusions based on current scientific data and statistics 	<ul style="list-style-type: none"> Generates conclusions that may be based on current scientific data and statistics 	<ul style="list-style-type: none"> Generates conclusions using scientific and statistical data 	<ul style="list-style-type: none"> Accurately generates conclusions using appropriate scientific and mathematical data

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ILO 6: Information literacy: Identify and search relevant libraries of information and databases; synthesize information obtained from primary literature using properly referenced citations

Indicators	Initial	Developing	Developed	Proficient
6.1. Demonstrates appropriate ability search and acquire resources	<ul style="list-style-type: none"> Does not identify or solicit help in obtaining external resources to support topic 	<ul style="list-style-type: none"> Identified resources may not be sufficient in quality and infrequently solicits guidance from library personnel 	<ul style="list-style-type: none"> Identifies resources appropriate for scientific inquiry and solicits guidance from library personnel 	<ul style="list-style-type: none"> Identifies a variety of relevant sources and regularly seeks guidance from library personnel
6.2. Demonstrates appropriate incorporation of references	<ul style="list-style-type: none"> Does not incorporate references 	<ul style="list-style-type: none"> Incorporates references from psychological sources that do not clearly support ideas 	<ul style="list-style-type: none"> Incorporates relevant references that generally supports ideas 	<ul style="list-style-type: none"> Incorporates relevant references from respected psychological sources
6.3. Demonstrates appropriate citation of references	<ul style="list-style-type: none"> Does not use citations 	<ul style="list-style-type: none"> Uses citations but they are not formatted in APA style 	<ul style="list-style-type: none"> Demonstrates use of appropriate citations in context 	<ul style="list-style-type: none"> Uses properly cited references and includes all necessary information in reference list

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California Northstate College of Dental Medicine
Ethics in Dental Medicine and Health Care Course Syllabus

Course #	Course Title	Credits	Year	Term
BSS 522	Ethics in Dental Medicine and Health Care	2	DS 1	Spring

Credit Hour Policy

For each 15-week semester, one (1) hour of credit is assigned per hour each week of classroom or direct faculty didactic instruction (that is, per hour of lecture or student in-class time) and a minimum of two (2) hours of out-of-class student work (homework). For practicum and internship time, one (1) hour of credit is assigned per three (3) hours each week of student time spent in this activity.

Maximum Enrollment: 80

Calendar of Important Dates:

Date	
January 10, 2021	First day of Spring Term all DMD 1 students
March 1, 2021	Assignment of first group case scenario
May 15, 2021	First 4 case scenarios presentation
May 22, 2021	Second 4 case scenarios presentation
May 30, 2021	Ethics Salons
June 8, 2021	Final Exam

Course Coordinator, Instructors and Contact Information

Richard Simonsen DDS (course co-director)

Room:

E mail

Office hours

Leon Assael DMD (course co-director)

Room:

E-mail: leon.assael@cnsu.edu

Office hours: Wednesdays 12:00pm-1:00pm, and 3:00pm-4:00pm (or by appointment)

Holly Jacobson BA (course administrator)

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Room: xxx

E mail: holly.jacobson@cnsu.edu

Classroom and Meeting Times

Room: Classroom xxxx

Time: xxxx 2 hours per week

Course Description

The fundamentals of dental and medical ethics are presented including beneficence and non- malfeasance. The Helsinki statement and other aspects of human research guidelines are presented including the role of Human Studies committees. The care of animals in biomedical research is discussed as well as the ethical use of human tissue in clinical care, transplant medicine etc. Ethical financial relationships and the underlying law behind them in clinical practice is discussed. The role of the criminal, tort system, the Board of Dentistry of California, and the ADA in dental ethics is presented.

Prerequisite Courses

None

Prerequisite Knowledge

None

Required Textbook(s) and Material(s)

McCormick, Suzanne Stucki, *Ethical Decision Making in Dentistry*, PMPH USA, 2017 electronic reserve CNU

Technology

1. Computer-assisted instruction (Clickers) and SCANTRON Sheets
2. Web-based course management (Canvas) and Examsoft
3. Audio/Video recordings where applicable
4. PowerPoint
5. Epic electronic health record
6. PACS, DICOM compatible imaging software
7. Dental operator

Evaluation Components

In keeping with the Team Based Learning (TBL) approach, grades will be determined as follows:

Individual Components	70%
Salon presentation	20%
Final exam	50%

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Team Components	30%
Group case based	20%
Peer Evaluation	10%

GRADING

All students must demonstrate minimal individual competency. Therefore, students earning less than 75% on the total Individual component score will not have team component scores added to calculate their final course grade. During the course, students who score less than 75% on individual components may be subject to periodic course content review and may receive an Academic Alert.

In order to progress from one semester to the next, students must pass all courses with a letter a grade of C or higher and maintain a minimum cumulative grade point average (GPA) of 2.0. The breakdown for assignment of letter grades and grade points for each letter grade are as follows:

Percent	Letter Grade/Action
90.0 – 100%	A
80.0 – 89.9%	B
75.0 – 79.9%	C - Pass
60.0 – 74.9%	D – Requiring remediation (successful remediation recorded as C, unsuccessful remediation recorded as F)
Below 60.0%	F – Fail (course must be repeated)
Incomplete	I

Incomplete

During a semester, a student may not complete all required assignments and/or examinations due to extenuating circumstances, such as, but not limited to, an illness or a family emergency. In such a case, the course director may give a grade of Incomplete for the course. The course with the incomplete grade has to be completed successfully within the time frame as being defined by the student's academic plan, normally in the same academic year, otherwise a leave of absence would be required.

Core-Course Policies

All students are required to adhere to the Academic Policies that impact on student progression and conduct while attending the DMD program, including the following: Academic Progression Policy, Excused Absence Policy, Exam Policy, Course Grade Appeal Policy, Course Add/Drop Policy and Attendance Policy. Refer to the current Student Handbook for the detailed policies.

Course Specific Policies

1. Group case-based projects are to be submitted via CANVAS by 11:59pm PST on the deadline indicated. Only one group member should submit the assignment on behalf of the group. The course coordinator reserves the right to deduct points for late submission (20% of assignment grade for every 24 hours the assignment is turned in late).
Presentation of PCS cases requires the active participation of each team member, preferably presenting the component of the case the student was responsible for developing.
2. Grade appeal for any individual assignments (including exams) should be submitted to the course coordinator in writing within 5 business days of grade release.
3. There will be no rounding of the final grade for this course.

Topics and Schedule

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(Subject to change. Updates will be posted to CANVAS and announced by email)

All readings are in Vital Source, or as assigned and posted to CANVAS

EACH SESSION IS 2 HOURS

Date	Topics	Readings*	Instructor	Notes
Week 1	Fundamentals of dental ethics		Simonsen	
Week 2	Ethical Dilemmas in the education of dentists	McCormick, chapter 1	Assael	
Week 3	Ethics in licensure	McCormick, chapter 3	Keating	
Week 4	Ethics in treatment planning		Simonsen	
Week 5	Ethics in informed consent	McCormick, chapter 15	Cadra	videos
Week 6	First case based ethics salon		Clinical faculty	
Week 7	Patient autonomy, justice, veracity, Beneficence and nonmaleficence in dental practice		Simonsen	Project 1 case assignment to groups
Week 8	OSCE ethics patient interview		Clinical faculty	
Week 9	Ethics Cases Group 1		Clinical faculty	
Week 10	The ethical dilemmas of group practice, systems based practice, and individual practice.	McCormick chapter 4 and 6	Assael	
Week 11	Second case based ethics salon		Clinical faculty	
Week 12	Ethical business practices in dental practice		Chang	
Week 13	Ethics cases group 2		Keating	

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Week 14	Summative session dental ethics		Simonsen	
Week 15	Final exam		Simonsen	

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Course Learning Outcomes and links to Program Learning Outcomes (Appendix A) and Institutional Learning Outcomes (Appendix B)

No.	Course Learning Outcome	DMD PLO	DMD ILO	Learning Hierarchy ^b	Assessment Method
1	Understand the fundamental of ethics in dental education and practice	1,2,3,4,7,8	1,3,4,6	1,2, 3	Clinical evaluation Group projects
2	Be able to apply didactic knowledge of dental ethics to address clinical problems in dental practice.	1,2,3,5,6,7,8	1,4,	2, 3	Clinical assessment Quizzes Final exam

^a plo's appendix A

^b Learning Hierarchy based on Bloom's Taxonomy with 1=Memorization and/or Comprehension; 2=Application and/or Analysis; 3=Synthesis and/or Evaluation.

Teaching/ Learning Methodology

1. Didactic: lectures, required readings
2. Learning Activities: laboratory practice, OSCE, laboratory assignments/exercises, group project

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CLO Rubrics

CLO 1: Understand the fundamental of ethics in dental education and practice

Indicators	Initial	Developing	Developed	Proficient
Understand the fundamental of ethics in dental education and practice	Only prior practical knowledge of ethics	Demonstrates rudimentary ability to relate ethical standards	Has detailed understanding of ethical responsibilities and can relate fundamentals	Consistently demonstrates the ability to apply ethical knowledge into practice

CLO 2: Be able to apply didactic knowledge of dental ethics to address clinical problems in dental practice

Indicators	Initial	Developing	Developed	Proficient
Apply didactic knowledge of ethics into clinical practice	Has no or limited knowledge of application of ethics into practice	Begins to exhibit application of didactic knowledge of ethics into practice	Consistently applies didactic knowledge of ethics into dental practice	Complete knowledge and skill in application of ethical standards and is able to reflect on these and augment them through integration and consideration of consequences of actions.

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Appendix A

Program Learning Outcomes (PLOs) CNU College of Dental Medicine

25. Patient-Centered Care: Demonstrate understanding of healthcare disparities and cultural awareness in patient counseling and patient advocacy
26. Evidence-Based Care: Apply current, evidence-based oral healthcare within the scope of general dentistry
27. Culturally competent, empathic communication: Demonstrate patient centered, empathic, and culturally competent communication and interpersonal skills
28. Oral and Written Communication: Demonstrate sound oral and written communications in patient care
29. Critical Thinking: Utilize critical thinking, problem solving skills and systemic thinking in assessing and making reasoned, evidence-based decisions in patient care
30. Ethics and Professionalism: Demonstrate professionalism and ethical decision making
31. Biomedical Sciences Knowledge: Demonstrate an understanding of the fundamentals of biomedical sciences and apply them appropriately in oral healthcare
32. Practice Management: Apply legal, regulatory and business management concepts related to provision of oral healthcare services

DMD Program Learning Outcomes (PLOs) Proficiency Rubric

PLO 1: Patient-Centered Care

Demonstrate understanding of healthcare disparities and cultural awareness and capability in patient counseling and providing appropriate patient advocacy

Indicators	Initial	Developing	Developed	Proficient
1.1. Education. Demonstrates ability to educate all audiences through effectively communicating information and assessing learning	<ul style="list-style-type: none"> Does not appropriately counsel patients Does not check for understanding, ask questions, and/or asks inappropriate questions. Does not demonstrate the ability to find and utilize appropriate resources and references necessary for providing accurate counseling, consultation and education 	<ul style="list-style-type: none"> Counsels patients but leaves out pertinent information needed by patient Communicates with basic level of clarity but does not always check for understanding or rephrase when confusion occurs. Demonstrates the ability to find a one or two resources, yet the resources are not the best or most appropriate for providing accurate 	<ul style="list-style-type: none"> Generally demonstrates empathy, communicates accurate information clearly, checks for understanding Seeks to ensure understanding and generally asks questions. Frequently demonstrates the ability to find and utilize appropriate resources and references necessary for providing accurate 	<ul style="list-style-type: none"> Consistently demonstrates empathy, communicates accurate information clearly, checks for understanding Ensures understanding and asks appropriate questions. Consistently demonstrates the ability to find and utilize appropriate resources and references for providing accurate patient counseling,

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		counseling, consultation and education	counseling, consultation and education	consultation and education
1.2. Patient advocacy. Represents the patient's best interests	<ul style="list-style-type: none"> Does not demonstrate the ability represent a patient's best interest 	<ul style="list-style-type: none"> Demonstrates awareness of issues that impact a patient Demonstrates minimal ability to articulate these issues but does not demonstrate ability to sufficiently advocate on a patient's behalf 	<ul style="list-style-type: none"> Demonstrates sufficient awareness of issues that impact a patient Demonstrates ability to articulate these issues Demonstrates ability to sufficiently advocate on a patient's behalf 	<ul style="list-style-type: none"> Demonstrates full awareness of the most important issues that impact a patient Demonstrates ability to clearly and effectively articulate these issues Demonstrates ability to effectively advocate on a patient's behalf

PLO 2: Evidence-Based Care.

Apply sound, current, and evidence-based oral healthcare within the scope of general dentistry

Indicators	Initial	Developing	Developed	Proficient
2.1. Patient-centered care. Demonstrates ability to provide patient-centered care as the medication expert (collect and interpret evidence, prioritize, formulate assessments and recommendations, implement, monitor and adjust plans, and document activities)	<ul style="list-style-type: none"> Does not demonstrate ability to provide patient-centered care at the medication expert level; e.g., demonstrates ability to collect but not sufficiently interpret evidence, does not prioritize, formulates basic assessments and recommendations, does not sufficiently monitor and adjust plans nor document activities. 	<ul style="list-style-type: none"> Demonstrates ability to provide patient-centered care as the medication expert in some, but not all, areas as follows: collect and interpret evidence, prioritize, formulate assessments and recommendations, implement, monitor and adjust plans, and document activities 	<ul style="list-style-type: none"> Demonstrates ability to provide patient-centered care as the medication expert (generally demonstrates ability to collect and interpret evidence, prioritize, formulate assessments and recommendations, implement, monitor and adjust plans, and document activities) 	<ul style="list-style-type: none"> Demonstrates ability to provide sufficient patient-centered care as the expert (collects and interprets evidence, prioritizes, formulates assessments and recommendations, implements, monitors and adjusts plans, and documents activities)
2.2. Systems management. Demonstrates ability to manage patient healthcare needs using human, financial, technological, and physical resources to	<ul style="list-style-type: none"> Does not demonstrate understanding of oral healthcare delivery systems parts Does not demonstrate understanding of the forces that 	<ul style="list-style-type: none"> Demonstrates understanding of some parts of oral healthcare delivery systems but does not identify how they are related to each other Demonstrates understanding of 	<ul style="list-style-type: none"> Demonstrates understanding of most major components of oral healthcare systems and their respective relationships Demonstrates understanding of the forces that 	<ul style="list-style-type: none"> Demonstrates understanding of the major components of oral healthcare systems, their respective relationships, and their functions related to patient care

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optimize the safety and efficacy of medication use systems	<p>influence components of the oral healthcare delivery system, including their connection to patient care</p> <ul style="list-style-type: none"> • Does not demonstrate understanding of any challenges to systems that affect oral healthcare delivery Does not demonstrate understanding of how to work with different subsystems to deliver oral healthcare 	<p>some forces that influence the parts of healthcare delivery systems, but demonstrate minimal understanding of their connection to patient care</p> <ul style="list-style-type: none"> • Demonstrates understanding of some challenges that can affect delivery of oral healthcare • Demonstrates some understanding of how to work with different subsystems and how they function to deliver oral healthcare, but demonstrate minimal awareness or understanding of one's own role within the oral healthcare delivery system 	<p>influence the components of healthcare delivery systems, and demonstrate some understanding of their influence on the quality of patient care</p> <ul style="list-style-type: none"> • Demonstrates understanding of most challenges that can affect delivery of oral healthcare, but does not demonstrate complete comprehension of the effects Demonstrates basic understanding of how to work with different subsystems and how they function to deliver oral healthcare and demonstrate some understanding of one's role within the oral healthcare delivery system, but does not necessarily demonstrate application of knowledge in a manner that maximizes the quality of oral healthcare 	<ul style="list-style-type: none"> • Demonstrates thorough understanding of the forces that influence components of healthcare delivery systems and demonstrate full understanding of their influence and implications on the quality of patient care • Demonstrates understanding of pertinent challenges to specific aspects of healthcare delivery by demonstrating abilities to thoroughly discuss the implications for the appropriate parts of oral health care delivery systems Demonstrates excellent understanding of how to work with different subsystems involved while also demonstrating understanding of one's role within the subsystems, and demonstrate appropriate application of knowledge in a manner that maximizes the quality of oral healthcare
2.3. Health and wellness. Designs prevention, intervention, and	<ul style="list-style-type: none"> • Does not demonstrate understanding of how the arts can be 	<ul style="list-style-type: none"> • Demonstrates knowledge of some of the ways that the arts can be utilized 	<ul style="list-style-type: none"> • Demonstrates sufficient knowledge of multiple ways that 	<ul style="list-style-type: none"> • Demonstrates thorough knowledge of the ways that the arts

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educational strategies for individuals and communities to manage chronic disease and improve oral health and wellness	utilized to optimize patients' well-being	to optimize patients' well-being	the arts can be utilized to optimize patients' well-being	can be utilized to optimize patients' well-being and creatively applies this knowledge to improve well-being and the practice and delivery of oral healthcare
2.4. Population-based care. Demonstrates understanding of how population-based care influences patient-centered care and the development of practice guidelines and evidence-based best practices	<ul style="list-style-type: none"> • Does not demonstrate awareness of population-based care. 	<ul style="list-style-type: none"> • Demonstrates minimal understanding of population-based care and how it influences patient-centered care • Does not demonstrate awareness of how these notions influence the development of practice guidelines 	<ul style="list-style-type: none"> • Demonstrates sufficient understanding of population-based care and how it influences patient-centered care • Demonstrates sufficient understanding of how population-based care influences the development of practice guidelines and best practices for patient care 	<ul style="list-style-type: none"> • Demonstrates superb understanding of population-based care and how it influences patient-centered care • Demonstrates superb understanding of how population-based care influences the development of practice guidelines and demonstrates knowledge of best practices for patient care

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PLO 3: Culturally Competent, Empathic Communication.

Demonstrate patient centered, empathic and culturally competent communication and interpersonal skills

Indicators	Initial	Developing	Developed	Proficient
3.1. Empathy. Demonstrates the ability to communicate with the patient empathically.	<ul style="list-style-type: none"> Does not demonstrate the ability to communicate with the patient empathically. 	<ul style="list-style-type: none"> Demonstrates some ability, but experiences lapses in the ability to communicate empathically 	<ul style="list-style-type: none"> Demonstrates the ability to communicate empathically, with few lapses. 	<ul style="list-style-type: none"> Demonstrates an advanced ability, and never experiences lapses in communicating empathically.
3.2. Cultural competence. Demonstrates the ability to engage in communication with the patient that is culturally aware and accepting.	<ul style="list-style-type: none"> Does not demonstrate communication and interactions that convey respect or concern for patients and the community. Does not demonstrate an awareness of customs, beliefs, or perspectives in diverse patients Does not demonstrate awareness of cultural and linguistic needs of patients in order to communicate health information 	<ul style="list-style-type: none"> Demonstrates communication and interactions characteristic of a minimal level of respect, and little concern for patients and the community is apparent through use of some appropriate communication, but student does not employ follow-up questions for clarification, when necessary, and student provides inappropriate detail in responses Demonstrates a minimal level of awareness of customs, beliefs, or perspectives in diverse patients Demonstrates minimal awareness of cultural and linguistic needs of patients; either does not or only attempt to adapt behaviors, but does so ineffectively, to communicate health information 	<ul style="list-style-type: none"> Demonstrates appropriate communication and interactions that are characteristic of a basic level of respect, and concern for patients and the community is apparent through use of appropriate communication, where student uses some clear, but not necessarily relevant or detailed, follow-up questions and responses Demonstrates awareness of customs and beliefs, but may not clarify with patients about personal perspectives Demonstrates awareness of the cultural and linguistic needs of diverse patients, and adapt behaviors to communicate health information, but communication 	<ul style="list-style-type: none"> Demonstrates professional communication and interactions by showing empathy, respect, and concern for patients and the community through use of appropriate communication where follow-up questions (as needed) and responses are clear, relevant, and detailed Demonstrates awareness of customs, beliefs, or perspectives in diverse patients; ask appropriate questions to clarify perspectives and perceptions in diverse patients Demonstrates full awareness of and responsiveness to cultural and linguistic needs of diverse patients by adapting behaviors appropriately in order to effectively communicate health information

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			may not be effective	
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PLO 4: Oral and Written Communication.

Demonstrate sound oral and written communications in patient care

Indicators	Initial	Developing	Developed	Proficient
4.1. Oral communication. Demonstrate sound oral communication in patient care.	<ul style="list-style-type: none"> Does not demonstrate logical reasoning in oral communications in patient care. Does not demonstrate the ability to cite sound evidence that support ideas within presentations or discussions. 	<ul style="list-style-type: none"> Demonstrates some logical reasoning in oral communications in patient care but demonstrates some lapses. Demonstrates some ability to cite sound evidence that support ideas within presentations or discussions, but demonstrates some lapses. 	<ul style="list-style-type: none"> Generally demonstrates logical reasoning in oral communications in patient care. Generally demonstrates the ability to cite sound evidence that support ideas within presentations or discussions. 	<ul style="list-style-type: none"> Consistently demonstrates logical reasoning in oral communications in patient care. Consistently demonstrates the ability to cite sound evidence that support ideas within presentations or discussions.
4.2. Written communication. Demonstrate sound written communication in patient care.	<ul style="list-style-type: none"> Does not demonstrate logical reasoning in written communications in patient care. Does not demonstrate the written ability to cite sound evidence that support ideas. 	<ul style="list-style-type: none"> Demonstrates some logical reasoning in written communications in patient care but demonstrates some lapses. Demonstrates some written ability to cite sound evidence that support ideas, but demonstrates some lapses. 	<ul style="list-style-type: none"> Generally logical reasoning in written communications in patient care. Generally demonstrates the written ability to cite sound evidence that support ideas. 	<ul style="list-style-type: none"> Consistently demonstrates logical reasoning in written communications in patient care. Consistently demonstrates the written ability to cite sound evidence that support ideas.

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PLO 5: Critical Thinking.

Utilize critical thinking, problem solving skills and systemic thinking in assessing and making reasoned, evidence-based decisions in patient care

Indicators	Initial	Developing	Developed	Proficient
5.1. Problem solving. Identifies problems; explore and prioritize potential strategies; and designs, implements, and evaluates viable solutions	<ul style="list-style-type: none"> • Is not able to correctly identify the problem or issue being considered. • Does not identify appropriate resources. Includes extraneous information or inappropriate or insufficient resources. • Does not demonstrate understanding of the content of materials reviewed. Makes inappropriate inferences. • Does not evaluate possible alternatives or generates ideas that are illogical or extraneous to issue at hand. • Does not propose a solution or does not articulate decision. Does not adequately provide rationale for selected alternative or decision 	<ul style="list-style-type: none"> • Identifies the problem or issue but does not demonstrate awareness of all the factors associated with the problem or issues that impact decision making. • Identifies a few, but not all, resources needed for decision making. • Demonstrates ability to interpret some information and data but not all. • Does not fully or effectively evaluate alternative solutions. • Proposes a decision with many apparent weaknesses (i.e., not feasible, lack of regard for consequences, lack of supporting evidence, illogical, irrelevant to issue at hand, etc.). Provides rationale for selected alternative or decision but does not build a solid position with supporting evidence. Is unable to defend decision or course of action. 	<ul style="list-style-type: none"> • Correctly identifies problem or issue being considered and demonstrates adequate awareness of the factors associated with this problem or issue that impact decision making. • Identifies most of the resources needed. • Demonstrates ability to interpret most information and data. • Considers and evaluates possible solutions in a way that generally leads to a logical decision or course of action. • Proposes a solution that does not contain apparent weaknesses that may or may not be the obvious clear choice. Solutions chosen demonstrate consideration of most of the strengths, weaknesses, feasibility, effects, consequences, relevance, etc.). Provides rationale for selected alternative or decision which includes some solid supporting 	<ul style="list-style-type: none"> • Consistently correctly identifies the problem or issue being considered and all of the primary factors associated with this problem or issue that impact decision making. Articulates the importance of these factors. • Identifies all appropriate resources. • Demonstrates ability to correctly interpret information and data needed for appropriate decision making. Demonstrates awareness of importance of these data in decision-making process. • Considers and evaluates possible solutions effectively and thoroughly. Evaluation leads to sound, logical, and “best” decision or course of action. • Proposes a solution that is entirely appropriate to the situation at hand. Solutions chosen demonstrate consideration of all of the important

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			evidence. Is able to defend decision or course of action at a basic level.	and relevant strengths, weaknesses, feasibility, effects, consequences, etc.). Provides rationale for selected alternative or decision and builds a solid position with appropriate and relevant supporting evidence. Effectively defends decision or course of action.
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PLO 6: Ethics and Professionalism.

Demonstrating professionalism and ethical decision making

Indicators	Initial	Developing	Developed	Proficient
6.1. Professionalism. Demonstrates behaviors and values that are consistent with the trust given to the profession by patients, other healthcare providers, and society	<ul style="list-style-type: none"> • Does not consistently demonstrate professional attitudes and behaviors (altruism, excellence, duty, accountability, honesty, and integrity) • Demonstrates frequent lapses in accountability or quality of work 	<ul style="list-style-type: none"> • Demonstrates some professional attitudes and behaviors yet there is inconsistency that may impede on the quality of work or treatment of patients and other healthcare team members (altruism, excellence, duty, accountability, honesty, and integrity) 	<ul style="list-style-type: none"> • Generally demonstrates most of the professional attitudes and behaviors (altruism, excellence, duty, accountability, honesty, and integrity) that are required in the profession • Demonstrates ability to use these behaviors and values to improve healthcare 	<ul style="list-style-type: none"> • Consistently demonstrates the professional attitudes and behaviors that uphold the integrity and competence of the work and the treatment of patients and other healthcare team professionals (altruism, excellence, duty, accountability, honesty, and integrity) • Consistently uses these behaviors and values to improve healthcare
6.2. Ethics. Demonstrates the ability to make decisions consistent with the values of practitioners and scholars of oral healthcare.	<ul style="list-style-type: none"> • Does not make ethical decisions consistent with the values of practitioners and scholars of oral healthcare. 	<ul style="list-style-type: none"> • Demonstrates the ability to exercise ethical decision making, and a rudimentary knowledge of ethics within oral healthcare. 	<ul style="list-style-type: none"> • Demonstrates the ability to exercise clear and ethical decision making, and a sufficient knowledge of ethics within oral healthcare. 	Demonstrates the ability to exercise clear and ethical decision making, and an advanced knowledge of ethics within oral healthcare.

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PLO 7: Biomedical Sciences Knowledge.

Demonstrate an understanding of the fundamentals of biomedical sciences and apply them appropriately in oral healthcare

Indicators	Initial	Developing	Developed	Proficient
7.1. Diagnostic and pharmacologic. Demonstrates the ability to describe how to deliver patient assessments, knowledge of medicines, and delivering diagnoses.	<ul style="list-style-type: none"> Does not demonstrate the ability to describe diagnostic and pharmacologic knowledge related to oral health. 	<ul style="list-style-type: none"> Demonstrates a rudimentary ability to describe diagnostic and pharmacologic knowledge related to oral health. 	<ul style="list-style-type: none"> Demonstrates a sufficient ability to describe diagnostic and pharmacologic knowledge related to oral health. 	<ul style="list-style-type: none"> Demonstrates an advanced ability to describe diagnostic and pharmacologic knowledge related to oral health.
7.2. Orofacial pain/temporomandibular/ Sleep disorder. Demonstrates the ability to describe the anatomical, physiological, and neurological basis; classification, epidemiology, and etiology; and assessments and treatments of orofacial pain, temporomandibular joint disease, and sleep disorders.	<ul style="list-style-type: none"> Does not demonstrate the ability to describe scientific or assessment knowledge related to OFP/TMJ disease and sleep disorders. 	<ul style="list-style-type: none"> Demonstrates a rudimentary ability to describe scientific or assessment knowledge related to OFP/TMJ disease and sleep disorders. 	<ul style="list-style-type: none"> Demonstrates a sufficient ability to describe scientific or assessment knowledge related to OFP/TMJ disease and sleep disorders. 	<ul style="list-style-type: none"> Demonstrates an advanced ability to describe scientific or assessment knowledge related to OFP/TMJ disease and sleep disorders.
7.3. Maxillofacial pathology Demonstrates the ability to describe the scientific aspects of head and neck diseases, as well as knowledge of assessment and diagnosis.	<ul style="list-style-type: none"> Does not demonstrate the ability to describe the scientific or assessment knowledge related to head and neck diseases. 	<ul style="list-style-type: none"> Demonstrates a rudimentary ability to describe the scientific or assessment knowledge related to head and neck diseases. 	<ul style="list-style-type: none"> Demonstrates a sufficient ability to describe the scientific or assessment knowledge related to head and neck diseases. 	<ul style="list-style-type: none"> Demonstrates an advanced ability to describe the scientific or assessment knowledge related to head and neck diseases.

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PLO 8: Practice Management.

Apply legal, regulatory, and business management concepts related to the provision of oral healthcare services

Indicators	Initial	Developing	Developed	Proficient
8.1. Legal aspects Applies legal and regulatory concepts related to the provision of oral healthcare services.	<ul style="list-style-type: none"> Does not demonstrate an understanding or the ability to apply legal and regulatory concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates a rudimentary understanding and ability to apply legal and regulatory concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates a sound understanding and ability to apply legal and regulatory concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates an advanced understanding and ability to apply legal and regulatory concepts related to the provision of oral healthcare sciences.
8.2. Business management Applies business management concepts to the provision of oral healthcare services.	<ul style="list-style-type: none"> Does not demonstrate an understanding or the ability to apply business management concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates a rudimentary understanding and ability to apply business management concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates a sound understanding and ability to apply business management concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates an advanced understanding and ability to apply business management concepts related to the provision of oral healthcare sciences.

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Appendix B

California Northstate University Institutional Learning Objectives

ILO 1: Critical thinking: Exercise reasoned judgment to assess technical information and make well-informed decisions using evidence-based approaches

ILO 2: Written communication. Demonstrate the ability to write coherent, supported, and logically structured prose

ILO 3: Oral communication: Demonstrates oral communication skills

ILO 4: Professionalism. Interact with respect, empathy, diplomacy, and cultural competence

ILO 5: Quantitative reasoning: Demonstrate ability to use mathematics and statistics in problem solving

ILO 6: Information literacy: Identify and search relevant libraries of information and databases; synthesize information obtained from primary literature using properly referenced citations

DMD Institutional Learning Outcomes (ILOs) Proficiency Rubric

ILO 1: Critical thinking: Exercise reasoned judgment to assess technical information and make well-informed decisions using evidence-based approaches

Indicator	Initial	Developing	Developed	Proficient
1.1. Demonstrates identification of problem or issues	<ul style="list-style-type: none"> Does not correctly identify the problem or issue being considered Does not demonstrate understanding of the psychological factors that contribute to current patient state 	<ul style="list-style-type: none"> Identifies the problem or issue but does not demonstrate awareness of all the factors impacting decision making Demonstrates understanding of some possible psychological factors that contribute to current patient state 	<ul style="list-style-type: none"> Correctly identifies the problem or issue but does not demonstrate awareness of all factors impacting decision making Demonstrates understanding of most psychological factors that contribute to the current patient state 	<ul style="list-style-type: none"> Correctly identifies all of the primary factors associated with problem or issue impacting decision making Demonstrates thorough understanding of all possible psychological factors that contribute to the current patient state
1.2. Demonstrates identification of resources	<ul style="list-style-type: none"> Does not identify appropriate resources 	<ul style="list-style-type: none"> Identifies a few resources needed 	<ul style="list-style-type: none"> Identifies most of the resources needed 	<ul style="list-style-type: none"> Correctly identifies all appropriate resources

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1.3. Finds and interprets data needed for critical thinking and decision making	<ul style="list-style-type: none"> Does not demonstrate understanding of the data needed for critical thinking and decision making 	<ul style="list-style-type: none"> Demonstrates ability to interpret some data but not all 	<ul style="list-style-type: none"> Demonstrates ability to interpret most data 	<ul style="list-style-type: none"> Demonstrates ability to correctly interpret data needed for decision making
1.4. Demonstrates knowledge of alternatives when evaluating for possible solutions	<ul style="list-style-type: none"> Does not evaluate possible alternatives for treatment or diagnosis 	<ul style="list-style-type: none"> Does not effectively evaluate alternative treatment or diagnostic solutions 	<ul style="list-style-type: none"> Evaluates possible treatment and diagnostic solutions leading to a logical decision 	<ul style="list-style-type: none"> Effectively and thoroughly considers and evaluates possible diagnostic and treatment solutions
1.5. Proposes and selects appropriate solutions	<ul style="list-style-type: none"> Does not propose solutions to the client's needs 	<ul style="list-style-type: none"> Proposes solutions without consideration of alternatives 	<ul style="list-style-type: none"> Solutions chosen demonstrate consideration of most of the strengths, weaknesses, and consequences of the decision 	<ul style="list-style-type: none"> Proposes solutions that are appropriate to the situation and demonstrate consideration of all relevant strengths, weaknesses, and consequences
1.6. Presents rationale for course of action	<ul style="list-style-type: none"> Does not adequately provide rationale for treatment decision 	<ul style="list-style-type: none"> Provides rationale for decision but does not integrate into mental health treatment plan 	<ul style="list-style-type: none"> Provides rationale for decision with solid supporting evidence from available psychological literature and/or case factors 	<ul style="list-style-type: none"> Provides rationale for decision and with appropriate and relevant supporting case evidence and integrates findings into treatment plan

ILO 2: Written communication. Demonstrate the ability to write coherent, supported, and logically structured prose

Indicators	Initial	Developing	Developed	Proficient
2.1. Demonstrates knowledge and awareness of intended audience	<ul style="list-style-type: none"> Does not demonstrate knowledge or awareness of audience for which the document is intended 	<ul style="list-style-type: none"> Demonstrates some ability to craft a document appropriate for its audience 	<ul style="list-style-type: none"> Demonstrates ability to craft a document appropriate for its audience 	<ul style="list-style-type: none"> Consistently demonstrates ability to craft documents appropriate for the audience
2.2. Demonstrates clear and logical thought	<ul style="list-style-type: none"> Does not demonstrate clear or logical thought in their documentation 	<ul style="list-style-type: none"> Writing does not sufficiently conceptualize case variables or analyze subject under discussion 	<ul style="list-style-type: none"> Demonstrates general clear or logical thought in their documentation 	<ul style="list-style-type: none"> Research and clinical documentation demonstrates clear and focused thinking
2.3. Demonstrates support for and development of ideas	<ul style="list-style-type: none"> Does not explain or develop ideas 	<ul style="list-style-type: none"> Demonstrates minimal support for ideas 	<ul style="list-style-type: none"> Writing contains examples that generally support ideas 	<ul style="list-style-type: none"> Supports ideas with relevant, clear, impactful examples

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2.4. Demonstrates appropriate use of evidence to support arguments	<ul style="list-style-type: none"> • Demonstrates an attempt to use proper citations to support ideas 	<ul style="list-style-type: none"> • Uses credible and relevant sources to support ideas appropriate in the study of psychology 	<ul style="list-style-type: none"> • Consistently uses credible and relevant sources to support ideas 	<ul style="list-style-type: none"> • Demonstrates skillful use of credible and relevant sources to develop and support ideas
2.5. Demonstrates appropriate use of language, syntax, and mechanics	<ul style="list-style-type: none"> • Has excessive or severe errors in language usage 	<ul style="list-style-type: none"> • Generally conveys meaning to readers with clarity, though writing may include some errors 	<ul style="list-style-type: none"> • Language conveys meaning to readers and writing contains very few errors 	<ul style="list-style-type: none"> • Uses language effectively and skillfully to communicate meaning to readers

ILO 3: Oral communication: Demonstrates oral communication skills

Indicators	Initial	Developing	Developed	Proficient
3.1. Demonstrates knowledge and awareness of intended audience	<ul style="list-style-type: none"> • Does not demonstrate knowledge or awareness of audience for which the communication is intended 	<ul style="list-style-type: none"> • Demonstrates some ability to communicate in a manner appropriate to the audience 	<ul style="list-style-type: none"> • Demonstrates ability to communicate appropriate to the audience 	<ul style="list-style-type: none"> • Consistently demonstrates ability to communicate in a manner appropriate to the audience
3.2. Demonstrates clear and logical thought	<ul style="list-style-type: none"> • Does not demonstrate clear or logical thought in their communication 	<ul style="list-style-type: none"> • Communication does not sufficiently conceptualize case variables or analyze subject under discussion 	<ul style="list-style-type: none"> • Demonstrates general clear or logical thought in their communication 	<ul style="list-style-type: none"> • Communication demonstrates clear and focused thinking
3.3. Demonstrates effective use of language in their communication	<ul style="list-style-type: none"> • Does not know professional psychological language or uses jargon • Does not know the proper technical language regarding mental health treatment 	<ul style="list-style-type: none"> • Demonstrates inaccurate use of psychological language or uses jargon in professional communications • Utilizes scientific language that is incomprehensible to patients 	<ul style="list-style-type: none"> • Demonstrates appropriate use of professional language and minimal jargon • Utilizes generalized language to interact with patients 	<ul style="list-style-type: none"> • Demonstrates use of appropriate, professional language • Utilizes generalized language to interact with patients
3.4. Demonstrates appropriate active listening techniques when addressing questions	<ul style="list-style-type: none"> • Does not acknowledge other viewpoints • Has great difficulty answering questions 	<ul style="list-style-type: none"> • Demonstrates little attempt to recognize other viewpoints • Answers are simplistic and lack intellectual depth 	<ul style="list-style-type: none"> • Recognizes other viewpoints but has difficulty incorporating them into case conceptualization • Adequately answers patient questions 	<ul style="list-style-type: none"> • Listens to questions with a consideration of alternative viewpoints • Answers questions thoughtfully referencing evidence

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3.5. Orally communicates meaning to audience	<ul style="list-style-type: none"> • Vocal delivery is too soft or too fast • Long, unintended silences and/or speech disruptions frequently distract audience • Speaker makes no attempt to engage audience 	<ul style="list-style-type: none"> • Vocal delivery is audible • Speech rate or volume disruptions occasionally distract from comprehension • Attempts to engage audience 	<ul style="list-style-type: none"> • Vocal delivery is varied and dynamic • Speech rate, volume, and tone enhance listener interest and facilitate understanding • Generally engages audience 	<ul style="list-style-type: none"> • Vocal delivery is varied and dynamic • Speech rate, volume, and tone enhance listener interest and facilitate understanding • Thoroughly engages audience
3.6. Utilizes non-verbal means to enhance message	<ul style="list-style-type: none"> • Eye contact, body language, and facial expressions are inappropriate 	<ul style="list-style-type: none"> • Eye contact, body language, and facial expressions neither enhance nor hinder oral effectiveness 	<ul style="list-style-type: none"> • Use of eye contact, body language, and facial expressions are mostly consistent with the verbal message 	<ul style="list-style-type: none"> • Use of eye contact, body language, and facial expressions that are consistent with the verbal message

ILO 4: Professionalism. Interact with respect, empathy, diplomacy, and cultural competence

Indicators	Initial	Developing	Developed	Proficient
4.1. Demonstrates professional attitudes and behaviors	<ul style="list-style-type: none"> • Does not generally demonstrate professional attitudes or behaviors expected from a dentist 	<ul style="list-style-type: none"> • Demonstrates some attitudes and behaviors that may be characteristic of a dentist 	<ul style="list-style-type: none"> • Generally demonstrates attitudes and behaviors expected from a dentist 	<ul style="list-style-type: none"> • Consistently demonstrates attitudes and behaviors expected from a dentist
4.2. Demonstrates personal responsibility and accountability	<ul style="list-style-type: none"> • Does not demonstrate personal accountability or responsibility for work completed 	<ul style="list-style-type: none"> • Demonstrates minimal personal accountability and responsibility for work completed 	<ul style="list-style-type: none"> • Demonstrates personal accountability and responsibility for the work completed 	<ul style="list-style-type: none"> • Consistently demonstrates personal accountability and responsibility for work completed
4.3. Demonstrates respectful and sensitive behaviors to the cultural and linguistic needs of diverse patients	<ul style="list-style-type: none"> • Does not demonstrate an awareness of patients' customs, beliefs, or perspectives • Does not demonstrate awareness of linguistic needs of patients 	<ul style="list-style-type: none"> • Demonstrates a minimal level of awareness of customs, beliefs, or perspectives of patients • Demonstrates minimal awareness of cultural and linguistic needs of patients 	<ul style="list-style-type: none"> • Demonstrates awareness of customs and beliefs • Demonstrates awareness of the cultural and linguistic needs of patients 	<ul style="list-style-type: none"> • Demonstrates awareness of customs, beliefs, or perspectives in patients • Demonstrates full awareness and responds to the cultural and linguistic needs of patients
4.4. Demonstrates professional demeanor	<ul style="list-style-type: none"> • Appears inattentive and impatient • Uses inappropriate body language • Dresses in attire that is inappropriate 	<ul style="list-style-type: none"> • Appears unfocused and distracted • Uses acceptable body language • Dresses in attire that is not offensive 	<ul style="list-style-type: none"> • Appears composed and focused • Uses appropriate body language • Dresses in attire that is professional 	<ul style="list-style-type: none"> • Uses articulate, tactful, and diplomatic speech • Uses professional body language • Dresses in attire that is professional, and well-suited for the environment

ILO 5: Quantitative reasoning: Demonstrate ability to use mathematics and statistics in problem solving

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Indicators	Initial	Developing	Developed	Proficient
5.1. Demonstrates ability to perform calculations and apply mathematical principles to solve problems	<ul style="list-style-type: none"> Does not demonstrate ability to apply statistical or psychometric principles 	<ul style="list-style-type: none"> Demonstrates ability to perform basic statistical calculations but does not know how to apply psychometric principles to solve problems 	<ul style="list-style-type: none"> Demonstrates ability to perform most statistical calculations accurately and to apply psychometric principles to solve problems 	<ul style="list-style-type: none"> Consistently demonstrates ability to perform statistical calculations accurately and to appropriately apply psychometric principles to solve problems
5.2. Demonstrates understanding of experimental designs and methodology	<ul style="list-style-type: none"> Displays difficulty proposing a basic experiment or research project 	<ul style="list-style-type: none"> Comprehends basic experiments designed by others 	<ul style="list-style-type: none"> Evaluates research, method, and protocol to review valid and reliable research 	<ul style="list-style-type: none"> Proposes appropriate and innovative designs to address a new hypothesis and research question
5.3. Demonstrates logical and appropriate interpretation of data	<ul style="list-style-type: none"> Demonstrates a limited ability to interpret scientific data 	<ul style="list-style-type: none"> Attempts to interpret scientific data 	<ul style="list-style-type: none"> Demonstrates the ability to interpret scientific data 	<ul style="list-style-type: none"> Interprets data in the context of current scientific knowledge
5.4. Demonstrates logical thought patterns in generating conclusions	<ul style="list-style-type: none"> Does not generate conclusions based on current scientific data and statistics 	<ul style="list-style-type: none"> Generates conclusions that may be based on current scientific data and statistics 	<ul style="list-style-type: none"> Generates conclusions using scientific and statistical data 	<ul style="list-style-type: none"> Accurately generates conclusions using appropriate scientific and mathematical data

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ILO 6: Information literacy: Identify and search relevant libraries of information and databases; synthesize information obtained from primary literature using properly referenced citations

Indicators	Initial	Developing	Developed	Proficient
6.1. Demonstrates appropriate ability search and acquire resources	<ul style="list-style-type: none"> Does not identify or solicit help in obtaining external resources to support topic 	<ul style="list-style-type: none"> Identified resources may not be sufficient in quality and infrequently solicits guidance from library personnel 	<ul style="list-style-type: none"> Identifies resources appropriate for scientific inquiry and solicits guidance from library personnel 	<ul style="list-style-type: none"> Identifies a variety of relevant sources and regularly seeks guidance from library personnel
6.2. Demonstrates appropriate incorporation of references	<ul style="list-style-type: none"> Does not incorporate references 	<ul style="list-style-type: none"> Incorporates references from psychological sources that do not clearly support ideas 	<ul style="list-style-type: none"> Incorporates relevant references that generally supports ideas 	<ul style="list-style-type: none"> Incorporates relevant references from respected psychological sources
6.3. Demonstrates appropriate citation of references	<ul style="list-style-type: none"> Does not use citations 	<ul style="list-style-type: none"> Uses citations but they are not formatted in APA style 	<ul style="list-style-type: none"> Demonstrates use of appropriate citations in context 	<ul style="list-style-type: none"> Uses properly cited references and includes all necessary information in reference list

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California Northstate University College of Dental Medicine
Behavioral Medicine Course Syllabus

Course #	Course Title	Credits	Year	Term
BSS 662	Behavioral Medicine (CP Course) <i>LAL, Clin</i>	3	DS 2	Spring

Credit Hour Policy

For each 15-week semester, one (1) hour of credit is assigned per hour each week of classroom or direct faculty didactic instruction (that is, per hour of lecture or student in-class time) and a minimum of two (2) hours of out-of-class student work (homework). For practicum and internship time, one (1) hour of credit is assigned per three (3) hours each week of student time spent in this activity.

Maximum Enrollment: 80

Calendar of Important Dates:

Date	
	First day of Spring Term for all DMD 2 students

Course Coordinator, Instructors and Contact Information

Bret McLaughlin D. Psych. (course co-director)

Room:

E mail: bret.mccaughlin@cnsu.edu

Office hours

Leon Assael DMD (course co-director)

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Room:

E-mail: leon.assael@cnsu.edu

Office hours: Wednesdays 12:00pm-1:00pm, and 3:00pm-4:00pm (or by appointment)

Holly Jacobson BA (course administrator)

Room: xxx

E mail: holly.jacobson@cnsu.edu

Classroom and Meeting Times

Room: Classroom xxxx

Time: xxxx 2 hours per week

Clinic and meeting times

Room: Stone Lake Psychology Clinic

Time: 4 hours per week for 3 weeks per student

Course Description

In this course aspects of clinical psychology of importance in dental practice is presented. Cased base learning will include: minor and major psychiatric illnesses impacting on oral health and the provision of oral health care; elder, spousal and child abuse; dental fear; and, dental phobias.

Prerequisite Courses

None

Prerequisite Knowledge

None

Required Textbook(s) and Material(s)

15. *Bates guide to physical examination and history Taking- 11th edition*, Bickley, Lynn, Wolters Kluwer
16. Yagiela, *Pharmacotherapy and therapeutics for Dentistry*, Elsevier, 2018
17. Casamassimo, *Pediatric Dentistry, infancy through adolescence*, Elsevier 2017
18. Barlow, D. *Clinical Handbook of Psychological disorders*, the Guilford Press, 2014

Technology

1. Computer-assisted instruction (Clickers) and SCANTRON Sheets
2. Web-based course management (Canvas) and Examsoft
3. Audio/Video recordings where applicable
4. PowerPoint
5. Epic electronic health record

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6. PACS, DICOM compatible imaging software
7. Psychology clinic

Evaluation Components

In keeping with the Team Based Learning (TBL) approach, grades will be determined as follows:

Individual Components	80%
First quiz	10%
Second Quiz	10%
Final exam	30%
Clinical evaluation practical	30%

Team Components	20%
Group PCS projects X2	10%
Peer Evaluation	10%

GRADING

All students must demonstrate minimal individual competency. Therefore, students earning less than 75% on the total Individual component score will not have team component scores added to calculate their final course grade. During the course, students who score less than 75% on individual components may be subject to periodic course content review and may receive an Academic Alert.

In order to progress from one semester to the next, students must pass all courses with a letter a grade of C or higher and maintain a minimum cumulative grade point average (GPA) of 2.0. The breakdown for assignment of letter grades and grade points for each letter grade are as follows:

Percent	Letter Grade/Action
90.0 – 100%	A
80.0 – 89.9%	B
75.0 – 79.9%	C - Pass
60.0 – 74.9%	D – Requiring remediation (successful remediation recorded as C, unsuccessful remediation recorded as F)
Below 60.0%	F – Fail (course must be repeated)
Incomplete	I

Incomplete

During a semester, a student may not complete all required assignments and/or examinations due to extenuating circumstances, such as, but not limited to, an illness or a family emergency. In such a case, the course director may give a grade of Incomplete for the course. The course with the incomplete grade has to be completed successfully within the time frame as being defined by the student's academic plan, normally in the same academic year, otherwise a leave of absence would be required.

Core-Course Policies

All students are required to adhere to the Academic Policies that impact on student progression and conduct while attending the DMD program, including the following: Academic Progression Policy, Excused Absence Policy, Exam Policy, Course Grade Appeal Policy, Course Add/Drop Policy and Attendance Policy. Refer to the current Student Handbook for the detailed policies.

Course Specific Policies

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1. Group PCS cases are to be submitted via CANVAS by 11:59pm PST on the deadline indicated. Only one group member should submit the assignment on behalf of the group. The course coordinator reserves the right to deduct points for late submission (20% of assignment grade for every 24 hours the assignment is turned in late).

Presentation of PCS cases requires the active participation of each team member, preferably presenting the component of the case the student was responsible for developing.

2. Grade appeal for any individual assignments (including exams) should be submitted to the course coordinator in writing within 5 business days of grade release.
3. There will be no rounding of the final grade for this course.

Topics and Schedule

(Subject to change. Updates will be posted to CANVAS and announced by email)

All readings are in Vital Source, or as assigned and posted to CANVAS

Each didactic session including LAL is 2 hours. Each clinical session is 4 hours. Students are divided into groups of 4 students (groups 1-20) for each of their 3 sessions. Each group of 4 will attend either Monday, Tuesday, Wednesday or Thursday clinic.

Date	Topics	Readings*	Instructor	Notes
Week 1 LAL	Introduction to behavioral sciences		McLaughlin/ Assael	
1: Clinic assignment	Groups 1,2,3,4 (4 students per day mon/tues/wed/thurs)		Clinical faculty and staff	
Week 2	Behavioral issues in dental practice		Assael	
2: Clinic assignment	Groups 5,6,7,8		Clinical faculty and staff	
Week 3 Psychological disorders 1	Panic disorder, phobias, PTSD	Barlow Chapter 1,2,3	McLaughlin	
Week 3: clinic assignment	Groups 9,10,11,12		Clinical faculty and staff	
Week 4: psychological disorders 2	OCD, anxiety disorder, depression	Barlow chapter 4,5,6,7,8	McLaughlin	
Week 4 Clinic assignment	Groups 13,14,15,16		Clinical faculty and staff	
Week 5: Psychological disorders 3	Borderline personality, bipolar disorder, schizophrenia and other psychoses	Barlow chapter 10,11,12,13	McLaughlin	Case assignments X4 to groups

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Week 5 clinic assignment	Groups 17,18,19,20		Clinical faculty	
Week 6	Dental fear and anxiety		Assael	
Week 6 clinic	Groups 1,2,3,4 (4 students per day mon/tues/wed/thurs)		Clinical faculty	
Week 7	The patient behavioral history in dental practice.	Bates, chapter 3	Clinical faculty	
Week 7 clinic	Groups 5,6,7,8	Bates chapter 2 UCSD practical guide to clinical medicine	Keating	
Week 8	Psychotropic Pharmacopeia in dental practice	Yagiela, chapter 12	Cadra	
Week 8 clinic	Groups 9,10,11,12		Clinical faculty	
Week 9	Managing dental phobias, pain and anxiety in dental practice		Keating Assael Oral surgery fac	
Week 9 clinic	Groups 13,14,15,16		Clinical faculty and staff	
Week 10	Opioids use in dental patients and prescription opioids		Harold Tu	
Week 10 clinic	Groups 17,18,19,20		Clinical faculty	
Week 11	Other drug/alcohol abuse in dental practice		Harold Tu	
Week 11 clinic	Groups 1,2,3,4 (4 students per day mon/tues/wed/thurs)		Clinical faculty	
Week 12	Working with the behavioral health interprofessional team in collaborative practice models		Huong Le	
Week 12 clinic	Groups 5,6,7,8		faculty	
Week 13	Case presentations groups 1 and 2		Clinical faculty	

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Week 13 clinic	Groups 9,10,11,12		Clinical faculty and staff	
Week 14	Case presentations groups 3 and 4		Clinical faculty	
Week 14 clinic	Groups 13,14,15,16		Clinical faculty	
Week 15	Final exam		Faculty	
Week 15 clinic	Groups 17,18,19,20		Clinical faculty	

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Course Learning Outcomes and links to Program Learning Outcomes (Appendix A) and Institutional Learning Outcomes (Appendix B)

No.	Course Learning Outcome	DMD PLO	DMD ILO	Learning Hierarchy ^b	Assessment Method
1	Develop an initial understanding and capability to assess behavioral issues in dental practice	1,2,3,4,7,8	1,3,4,6	1,2, 3	Clinical evaluation Group projects
2	Communicate with the behavioral science clinical team with regard to interprofessional collaborative practice issues	1,2,3,5,6,7,8	1,4,	2, 3	Clinical assessment Final exam

^a plo's appendix A

^b Learning Hierarchy based on Bloom's Taxonomy with 1=Memorization and/or Comprehension; 2=Application and/or Analysis; 3=Synthesis and/or Evaluation.

Teaching/ Learning Methodology

1. Didactic: lectures, required readings
2. Learning Activities: laboratory practice, OSCE, laboratory assignments/exercises, group project

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CLO Rubrics

CLO 1: Develop an initial understanding and capability to assess behavioral issues in dental practice

Indicators	Initial	Developing	Developed	Proficient
Has an understanding and capability to assess behavioral issues in dental practice	Begins to apply behavioral sciences knowledge to the attendance of clinical issues in dental practice	Demonstrates ability be a clinical team member but with evolving demonstration of understanding their own role and the role of others in behavioral sciences	Has detailed understanding of behavioral sciences issues in dental practice and has the capability to apply that knowledge in the care of dental patients	Consistently demonstrates the ability participate at the level of their knowledge and skill as a clinical team member.

CLO 2: Communicate with the behavioral science clinical team with regard to interprofessional collaborative practice issues to improve patient care

Indicators	Initial	Developing	Developed	Proficient
Can communicate with the behavioral sciences team with regard to collaborative practice issues to improve patient care	Has no or limited knowledge of behavioral health professionals and their role in oral health care	Begins to exhibit knowledge of the capability of the behavioral health team as a resource in oral health practice	Can implement team approach to care with behavioral health in patient care with uncommon non critical errors	Creates features of a collaborative practice team in oral health and behavioral health

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Appendix A

Program Learning Outcomes (PLOs) CNU College of Dental Medicine

33. Patient-Centered Care: Demonstrate understanding of healthcare disparities and cultural awareness in patient counseling and patient advocacy
34. Evidence-Based Care: Apply current, evidence-based oral healthcare within the scope of general dentistry
35. Culturally competent, empathic communication: Demonstrate patient centered, empathic, and culturally competent communication and interpersonal skills
36. Oral and Written Communication: Demonstrate sound oral and written communications in patient care
37. Critical Thinking: Utilize critical thinking, problem solving skills and systemic thinking in assessing and making reasoned, evidence-based decisions in patient care
38. Ethics and Professionalism: Demonstrate professionalism and ethical decision making
39. Biomedical Sciences Knowledge: Demonstrate an understanding of the fundamentals of biomedical sciences and apply them appropriately in oral healthcare
40. Practice Management: Apply legal, regulatory and business management concepts related to provision of oral healthcare services

DMD Program Learning Outcomes (PLOs) Proficiency Rubric

PLO 1: Patient-Centered Care

Demonstrate understanding of healthcare disparities and cultural awareness and capability in patient counseling and providing appropriate patient advocacy

Indicators	Initial	Developing	Developed	Proficient
1.1. Education. Demonstrates ability to educate all audiences through effectively communicating information and assessing learning	<ul style="list-style-type: none"> Does not appropriately counsel patients Does not check for understanding, ask questions, and/or asks inappropriate questions. Does not demonstrate the ability to find and utilize appropriate resources and references necessary for providing accurate counseling, 	<ul style="list-style-type: none"> Counsels patients but leaves out pertinent information needed by patient Communicates with basic level of clarity but does not always check for understanding or rephrase when confusion occurs. Demonstrates the ability to find a one or two resources, yet the resources are not the best or 	<ul style="list-style-type: none"> Generally demonstrates empathy, communicates accurate information clearly, checks for understanding Seeks to ensure understanding and generally asks questions. Frequently demonstrates the ability to find and utilize appropriate resources and 	<ul style="list-style-type: none"> Consistently demonstrates empathy, communicates accurate information clearly, checks for understanding Ensures understanding and asks appropriate questions. Consistently demonstrates the ability to find and utilize appropriate resources and

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	consultation and education	most appropriate for providing accurate counseling, consultation and education	references necessary for providing accurate counseling, consultation and education	references for providing accurate patient counseling, consultation and education
1.2. Patient advocacy. Represents the patient's best interests	<ul style="list-style-type: none"> Does not demonstrate the ability represent a patient's best interest 	<ul style="list-style-type: none"> Demonstrates awareness of issues that impact a patient Demonstrates minimal ability to articulate these issues but does not demonstrate ability to sufficiently advocate on a patient's behalf 	<ul style="list-style-type: none"> Demonstrates sufficient awareness of issues that impact a patient Demonstrates ability to articulate these issues Demonstrates ability to sufficiently advocate on a patient's behalf 	<ul style="list-style-type: none"> Demonstrates full awareness of the most important issues that impact a patient Demonstrates ability to clearly and effectively articulate these issues Demonstrates ability to effectively advocate on a patient's behalf

PLO 2: Evidence-Based Care.

Apply sound, current, and evidence-based oral healthcare within the scope of general dentistry

Indicators	Initial	Developing	Developed	Proficient
2.1. Patient-centered care. Demonstrates ability to provide patient-centered care as the medication expert (collect and interpret evidence, prioritize, formulate assessments and recommendations, implement, monitor and adjust plans, and document activities)	<ul style="list-style-type: none"> Does not demonstrate ability to provide patient-centered care at the medication expert level; e.g., demonstrates ability to collect but not sufficiently interpret evidence, does not prioritize, formulates basic assessments and recommendations, does not sufficiently monitor and adjust plans nor document activities. 	<ul style="list-style-type: none"> Demonstrates ability to provide patient-centered care as the medication expert in some, but not all, areas as follows: collect and interpret evidence, prioritize, formulate assessments and recommendations, implement, monitor and adjust plans, and document activities 	<ul style="list-style-type: none"> Demonstrates ability to provide patient-centered care as the medication expert (generally demonstrates ability to collect and interpret evidence, prioritize, formulate assessments and recommendations, implement, monitor and adjust plans, and document activities) 	<ul style="list-style-type: none"> Demonstrates ability to provide sufficient patient-centered care as the expert (collects and interprets evidence, prioritizes, formulates assessments and recommendations, implements, monitors and adjusts plans, and documents activities)
2.2. Systems management. Demonstrates ability to manage patient healthcare needs using human,	<ul style="list-style-type: none"> Does not demonstrate understanding of oral healthcare delivery systems parts 	<ul style="list-style-type: none"> Demonstrates understanding of some parts of oral healthcare delivery systems but does not identify how 	<ul style="list-style-type: none"> Demonstrates understanding of most major components of oral healthcare systems and their respective relationships 	<ul style="list-style-type: none"> Demonstrates understanding of the major components of oral healthcare systems, their respective relationships, and

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financial, technological, and physical resources to optimize the safety and efficacy of medication use systems	<ul style="list-style-type: none"> • Does not demonstrate understanding of the forces that influence components of the oral healthcare delivery system, including their connection to patient care • Does not demonstrate understanding of any challenges to systems that affect oral healthcare delivery Does not demonstrate understanding of how to work with different subsystems to deliver oral healthcare 	<p>they are related to each other</p> <ul style="list-style-type: none"> • Demonstrates understanding of some forces that influence the parts of healthcare delivery systems, but demonstrate minimal understanding of their connection to patient care • Demonstrates understanding of some challenges that can affect delivery of oral healthcare • Demonstrates some understanding of how to work with different subsystems and how they function to deliver oral healthcare, but demonstrate minimal awareness or understanding of one's own role within the oral healthcare delivery system 	<ul style="list-style-type: none"> • Demonstrates understanding of the forces that influence the components of healthcare delivery systems, and demonstrate some understanding of their influence on the quality of patient care • Demonstrates understanding of most challenges that can affect delivery of oral healthcare, but does not demonstrate complete comprehension of the effects Demonstrates basic understanding of how to work with different subsystems and how they function to deliver oral healthcare and demonstrate some understanding of one's role within the oral healthcare delivery system, but does not necessarily demonstrate application of knowledge in a manner that maximizes the quality of oral healthcare 	<p>their functions related to patient care</p> <ul style="list-style-type: none"> • Demonstrates thorough understanding of the forces that influence components of healthcare delivery systems and demonstrate full understanding of their influence and implications on the quality of patient care • Demonstrates understanding of pertinent challenges to specific aspects of healthcare delivery by demonstrating abilities to thoroughly discuss the implications for the appropriate parts of oral health care delivery systems Demonstrates excellent understanding of how to work with different subsystems involved while also demonstrating understanding of one's role within the subsystems, and demonstrate appropriate application of knowledge in a manner that maximizes the quality of oral healthcare
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<p>2.3. Health and wellness. Designs prevention, intervention, and educational strategies for individuals and communities to manage chronic disease and improve oral health and wellness</p>	<ul style="list-style-type: none"> • Does not demonstrate understanding of how the arts can be utilized to optimize patients' well-being 	<ul style="list-style-type: none"> • Demonstrates knowledge of some of the ways that the arts can be utilized to optimize patients' well-being 	<ul style="list-style-type: none"> • Demonstrates sufficient knowledge of multiple ways that the arts can be utilized to optimize patients' well-being 	<ul style="list-style-type: none"> • Demonstrates thorough knowledge of the ways that the arts can be utilized to optimize patients' well-being and creatively applies this knowledge to improve well-being and the practice and delivery of oral healthcare
<p>2.4. Population-based care. Demonstrates understanding of how population-based care influences patient-centered care and the development of practice guidelines and evidence-based best practices</p>	<ul style="list-style-type: none"> • Does not demonstrate awareness of population-based care. 	<ul style="list-style-type: none"> • Demonstrates minimal understanding of population-based care and how it influences patient-centered care • Does not demonstrate awareness of how these notions influence the development of practice guidelines 	<ul style="list-style-type: none"> • Demonstrates sufficient understanding of population-based care and how it influences patient-centered care • Demonstrates sufficient understanding of how population-based care influences the development of practice guidelines and best practices for patient care 	<ul style="list-style-type: none"> • Demonstrates superb understanding of population-based care and how it influences patient-centered care • Demonstrates superb understanding of how population-based care influences the development of practice guidelines and demonstrates knowledge of best practices for patient care

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PLO 3: Culturally Competent, Empathic Communication.

Demonstrate patient centered, empathic and culturally competent communication and interpersonal skills

Indicators	Initial	Developing	Developed	Proficient
3.1. Empathy. Demonstrates the ability to communicate with the patient empathically.	<ul style="list-style-type: none"> Does not demonstrate the ability to communicate with the patient empathically. 	<ul style="list-style-type: none"> Demonstrates some ability, but experiences lapses in the ability to communicate empathically 	<ul style="list-style-type: none"> Demonstrates the ability to communicate empathically, with few lapses. 	<ul style="list-style-type: none"> Demonstrates an advanced ability, and never experiences lapses in communicating empathically.
3.2. Cultural competence. Demonstrates the ability to engage in communication with the patient that is culturally aware and accepting.	<ul style="list-style-type: none"> Does not demonstrate communication and interactions that convey respect or concern for patients and the community. Does not demonstrate an awareness of customs, beliefs, or perspectives in diverse patients Does not demonstrate awareness of cultural and linguistic needs of patients in order to communicate health information 	<ul style="list-style-type: none"> Demonstrates communication and interactions characteristic of a minimal level of respect, and little concern for patients and the community is apparent through use of some appropriate communication, but student does not employ follow-up questions for clarification, when necessary, and student provides inappropriate detail in responses Demonstrates a minimal level of awareness of customs, beliefs, or perspectives in diverse patients Demonstrates minimal awareness of cultural and linguistic needs of patients; either does not or only attempt to adapt behaviors, but does so ineffectively, to communicate health information 	<ul style="list-style-type: none"> Demonstrates appropriate communication and interactions that are characteristic of a basic level of respect, and concern for patients and the community is apparent through use of appropriate communication, where student uses some clear, but not necessarily relevant or detailed, follow-up questions and responses Demonstrates awareness of customs and beliefs, but may not clarify with patients about personal perspectives Demonstrates awareness of the cultural and linguistic needs of diverse patients, and adapt behaviors to communicate health information, but communication 	<ul style="list-style-type: none"> Demonstrates professional communication and interactions by showing empathy, respect, and concern for patients and the community through use of appropriate communication where follow-up questions (as needed) and responses are clear, relevant, and detailed Demonstrates awareness of customs, beliefs, or perspectives in diverse patients; ask appropriate questions to clarify perspectives and perceptions in diverse patients Demonstrates full awareness of and responsiveness to cultural and linguistic needs of diverse patients by adapting behaviors appropriately in order to effectively communicate health information

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			may not be effective	
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PLO 4: Oral and Written Communication.

Demonstrate sound oral and written communications in patient care

Indicators	Initial	Developing	Developed	Proficient
4.1. Oral communication. Demonstrate sound oral communication in patient care.	<ul style="list-style-type: none"> Does not demonstrate logical reasoning in oral communications in patient care. Does not demonstrate the ability to cite sound evidence that support ideas within presentations or discussions. 	<ul style="list-style-type: none"> Demonstrates some logical reasoning in oral communications in patient care but demonstrates some lapses. Demonstrates some ability to cite sound evidence that support ideas within presentations or discussions, but demonstrates some lapses. 	<ul style="list-style-type: none"> Generally demonstrates logical reasoning in oral communications in patient care. Generally demonstrates the ability to cite sound evidence that support ideas within presentations or discussions. 	<ul style="list-style-type: none"> Consistently demonstrates logical reasoning in oral communications in patient care. Consistently demonstrates the ability to cite sound evidence that support ideas within presentations or discussions.
4.2. Written communication. Demonstrate sound written communication in patient care.	<ul style="list-style-type: none"> Does not demonstrate logical reasoning in written communications in patient care. Does not demonstrate the written ability to cite sound evidence that support ideas. 	<ul style="list-style-type: none"> Demonstrates some logical reasoning in written communications in patient care but demonstrates some lapses. Demonstrates some written ability to cite sound evidence that support ideas, but demonstrates some lapses. 	<ul style="list-style-type: none"> Generally logical reasoning in written communications in patient care. Generally demonstrates the written ability to cite sound evidence that support ideas. 	<ul style="list-style-type: none"> Consistently demonstrates logical reasoning in written communications in patient care. Consistently demonstrates the written ability to cite sound evidence that support ideas.

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PLO 5: Critical Thinking.

Utilize critical thinking, problem solving skills and systemic thinking in assessing and making reasoned, evidence-based decisions in patient care

Indicators	Initial	Developing	Developed	Proficient
5.1. Problem solving. Identifies problems; explore and prioritize potential strategies; and designs, implements, and evaluates viable solutions	<ul style="list-style-type: none"> • Is not able to correctly identify the problem or issue being considered. • Does not identify appropriate resources. Includes extraneous information or inappropriate or insufficient resources. • Does not demonstrate understanding of the content of materials reviewed. Makes inappropriate inferences. • Does not evaluate possible alternatives or generates ideas that are illogical or extraneous to issue at hand. • Does not propose a solution or does not articulate decision. Does not adequately provide rationale for selected alternative or decision 	<ul style="list-style-type: none"> • Identifies the problem or issue but does not demonstrate awareness of all the factors associated with the problem or issues that impact decision making. • Identifies a few, but not all, resources needed for decision making. • Demonstrates ability to interpret some information and data but not all. • Does not fully or effectively evaluate alternative solutions. • Proposes a decision with many apparent weaknesses (i.e., not feasible, lack of regard for consequences, lack of supporting evidence, illogical, irrelevant to issue at hand, etc.). Provides rationale for selected alternative or decision but does not build a solid position with supporting evidence. Is unable to defend decision or course of action. 	<ul style="list-style-type: none"> • Correctly identifies problem or issue being considered and demonstrates adequate awareness of the factors associated with this problem or issue that impact decision making. • Identifies most of the resources needed. • Demonstrates ability to interpret most information and data. • Considers and evaluates possible solutions in a way that generally leads to a logical decision or course of action. • Proposes a solution that does not contain apparent weaknesses that may or may not be the obvious clear choice. Solutions chosen demonstrate consideration of most of the strengths, weaknesses, feasibility, effects, consequences, relevance, etc.). Provides rationale for selected alternative or decision which includes some solid supporting 	<ul style="list-style-type: none"> • Consistently correctly identifies the problem or issue being considered and all of the primary factors associated with this problem or issue that impact decision making. Articulates the importance of these factors. • Identifies all appropriate resources. • Demonstrates ability to correctly interpret information and data needed for appropriate decision making. Demonstrates awareness of importance of these data in decision-making process. • Considers and evaluates possible solutions effectively and thoroughly. Evaluation leads to sound, logical, and “best” decision or course of action. • Proposes a solution that is entirely appropriate to the situation at hand. Solutions chosen demonstrate consideration of all of the important

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			evidence. Is able to defend decision or course of action at a basic level.	and relevant strengths, weaknesses, feasibility, effects, consequences, etc.). Provides rationale for selected alternative or decision and builds a solid position with appropriate and relevant supporting evidence. Effectively defends decision or course of action.
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PLO 6: Ethics and Professionalism.

Demonstrating professionalism and ethical decision making

Indicators	Initial	Developing	Developed	Proficient
6.1. Professionalism. Demonstrates behaviors and values that are consistent with the trust given to the profession by patients, other healthcare providers, and society	<ul style="list-style-type: none"> • Does not consistently demonstrate professional attitudes and behaviors (altruism, excellence, duty, accountability, honesty, and integrity) • Demonstrates frequent lapses in accountability or quality of work 	<ul style="list-style-type: none"> • Demonstrates some professional attitudes and behaviors yet there is inconsistency that may impede on the quality of work or treatment of patients and other healthcare team members (altruism, excellence, duty, accountability, honesty, and integrity) 	<ul style="list-style-type: none"> • Generally demonstrates most of the professional attitudes and behaviors (altruism, excellence, duty, accountability, honesty, and integrity) that are required in the profession • Demonstrates ability to use these behaviors and values to improve healthcare 	<ul style="list-style-type: none"> • Consistently demonstrates the professional attitudes and behaviors that uphold the integrity and competence of the work and the treatment of patients and other healthcare team professionals (altruism, excellence, duty, accountability, honesty, and integrity) • Consistently uses these behaviors and values to improve healthcare
6.2. Ethics. Demonstrates the ability to make decisions consistent with the values of practitioners and scholars of oral healthcare.	<ul style="list-style-type: none"> • Does not make ethical decisions consistent with the values of practitioners and scholars of oral healthcare. 	<ul style="list-style-type: none"> • Demonstrates the ability to exercise ethical decision making, and a rudimentary knowledge of ethics within oral healthcare. 	<ul style="list-style-type: none"> • Demonstrates the ability to exercise clear and ethical decision making, and a sufficient knowledge of ethics within oral healthcare. 	Demonstrates the ability to exercise clear and ethical decision making, and an advanced knowledge of ethics within oral healthcare.

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PLO 7: Biomedical Sciences Knowledge.

Demonstrate an understanding of the fundamentals of biomedical sciences and apply them appropriately in oral healthcare

Indicators	Initial	Developing	Developed	Proficient
7.1. Diagnostic and pharmacologic. Demonstrates the ability to describe how to deliver patient assessments, knowledge of medicines, and delivering diagnoses.	<ul style="list-style-type: none"> Does not demonstrate the ability to describe diagnostic and pharmacologic knowledge related to oral health. 	<ul style="list-style-type: none"> Demonstrates a rudimentary ability to describe diagnostic and pharmacologic knowledge related to oral health. 	<ul style="list-style-type: none"> Demonstrates a sufficient ability to describe diagnostic and pharmacologic knowledge related to oral health. 	<ul style="list-style-type: none"> Demonstrates an advanced ability to describe diagnostic and pharmacologic knowledge related to oral health.
7.2. Orofacial pain/temporomandibular/ Sleep disorder. Demonstrates the ability to describe the anatomical, physiological, and neurological basis; classification, epidemiology, and etiology; and assessments and treatments of orofacial pain, temporomandibular joint disease, and sleep disorders.	<ul style="list-style-type: none"> Does not demonstrate the ability to describe scientific or assessment knowledge related to OFP/TMJ disease and sleep disorders. 	<ul style="list-style-type: none"> Demonstrates a rudimentary ability to describe scientific or assessment knowledge related to OFP/TMJ disease and sleep disorders. 	<ul style="list-style-type: none"> Demonstrates a sufficient ability to describe scientific or assessment knowledge related to OFP/TMJ disease and sleep disorders. 	<ul style="list-style-type: none"> Demonstrates an advanced ability to describe scientific or assessment knowledge related to OFP/TMJ disease and sleep disorders.
7.3. Maxillofacial pathology Demonstrates the ability to describe the scientific aspects of head and neck diseases, as well as knowledge of assessment and diagnosis.	<ul style="list-style-type: none"> Does not demonstrate the ability to describe the scientific or assessment knowledge related to head and neck diseases. 	<ul style="list-style-type: none"> Demonstrates a rudimentary ability to describe the scientific or assessment knowledge related to head and neck diseases. 	<ul style="list-style-type: none"> Demonstrates a sufficient ability to describe the scientific or assessment knowledge related to head and neck diseases. 	<ul style="list-style-type: none"> Demonstrates an advanced ability to describe the scientific or assessment knowledge related to head and neck diseases.

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PLO 8: Practice Management.

Apply legal, regulatory, and business management concepts related to the provision of oral healthcare services

Indicators	Initial	Developing	Developed	Proficient
8.1. Legal aspects Applies legal and regulatory concepts related to the provision of oral healthcare services.	<ul style="list-style-type: none"> Does not demonstrate an understanding or the ability to apply legal and regulatory concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates a rudimentary understanding and ability to apply legal and regulatory concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates a sound understanding and ability to apply legal and regulatory concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates an advanced understanding and ability to apply legal and regulatory concepts related to the provision of oral healthcare sciences.
8.2. Business management Applies business management concepts to the provision of oral healthcare services.	<ul style="list-style-type: none"> Does not demonstrate an understanding or the ability to apply business management concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates a rudimentary understanding and ability to apply business management concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates a sound understanding and ability to apply business management concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates an advanced understanding and ability to apply business management concepts related to the provision of oral healthcare sciences.

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Appendix B

California Northstate University Institutional Learning Objectives

ILO 1: Critical thinking: Exercise reasoned judgment to assess technical information and make well-informed decisions using evidence-based approaches

ILO 2: Written communication. Demonstrate the ability to write coherent, supported, and logically structured prose

ILO 3: Oral communication: Demonstrates oral communication skills

ILO 4: Professionalism. Interact with respect, empathy, diplomacy, and cultural competence

ILO 5: Quantitative reasoning: Demonstrate ability to use mathematics and statistics in problem solving

ILO 6: Information literacy: Identify and search relevant libraries of information and databases; synthesize information obtained from primary literature using properly referenced citations

DMD Institutional Learning Outcomes (ILOs) Proficiency Rubric

ILO 1: Critical thinking: Exercise reasoned judgment to assess technical information and make well-informed decisions using evidence-based approaches

Indicator	Initial	Developing	Developed	Proficient
1.1. Demonstrates identification of problem or issues	<ul style="list-style-type: none"> Does not correctly identify the problem or issue being considered Does not demonstrate understanding of the psychological factors that contribute to current patient state 	<ul style="list-style-type: none"> Identifies the problem or issue but does not demonstrate awareness of all the factors impacting decision making Demonstrates understanding of some possible psychological factors that contribute to current patient state 	<ul style="list-style-type: none"> Correctly identifies the problem or issue but does not demonstrate awareness of all factors impacting decision making Demonstrates understanding of most psychological factors that contribute to the current patient state 	<ul style="list-style-type: none"> Correctly identifies all of the primary factors associated with problem or issue impacting decision making Demonstrates thorough understanding of all possible psychological factors that contribute to the current patient state
1.2. Demonstrates identification of resources	<ul style="list-style-type: none"> Does not identify appropriate resources 	<ul style="list-style-type: none"> Identifies a few resources needed 	<ul style="list-style-type: none"> Identifies most of the resources needed 	<ul style="list-style-type: none"> Correctly identifies all appropriate resources

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1.3. Finds and interprets data needed for critical thinking and decision making	<ul style="list-style-type: none"> Does not demonstrate understanding of the data needed for critical thinking and decision making 	<ul style="list-style-type: none"> Demonstrates ability to interpret some data but not all 	<ul style="list-style-type: none"> Demonstrates ability to interpret most data 	<ul style="list-style-type: none"> Demonstrates ability to correctly interpret data needed for decision making
1.4. Demonstrates knowledge of alternatives when evaluating for possible solutions	<ul style="list-style-type: none"> Does not evaluate possible alternatives for treatment or diagnosis 	<ul style="list-style-type: none"> Does not effectively evaluate alternative treatment or diagnostic solutions 	<ul style="list-style-type: none"> Evaluates possible treatment and diagnostic solutions leading to a logical decision 	<ul style="list-style-type: none"> Effectively and thoroughly considers and evaluates possible diagnostic and treatment solutions
1.5. Proposes and selects appropriate solutions	<ul style="list-style-type: none"> Does not propose solutions to the client's needs 	<ul style="list-style-type: none"> Proposes solutions without consideration of alternatives 	<ul style="list-style-type: none"> Solutions chosen demonstrate consideration of most of the strengths, weaknesses, and consequences of the decision 	<ul style="list-style-type: none"> Proposes solutions that are appropriate to the situation and demonstrate consideration of all relevant strengths, weaknesses, and consequences
1.6. Presents rationale for course of action	<ul style="list-style-type: none"> Does not adequately provide rationale for treatment decision 	<ul style="list-style-type: none"> Provides rationale for decision but does not integrate into mental health treatment plan 	<ul style="list-style-type: none"> Provides rationale for decision with solid supporting evidence from available psychological literature and/or case factors 	<ul style="list-style-type: none"> Provides rationale for decision and with appropriate and relevant supporting case evidence and integrates findings into treatment plan

ILO 2: Written communication. Demonstrate the ability to write coherent, supported, and logically structured prose

Indicators	Initial	Developing	Developed	Proficient
2.1. Demonstrates knowledge and awareness of intended audience	<ul style="list-style-type: none"> Does not demonstrate knowledge or awareness of audience for which the document is intended 	<ul style="list-style-type: none"> Demonstrates some ability to craft a document appropriate for its audience 	<ul style="list-style-type: none"> Demonstrates ability to craft a document appropriate for its audience 	<ul style="list-style-type: none"> Consistently demonstrates ability to craft documents appropriate for the audience
2.2. Demonstrates clear and logical thought	<ul style="list-style-type: none"> Does not demonstrate clear or logical thought in their documentation 	<ul style="list-style-type: none"> Writing does not sufficiently conceptualize case variables or analyze subject under discussion 	<ul style="list-style-type: none"> Demonstrates general clear or logical thought in their documentation 	<ul style="list-style-type: none"> Research and clinical documentation demonstrates clear and focused thinking
2.3. Demonstrates support for and development of ideas	<ul style="list-style-type: none"> Does not explain or develop ideas 	<ul style="list-style-type: none"> Demonstrates minimal support for ideas 	<ul style="list-style-type: none"> Writing contains examples that generally support ideas 	<ul style="list-style-type: none"> Supports ideas with relevant, clear, impactful examples

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2.4. Demonstrates appropriate use of evidence to support arguments	<ul style="list-style-type: none"> • Demonstrates an attempt to use proper citations to support ideas 	<ul style="list-style-type: none"> • Uses credible and relevant sources to support ideas appropriate in the study of psychology 	<ul style="list-style-type: none"> • Consistently uses credible and relevant sources to support ideas 	<ul style="list-style-type: none"> • Demonstrates skillful use of credible and relevant sources to develop and support ideas
2.5. Demonstrates appropriate use of language, syntax, and mechanics	<ul style="list-style-type: none"> • Has excessive or severe errors in language usage 	<ul style="list-style-type: none"> • Generally conveys meaning to readers with clarity, though writing may include some errors 	<ul style="list-style-type: none"> • Language conveys meaning to readers and writing contains very few errors 	<ul style="list-style-type: none"> • Uses language effectively and skillfully to communicate meaning to readers

ILO 3: Oral communication: Demonstrates oral communication skills

Indicators	Initial	Developing	Developed	Proficient
3.1. Demonstrates knowledge and awareness of intended audience	<ul style="list-style-type: none"> • Does not demonstrate knowledge or awareness of audience for which the communication is intended 	<ul style="list-style-type: none"> • Demonstrates some ability to communicate in a manner appropriate to the audience 	<ul style="list-style-type: none"> • Demonstrates ability to communicate appropriate to the audience 	<ul style="list-style-type: none"> • Consistently demonstrates ability to communicate in a manner appropriate to the audience
3.2. Demonstrates clear and logical thought	<ul style="list-style-type: none"> • Does not demonstrate clear or logical thought in their communication 	<ul style="list-style-type: none"> • Communication does not sufficiently conceptualize case variables or analyze subject under discussion 	<ul style="list-style-type: none"> • Demonstrates general clear or logical thought in their communication 	<ul style="list-style-type: none"> • Communication demonstrates clear and focused thinking
3.3. Demonstrates effective use of language in their communication	<ul style="list-style-type: none"> • Does not know professional psychological language or uses jargon • Does not know the proper technical language regarding mental health treatment 	<ul style="list-style-type: none"> • Demonstrates inaccurate use of psychological language or uses jargon in professional communications • Utilizes scientific language that is incomprehensible to patients 	<ul style="list-style-type: none"> • Demonstrates appropriate use of professional language and minimal jargon • Utilizes generalized language to interact with patients 	<ul style="list-style-type: none"> • Demonstrates use of appropriate, professional language • Utilizes generalized language to interact with patients
3.4. Demonstrates appropriate active listening techniques when addressing questions	<ul style="list-style-type: none"> • Does not acknowledge other viewpoints • Has great difficulty answering questions 	<ul style="list-style-type: none"> • Demonstrates little attempt to recognize other viewpoints • Answers are simplistic and lack intellectual depth 	<ul style="list-style-type: none"> • Recognizes other viewpoints but has difficulty incorporating them into case conceptualization • Adequately answers patient questions 	<ul style="list-style-type: none"> • Listens to questions with a consideration of alternative viewpoints • Answers questions thoughtfully referencing evidence

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3.5. Orally communicates meaning to audience	<ul style="list-style-type: none"> • Vocal delivery is too soft or too fast • Long, unintended silences and/or speech disruptions frequently distract audience • Speaker makes no attempt to engage audience 	<ul style="list-style-type: none"> • Vocal delivery is audible • Speech rate or volume disruptions occasionally distract from comprehension • Attempts to engage audience 	<ul style="list-style-type: none"> • Vocal delivery is varied and dynamic • Speech rate, volume, and tone enhance listener interest and facilitate understanding • Generally engages audience 	<ul style="list-style-type: none"> • Vocal delivery is varied and dynamic • Speech rate, volume, and tone enhance listener interest and facilitate understanding • Thoroughly engages audience
3.6. Utilizes non-verbal means to enhance message	<ul style="list-style-type: none"> • Eye contact, body language, and facial expressions are inappropriate 	<ul style="list-style-type: none"> • Eye contact, body language, and facial expressions neither enhance nor hinder oral effectiveness 	<ul style="list-style-type: none"> • Use of eye contact, body language, and facial expressions are mostly consistent with the verbal message 	<ul style="list-style-type: none"> • Use of eye contact, body language, and facial expressions that are consistent with the verbal message

ILO 4: Professionalism. Interact with respect, empathy, diplomacy, and cultural competence

Indicators	Initial	Developing	Developed	Proficient
4.1. Demonstrates professional attitudes and behaviors	<ul style="list-style-type: none"> • Does not generally demonstrate professional attitudes or behaviors expected from a dentist 	<ul style="list-style-type: none"> • Demonstrates some attitudes and behaviors that may be characteristic of a dentist 	<ul style="list-style-type: none"> • Generally demonstrates attitudes and behaviors expected from a dentist 	<ul style="list-style-type: none"> • Consistently demonstrates attitudes and behaviors expected from a dentist
4.2. Demonstrates personal responsibility and accountability	<ul style="list-style-type: none"> • Does not demonstrate personal accountability or responsibility for work completed 	<ul style="list-style-type: none"> • Demonstrates minimal personal accountability and responsibility for work completed 	<ul style="list-style-type: none"> • Demonstrates personal accountability and responsibility for the work completed 	<ul style="list-style-type: none"> • Consistently demonstrates personal accountability and responsibility for work completed
4.3. Demonstrates respectful and sensitive behaviors to the cultural and linguistic needs of diverse patients	<ul style="list-style-type: none"> • Does not demonstrate an awareness of patients' customs, beliefs, or perspectives • Does not demonstrate awareness of linguistic needs of patients 	<ul style="list-style-type: none"> • Demonstrates a minimal level of awareness of customs, beliefs, or perspectives of patients • Demonstrates minimal awareness of cultural and linguistic needs of patients 	<ul style="list-style-type: none"> • Demonstrates awareness of customs and beliefs • Demonstrates awareness of the cultural and linguistic needs of patients 	<ul style="list-style-type: none"> • Demonstrates awareness of customs, beliefs, or perspectives in patients • Demonstrates full awareness and responds to the cultural and linguistic needs of patients
4.4. Demonstrates professional demeanor	<ul style="list-style-type: none"> • Appears inattentive and impatient • Uses inappropriate body language • Dresses in attire that is inappropriate 	<ul style="list-style-type: none"> • Appears unfocused and distracted • Uses acceptable body language • Dresses in attire that is not offensive 	<ul style="list-style-type: none"> • Appears composed and focused • Uses appropriate body language • Dresses in attire that is professional 	<ul style="list-style-type: none"> • Uses articulate, tactful, and diplomatic speech • Uses professional body language • Dresses in attire that is professional, and well-suited for the environment

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ILO 5: Quantitative reasoning: Demonstrate ability to use mathematics and statistics in problem solving

Indicators	Initial	Developing	Developed	Proficient
5.1. Demonstrates ability to perform calculations and apply mathematical principles to solve problems	<ul style="list-style-type: none"> Does not demonstrate ability to apply statistical or psychometric principles 	<ul style="list-style-type: none"> Demonstrates ability to perform basic statistical calculations but does not know how to apply psychometric principles to solve problems 	<ul style="list-style-type: none"> Demonstrates ability to perform most statistical calculations accurately and to apply psychometric principles to solve problems 	<ul style="list-style-type: none"> Consistently demonstrates ability to perform statistical calculations accurately and to appropriately apply psychometric principles to solve problems
5.2. Demonstrates understanding of experimental designs and methodology	<ul style="list-style-type: none"> Displays difficulty proposing a basic experiment or research project 	<ul style="list-style-type: none"> Comprehends basic experiments designed by others 	<ul style="list-style-type: none"> Evaluates research, method, and protocol to review valid and reliable research 	<ul style="list-style-type: none"> Proposes appropriate and innovative designs to address a new hypothesis and research question
5.3. Demonstrates logical and appropriate interpretation of data	<ul style="list-style-type: none"> Demonstrates a limited ability to interpret scientific data 	<ul style="list-style-type: none"> Attempts to interpret scientific data 	<ul style="list-style-type: none"> Demonstrates the ability to interpret scientific data 	<ul style="list-style-type: none"> Interprets data in the context of current scientific knowledge
5.4. Demonstrates logical thought patterns in generating conclusions	<ul style="list-style-type: none"> Does not generate conclusions based on current scientific data and statistics 	<ul style="list-style-type: none"> Generates conclusions that may be based on current scientific data and statistics 	<ul style="list-style-type: none"> Generates conclusions using scientific and statistical data 	<ul style="list-style-type: none"> Accurately generates conclusions using appropriate scientific and mathematical data

ILO 6: Information literacy: Identify and search relevant libraries of information and databases; synthesize information obtained from primary literature using properly referenced citations

Indicators	Initial	Developing	Developed	Proficient
6.1. Demonstrates appropriate ability search and acquire resources	<ul style="list-style-type: none"> Does not identify or solicit help in obtaining external resources to support topic 	<ul style="list-style-type: none"> Identified resources may not be sufficient in quality and infrequently solicits guidance from library personnel 	<ul style="list-style-type: none"> Identifies resources appropriate for scientific inquiry and solicits guidance from library personnel 	<ul style="list-style-type: none"> Identifies a variety of relevant sources and regularly seeks guidance from library personnel
6.2. Demonstrates appropriate incorporation of references	<ul style="list-style-type: none"> Does not incorporate references 	<ul style="list-style-type: none"> Incorporates references from psychological sources that do not clearly support ideas 	<ul style="list-style-type: none"> Incorporates relevant references that generally supports ideas 	<ul style="list-style-type: none"> Incorporates relevant references from respected psychological sources
6.3. Demonstrates appropriate citation of references	<ul style="list-style-type: none"> Does not use citations 	<ul style="list-style-type: none"> Uses citations but they are not formatted in APA style 	<ul style="list-style-type: none"> Demonstrates use of appropriate citations in context 	<ul style="list-style-type: none"> Uses properly cited references and includes all necessary

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California Northstate College of Dental Medicine

Foundations of Dental Medicine Course Syllabus

Course #	Course Title	Credits	Year	Term
OMFS 511	Foundations of Dental Medicine <i>LAL</i>	3	DS 1	Fall

Credit Hour Policy

For each 15-week semester, one (1) hour of credit is assigned per hour each week of classroom or direct faculty didactic instruction (that is, per hour of lecture or student in-class time) and a minimum of two (2) hours of out-of-class student work (homework). For practicum and internship time, one (1) hour of credit is assigned per three (3) hours each week of student time spent in this activity.

Maximum Enrollment: 80

Calendar of Important Dates:

This course begins in the summer term and is the major educational component of the first year Summer term.

Date	
August 6, 2020	First day of term for all DMD 1 students
October 10, 2020	Group project selection: one for each college of 20 students
December 1, 2020	Group project groups 1 and 2
December 8, 2020	Group project groups 3 and 4
December 15, 2020	Final Exam

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Course Coordinator, Instructors and Contact Information

Michael Cadra DDS MD (course co-director)

Room:

E mail

Office hours

Leon Assael DMD (Course co-director)

Room:

E-mail: leon.assael@cnsu.edu

Office hours: Wednesdays 12:00pm-1:00pm, and 3:00pm-4:00pm (or by appointment)

Holly Jacobson BA (course administrator)

Room: xxx

E mail: holly.jacobson@cnsu.edu

Classroom LAL and Meeting Times

Room: Classroom xxxx

Time: xxxx 3 hours per week

Course description

This course will focus on introduction to the patient/doctor relationship, the role of dental medicine in health care, the scientific basis of the molecular basis, pathophysiology, diagnostic methods, and treatment modalities of major oral diseases. These are reviewed to provide the basis for case based learning in Human Studies. Examples will include congenital diseases such as cleft lip and palate, degenerative diseases such as rheumatoid arthritis, neoplastic disease such as oral squamous cancer, traumatic diseases such as facial fracture, and infectious disease such as HPV.

This course includes a review of biochemistry relevant to the medical school first and second year HS courses to match the coursework provided to the MD students in foundations of medicine. It will review the critical thinking, evidence based medicine, research modalities and analysis of scientific literature to apply in clinical education and practice

Prerequisite Courses

None

Prerequisite Knowledge

None

Required Textbook(s) and Material(s)

19. *Medical Biochemistry*, Baynes and Dominiczak, 4th Ed, Elsevier 2014
20. *The CONSORT Statement*, www.consort-statement.org
21. *The PRISMA Statement*. www.prisma-statement.org
22. *The STROBE statement*, www.strobe-statement.org

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Technology

1. Computer-assisted instruction (Clickers) and SCANTRON Sheets
2. Web-based course management (Canvas) and Examsoft
3. Audio/Video recordings where applicable
4. PowerPoint
5. Epic electronic health record
6. PACS, DICOM compatible imaging software
7. Dental operator

Evaluation Components

In keeping with the Team Based Learning (TBL) approach, grades will be determined as follows:

Individual Components	50%
Final Exam	50%

Group Components	50%
CCBL Participation and Project	20%
Biochemistry Boot Camp	10%
Dental Medical Skills	10%
Final Exam	50%

GRADING

All students must demonstrate minimal individual competency. Therefore, students earning less than 75% on the total Individual component score will not have team component scores added to calculate their final course grade. During the course, students who score less than 75% on individual components may be subject to periodic course content review and may receive an Academic Alert.

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In order to progress from one semester to the next, students must pass all courses with a letter a grade of C or higher and maintain a minimum cumulative grade point average (GPA) of 2.0. The breakdown for assignment of letter grades and grade points for each letter grade are as follows:

Percent	Letter Grade/Action
90.0 – 100%	A
80.0 – 89.9%	B
75.0 – 79.9%	C - Pass
60.0 – 74.9%	D – Requiring remediation (successful remediation recorded as C, unsuccessful remediation recorded as F)
Below 60.0%	F – Fail (course must be repeated)
Incomplete	I

Incomplete

During a semester, a student may not complete all required assignments and/or examinations due to extenuating circumstances, such as, but not limited to, an illness or a family emergency. In such a case, the course director may give a grade of Incomplete for the course. The course with the incomplete grade has to be completed successfully within the time frame as being defined by the student's academic plan, normally in the same academic year, otherwise a leave of absence would be required.

Core-Course Policies

All students are required to adhere to the Academic Policies that impact on student progression and conduct while attending the DMD program, including the following: Academic Progression Policy, Excused Absence Policy, Exam Policy, Course Grade Appeal Policy, Course Add/Drop Policy and Attendance Policy. Refer to the current Student Handbook for the detailed policies.

Course Specific Policies

1. Group Projects cases are to be submitted via CANVAS by 11:59pm PST on the deadline indicated. Only one group member should submit the assignment on behalf of the group. The course coordinator reserves the right to deduct points for late submission (20% of assignment grade for every 24 hours the assignment is turned in late).
Presentation of group cases requires the active participation of each team member, preferably presenting the component of the case the student was responsible for developing. The teams will each have 30 minutes for presentation which is ample time for participation of each member
2. Grade appeal for any individual assignments (including exams) should be submitted to the course coordinator in writing within 5 business days of grade release.
3. There will be no rounding of the final grade for this course.

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Topics and Schedule*(Subject to change. Updates will be posted to CANVAS and announced by email)*

All readings are in Vital Source, or as assigned and posted to CANVAS

Foundations of Dental Medicine DS1 - CDM 511 – Summer Fall 2020-21				
8/6/2018 - 9/21/2018				
Weeks	Date	Time	Title	Faculty
Week 1				
	Monday, 8/6/18	8:00 - 9:00 am	Introduction to Foundations	Assael
	Monday, 8/6/18	9:00 - 10:00 am	Body & Fluid Compartments	Yarbrough
	Monday, 8/6/18	10:00 - 12:00 pm	MANDATORY: CCBL Group 1	Cadra
	Monday, 8/6/18	12:00 - 1:00 pm	LUNCH	
	Monday, 8/6/18	1:00 - 3:00 pm	MANDATORY: CCBL Group 2	CADRA
	Monday, 8/6/18	3:00 - 5:00 pm	SELF STUDY	
	Tuesday, 8/7/18	8:00 - 10:00 am	Microbiota & Infectious; Agents: Biology & Ways of Life	El-Sawi
	Tuesday, 8/7/18	10:00 - 12:00 pm	Enzyme Function & Kinetics	Krig
	Tuesday, 8/7/18	12:00 - 1:00 pm	LUNCH	
	Tuesday, 8/7/18	1:00 - 2:00 pm	Introduction to Histology	Ramsamooj
	Tuesday, 8/7/18	2:00 - 4:00 pm	BIOCHEM BOOTCAMP	
	Tuesday, 8/7/18	4:00 - 5:00 pm	SELF STUDY	
	Wednesday, 8/8/18	8:00 - 10:00 am	Masters Colloquium	
	Wednesday, 8/8/18	10:00 - 12:00 pm	MANDATORY: CCBL Group 1	Ely
	Wednesday, 8/8/18	12:00 - 1:00 pm	LUNCH	
	Wednesday, 8/8/18	1:00 - 3:00 pm	MANDATORY: CCBL Group 2	Ely
	Wednesday, 8/8/18	3:00 - 5:00 pm	SELF STUDY	
	Thursday, 8/9/18	8:00 - 10:00 am	Cell Growth & Communication	Krig
	Thursday, 8/9/18	10:00 - 12:00 pm	Dental/Medical Skills Group A / Self Study	
	Thursday, 8/9/18	12:00 - 1:00 pm	LUNCH	
	Thursday, 8/9/18	1:00 - 3:00 pm	DentalMedical Skills Group B / Self Study	

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	Thursday, 8/9/18	3:00 - 5:00 pm	Dental/Medical Skills Group C / Self Study	
	Friday, 8/10/18	8:00 - 10:00 am	Introduction to Pharmacokinetics	Gerriets
	Friday, 8/10/18	10:00 - 12:00 pm	MANDATORY: CCBL Group 1	Ely
	Friday, 8/10/18	12:00 - 1:00 pm	LUNCH	
	Friday, 8/10/18	1:00 - 3:00 pm	MANDATORY: CCBL Group 2	Ely
	Friday, 8/10/18	3:00 - 4:00 pm	SELF STUDY	
	Friday, 8/10/18	4:00 - 5:00 pm	Release of CCBL Genetics Learning Objectives & Bradbury slides set(s)	
Week 2				
	Monday, 8/13/18	8:00 - 10:00 am	Introduction to Pharmacodynamics	Gerriets
	Monday, 8/13/18	10:00 - 12:00 pm	MANDATORY: CCBL Group 3	Ely
	Monday, 8/13/18	12:00 - 1:00 pm	LUNCH	
	Monday, 8/13/18	1:00 - 3:00 pm	MANDATORY: CCBL Group 4	Ely
	Monday, 8/13/18	3:00 - 5:00 pm	SELF STUDY	
	Tuesday, 8/14/18	8:00 - 10:00 am	MANDATORY FORMATIVE EXAM	Ely
	Tuesday, 8/14/18	10:00 - 11:00 am	Drug-Patient Factors	Gerriets
	Tuesday, 8/14/18	11:00 - 12:00 pm	Human Immune Response Overview	Ely
	Tuesday, 8/14/18	12:00 - 1:00 pm	LUNCH	
	Tuesday, 8/14/18	1:00 - 2:00 pm	Cellular Adaptation & Inflammation	Ramsamooj
	Tuesday, 8/14/18	2:00 - 4:00 pm	BIOCHEM BOOTCAMP	
	Tuesday, 8/14/18	4:00 - 5:00 pm	SELF STUDY	
	Wednesday, 8/15/18	8:00 - 10:00 am	Masters Colloquium	
	Wednesday, 8/15/18	10:00 - 12:00 pm	MANDATORY: CCBL Group 3	Ely
	Wednesday, 8/15/18	12:00 - 1:00 pm	LUNCH	
	Wednesday, 8/15/18	1:00 - 3:00 pm	MANDATORY: CCBL Group 4	Ely
	Wednesday, 8/15/18	3:00 - 5:00 pm	SELF STUDY	
	Thursday, 8/16/18	8:00 - 9:00 am	Pharmacogenomics	Gerriets
	Thursday, 8/16/18	9:00 - 10:00 am	Innate Immune Response	Ely
	Thursday, 8/16/18	10:00 - 12:00 pm	Dental/Medical Skills - Group C / MANDATORY: Biostatistics LAB Group A	MS / Puglisi & Jialal - IDL Lab
	Thursday, 8/16/18	12:00 - 1:00 pm	LUNCH	
	Thursday, 8/16/18	1:00 - 3:00 pm	Dental/Medical Skills - Group A / MANDATORY: Biostatistics LAB Group B	MS / Puglisi & Jialal - IDL Lab
	Thursday, 8/16/18	3:00 - 5:00 pm	Dental/Medical Skills - Group B / MANDATORY: Biostatistics LAB Group C	MS / Puglisi & Jialal - IDL Lab

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	Friday, 8/17/18	8:00 - 10:00 am	MANDATORY: Complement Workshop	Ely
	Friday, 8/17/18	10:00 - 12:00 pm	MANDATORY: CCBL Group 3	Ely
	Friday, 8/17/18	12:00 - 1:00 pm	LUNCH	
	Friday, 8/17/18	1:00 - 3:00 pm	MANDATORY: CCBL Group 4	Ely
	Friday, 8/17/18	3:00 - 4:00 pm	SELF STUDY	
	Friday, 8/17/18	4:00 - 5:00 pm	Release of CCBL Genetics Learning Objectives & Bradbury slides set(s)	
Week 3				
	Monday, 8/20/18	8:00 - 10:00 am	Carbohydrate Metabolism	Gerriets
	Monday, 8/20/18	10:00 - 12:00 pm	MANDATORY: CCBL Group 5	
	Monday, 8/20/18	12:00 - 1:00 pm	LUNCH	
	Monday, 8/20/18	1:00 - 3:00 pm	MANDATORY: CCBL Group 6	
	Monday, 8/20/18	3:00 - 5:00 pm	SELF STUDY	
	Tuesday, 8/21/18	8:00 - 10:00 am	MANDATORY: Mid Exam Part A	
	Tuesday, 8/21/18	10:00 - 12:00 pm	MANDATORY: Team Test Groups 6-10	
	Tuesday, 8/21/18	12:00 - 1:00 pm	LUNCH	
	Tuesday, 8/21/18	1:00 - 3:00 pm	BIOCHEM BOOTCAMP	
	Tuesday, 8/21/18	3:00 - 5:00 pm	SELF STUDY	
	Wednesday, 8/22/18	8:00 - 9:00 am	TCA Cycle & Oxidative Phosphorylation	Gerriets
	Wednesday, 8/22/18	9:00 - 10:00 am	Protein Targeting & Trafficking	Krig
	Wednesday, 8/22/18	10:00 - 12:00 pm	MANDATORY: CCBL Group 5	Ely
	Wednesday, 8/22/18	12:00 - 1:00 pm	LUNCH	
	Wednesday, 8/22/18	1:00 - 3:00 pm	MANDATORY: CCBL Group 6	Ely
	Wednesday, 8/22/18	3:00 - 5:00 pm	SELF STUDY	
	Thursday, 8/23/18	8:00 - 9:00 am	Lipid Metabolism Overview	Krig
	Thursday, 8/23/18	9:00 - 10:00 am	Antigen Presentation	Ely
	Thursday, 8/23/18	10:00 - 12:00 pm	Dental/Medical Skills - Group B / Self Study	
	Thursday, 8/23/18	12:00 - 1:00 pm	LUNCH	
	Thursday, 8/23/18	1:00 - 3:00 pm	Medical Skills - Group C / Self Study	
	Thursday, 8/23/18	3:00 - 5:00 pm	Medical Skills - Group A / Self Study	
	Friday, 8/24/18	8:00 - 9:00 am	Cholesterol Metabolism & Transport	Krig
	Friday, 8/24/18	9:00 - 10:00 am	Antigen Receptors & V(D)J Recombination	Ely

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	Friday, 8/24/18	10:00 - 12:00 pm	<u>MANDATORY</u>: CCBL Group 5	Ely
	Friday, 8/24/18	12:00 - 1:00 pm	LUNCH	
	Friday, 8/24/18	1:00 - 3:00 pm	<u>MANDATORY</u>: CCBL Group 6	Ely
	Friday, 8/24/18	3:00 - 4:00 pm	SELF STUDY	
	Friday, 8/24/18	4:00 - 5:00 pm	Release of CCBL Genetics Learning Objectives & Bradbury slides set(s)	
Week 4				
	Monday, 8/27/18	8:00 - 9:00 am	Introduction to Embryology & Gametogenesis	Vanguri
	Monday, 8/27/18	9:00 - 10:00 am	Introduction to Bacteriology, Part 1	El-Sawi
	Monday, 8/27/18	10:00 - 12:00 pm	<u>MANDATORY</u>: CCBL Group 7	Ely
	Monday, 8/27/18	12:00 - 1:00 pm	LUNCH	
	Monday, 8/27/18	1:00 - 3:00 pm	<u>MANDATORY</u>: CCBL Group 8	Ely
	Monday, 8/27/18	3:00 - 5:00 pm	SELF STUDY	
	Tuesday, 8/28/18	8:00 - 9:00 am	Embryology: Fertilization, Cleavage, Early Implantation	Vanguri
	Tuesday, 8/28/18	9:00 - 10:00 am	Introduction to Bacteriology, Part 2	El-sawi
	Tuesday, 8/28/18	10:00 - 12:00 pm	T-Cell Development & Function	Ely
	Tuesday, 8/28/18	12:00 - 1:00 pm	LUNCH	
	Tuesday, 8/28/18	1:00 - 2:00 pm	Reversible/Irreversible Cell Injury, Apoptosis & Necrosis	Al-eyd
	Tuesday, 8/28/18	2:00 - 4:00 pm	BIOCHEM BOOTCAMP	
	Tuesday, 8/28/18	4:00 - 5:00 pm	SELF STUDY	
	Wednesday, 8/29/18	8:00 - 10:00 am	Masters Colloquium	
	Wednesday, 8/29/18	10:00 - 12:00 pm	<u>MANDATORY</u>: CCBL Group 7	Ely
	Wednesday, 8/29/18	12:00 - 1:00 pm	LUNCH	
	Wednesday, 8/29/18	1:00 - 3:00 pm	<u>MANDATORY</u>: CCBL Group 8	Ely
	Wednesday, 8/29/18	3:00 - 5:00 pm	SELF STUDY	
	Thursday, 8/30/18	8:00 - 10:00 am	B-cells: Development & Function	Ely
	Thursday, 8/30/18	10:00 - 12:00 pm	Medical Skills - Group A / Self Study	
	Thursday, 8/30/18	12:00 - 1:00 pm	LUNCH	
	Thursday, 8/30/18	1:00 - 3:00 pm	Medical Skills - Group B / Self Study	
	Thursday, 8/30/18	3:00 - 5:00 pm	Medical Skills - Group C / Self Study	
	Friday, 8/31/18	8:00 - 9:00 am	Introduction to Antibiotics	Gerriets

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	Friday, 8/31/18	9:00 - 10:00 am	Embryology: Germ Layer Formation	Vanguri
	Friday, 8/31/18	10:00 - 12:00 pm	MANDATORY: CCBL Group 7	Ely
	Friday, 8/31/18	12:00 - 1:00 pm	LUNCH	
	Friday, 8/31/18	1:00 - 3:00 pm	MANDATORY: CCBL Group 8	Ely
	Friday, 8/31/18	3:00 - 4:00 pm	SELF STUDY	
	Friday, 8/31/18	4:00 - 5:00 pm	Release of CCBL Genetics Learning Objectives & Bradbury slides set(s)	

Week 5				
	Monday, 9/3/17	HOLIDAY - Labor Day		
	Tuesday, 9/4/18	8:00 - 10:00 am	MANDATORY: Mid Exam Part B	
	Tuesday, 9/4/18	10:00 - 12:00 pm	MANDATORY: Team Test Groups 1-5	
	Tuesday, 9/4/18	12:00 - 1:00 pm	LUNCH	
	Tuesday, 9/4/18	1:00 - 3:00 pm	BIOCHEM BOOTCAMP	
	Tuesday, 9/4/18	3:00 - 5:00 pm	SELF STUDY	
	Wednesday, 9/5/18	8:00 - 9:00 am	Clinical Presentation: Well Visits	Glaser
	Wednesday, 9/5/18	9:00 - 12:00 pm	MANDATORY WORKSHOP: Introduction to the Autonomic Nervous System & Autonomic Pharmacology	Yarbrough & Gerriets
	Wednesday, 9/5/18	12:00 - 1:00 pm	LUNCH	
	Wednesday, 9/5/18	1:00 - 2:00 pm	Neoplasia	Hejazi
	Wednesday, 9/5/18	2:00 - 5:00 pm	SELF STUDY	
	Thursday, 9/6/18	8:00 - 9:00 am	Introduction to Vaccines	Ely
	Thursday, 9/6/18	9:00 - 10:00 am	Physiological Control of Temperature	Yarbrough
	Thursday, 9/6/18	10:00 - 12:00 pm	Dental/Medical Skills - Group C / MANDATORY: Biostatistics LAB Group B	Puglisi & Jialal / IDL Lab
	Thursday, 9/6/18	12:00 - 1:00 pm	LUNCH	
	Thursday, 9/6/18	1:00 - 3:00 pm	Dental/Medical Skills - Group A / MANDATORY: Biostatistics LAB Group C	Puglisi & Jialal / IDL Lab
	Thursday, 9/6/18	3:00 - 5:00 pm	Dental/Medical Skills - Group B / MANDATORY: Biostatistics LAB Group A	Puglisi & Jialal / IDL Lab
	Friday, 9/7/18	8:00 - 10:00 am	Introduction to Virology	El-Sawi
	Friday, 9/7/18	10:00 - 12:00 pm	MANDATORY: Clinical Cases	Glaser
	Friday, 9/7/18	12:00 - 1:00 pm	LUNCH	
	Friday, 9/7/18	1:00 - 5:00 pm	SELF STUDY	
Week 6				

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	Monday, 9/10/18	8:00 - 10:00 am	Introduction to Mycology & Parasitology	El-Sawi
	Monday, 9/10/18	10:00 - 12:00 pm	MANDATORY: CCBL Group 9	Ely
	Monday, 9/10/18	12:00 - 1:00 pm	LUNCH	
	Monday, 9/10/18	1:00 - 3:00 pm	MANDATORY: CCBL Group 10	Ely
	Monday, 9/10/18	3:00 - 5:00 pm	SELF STUDY	
	Tuesday, 9/11/18	8:00 - 10:00 am	Pharmacokinetics & Pharmacodynamics - Wrap-up & Review	Gerriets
	Tuesday, 9/11/18	10:00 - 11:00 am	Clinical Presentation: Allergy - Hypersensitivity Reactions & Allergy	Ely
	Tuesday, 9/11/18	11:00 - 12:00 pm	Pharmacological Management of Allergic Reactions	Gerriets
	Tuesday, 9/11/18	12:00 - 1:00 pm	LUNCH	
	Tuesday, 9/11/18	1:00 - 3:00 pm	BIOCHEM BOOTCAMP	
	Tuesday, 9/11/18	3:00 - 5:00 pm	SELF STUDY	
	Wednesday, 9/12/18	8:00 - 10:00 am	MANDATORY: Masters Colloquium	
	Wednesday, 9/12/18	10:00 - 12:00 pm	MANDATORY: CCBL Group 9	Ely
	Wednesday, 9/12/18	12:00 - 1:00 pm	LUNCH	
	Wednesday, 9/12/18	1:00 - 3:00 pm	MANDATORY: CCBL Group 10	Ely
	Wednesday, 9/12/18	3:00 - 5:00 pm	SELF STUDY	
	Thursday, 9/13/18	8:00 - 10:00 am	MANDATORY - CCBL WORKSHOP: GROUPS 1-10 Presentations	
	Thursday, 9/13/18	10:00 - 12:00 pm	Dental/Medical Skills - Group B / Self Study	
	Thursday, 9/13/18	12:00 - 1:00 pm	LUNCH	
	Thursday, 9/13/18	1:00 - 3:00 pm	Dental/Medical Skills - Group C / Ask The Expert! Pathology Slam	
	Thursday, 9/13/18	3:00 - 5:00 pm	Dental/Medical Skills - Group A / Ask The Expert! Pathology Slam	
	Friday, 9/14/18	8:00 - 9:30 am	FACULTY-LED COURSE CONTENT REVIEW (excludes Pharm) GUIDANCE ON TEST COMPOSITION	
	Friday, 9/14/18	9:30 - 10:00 am	MANDATORY: COURSE EVALUATION	
	Friday, 9/14/18	10:00 - 12:00 pm	MANDATORY: CCBL Group 9	Ely
	Friday, 9/14/18	12:00 - 1:00 pm	LUNCH	
	Friday, 9/14/18	1:00 - 3:00 pm	MANDATORY: CCBL Group 10	Ely
	Friday, 9/14/18	3:00 - 4:00 pm	SELF STUDY	
	Friday, 9/14/18	4:00 - 5:00 pm	Release of CCBL Genetics Learning Objectives & Bradbury slides set(s)	
Week 7	Monday, 9/17/18	8:00 - 12:00 pm	Comprehensive Summative Exam	
EXAM				

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	Tuesday, 9/18/18	1:00 - 5:00 pm	N/A	
	Wednesday, 9/19/18	8:00 - 5:00 pm	N/A	
	Thursday, 9/20/18	8:00 - 5:00 pm	Dental/ MEDICAL SKILLS SUMMATIVE EXAM	
	Friday, 9/21/18	8:00 - 12:00 pm	Biochem review exam	

Biochemistry Bootcamp Sessions

1. Amino Acids/proteins/carbohydrates/lipids
2. Blood plasma/oxygen transport/hemostasis
3. Energy/ membranes/oxidative metabolism
4. DNA/RNA/protein synthesis
5. Absorption/transport and utilization of nutrients
6. Gene expression/proteomics

Clinical Case Based Learning: CCBL sessions (divided into 3 sessions each for 3 groups)

Development of understanding of etiopathogenesis, treatment and outcomes in case-based format in small group learning with clinician educator

- Session 1: Embryology of cleft lip and palate and other craniofacial disorders
- Session 2: Bacterial and Viral diseases of the oral cavity
- Session 3: Tumors of the head and neck

Dental/Medical Skills Lab

1. Vital signs, head and neck exam
2. Specimen collection and parenteral administration: saliva, venipuncture, IM, SC and SM injections
3. Oroscopic mucosal, endoscopic, laryngoscopy, otoscopy, ophthalmoscopy,
4. Clinical photography and digital surface scanning
5. Auscultation of the carotid, trachea heart and lungs
6. Ultrasound of the oral and maxillofacial region

Course Learning Outcomes

1. Review fundamentals of biochemistry
2. Introduce basic science underpinnings of clinical practice in preparation for systems based basic medical science HS curriculum
3. Develop initial clinical skills in oral and maxillofacial studies

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4. Apply basic science knowledge in CCBL sessions to clinical cases

Course Learning Outcomes and links to Program Learning Outcomes (Appendix A) and Institutional Learning Outcomes (Appendix B)

No.	Course Learning Outcome	DMD PLO	DMD ILO	Learning Hierarchy ^b	Assessment Method
1	Review fundamentals of biochemistry	2,3,4,7,8	1,3,4,6	1,2, 3	Biochem Exam
2	Introduce basic science underpinnings of clinical practice in preparation for systems based basic medical science HS curriculum	1,2,3,5,6,7,8	1,4,	1,2, 3	Final exam
3	Develop initial clinical skills in oral and maxillofacial studies	1,2,3,5,6,7,	1,4	1,2	Skills formative assessment in lab
4	Apply basic science knowledge in CCBL sessions to clinical cases	1,2,3,5,6,7,	1,4	2,3	Group and peer assessment

^a plo's appendix A

^b Learning Hierarchy based on Bloom's Taxonomy with 1=Memorization and/or Comprehension; 2=Application and/or Analysis; 3=Synthesis and/or Evaluation.

Teaching/ Learning Methodology

1. LAL: Lecture and active learning **CLO Rubrics**

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CLO 1: Review fundamentals of biochemistry

Indicators	Initial	Developing	Developed	Proficient
Demonstrates an understanding of the elements of biochemistry to apply in HS courses	Does not understand the elements of biochemistry to apply in HS courses.	Demonstrates rudimentary understanding of these elements	Has detailed understanding the component of biochemistry applied to human systems	Consistently demonstrates the ability to apply knowledge and skill as a dental student and can assist other students in these domains

CLO 2: Introduce basic science underpinnings of clinical practice in preparation for systems-based basic medical science HS curriculum

Indicators	Initial	Developing	Developed	Proficient
Develop an understanding of the underpinnings of basic science applied to clinical practice	Has no or limited knowledge of the basic science underpinnings of clinical practice	Begins to exhibit knowledge of these underpinnings	Is capable of applying basic science to clinical examples effectively	Consistently applies biomedical science to clinical situations utilizing innovation and analysis

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CLO 3: Develop initial clinical skills in oral and maxillofacial studies

Indicators	Initial	Developing	Developed	Proficient
Develop initial clinical skills in oral and maxillofacial studies	Has no or limited knowledge or experience with these skills	Begins to exhibit capability of applying clinical skills in practice	Is capable of applying fundamental skills in oral and maxillofacial studies to clinical diagnostic procedures	Is utilizing these skills in a integrated fashion to begin to address clinical problems

CLO 4: Apply basic science knowledge in CCBL sessions to clinical cases

Indicators	Initial	Developing	Developed	Proficient
Apply basic science knowledge to clinical cases in the CCBL format	Has no or limited ability	Begins to exhibit ability to apply basic science knowledge to a clinical question	Is capable of applying basic science to clinical examples effectively	Consistently applies biomedical science to clinical situations utilizing innovation and analysis

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Appendix A

Program Learning Outcomes (PLOs) CNU College of Dental Medicine

41. Patient-Centered Care: Demonstrate understanding of healthcare disparities and cultural awareness in patient counseling and patient advocacy
42. Evidence-Based Care: Apply current, evidence-based oral healthcare within the scope of general dentistry
43. Culturally competent, empathic communication: Demonstrate patient centered, empathic, and culturally competent communication and interpersonal skills
44. Oral and Written Communication: Demonstrate sound oral and written communications in patient care
45. Critical Thinking: Utilize critical thinking, problem solving skills and systemic thinking in assessing and making reasoned, evidence-based decisions in patient care
46. Ethics and Professionalism: Demonstrate professionalism and ethical decision making
47. Biomedical Sciences Knowledge: Demonstrate an understanding of the fundamentals of biomedical sciences and apply them appropriately in oral healthcare
48. Practice Management: Apply legal, regulatory and business management concepts related to provision of oral healthcare services

DMD Program Learning Outcomes (PLOs) Proficiency Rubric

PLO 1: Patient-Centered Care

Demonstrate understanding of healthcare disparities and cultural awareness and capability in patient counseling and providing appropriate patient advocacy

Indicators	Initial	Developing	Developed	Proficient
1.1. Education. Demonstrates ability to educate all audiences through effectively communicating information and assessing learning	<ul style="list-style-type: none"> Does not appropriately counsel patients Does not check for understanding, ask questions, and/or asks inappropriate questions. Does not demonstrate the ability to find and utilize appropriate resources and references necessary for providing accurate counseling, consultation and education 	<ul style="list-style-type: none"> Counsels patients but leaves out pertinent information needed by patient Communicates with basic level of clarity but does not always check for understanding or rephrase when confusion occurs. Demonstrates the ability to find a one or two resources, yet the resources are not the best or most appropriate for providing accurate counseling, 	<ul style="list-style-type: none"> Generally demonstrates empathy, communicates accurate information clearly, checks for understanding Seeks to ensure understanding and generally asks questions. Frequently demonstrates the ability to find and utilize appropriate resources and references necessary for providing accurate counseling, 	<ul style="list-style-type: none"> Consistently demonstrates empathy, communicates accurate information clearly, checks for understanding Ensures understanding and asks appropriate questions. Consistently demonstrates the ability to find and utilize appropriate resources and references for providing accurate patient counseling,

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		consultation and education	consultation and education	consultation and education
1.2. Patient advocacy. Represents the patient's best interests	<ul style="list-style-type: none"> Does not demonstrate the ability represent a patient's best interest 	<ul style="list-style-type: none"> Demonstrates awareness of issues that impact a patient Demonstrates minimal ability to articulate these issues but does not demonstrate ability to sufficiently advocate on a patient's behalf 	<ul style="list-style-type: none"> Demonstrates sufficient awareness of issues that impact a patient Demonstrates ability to articulate these issues Demonstrates ability to sufficiently advocate on a patient's behalf 	<ul style="list-style-type: none"> Demonstrates full awareness of the most important issues that impact a patient Demonstrates ability to clearly and effectively articulate these issues Demonstrates ability to effectively advocate on a patient's behalf

PLO 2: Evidence-Based Care.

Apply sound, current, and evidence-based oral healthcare within the scope of general dentistry

Indicators	Initial	Developing	Developed	Proficient
2.1. Patient-centered care. Demonstrates ability to provide patient-centered care as the medication expert (collect and interpret evidence, prioritize, formulate assessments and recommendations, implement, monitor and adjust plans, and document activities)	<ul style="list-style-type: none"> Does not demonstrate ability to provide patient-centered care at the medication expert level; e.g., demonstrates ability to collect but not sufficiently interpret evidence, does not prioritize, formulates basic assessments and recommendations, does not sufficiently monitor and adjust plans nor document activities. 	<ul style="list-style-type: none"> Demonstrates ability to provide patient-centered care as the medication expert in some, but not all, areas as follows: collect and interpret evidence, prioritize, formulate assessments and recommendations, implement, monitor and adjust plans, and document activities 	<ul style="list-style-type: none"> Demonstrates ability to provide patient-centered care as the medication expert (generally demonstrates ability to collect and interpret evidence, prioritize, formulate assessments and recommendations, implement, monitor and adjust plans, and document activities) 	<ul style="list-style-type: none"> Demonstrates ability to provide sufficient patient-centered care as the expert (collects and interprets evidence, prioritizes, formulates assessments and recommendations, implements, monitors and adjusts plans, and documents activities)
2.2. Systems management. Demonstrates ability to manage patient healthcare needs using human, financial, technological, and physical resources to optimize the safety	<ul style="list-style-type: none"> Does not demonstrate understanding of oral healthcare delivery systems parts Does not demonstrate understanding of the forces that influence 	<ul style="list-style-type: none"> Demonstrates understanding of some parts of oral healthcare delivery systems but does not identify how they are related to each other Demonstrates understanding of some forces that 	<ul style="list-style-type: none"> Demonstrates understanding of most major components of oral healthcare systems and their respective relationships Demonstrates understanding of the forces that influence the 	<ul style="list-style-type: none"> Demonstrates understanding of the major components of oral healthcare systems, their respective relationships, and their functions related to patient care

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and efficacy of medication use systems	<p>components of the oral healthcare delivery system, including their connection to patient care</p> <ul style="list-style-type: none"> • Does not demonstrate understanding of any challenges to systems that affect oral healthcare delivery Does not demonstrate understanding of how to work with different subsystems to deliver oral healthcare 	<p>influence the parts of healthcare delivery systems, but demonstrate minimal understanding of their connection to patient care</p> <ul style="list-style-type: none"> • Demonstrates understanding of some challenges that can affect delivery of oral healthcare • Demonstrates some understanding of how to work with different subsystems and how they function to deliver oral healthcare, but demonstrate minimal awareness or understanding of one's own role within the oral healthcare delivery system 	<p>components of healthcare delivery systems, and demonstrate some understanding of their influence on the quality of patient care</p> <ul style="list-style-type: none"> • Demonstrates understanding of most challenges that can affect delivery of oral healthcare, but does not demonstrate complete comprehension of the effects Demonstrates basic understanding of how to work with different subsystems and how they function to deliver oral healthcare and demonstrate some understanding of one's role within the oral healthcare delivery system, but does not necessarily demonstrate application of knowledge in a manner that maximizes the quality of oral healthcare 	<ul style="list-style-type: none"> • Demonstrates thorough understanding of the forces that influence components of healthcare delivery systems and demonstrate full understanding of their influence and implications on the quality of patient care • Demonstrates understanding of pertinent challenges to specific aspects of healthcare delivery by demonstrating abilities to thoroughly discuss the implications for the appropriate parts of oral health care delivery systems Demonstrates excellent understanding of how to work with different subsystems involved while also demonstrating understanding of one's role within the subsystems, and demonstrate appropriate application of knowledge in a manner that maximizes the quality of oral healthcare
2.3. Health and wellness. Designs prevention, intervention, and	<ul style="list-style-type: none"> • Does not demonstrate understanding of how the arts can be 	<ul style="list-style-type: none"> • Demonstrates knowledge of some of the ways that the arts can be utilized 	<ul style="list-style-type: none"> • Demonstrates sufficient knowledge of multiple ways that 	<ul style="list-style-type: none"> • Demonstrates thorough knowledge of the ways that the arts

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educational strategies for individuals and communities to manage chronic disease and improve oral health and wellness	utilized to optimize patients' well-being	to optimize patients' well-being	the arts can be utilized to optimize patients' well-being	can be utilized to optimize patients' well-being and creatively applies this knowledge to improve well-being and the practice and delivery of oral healthcare
2.4. Population-based care. Demonstrates understanding of how population-based care influences patient-centered care and the development of practice guidelines and evidence-based best practices	<ul style="list-style-type: none"> • Does not demonstrate awareness of population-based care. 	<ul style="list-style-type: none"> • Demonstrates minimal understanding of population-based care and how it influences patient-centered care • Does not demonstrate awareness of how these notions influence the development of practice guidelines 	<ul style="list-style-type: none"> • Demonstrates sufficient understanding of population-based care and how it influences patient-centered care • Demonstrates sufficient understanding of how population-based care influences the development of practice guidelines and best practices for patient care 	<ul style="list-style-type: none"> • Demonstrates superb understanding of population-based care and how it influences patient-centered care • Demonstrates superb understanding of how population-based care influences the development of practice guidelines and demonstrates knowledge of best practices for patient care

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PLO 3: Culturally Competent, Empathic Communication.

Demonstrate patient centered, empathic and culturally competent communication and interpersonal skills

Indicators	Initial	Developing	Developed	Proficient
3.1. Empathy. Demonstrates the ability to communicate with the patient empathically.	<ul style="list-style-type: none"> Does not demonstrate the ability to communicate with the patient empathically. 	<ul style="list-style-type: none"> Demonstrates some ability, but experiences lapses in the ability to communicate empathically 	<ul style="list-style-type: none"> Demonstrates the ability to communicate empathically, with few lapses. 	<ul style="list-style-type: none"> Demonstrates an advanced ability, and never experiences lapses in communicating empathically.
3.2. Cultural competence. Demonstrates the ability to engage in communication with the patient that is culturally aware and accepting.	<ul style="list-style-type: none"> Does not demonstrate communication and interactions that convey respect or concern for patients and the community. Does not demonstrate an awareness of customs, beliefs, or perspectives in diverse patients Does not demonstrate awareness of cultural and linguistic needs of patients in order to communicate health information 	<ul style="list-style-type: none"> Demonstrates communication and interactions characteristic of a minimal level of respect, and little concern for patients and the community is apparent through use of some appropriate communication, but student does not employ follow-up questions for clarification, when necessary, and student provides inappropriate detail in responses Demonstrates a minimal level of awareness of customs, beliefs, or perspectives in diverse patients Demonstrates minimal awareness of cultural and linguistic needs of patients; either does not or only attempt to adapt behaviors, but does so ineffectively, to communicate health information 	<ul style="list-style-type: none"> Demonstrates appropriate communication and interactions that are characteristic of a basic level of respect, and concern for patients and the community is apparent through use of appropriate communication, where student uses some clear, but not necessarily relevant or detailed, follow-up questions and responses Demonstrates awareness of customs and beliefs, but may not clarify with patients about personal perspectives Demonstrates awareness of the cultural and linguistic needs of diverse patients, and adapt behaviors to communicate health information, but communication 	<ul style="list-style-type: none"> Demonstrates professional communication and interactions by showing empathy, respect, and concern for patients and the community through use of appropriate communication where follow-up questions (as needed) and responses are clear, relevant, and detailed Demonstrates awareness of customs, beliefs, or perspectives in diverse patients; ask appropriate questions to clarify perspectives and perceptions in diverse patients Demonstrates full awareness of and responsiveness to cultural and linguistic needs of diverse patients by adapting behaviors appropriately in order to effectively communicate health information

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			may not be effective	
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PLO 4: Oral and Written Communication.

Demonstrate sound oral and written communications in patient care

Indicators	Initial	Developing	Developed	Proficient
4.1. Oral communication. Demonstrate sound oral communication in patient care.	<ul style="list-style-type: none"> Does not demonstrate logical reasoning in oral communications in patient care. Does not demonstrate the ability to cite sound evidence that support ideas within presentations or discussions. 	<ul style="list-style-type: none"> Demonstrates some logical reasoning in oral communications in patient care but demonstrates some lapses. Demonstrates some ability to cite sound evidence that support ideas within presentations or discussions, but demonstrates some lapses. 	<ul style="list-style-type: none"> Generally demonstrates logical reasoning in oral communications in patient care. Generally demonstrates the ability to cite sound evidence that support ideas within presentations or discussions. 	<ul style="list-style-type: none"> Consistently demonstrates logical reasoning in oral communications in patient care. Consistently demonstrates the ability to cite sound evidence that support ideas within presentations or discussions.
4.2. Written communication. Demonstrate sound written communication in patient care.	<ul style="list-style-type: none"> Does not demonstrate logical reasoning in written communications in patient care. Does not demonstrate the written ability to cite sound evidence that support ideas. 	<ul style="list-style-type: none"> Demonstrates some logical reasoning in written communications in patient care but demonstrates some lapses. Demonstrates some written ability to cite sound evidence that support ideas, but demonstrates some lapses. 	<ul style="list-style-type: none"> Generally logical reasoning in written communications in patient care. Generally demonstrates the written ability to cite sound evidence that support ideas. 	<ul style="list-style-type: none"> Consistently demonstrates logical reasoning in written communications in patient care. Consistently demonstrates the written ability to cite sound evidence that support ideas.

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PLO 5: Critical Thinking.

Utilize critical thinking, problem solving skills and systemic thinking in assessing and making reasoned, evidence-based decisions in patient care

Indicators	Initial	Developing	Developed	Proficient
5.1. Problem solving. Identifies problems; explore and prioritize potential strategies; and designs, implements, and evaluates viable solutions	<ul style="list-style-type: none"> • Is not able to correctly identify the problem or issue being considered. • Does not identify appropriate resources. Includes extraneous information or inappropriate or insufficient resources. • Does not demonstrate understanding of the content of materials reviewed. Makes inappropriate inferences. • Does not evaluate possible alternatives or generates ideas that are illogical or extraneous to issue at hand. • Does not propose a solution or does not articulate decision. Does not adequately provide rationale for selected alternative or decision 	<ul style="list-style-type: none"> • Identifies the problem or issue but does not demonstrate awareness of all the factors associated with the problem or issues that impact decision making. • Identifies a few, but not all, resources needed for decision making. • Demonstrates ability to interpret some information and data but not all. • Does not fully or effectively evaluate alternative solutions. • Proposes a decision with many apparent weaknesses (i.e., not feasible, lack of regard for consequences, lack of supporting evidence, illogical, irrelevant to issue at hand, etc.). Provides rationale for selected alternative or decision but does not build a solid position with supporting evidence. Is unable to defend decision or course of action. 	<ul style="list-style-type: none"> • Correctly identifies problem or issue being considered and demonstrates adequate awareness of the factors associated with this problem or issue that impact decision making. • Identifies most of the resources needed. • Demonstrates ability to interpret most information and data. • Considers and evaluates possible solutions in a way that generally leads to a logical decision or course of action. • Proposes a solution that does not contain apparent weaknesses that may or may not be the obvious clear choice. Solutions chosen demonstrate consideration of most of the strengths, weaknesses, feasibility, effects, consequences, relevance, etc.). Provides rationale for selected alternative or decision which includes some solid supporting 	<ul style="list-style-type: none"> • Consistently correctly identifies the problem or issue being considered and all of the primary factors associated with this problem or issue that impact decision making. Articulates the importance of these factors. • Identifies all appropriate resources. • Demonstrates ability to correctly interpret information and data needed for appropriate decision making. Demonstrates awareness of importance of these data in decision-making process. • Considers and evaluates possible solutions effectively and thoroughly. Evaluation leads to sound, logical, and “best” decision or course of action. • Proposes a solution that is entirely appropriate to the situation at hand. Solutions chosen demonstrate consideration of all of the important

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			evidence. Is able to defend decision or course of action at a basic level.	and relevant strengths, weaknesses, feasibility, effects, consequences, etc.). Provides rationale for selected alternative or decision and builds a solid position with appropriate and relevant supporting evidence. Effectively defends decision or course of action.
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PLO 6: Ethics and Professionalism.

Demonstrating professionalism and ethical decision making

Indicators	Initial	Developing	Developed	Proficient
6.1. Professionalism. Demonstrates behaviors and values that are consistent with the trust given to the profession by patients, other healthcare providers, and society	<ul style="list-style-type: none"> • Does not consistently demonstrate professional attitudes and behaviors (altruism, excellence, duty, accountability, honesty, and integrity) • Demonstrates frequent lapses in accountability or quality of work 	<ul style="list-style-type: none"> • Demonstrates some professional attitudes and behaviors yet there is inconsistency that may impede on the quality of work or treatment of patients and other healthcare team members (altruism, excellence, duty, accountability, honesty, and integrity) 	<ul style="list-style-type: none"> • Generally demonstrates most of the professional attitudes and behaviors (altruism, excellence, duty, accountability, honesty, and integrity) that are required in the profession • Demonstrates ability to use these behaviors and values to improve healthcare 	<ul style="list-style-type: none"> • Consistently demonstrates the professional attitudes and behaviors that uphold the integrity and competence of the work and the treatment of patients and other healthcare team professionals (altruism, excellence, duty, accountability, honesty, and integrity) • Consistently uses these behaviors and values to improve healthcare
6.2. Ethics. Demonstrates the ability to make decisions consistent with the values of practitioners and scholars of oral healthcare.	<ul style="list-style-type: none"> • Does not make ethical decisions consistent with the values of practitioners and scholars of oral healthcare. 	<ul style="list-style-type: none"> • Demonstrates the ability to exercise ethical decision making, and a rudimentary knowledge of ethics within oral healthcare. 	<ul style="list-style-type: none"> • Demonstrates the ability to exercise clear and ethical decision making, and a sufficient knowledge of ethics within oral healthcare. 	Demonstrates the ability to exercise clear and ethical decision making, and an advanced knowledge of ethics within oral healthcare.

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PLO 7: Biomedical Sciences Knowledge.

Demonstrate an understanding of the fundamentals of biomedical sciences and apply them appropriately in oral healthcare

Indicators	Initial	Developing	Developed	Proficient
7.1. Diagnostic and pharmacologic. Demonstrates the ability to describe how to deliver patient assessments, knowledge of medicines, and delivering diagnoses.	<ul style="list-style-type: none"> Does not demonstrate the ability to describe diagnostic and pharmacologic knowledge related to oral health. 	<ul style="list-style-type: none"> Demonstrates a rudimentary ability to describe diagnostic and pharmacologic knowledge related to oral health. 	<ul style="list-style-type: none"> Demonstrates a sufficient ability to describe diagnostic and pharmacologic knowledge related to oral health. 	<ul style="list-style-type: none"> Demonstrates an advanced ability to describe diagnostic and pharmacologic knowledge related to oral health.
7.2. Orofacial pain/temporomandibular/ Sleep disorder. Demonstrates the ability to describe the anatomical, physiological, and neurological basis; classification, epidemiology, and etiology; and assessments and treatments of orofacial pain, temporomandibular joint disease, and sleep disorders.	<ul style="list-style-type: none"> Does not demonstrate the ability to describe scientific or assessment knowledge related to OFP/TMJ disease and sleep disorders. 	<ul style="list-style-type: none"> Demonstrates a rudimentary ability to describe scientific or assessment knowledge related to OFP/TMJ disease and sleep disorders. 	<ul style="list-style-type: none"> Demonstrates a sufficient ability to describe scientific or assessment knowledge related to OFP/TMJ disease and sleep disorders. 	<ul style="list-style-type: none"> Demonstrates an advanced ability to describe scientific or assessment knowledge related to OFP/TMJ disease and sleep disorders.
7.3. Maxillofacial pathology Demonstrates the ability to describe the scientific aspects of head and neck diseases, as well as knowledge of assessment and diagnosis.	<ul style="list-style-type: none"> Does not demonstrate the ability to describe the scientific or assessment knowledge related to head and neck diseases. 	<ul style="list-style-type: none"> Demonstrates a rudimentary ability to describe the scientific or assessment knowledge related to head and neck diseases. 	<ul style="list-style-type: none"> Demonstrates a sufficient ability to describe the scientific or assessment knowledge related to head and neck diseases. 	<ul style="list-style-type: none"> Demonstrates an advanced ability to describe the scientific or assessment knowledge related to head and neck diseases.

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PLO 8: Practice Management.

Apply legal, regulatory, and business management concepts related to the provision of oral healthcare services

Indicators	Initial	Developing	Developed	Proficient
8.1. Legal aspects Applies legal and regulatory concepts related to the provision of oral healthcare services.	<ul style="list-style-type: none"> Does not demonstrate an understanding or the ability to apply legal and regulatory concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates a rudimentary understanding and ability to apply legal and regulatory concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates a sound understanding and ability to apply legal and regulatory concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates an advanced understanding and ability to apply legal and regulatory concepts related to the provision of oral healthcare sciences.
8.2. Business management Applies business management concepts to the provision of oral healthcare services.	<ul style="list-style-type: none"> Does not demonstrate an understanding or the ability to apply business management concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates a rudimentary understanding and ability to apply business management concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates a sound understanding and ability to apply business management concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates an advanced understanding and ability to apply business management concepts related to the provision of oral healthcare sciences.

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Appendix B

California Northstate University Institutional Learning Objectives

ILO 1: Critical thinking: Exercise reasoned judgment to assess technical information and make well-informed decisions using evidence-based approaches

ILO 2: Written communication. Demonstrate the ability to write coherent, supported, and logically structured prose

ILO 3: Oral communication: Demonstrates oral communication skills

ILO 4: Professionalism. Interact with respect, empathy, diplomacy, and cultural competence

ILO 5: Quantitative reasoning: Demonstrate ability to use mathematics and statistics in problem solving

ILO 6: Information literacy: Identify and search relevant libraries of information and databases; synthesize information obtained from primary literature using properly referenced citations

DMD Institutional Learning Outcomes (ILOs) Proficiency Rubric

ILO 1: Critical thinking: Exercise reasoned judgment to assess technical information and make well-informed decisions using evidence-based approaches

Indicator	Initial	Developing	Developed	Proficient
1.1. Demonstrates identification of problem or issues	<ul style="list-style-type: none"> Does not correctly identify the problem or issue being considered Does not demonstrate understanding of the psychological factors that contribute to current patient state 	<ul style="list-style-type: none"> Identifies the problem or issue but does not demonstrate awareness of all the factors impacting decision making Demonstrates understanding of some possible psychological factors that contribute to current patient state 	<ul style="list-style-type: none"> Correctly identifies the problem or issue but does not demonstrate awareness of all factors impacting decision making Demonstrates understanding of most psychological factors that contribute to the current patient state 	<ul style="list-style-type: none"> Correctly identifies all of the primary factors associated with problem or issue impacting decision making Demonstrates thorough understanding of all possible psychological factors that contribute to the current patient state
1.2. Demonstrates identification of resources	<ul style="list-style-type: none"> Does not identify appropriate resources 	<ul style="list-style-type: none"> Identifies a few resources needed 	<ul style="list-style-type: none"> Identifies most of the resources needed 	<ul style="list-style-type: none"> Correctly identifies all appropriate resources

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1.3. Finds and interprets data needed for critical thinking and decision making	<ul style="list-style-type: none"> Does not demonstrate understanding of the data needed for critical thinking and decision making 	<ul style="list-style-type: none"> Demonstrates ability to interpret some data but not all 	<ul style="list-style-type: none"> Demonstrates ability to interpret most data 	<ul style="list-style-type: none"> Demonstrates ability to correctly interpret data needed for decision making
1.4. Demonstrates knowledge of alternatives when evaluating for possible solutions	<ul style="list-style-type: none"> Does not evaluate possible alternatives for treatment or diagnosis 	<ul style="list-style-type: none"> Does not effectively evaluate alternative treatment or diagnostic solutions 	<ul style="list-style-type: none"> Evaluates possible treatment and diagnostic solutions leading to a logical decision 	<ul style="list-style-type: none"> Effectively and thoroughly considers and evaluates possible diagnostic and treatment solutions
1.5. Proposes and selects appropriate solutions	<ul style="list-style-type: none"> Does not propose solutions to the client's needs 	<ul style="list-style-type: none"> Proposes solutions without consideration of alternatives 	<ul style="list-style-type: none"> Solutions chosen demonstrate consideration of most of the strengths, weaknesses, and consequences of the decision 	<ul style="list-style-type: none"> Proposes solutions that are appropriate to the situation and demonstrate consideration of all relevant strengths, weaknesses, and consequences
1.6. Presents rationale for course of action	<ul style="list-style-type: none"> Does not adequately provide rationale for treatment decision 	<ul style="list-style-type: none"> Provides rationale for decision but does not integrate into mental health treatment plan 	<ul style="list-style-type: none"> Provides rationale for decision with solid supporting evidence from available psychological literature and/or case factors 	<ul style="list-style-type: none"> Provides rationale for decision and with appropriate and relevant supporting case evidence and integrates findings into treatment plan

ILO 2: Written communication. Demonstrate the ability to write coherent, supported, and logically structured prose

Indicators	Initial	Developing	Developed	Proficient
2.1. Demonstrates knowledge and awareness of intended audience	<ul style="list-style-type: none"> Does not demonstrate knowledge or awareness of audience for which the document is intended 	<ul style="list-style-type: none"> Demonstrates some ability to craft a document appropriate for its audience 	<ul style="list-style-type: none"> Demonstrates ability to craft a document appropriate for its audience 	<ul style="list-style-type: none"> Consistently demonstrates ability to craft documents appropriate for the audience
2.2. Demonstrates clear and logical thought	<ul style="list-style-type: none"> Does not demonstrate clear or logical thought in their documentation 	<ul style="list-style-type: none"> Writing does not sufficiently conceptualize case variables or analyze subject under discussion 	<ul style="list-style-type: none"> Demonstrates general clear or logical thought in their documentation 	<ul style="list-style-type: none"> Research and clinical documentation demonstrates clear and focused thinking
2.3. Demonstrates support for and development of ideas	<ul style="list-style-type: none"> Does not explain or develop ideas 	<ul style="list-style-type: none"> Demonstrates minimal support for ideas 	<ul style="list-style-type: none"> Writing contains examples that generally support ideas 	<ul style="list-style-type: none"> Supports ideas with relevant, clear, impactful examples

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2.4. Demonstrates appropriate use of evidence to support arguments	<ul style="list-style-type: none"> • Demonstrates an attempt to use proper citations to support ideas 	<ul style="list-style-type: none"> • Uses credible and relevant sources to support ideas appropriate in the study of psychology 	<ul style="list-style-type: none"> • Consistently uses credible and relevant sources to support ideas 	<ul style="list-style-type: none"> • Demonstrates skillful use of credible and relevant sources to develop and support ideas
2.5. Demonstrates appropriate use of language, syntax, and mechanics	<ul style="list-style-type: none"> • Has excessive or severe errors in language usage 	<ul style="list-style-type: none"> • Generally conveys meaning to readers with clarity, though writing may include some errors 	<ul style="list-style-type: none"> • Language conveys meaning to readers and writing contains very few errors 	<ul style="list-style-type: none"> • Uses language effectively and skillfully to communicate meaning to readers

ILO 3: Oral communication: Demonstrates oral communication skills

Indicators	Initial	Developing	Developed	Proficient
3.1. Demonstrates knowledge and awareness of intended audience	<ul style="list-style-type: none"> • Does not demonstrate knowledge or awareness of audience for which the communication is intended 	<ul style="list-style-type: none"> • Demonstrates some ability to communicate in a manner appropriate to the audience 	<ul style="list-style-type: none"> • Demonstrates ability to communicate appropriate to the audience 	<ul style="list-style-type: none"> • Consistently demonstrates ability to communicate in a manner appropriate to the audience
3.2. Demonstrates clear and logical thought	<ul style="list-style-type: none"> • Does not demonstrate clear or logical thought in their communication 	<ul style="list-style-type: none"> • Communication does not sufficiently conceptualize case variables or analyze subject under discussion 	<ul style="list-style-type: none"> • Demonstrates general clear or logical thought in their communication 	<ul style="list-style-type: none"> • Communication demonstrates clear and focused thinking
3.3. Demonstrates effective use of language in their communication	<ul style="list-style-type: none"> • Does not know professional psychological language or uses jargon • Does not know the proper technical language regarding mental health treatment 	<ul style="list-style-type: none"> • Demonstrates inaccurate use of psychological language or uses jargon in professional communications • Utilizes scientific language that is incomprehensible to patients 	<ul style="list-style-type: none"> • Demonstrates appropriate use of professional language and minimal jargon • Utilizes generalized language to interact with patients 	<ul style="list-style-type: none"> • Demonstrates use of appropriate, professional language • Utilizes generalized language to interact with patients
3.4. Demonstrates appropriate active listening techniques when addressing questions	<ul style="list-style-type: none"> • Does not acknowledge other viewpoints • Has great difficulty answering questions 	<ul style="list-style-type: none"> • Demonstrates little attempt to recognize other viewpoints • Answers are simplistic and lack intellectual depth 	<ul style="list-style-type: none"> • Recognizes other viewpoints but has difficulty incorporating them into case conceptualization • Adequately answers patient questions 	<ul style="list-style-type: none"> • Listens to questions with a consideration of alternative viewpoints • Answers questions thoughtfully referencing evidence

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3.5. Orally communicates meaning to audience	<ul style="list-style-type: none"> • Vocal delivery is too soft or too fast • Long, unintended silences and/or speech disruptions frequently distract audience • Speaker makes no attempt to engage audience 	<ul style="list-style-type: none"> • Vocal delivery is audible • Speech rate or volume disruptions occasionally distract from comprehension • Attempts to engage audience 	<ul style="list-style-type: none"> • Vocal delivery is varied and dynamic • Speech rate, volume, and tone enhance listener interest and facilitate understanding • Generally engages audience 	<ul style="list-style-type: none"> • Vocal delivery is varied and dynamic • Speech rate, volume, and tone enhance listener interest and facilitate understanding • Thoroughly engages audience
3.6. Utilizes non-verbal means to enhance message	<ul style="list-style-type: none"> • Eye contact, body language, and facial expressions are inappropriate 	<ul style="list-style-type: none"> • Eye contact, body language, and facial expressions neither enhance nor hinder oral effectiveness 	<ul style="list-style-type: none"> • Use of eye contact, body language, and facial expressions are mostly consistent with the verbal message 	<ul style="list-style-type: none"> • Use of eye contact, body language, and facial expressions that are consistent with the verbal message

ILO 4: Professionalism. Interact with respect, empathy, diplomacy, and cultural competence

Indicators	Initial	Developing	Developed	Proficient
4.1. Demonstrates professional attitudes and behaviors	<ul style="list-style-type: none"> • Does not generally demonstrate professional attitudes or behaviors expected from a dentist 	<ul style="list-style-type: none"> • Demonstrates some attitudes and behaviors that may be characteristic of a dentist 	<ul style="list-style-type: none"> • Generally demonstrates attitudes and behaviors expected from a dentist 	<ul style="list-style-type: none"> • Consistently demonstrates attitudes and behaviors expected from a dentist
4.2. Demonstrates personal responsibility and accountability	<ul style="list-style-type: none"> • Does not demonstrate personal accountability or responsibility for work completed 	<ul style="list-style-type: none"> • Demonstrates minimal personal accountability and responsibility for work completed 	<ul style="list-style-type: none"> • Demonstrates personal accountability and responsibility for the work completed 	<ul style="list-style-type: none"> • Consistently demonstrates personal accountability and responsibility for work completed
4.3. Demonstrates respectful and sensitive behaviors to the cultural and linguistic needs of diverse patients	<ul style="list-style-type: none"> • Does not demonstrate an awareness of patients' customs, beliefs, or perspectives • Does not demonstrate awareness of linguistic needs of patients 	<ul style="list-style-type: none"> • Demonstrates a minimal level of awareness of customs, beliefs, or perspectives of patients • Demonstrates minimal awareness of cultural and linguistic needs of patients 	<ul style="list-style-type: none"> • Demonstrates awareness of customs and beliefs • Demonstrates awareness of the cultural and linguistic needs of patients 	<ul style="list-style-type: none"> • Demonstrates awareness of customs, beliefs, or perspectives in patients • Demonstrates full awareness and responds to the cultural and linguistic needs of patients
4.4. Demonstrates professional demeanor	<ul style="list-style-type: none"> • Appears inattentive and impatient • Uses inappropriate body language • Dresses in attire that is inappropriate 	<ul style="list-style-type: none"> • Appears unfocused and distracted • Uses acceptable body language • Dresses in attire that is not offensive 	<ul style="list-style-type: none"> • Appears composed and focused • Uses appropriate body language • Dresses in attire that is professional 	<ul style="list-style-type: none"> • Uses articulate, tactful, and diplomatic speech • Uses professional body language • Dresses in attire that is professional, and well-suited for the environment

ILO 5: Quantitative reasoning: Demonstrate ability to use mathematics and statistics in problem solving

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Indicators	Initial	Developing	Developed	Proficient
5.1. Demonstrates ability to perform calculations and apply mathematical principles to solve problems	<ul style="list-style-type: none"> Does not demonstrate ability to apply statistical or psychometric principles 	<ul style="list-style-type: none"> Demonstrates ability to perform basic statistical calculations but does not know how to apply psychometric principles to solve problems 	<ul style="list-style-type: none"> Demonstrates ability to perform most statistical calculations accurately and to apply psychometric principles to solve problems 	<ul style="list-style-type: none"> Consistently demonstrates ability to perform statistical calculations accurately and to appropriately apply psychometric principles to solve problems
5.2. Demonstrates understanding of experimental designs and methodology	<ul style="list-style-type: none"> Displays difficulty proposing a basic experiment or research project 	<ul style="list-style-type: none"> Comprehends basic experiments designed by others 	<ul style="list-style-type: none"> Evaluates research, method, and protocol to review valid and reliable research 	<ul style="list-style-type: none"> Proposes appropriate and innovative designs to address a new hypothesis and research question
5.3. Demonstrates logical and appropriate interpretation of data	<ul style="list-style-type: none"> Demonstrates a limited ability to interpret scientific data 	<ul style="list-style-type: none"> Attempts to interpret scientific data 	<ul style="list-style-type: none"> Demonstrates the ability to interpret scientific data 	<ul style="list-style-type: none"> Interprets data in the context of current scientific knowledge
5.4. Demonstrates logical thought patterns in generating conclusions	<ul style="list-style-type: none"> Does not generate conclusions based on current scientific data and statistics 	<ul style="list-style-type: none"> Generates conclusions that may be based on current scientific data and statistics 	<ul style="list-style-type: none"> Generates conclusions using scientific and statistical data 	<ul style="list-style-type: none"> Accurately generates conclusions using appropriate scientific and mathematical data

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ILO 6: Information literacy: Identify and search relevant libraries of information and databases; synthesize information obtained from primary literature using properly referenced citations

Indicators	Initial	Developing	Developed	Proficient
6.1. Demonstrates appropriate ability search and acquire resources	<ul style="list-style-type: none"> Does not identify or solicit help in obtaining external resources to support topic 	<ul style="list-style-type: none"> Identified resources may not be sufficient in quality and infrequently solicits guidance from library personnel 	<ul style="list-style-type: none"> Identifies resources appropriate for scientific inquiry and solicits guidance from library personnel 	<ul style="list-style-type: none"> Identifies a variety of relevant sources and regularly seeks guidance from library personnel
6.2. Demonstrates appropriate incorporation of references	<ul style="list-style-type: none"> Does not incorporate references 	<ul style="list-style-type: none"> Incorporates references from psychological sources that do not clearly support ideas 	<ul style="list-style-type: none"> Incorporates relevant references that generally supports ideas 	<ul style="list-style-type: none"> Incorporates relevant references from respected psychological sources
6.3. Demonstrates appropriate citation of references	<ul style="list-style-type: none"> Does not use citations 	<ul style="list-style-type: none"> Uses citations but they are not formatted in APA style 	<ul style="list-style-type: none"> Demonstrates use of appropriate citations in context 	<ul style="list-style-type: none"> Uses properly cited references and includes all necessary information in reference list

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Clinical Clerkship: Oral and Maxillofacial Surgery

Summative Competency Evaluation in Medically Affected Patient (ASA 2 or 3)

Exodontia for Medically Affected Patient

Course #	Course Title	Credits	Year	Term
OMFS 772	Clinical Clerkship: Oral and Maxillofacial Surgery <i>4 weeks, 30 hours per week plus call</i>	8	DS 3	Spring

Narrative: In this competency evaluation the DMD student will provide a full intake evaluation of a patient requiring exodontia with a medically affecting condition to ASA level 2 or 3. The student will provide a coherent assessment that takes into account basic medical science issues regarding the affecting systemic disease including relevant pathology, pathophysiology, pharmacology, biochemistry, behavioral and social sciences. The student will as well recommend a treatment protocol that takes into account the compromises and interventions required to produce safe care. The student will present the case unaided to the faculty member who will present additional questions relevant to the care of the patient. The student will present the plan to the patient using PARQ (explanation of procedure, alternatives, once a safe plan is presented and accepted by faculty and patient, the student will perform exodontia. Provide postoperative instructions customized to the biomedical conditions and surgical intervention. Ethics and professionalism for all activities is assessed as well.

Competent: Gains competency for the evaluated procedure

Exceptional: Earns EPR (exceptional performance review) for the CE if in 2 or more domains

Scoring Rubric

ASSESSMENT DOMAIN	Not proficient	Developing	Competent	Exceptional
Biomedical Knowledge	Unable to correlate biomedical sciences into treatment decisions	Understands basics of biomedical sciences pertinent but does not apply knowledge completely to case	Understands and applies biomedical knowledge appropriately to this case to guide treatment decisions	Uses thorough knowledge and reflection to determine all necessary aspects of concurrent care decisions and incorporates

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				biomedical knowledge into customizing current and future care to patient needs
Patient intake information	Does not contribute necessary information to guide care decisions	Partially appropriately applies intake information to guide care	appropriately applies intake information to guide care	Utilizes information from intake including biomedical aspects, cultural behavioral and social issues to customize care to patient needs
Patient presentation and informed consent	Unable to provide PARQ consent to patient or to present treatment plan and its biomedical basis to faculty	Partially able to provide PARQ consent to patient or to present treatment plan and its biomedical basis to faculty	Able to provide appropriate PARQ consent to patient or to present treatment plan and its biomedical basis to faculty	Provides exceptional humanistic and biomedically knowledgeable presentation. Provides PARQ consent in caring and complete fashion
Procedural management Local anes/ surgical performance	Unable to provide local anesthesia or to perform surgery	Incomplete local anesthesia or surgical performance requiring assistance	Able to provide local anesthesia and perform surgery in caring and competent fashion	Shows facility in psychomotor aspects of anesthesia and surgical care with high level of patient comfort and acceptance
Patient comfort Ethics and professionalism	Exhibits overt lapses in professionalism or ethics	Lack of self-awareness or communication skills give impression of deficit in professionalism or ethics	Able to provide care in a fully ethical and professional manner that achieves patient comfort and acceptance	Manages difficult clinical situation of exceptional nature with humanism and highest level of professionalism
Postoperative instructions and plan	Does not provide coherent POI and plan	Has a critical error in POI and postoperative plan	Provides all POI and plan appropriately for the patient's condition	Provides all POI and plan appropriately for the patient's condition incorporating biomedical knowledge, customized to the nature of the surgical intervention and

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				cultural/behavioral issues
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**Course Syllabus for:
College of Dental Medicine
California Northstate University**

BSS 862, clinical clerkship, community-based education

Spring DS 4, 4 weeks, 30 hours per week, 8 credits

Course Unit Value: 8 Units

Per the Credit Assignment Policy one unit of credit equals one hour of instruction for didactic courses each week per semester; for classes containing lab work such as simulation or compounding, one unit of credit is equal to two hours each week. Thus, a one unit practicum which includes a mixture of didactic and hands-on activities may range from 15 to 30 hours per semester.

Maximum Enrollment: DS 4 class, 80

Calendar of Important Dates:

May xxxx	Site selection plenary session and submission of request
May xxxx	Completion and publication of site selection match
June 1 xxxx	Beginning of first rotation (each 4 weeks for 48 weeks)
May 1`	Final reflection paper due
May xxxx	Capstone presentations to DS 3 class and faculty by site as teams

Course Coordinator, Instructors and Contact Information

Leon Assael DMD and Wai Chan DDS co-directors

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Room: Office of the Dean 9700 West Taron Drive

Phone: 916-686-7871

E-mail: leon.assael@cnsu.edu and wai.chan@cnsu.edu

Office hours: Tuesdays 1pm to 4pm, Wednesdays 8am to 9am (or by appointment)

Classroom and Meeting Times

On site at community facilities, and at 9700 W Taron Drive TBA for orientation, selection and capstone presentations

Course Description

Affiliated health systems based practices will accept CNU students into their care teams where senior students will provide clinical care under the supervision of Volunteer Community Based Faculty in those sites. Suitable transportation and housing will be arranged for where needed. The purpose of the course is to provide community engagement with the constituencies served, to gain experience in community based clinical care and to interact with the interprofessional (primary care medicine and behavioral health) and intraprofessional (dental professionals) care teams.

This course will be at a community based rotation site to elaborate on the activities of the first rotation and engage a new community and a new clinic. In addition to comprehensive care experience, the student will compare and contrast communities and clinical care entities and provide a reflective essay on their community care experience. The reflective essay (of approximately 5000 words) should be in thesis format suitable for publication and address a principle issue identified in the service community of one or more of the community clerkships. The group Capstone presentation will present on each of the clinical sites to the faculty and DS3 (following) class as well as the DS4 BSS862 class and develop the themes of the individual students in reporting in their thesis on the community issues of note.

Prerequisite Courses

Successful completion of Comprehensive Care Dentistry ODONT 761 and ODONT 762, successful completion of oral and maxillofacial surgery clinical clerkship OMFS 761 and clinical clerkship pediatric dentistry OFS 762

Prerequisite Knowledge

Understanding of oral health systems and interprofessional practice from rotations and public health coursework

Required Textbook(s) and Material(s)

Textbook of Public Health Dentistry, 3rd edition, Hiremath SE, Elsevier, 2018

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Web Links

The FQHC as described by the CMMS (Center for Medicare and Medicaid Services) of federal government

<https://www.cms.gov/Outreach-and-Education/Medicare-Learning-Network-MLN/MLNProducts/downloads/fqhcfactsheet.pdf>

Technology

1. Web conference link to CNU for seminars
2. Web-based course management - CANVAS
3. Computer-assisted assessment - Exam Soft
4. Audio/Video recordings and demonstrations where applicable

Evaluation Components

In keeping with the Team Based Learning (TBL) approach in community health with integration of volunteer community faculty with full time CNU faculty, grades will be determined as follows:

Individual Components	80%
Daily evaluations of VCF faculty	20%
Summative evaluation by clinic director at end of rotation	40%
Reflective essay CAPSTONE THESIS	20%
Team Components	20%
In-class CAPSTONE PRESENTATION	10%
Peer-Evaluation OF CAPSTONE PRESENTATION	5%
Final CAPSTONE Team Project SUBMISSION	5%

All students must demonstrate minimal individual competency. Therefore, students earning less than 70% on the total Individual component score will not have team component scores added to calculate their final course grade. During the course, students who score less than 70.0% on individual components may be subject to periodic course content review and may receive an Academic Alert.

GRADING

In order to progress from one semester to the next, students must pass all courses with a letter a grade of C or higher and maintain a minimum cumulative grade point average (GPA) of 2.0. The breakdown for assignment of letter grades and grade points for each letter grade are as follows:

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90.0-100%	A
80.0-89.9%	B
75.0-79.9%	C - Pass
60.0-74.9%	D- Requiring remediation
Below 60.0%	F - Fail
Incomplete	I

Incomplete

During a semester, a student may not complete all required assignments and/or examinations due to extenuating circumstances, such as, but not limited to, an illness or a family emergency. In such a case, the course coordinator may give a grade of Incomplete for the course. The course with the incomplete grade has to be completed successfully within the time frame as being defined by the student's academic plan.

Core-Course Policies

All students are required to adhere to the Academic Policies that impact on student progression and conduct while attending the DMD program, including the following: Academic Progression Policy, Excused Absence Policy, Exam Policy, Course Grade Appeal Policy, Course Add/Drop Policy and Attendance Policy. Refer to the current Student Handbook for the detailed policies.

Course Specific Policies

1. Grade appeal for any individual assignment (including exams) should be submitted to the course coordinator in writing within 5 business days of grade release.
2. IRAT should only be taken when the student is physically present in the class.
3. Electronic devices should not be used during TRAT.
4. There will be no rounding of final grade for this course.

Topics and Schedule

(Subject to change. Updates will be posted to CANVAS and announced by email)

On the Friday before the beginning of each rotation (every 4 weeks) a 1 hour session to review plans and expectations plus a one hours session on ethics and public health (session 1) and on the FQHC model (session 2) will be given.

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Clinical rotations are of 4 weeks regardless of academic calendar and include holiday weeks. Normal active clinical time is from 8-12 and 1-5 PM depending upon the site requirements.

Capstone presentations will be plenary in May and of 3 hours duration.

Course Learning Outcomes

No.	Learning Outcome	CNUCDM PLO Links	CNU ILO Links	Learning Hierarchy ^c	Assessment Method ^d		
1	Improve clinical care abilities to a level of proficiency in the comprehensive dental care of dental patients at all stages of life.	1,2,3,4,5,6,7,8	1,2,5,6	2-3	Daily evaluations Summative evaluations		
2	Develop a defined awareness of the health system of the rotation site and how it is a resource to the community it serves.	1,2,3,4,5,6,7,8	1,3,4,6	2, 3	Capstone thesis Capstone presentation		
3	Demonstrate a detailed understanding of the health needs of the community served by the health system entity of the community based rotation	1,2,3,4,5,6,7,8	1,4,5,6	2, 3	<table><tr><td>Daily evaluations Summative evaluations</td></tr><tr><td>Capstone thesis Capstone presentation</td></tr></table>	Daily evaluations Summative evaluations	Capstone thesis Capstone presentation
Daily evaluations Summative evaluations							
Capstone thesis Capstone presentation							
4	Uses the knowledge, skills, abilities, behaviors, and attitudes necessary to demonstrate self-awareness, to improve as a clinician and a healer.	1,2,3,4,5,6,7,8	1,2,3,4,5,6	2, 3	Peer evaluation Capstone thesis and Capstone presentation		

^c Learning Hierarchy based on Bloom's Taxonomy with 1=Memorization and/or Comprehension; 2=Application and/or Analysis; 3=Synthesis and/or Evaluation

Program Learning Outcomes (PLOs) DMD Program

49. Patient-Centered Care: Demonstrate understanding of healthcare disparities and cultural awareness in patient counseling and patient advocacy
50. Evidence-Based Care: Apply current, evidence-based oral healthcare within the scope of general dentistry
51. Culturally competent, empathic communication: Demonstrate patient centered, empathic, and culturally competent communication and interpersonal skills
52. Oral and Written Communication: Demonstrate sound oral and written communications in patient care
53. Critical Thinking: Utilize critical thinking, problem solving skills and systemic thinking in assessing and making reasoned, evidence-based decisions in patient care
54. Ethics and Professionalism: Demonstrate professionalism and ethical decision making
55. Biomedical Sciences Knowledge: Demonstrate an understanding of the fundamentals of biomedical sciences and apply them appropriately in oral healthcare

56. Practice Management: Apply legal, regulatory and business management concepts related to provision of oral healthcare services

Teaching/ Learning Methodology

1. Clinical orientation
2. Patient care
3. Daily feedback
4. Case conferences
5. Learning Activities:
 - a. Capstone thesis
 - b. Capstone presentations
 - c. Faculty summative evaluation and peer review

CLO Rubrics – BSS 862

1. Improve clinical care abilities to a level of proficiency in the comprehensive dental care of dental patients at all stages of life

Indicators	Initial	Developing	Developed	Proficient
Improves clinical care abilities in a functioning clinical setting	Demonstrates difficulty in providing comprehensive clinical dental care in a functioning clinical setting	Provides comprehensive care in some but not all components of clinical dentistry. Often requires help or referral for comprehensive care components	Demonstrates solid ability to evaluate patients and to provide all uncomplicated care within the scope of general dentistry, accurately, compassionately, in an evidence based manner and in a humanistic and culturally sensitive way	Demonstrates proficiency providing exemplary care and is practice ready in every way including direct provision of care, patient and staff management, community engagement. Has developed a professional identity in dental medicine to be positioned for success as a practicing dentist.
Proficiently delivers care to patients at all stages of life	Unable to assess or treat patients at all stages of life due to lack of experience and applied knowledge	Provides limited care to infants, toddlers and/or elderly with appropriate applied knowledge. Experience is developing	Has substantial applied knowledge and experience to provide services within the scope of general dentistry at all stages of life	Can lead the oral health care team in providing oral health care to infants, toddler, children and the elderly within the scope of general dentistry

2. Develop a defined awareness of the health system of the rotation site and how it is a resource to the community it serves.

Indicators	Initial	Developing	Developed	Proficient
Demonstrates understanding of the role of the health entity in community education and its impact on the community it serves	Does not understand the nature of either the health system, the clinical entity or the community they serve	Demonstrates developing awareness of the health system, the rotation site and the community it engages	Demonstrates understanding of the social economic and business relationships of the clinic, the health system and the community including how care is accessed and what services are available	Demonstrates cultural, sociologic, economic and political understanding of the community, the health entities/systems impacting on the community and the role of the rotation site clinic in that milieu

3. Exhibit a detailed understanding of the health needs of the community served by the health system entity of the community based rotation

Indicators	Initial	Developing	Developed	Proficient
Demonstrates clinically useful sufficient knowledge of the health needs of the community served by the clinical rotation site	Demonstrates cursory understanding of the health needs of communities at large but not specific to the community served by the health system	Demonstrates developing understanding of the community including its cultural dynamics, economic status, epidemiology of disease and relationships with health resources	Demonstrates a working understanding of the disease burden, especially the oral disease burden on the community served by the health system and the community based rotation	Synthesizes the disease status of the community with the health systems and community resources in position to address extant diseases. Demonstrates understanding of how applying resources can impact the health related quality of life in the community.

4. Uses the knowledge, skills, abilities, behaviors, and attitudes necessary to demonstrate self-awareness, to improve as a clinician and a healer.

Indicators	Initial	Developing	Developed	Proficient
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Demonstrates self-knowledge and self-awareness to overcome biases, apply behaviors that improve clinical skills and improve patient outcomes	Does not demonstrate self-awareness of their role as a student dentist, health resource, dental team leader or healer	Demonstrates a developing sense of professional identity as a dentist, demonstrating some elements of being a health educator for patients; a reliable team member, devoted to service in the healing arts	Demonstrates a sense of self efficacy as a new dentist able to be relied upon by patients for their oral health care needs, health education and advocacy, understanding the critical importance of their role.	Demonstrates ability to promulgate their self-awareness of their role to all the members of the oral health care team and to promulgate a preventive and healing model of care to patients and the community
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Appendix 2-1 Methods for Determination of Competency

Human Studies Summative Competency Assessment (HSSCA)

Each of these competencies in HS will include the assessment of the medical condition noted, apply oral health treatment planning in and evidence based way applying clinical reasoning, and demonstrating ethics, professionalism and good communication skills. The following key is used to reflect on the utilization of the requested domains for Standard 2-5 response in the table below

- 1. Clinical Procedures (CP)**
- 2. Problem Solving (PS)**
- 3. Clinical Reasoning (CR)**
- 4. Professionalism (P)**
- 5. Ethical Decision Making (EDM)**
- 6. Communication Skills (CS)**

HS SCA	Course number	Assessment Method Domains	Prerequisites	Comments And Competency Statement Numerical links
Bleeding disorder	HS 526	OSCE PS,CR,CS	Didactic material HS526	2,3,4,6,7
Leukemia	HS 526	OSCE PS,CR,CS	Didactic material HS526	2,3,4,6,7
Anemia	HS 526	OSCE PS,CR,CS	Didactic material HS526	2,3,4,6,7
Arthritis	HS511	OSCE PS,CR,CS	Didactic material HS526	2,3,4,6,7
Osteoporosis	HS511	OSCE PS,CR,CS	Didactic material HS526	2,3,4,6,7
Stroke	HS551	OSCE PS,CR,CS,EDM	Didactic material HS551	2,3,4,6,7
Parkinson's Disease	HS551	OSCE PS,CR,CS,EDM	Didactic material HS551	2,3,4,6,7

Renal failure	HS 641	OSCE PS,CR,CS	Didactic material HS641	2,3,4,6,7
Acid/base acute infection	HS 641	OSCE PS,CR,CS	Didactic material HS641	2,3,4,6,7
Chronic hepatitis	HS 621	OSCE PS,CR,CS	Didactic material HS 621	2,3,4,6,7
Type 2 diabetes	HS 671	OSCE PS,CR,CS	Didactic material HS 671	2,3,4,6,7
Hyperthyroidism	HS 671	OSCE PS,CR,CS	Didactic material HS 671	2,3,4,6,7
Poly pharmacy	HS 632	OSCE PS,CR,CS, EDM	HS 632 and other HS courses	2,3,4,6,7
Complex medical case assessment: Cardiovascular/pulmonary	HS 721	Patient based PS,CR,CS, P, EDM	Concurrent medicine seminar	2,3,4,6,7 Patient selected from student's existing patients
Complex medical case assessment: Endocrine/oncology/OB/ GI or transplant	HS 722	Patient based PS,CR,CS, P, EDM	Concurrent medicine seminar	2,3,4,6,7 Patient selected from student's existing patients
Complex medical case assessment: Interdisciplinary/ hospital based	HS 821	Patient based PS,CR,CS, P, EDM	Concurrent medicine seminar	2,3,4,6,7 Patient selected from hospital consults while on rotation
Complex medical case assessment: preanesthetic/presurgical consult	HS822	Patient based PS,CR,CS, P, EDM	Concurrent medicine seminar	2,3,4,6,7 Patient selected from preop pool evaluated by student
Complex medical case assessment: Special Needs Patient	HS 821 HS 822	Patient based PS,CR,CS, P, EDM	Concurrent medicine seminar	2,3,4,6,7 Patient selected from preop pool

				evaluated by student
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Odontology Summative and Formative Competency Assessment (OSFCA)

OSFCA	Course number	Assessment method	Prerequisites	Comments
Infection Control	Odont501	Operatory based CP, PS,CR,CS, P, EDM	Didactics and Lab on infection control	1,2,3,4,5,6,7 While comp assessment is in first year each clinical comp continues to assess
Caries risk assessment, app. CAMBRA	Odont 522	Case-based didactic exam PS,CR, P, EDM	didactics Odont 522	1,2,3,4,5,6,7
Operative Dentistry lab FORMATIVE assessment	Odont 621	Laboratory exercise X 4 (class 1,2,3,4) CP, PS, CR	Didactics and lab ODONT 621	2,3,4,5, FORMATIVE
Periodont. Lab SRP formative assessment	Odont 631	Laboratory exercise x 1 CP, PS, CR	Didactics and lab Odon 631	2,3,4,5 FORMATIVE
Periodont. Lab Surgery formative assessment	Odont632	Laboratory exercise x 1 CP, PS, CR	Didactics and lab Odon 632	2,3,4,5 FORMATIVE
Outcomes of periodontal therapy	Odont 752	Patient based CP, PS,CR,CS, P, EDM	Seminar participation	1,2,3,4,5,6,7 Patient selected from students existing patients
Integrated perio care (at least 3) perio/pros/endo/ortho/ oral medicine/ oral surgery assessment	Odont 852	Patient Based CP, PS,CR,CS, P, EDM	Seminar participation	1,2,3,4,5,6,7 Patient selected from students existing patients

Full denture laboratory	Odont 641	Laboratory exercise CP, PS,CR	Lecture and lab Odont 641	2,3,4,5 FORMATIVE
Partial denture laboratory	Odont 641	Laboratory exercise CP, PS,CR	Lecture and lab Odont 641	2,3,4,5 FORMATIVE
Indirect fixed restoration and replacement of teeth)	Odont 741	Laboratory exercise X3 (crown, FPD, CADCAM CP, PS,CR	Lecture and lab Odont 741	2,3,4,5 FORMATIVE
Dental implant placement and restoration	Odont 841	Laboratory exercise CP, PS,CR	Lecture and lab Odont 841	2,3,4,5 FORMATIVE
Endodontic therapy	Odont 532	Laboratory exercise X3 (incisor, premolar, molar) CP, PS,CR	Lecture and lab Odont 532	2,3,4,5 FORMATIVE
Intake odontologic diagnosis and treatment planning	Odont 761	Patient based CP, PS,CR,CS, P, EDM	Daily participation	1,2,3,4,5,6,7
Comprehensive caries treatment	Odont 761	Patient based including comp evaluation of all restorations, application of CAMBRA and disease control CP, PS,CR,CS, P, EDM	Daily participation in clinic and case completion	1,2,3,4,5,6,7
Demonstration of phase 1 therapy	Odont 762	Patient based CP, PS,CR,CS, P, EDM	Phase 1 therapy completed in at least 3 cases	1,2,3,4,5,6,7
Leading the dental team	Odont 861	Team based	Odont 861 for at least 8 weeks	1,2,3,4,5,6,7

		CP, PS,CR,CS, P, EDM		
Completion of phase 1 and 2 therapy	Odont 861 Or Odont 862	Patient Based CP, PS,CR,CS, P, EDM	Odont 862 for at least 8 weeks	1,2,3,4,5,6,7
Operative dentistry: class 2	Odont 861 Or Odont 862	Patient Based CP, PS,CR,CS, P, EDM	When ready per group leader assessment	1,2,3,4,5,6,7
Operative dentistry: crown	Odont 861 or Odont 862	Patient Based CP, PS,CR,CS, P, EDM	When ready per group leader assessment	1,2,3,4,5,6,7
Endodontic therapy	Odont 861 or Odont 862	Patient Based CP, PS,CR,CS, P, EDM	When ready per group leader assessment	1,2,3,4,5,6,7
Scaling and root planing	Odont 861 or Odont 862	Patient Based CP, PS,CR,CS, P, EDM	When ready per group leader assessment	1,2,3,4,5,6,7
Full denture	Odont 861 or Odont 862	Patient Based CP, PS,CR,CS, P, EDM	When ready per group leader assessment	1,2,3,4,5,6,7
Partial Denture	Odont 861 or Odont 862	Patient Based CP, PS,CR,CS, P, EDM	When ready per group leader assessment	1,2,3,4,5,6,7
Fixed partial denture (either implant or tooth supported)	Odont 861 or Odont 862	Patient Based CP, PS,CR,CS, P, EDM	When ready per group leader assessment	1,2,3,4,5,6,7
Dental implant restoration	Odont 861 or Odont 862	Patient Based CP, PS,CR,CS, P, EDM	When ready per group leader assessment	1,2,3,4,5,6,7
Dental emergencies	Odont 861 or Odont 862	Patient Based CP, PS,CR,CS, P, EDM	When ready per group leader assessment	1,2,3,4,5,6,7

**Oral and Maxillofacial Studies Summative and Formative Competency Assessment
(OMFSFSCA)**

OMFSFSCA	Course number	Assessment method	Prerequisites	Comments
Patient doctor communication	OMFS 511	OSCE CP, PS,CR,CS, P, EDM	Small group OMFS 511	1,2,3,4,5,6,7 FORMATIVE
Anatomy case presentation with clinical correlation	OMFS 532	Laboratory presentation PS, CR, CS	Anatomy lab	2,3,4,5 FORMATIVE
Local anesthesia technique	OMFS 631	Clinical demonstration on subject X 4	OMFS 631 lab	1,2,3,4,5,6,7 FORMATIVE
Nitrous oxide administration	OMFS 632	Patient based CP, PS,CR,CS, P, EDM	OMFS 632 lab	1,2,3,4,5,6,7
Radiologic examination, exposure and interpretation	OMFS 651	Patient based periapical CP, PS,CR,CS, P, EDM	OMFS 651 lab and lecture	1,2,3,4,5,6,7
Radiographic examination exposure and interpretation	OMFS 751	Patient based Panoramic and Cone Beam CT CP, PS,CR,CS, P, EDM	OMFS 751 lab and lecture	1,2,3,4,5,6,7
Oral medicine/oral pathology case presentation	OMFS 862	Patient based CP, PS,CR,CS, P, EDM	OMFS 662,762 and in OMFS 862 seminar	1,2,3,4,5,6,7 Case selected preferably from student patient of record
Exodontia	OMFS 771	Laboratory CP, PS,CR	OMFS 771 lecture and lab	1,2,3,4,5,6,7 FORMATIVE
Pediatric operative dentistry	OMFS 791	Laboratory CP, PS,CR	OMFS 791 lecture and lab	,2,3,4,5, FORMATIVE
Space maintenance	OMFS 581	Laboratory CP, PS,CR	OMFS 581 AND OMFS 791 concurrent	2,3,4,5 FORMATIVE

Exodontia simple extraction	OMFS 761	Patient based CP, PS,CR,CS, P, EDM	In OMS clerkship or Comp care clinic	1,2,3,4,5,6,7
Exodontia surgical extraction	OMFS 761	Patient based CP, PS,CR,CS, P, EDM	In OMS clerkship or Comp care clinic	1,2,3,4,5,6,7
Preprosthetic surgery	OMFS 761	Patient based CP, PS,CR,CS, P, EDM	In OMS clerkship or Comp care clinic	1,2,3,4,5,6,7
Implant placement	OMFS 761 or Odont 862	Patient based CP, PS,CR,CS, P, EDM	In OMS clerkship or Comp care clinic	1,2,3,4,5,6,7
Medical assessment for surgery	OMFS 761	Patient based CP, PS,CR,CS, P, EDM	In OMS clerkship or Comp care clinic	1,2,3,4,5,6,7
Pain and anxiety control	OMFS 761	Patient based CP, PS,CR,CS, P, EDM	In OMS clerkship or Comp care clinic	1,2,3,4,5,6,7
Head and neck exam, screening and risk assessment for head and neck cancer	OMFS 772	Patient based CP, PS, CR, CS, P, EDM	In OMS clerkship or comp care clinic	
Dental care of the child preschool	OMFS 762	Patient based CP, PS,CR,CS, P, EDM	In peds clerkship or in comp care clinic	1,2,3,4,5,6,7
Dental care of the child K-12	OMFS 762	Patient based CP, PS,CR,CS, P, EDM	In peds clerkship or in comp care clinic	1,2,3,4,5,6,7
Orthodontic Growth and development assessment	OMFS 861	Patient Based CP, PS,CR,CS, P, EDM	In orthodontic clerkship or comp care clinic	1,2,3,4,5,6,7

**Behavioral and Social Sciences Summative and Formative Competency Assessments
(BSSSFCA)**

BSSSFCA	Course number	Assessment method	Prerequisites	Comments
Student wellbeing	BSS 501	Case-based PS,CR,CS, P, EDM	none	2,3,4,5,6,7 FORMATIVE
Ethics in dental practice	BSS 521	OSCE PS,CR,CS, P, EDM	BSS 521 small group	1,2,3,4,5,6,7 FORMATIVE
Psychiatric illnesses	BSS 661	Patient based CS, PS,CR,CS, P, EDM	INBSS 661	1,2,3,4,5,6,7 Patients of record from D3, D4 teams
Practice management	BSS 821	Practice simulation PS,CR,CS, P, EDM	BSS 721 and enrolled in BSS 821	2,3,4,5,6,7
Community assessment	BSS 862	Reflective essay PS,CR,CS, P, EDM	Enrolled in BSS 862 and in senior seminar in public health	2,3,4,6,7



CALIFORNIA
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2018-2019 General Catalog





JUNE 2018 Volume 1

THE PROVISIONS OF THIS CATALOG REFLECT
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The 2018-2019 University General Catalog covers the academic year from June 1, 2018 to May 31, 2019.

University General Catalog Academic Year 2018-2019

Professional and Undergraduate Programs

College of Pharmacy
College of Medicine
College of Psychology
College of Health Sciences



**CALIFORNIA
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Appendix 2-2 CNU General Catalog

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CNU GENERAL INFORMATION

Name, Address, and Website

California Northstate University
9700 West Taron Drive
Elk Grove, CA 95757
Main Campus Telephone: 916-686-7400
Website: <http://www.cnsu.edu>

Telephone numbers for CNU colleges, offices, and departments are provided in DIRECTORY, page 177, of this catalog.

Catalog and School Performance Fact Sheet

The University General Catalog (hereinafter referred to as "Catalog") provides important information on CNU's educational programs, policies, procedures, and student services. As a prospective student, you are encouraged to review this catalog prior to signing an enrollment agreement. You are also encouraged to review the School Performance Fact Sheet, which must be provided to you prior to signing an enrollment.

This institution is required to have you sign and date the information included in the School Performance Fact Sheet relating to completion rates, placement rates, license examination passage rates, salaries or wages, and the most recent three-year cohort default rate, if applicable, prior to signing the Student Enrollment Agreement. By signing the Enrollment Agreement, the student is acknowledging that the catalog, disclosures, and information located on the website have been made available to the student to read and review.

Catalog Availability and Modification Policy

The University General Catalog is available to members of CNU community and prospective students on each College's website at www.cnsu.edu. A link to the Catalog is provided under the "About" heading near the top of the homepage. The Catalog is updated annually during the summer break and more often if necessary due to a significant change in law or University or College policy. The Catalog is subject to change without notice as CNU deems necessary and appropriate. Changes to the publication be reflected in the annual publication of the Catalog. Significant changes that occur between Catalog publications will be published in a supplement. The supplement is available on the CNU website.

Catalog Questions

Students with questions related to this catalog should contact CNU Office of the Registrar. Any questions a student may

have regarding this catalog that have not been satisfactorily answered by the institution may be directed to the Bureau for Private Postsecondary Education at:

2535 Capitol Oaks Drive, Suite 400
Sacramento, CA 95833
or
P.O. Box 980818
West Sacramento, CA 95798-0818

Website: www.bppe.ca.gov; Tel: 888 370-7589; Fax: 916-263-1897.

Notice Concerning Transferability of Credits and Credentials Earned at our Institution

The transferability of credits you earn at California Northstate University is at the complete discretion of an institution to which you may seek to transfer. Acceptance of the degree and diploma you earn in your program is also at the complete discretion of the institution to which you may seek to transfer. If the credits, degree, or diploma that you earn at this institution are not accepted at the institution to which you seek to transfer, you may be required to repeat some or all of your coursework at that institution. For this reason you should make certain that your attendance at this institution will meet your educational goals. This may include contacting an institution to which you may seek to transfer after attending California Northstate University to determine if your credits, degree, and diploma will transfer.

Solvency Statement

In accordance with the requirements of California Education Code Section 94909(a)(12),

California Northstate University (CNU) confirms that:

- CNU does not have a pending petition in bankruptcy;
- CNU is not operating as a debtor in possession;
- CNU has not filed a petition in bankruptcy within the preceding five years or beforehand;
- CNU has not had a petition in bankruptcy filed against it within the preceding five years or beforehand that resulted in reorganization under Chapter 11 of the United States Bankruptcy Code (11 U.S.C. Sec. 1101 et seq.).

CNU Colleges and Programs



CNU Elk Grove Campus

9700 West Taron Drive

Elk Grove, CA 95757

Tel: 916-686-7400

College of Medicine

- Doctor of Medicine (MD)

College of Pharmacy

- Doctor of Pharmacy (PharmD)

College of Psychology

- Doctor of Psychology (PsyD)



CNU Rancho Cordova Campus

2910 Prospect Park Drive

Rancho Cordova, CA 95670

Tel: 916-686-7300

College of Health Science

- Bachelor of Science in Health Sciences (BS)
- Pre-Medical Post-Baccalaureate (non-degree)

ABOUT THE UNIVERSITY

California Northstate University (CNU) is a new institution dedicated to educating, developing, and training individuals to provide competent, patient-centered care. The University was developed after the successful launch of the College of Pharmacy. The founders of the College of Pharmacy built a progressive program that includes active learning, direct patient experiences, and research.

As a result of several recent publications and studies which indicated the need for an increase in the number of primary care physicians trained in California, senior operations staff at the College of Pharmacy began discussions for a new medical school in the greater Sacramento area early in the spring of 2010. With recent federal health care initiatives in combination with the needs of the aging baby-boomer population, primary care physicians are seeing ever-increasing patient loads. It was also recognized that as a result of the financial crisis facing California, the State has been unable to increase the number of medical students trained within the State. CNU College of Medicine (CNUCOM) will directly help the primary care physician shortage in California.

It is the goal of the University to create life-long learners that are trained to serve the community as leaders in health care science, education, and research. With this goal in mind, senior University officials have developed a strategic plan that addresses education, partnership, and scholarship.

Much of the preliminary design of the structure of the College of Medicine and its curriculum was in place by June/July 2011. As part of this process, community leaders in medicine within the Sacramento Valley were engaged in a series of meetings to plan the outlines and address the key issues to be covered within the medical school curriculum. This core group established broad outlines of the curriculum and structure of the College of Medicine and also served as members of the Institutional Self-Study Task Force. They were visionary and demanded that this new school stress areas of training frequently ignored or understated by many medical schools. Many members brought 20-30 years of experience in direct medical practice in the highly competitive Sacramento region to provide insight on how to best train future physicians. They noted that our nation is poised to institute new schemes for providing universal health care to its citizens and, at the same time, provide care that is high quality, cost-effective, and evidence-based.

Given disparities in access to healthcare services in the U.S. and the entry of more patients into the healthcare system with the recent introduction of the Affordable Care Act, there is a widely recognized need for more healthcare workers and biomedical professionals. Likewise, strong local demand for undergraduate education in health sciences by California high school graduates necessitates the creation of additional programs in this area. These factors have combined to support the creation of a third college at CNU that will educate students qualified for admission to post-baccalaureate schools seeking to pursue health sciences careers. Thus, the creation of the College of Health Sciences' Bachelor of Science degree program aligns with CNU's mission, purpose and strategic intent, "To advance the science and art of healthcare."

Mission & Vision

University Mission: To Advance the Science and Art of Healthcare.

Our Vision: To provide innovative education and healthcare delivery systems.

Our Values:

- **Working** as a team
- **Embracing** diversity and workplace excellence
- **Caring** about our students, our staff, our faculty, and our profession
- **Advancing** our university, our goals, and our discipline
- **Responding** to challenges that may impede Mission
- **Enhancing** communication and partnership

Institutional Learning Outcomes (ILOs)

Students are expected to master the Institutional Learning Outcomes (ILOs; learning outcomes expected of every student at California Northstate University). While the approach and specific outcomes vary in each program, all program and course learning outcomes are derived from these six fundamental institutional outcomes. At graduation, the student will have mastered:

1. Critical thinking. Exercise reasoned judgement to assess technical information and make well-informed decisions using evidence-based approaches.
2. Written communication. Demonstrate the ability to write coherent, supported, and logically structured prose.
3. Oral communication. Demonstrates oral communication skills.
4. Professionalism. Interact with respect, empathy, diplomacy, and cultural competence.
5. Quantitative reasoning. Demonstrate ability to use mathematics and statistics in problem solving.
6. Information literacy. Identify and search relevant libraries of information and databases; synthesize information obtained from primary literature using properly referenced citations.

Accreditation Information

WSCUC WASC Senior College and University Commission (WSCUC)

California Northstate University is accredited by the WASC Senior College and University Commission (WSCUC), 985 Atlantic Avenue, #100, Alameda, CA 94501, Tel: 510-748-9001.

Complaints Related to Accreditation Standards (WSCUC)

Accreditation by the Accrediting Commission for Senior Colleges and Universities represents the Commission's

judgment that an institution is satisfactorily achieving its mission and educational purposes and that it meets or exceeds the Commission's standards of quality, integrity, and effectiveness.

The Commission values information provided by students, employees, and others in determining whether an institution's performance is consistent with the Standards of Accreditation and Commission policies and procedures.

The Commission has two established means for receiving comments from students, employees and members of the public about its member institutions:

1. complaints
2. third-party comments

As a general rule, complaints are written by employees and students who have grievances that draw into question the member institution's adherence to one or more Commission Accreditation Standards or Policies. Third-party comments are usually more general comments of a substantive nature about a member institution.

Individuals should review the Policy on Complaints and Third-Party Comments Policy at the WASC website to ascertain the appropriate means to communicate comments and complaints. <https://www.wascsenior.org/content/complaints-and-third-party-comment-policy>.

California Northstate University encourages students to seek internal resolution to any conflict.

Bureau for Private Postsecondary Education (BPPE)

Approval to operate as a degree-granting college in California was obtained from the Bureau for Private Postsecondary Education (BPPE) on April 15, 2007. Approval to operate means compliance with state standards as set forth in the California Education Code.

Complaints Related to BPPE Licensing Standards

A complaint may be filed by completing the BPPE Complaint Form available from the BPPE website, <https://www.bppe.ca.gov/enforcement/complaint.shtml>, or calling the Bureau's Enforcement Section at the following address and telephone number: Bureau for Private Postsecondary Education, 2535 Capitol Oaks Drive, Suite 400, Sacramento, CA 95833, Tel: 916-431-6959, FAX: 916-263-1897.

California Northstate University encourages students to seek internal resolution to any conflict.

Accreditation Council for Pharmacy Education (ACPE)

California Northstate University's Doctor of Pharmacy program is accredited by the Accreditation Council for Pharmacy Education, 135 South LaSalle Street, Suite 4100, Chicago, IL 60503, Tel: 312-664-3575; FAX 312-664-4652, website www.acpe-accredit.org.

Complaints Related to ACPE Accreditation Standards

ACPE accredited colleges of pharmacy have an obligation to respond to any written complaints by students lodged against the University, or the pharmacy program that are related to the standards and the policies and procedures of ACPE.

CNUCOP encourages students to seek internal resolution to any conflict. Complaints may also be made directly to the Associate Dean for Student Affairs and Admissions. The written complaints will be kept on file and made available for inspection at onsite ACPE evaluations. Any student who wishes to file a complaint related to ACPE standards and policies should first visit the ACPE website at <http://www.acpe.org> to access the accreditation standards and policies. If the complaint is found to be related to one or more of the ACPE standards or policies listed and has not been resolved by the College/University the student may file a complaint directly to ACPE, <http://www.acpe-accredit.org/complaints/>

Liaison Committee on Medical Education (LCME)

The U.S. Department of Education recognizes the LCME for accreditation of medical education programs leading to the M.D. degree in the United States. CNUCOM has currently reached Step 3 (preliminary accreditation) of a five (5) step accreditation process.

For more information about our accreditation progress please visit <http://medicine.cnsu.edu/about/accreditation-licensing>.

For further information on LCME: Liaison Committee on Medical Education (LCME), Association of American Medical Colleges, 2450 N Street, N.W., Washington, DC 20037 Tel: 202-828-0596, <http://www.lcme.org/>

Complaints Related to LCME Accreditation Standards

The Liaison Committee on Medical Education (LCME) is required by the U.S. Secretary of Education to require its medical programs to record and handle student complaints regarding a school's adherence to the LCME Standards. LCME must demonstrate a link between its review of complaints and its evaluation of a program in the accreditation process. Therefore, in order to demonstrate compliance with the U.S. Department of Education Criteria for Recognition, and with the prior review and advice of Department of Education personnel, LCME requires medical schools to provide an opportunity for medical students to provide comments and/or complaints about the school's adherence to LCME's Standards.

The colleges and schools of medicine accredited by LCME have an obligation to respond to any written complaints by students lodged against the college or school of medicine, or the medical program that are related to the standards and the policies and procedures of LCME.

Any student who wishes to file a complaint may visit the LCME website (www.lcme.org) to access the standards and the procedures for filing a complaint directly to LCME. Complaints may also be made directly to the Associate Dean of Student Affairs, Admissions and Outreach. The written complaints are kept on file and made available for inspection at onsite evaluations.

California Northstate University College of Medicine encourages students to seek internal resolution to any conflict.

American Psychological Association (APA)

The College of Psychology will be pursuing American Psychological Association accreditation. This takes place in three phases. The first is "Intent to Apply" status. This step can now be initiated in Summer 2018. It involves the submission of a self-study report reviewed by the APA to determine whether or not the program is on track to meeting requirements for accreditation.

Within three years after the PsyD program is granted "Intent to Apply" status and no sooner than when two classes are

enrolled in the program and one has completed a term of practicum service may the program submit for "Accredited, on contingency" status. This requires a second self-study and a site visit by APA.

Within three years after receiving "Accredited, on contingency" status and after the inaugural class has completed internship, the College of Psychology can apply for full accreditation from APA. This requires a third self-study with proximal and distal data and a second site visit.

Complaints Related to APA Accreditation Standards

Complaints are to be directed to the Commission on Accreditation (CoA). The CoA can only review complaints against programs that are currently accredited. Please visit the APA website for information related to filing a complaint: <http://www.apa.org/ed/accreditation/about/other-questions.aspx>.

California Northstate University College of Psychology encourages students to seek internal resolution to any conflict.

COLLEGE OF MEDICINE

Mission, Vision, and Values

Mission: To advance the art and science of medicine through education, service, scholarship, and social accountability.

Education: To provide the environment for its graduates to become life-long learners in the field of medicine.

Scholarship: To identify leaders in basic science, translational, clinical, and educational research, development of educational materials and processes, and thought leadership in science and education to foster a scholarly environment for the medical school.

Service: To assist in serving the underserved in the community as a critical function of the medical school.

Social Accountability: To stress community service, community health, access to health care, global health, global health education, health care policy and advocacy, and diversity as essential elements of the medical school.

Vision: To develop a community-based medical school that delivers innovative programs in education, research, and patient care.

Values: The core values of California Northstate University College of Medicine are:

1. Excellence in Medical Care
2. Professionalism
3. Ethics
4. Compassion
5. Social Accountability
6. Innovation

Educational Philosophy

The California Northstate University College of Medicine (CNUCOM) curriculum is designed to help students become physicians who are self-directed and lifelong learners. The four (4) year curriculum is designed to facilitate and optimize student learning in a progressive and integrated manner both in didactic and experiential courses. CNUCOM recognizes the need to implement varied educational styles in order for students to become competent self-directed, life-long learners. Therefore, there will be a variety of formats for instruction ranging from lecture to completely self-directed.

The curriculum is a completely clinical presentation-based, integrated curriculum. Clinical presentations frame the introductory material in the Foundations of Clinical Medicine. All subsequent courses in the pre-clerkship Phase A curriculum (Year 1 and Year 2) integrate biochemistry, cell biology, embryology, genetics, anatomy, histology, immunology, microbiology, nutrition, pathology, pharmacology, and physiology with the clinical presentations. The Medical Skills course runs concurrently with the systems-based courses and is designed to integrate doctoring skills each week in order to reinforce and enhance the information

being taught in the rest of the curriculum. Masters Colloquium is a biweekly course designed to foster professionalism, ethics, and global health knowledge and behaviors throughout the Phase A curriculum.

The required clerkships and electives in Phases B and C carry our clinical presentation curriculum through completion of the medical education program. CNUCOM has aligned many of our Phase A clinical presentations with nationally recognized “must see” cases during the clerkships years, Phases B and C. Students will have the opportunity to master the basic sciences and foundational clinical skills associated with the clinical presentations in Phase A. Students will then see these clinical presentations again as live patients in Phases B and C and hone their clinical skills and develop a deeper understanding of therapeutics and treatment.

Learning Outcomes

Program Learning Outcomes

Upon successful completion of CNUCOM Doctor of Medicine program, students will be able to demonstrate the following learning program learning outcomes:

1. **Patient Care.** Demonstrate ability to provide evidence-based care that is compassionate, respectful of patients' differences, values, and preferences. Demonstrate the ability to listen, clearly inform, communicate and educate patients for the promotion of health and the treatment of illness; advocate for disease prevention, wellness and the promotion of healthy lifestyles including a focus on population health. Demonstrate ability to accurately evaluate relevant social and clinical information in the context of the patient's visit.
2. **Medical and Scientific Knowledge.** Demonstrate knowledge about established and evolving biomedical and clinical sciences. Demonstrate ability to apply this knowledge to the practice of medicine. Demonstrate ability to appraise and assimilate scientific evidence into their own ongoing learning, research, and patient care.
3. **Communication and Interpersonal Skills.** Demonstrate compassionate and effective interpersonal communication skills toward patients and families. Demonstrate ability to articulate information (written and oral) in an organized and clear manner in order to educate and inform patients, families, and colleagues.
4. **Professionalism.** Demonstrate a commitment to the highest standards of professional responsibility and adhere to ethical principles. Students should display the personal attributes of compassion, honesty, integrity, and cultural empathy in all interactions with patients, families, and the medical community.
5. **Healthcare Systems.** Demonstrate knowledge of and responsibility to the larger context of health care (social, behavioral, economic factors). Demonstrate the ability

to effectively call on system resources to provide optimal care.

6. **Reflective Practice and Personal Development.**

Demonstrate ability to reflect upon their experiences with the goal of continual improvement. Demonstrate habits of analyzing experiences that affect their well-being and their relationships with groups and individuals. Demonstrate self-motivation and awareness of and responsiveness to their own limitations.

Co-Curricular Learning Outcomes

Upon successful completion of CNUCOM Doctor of Medicine program, students will be able to demonstrate the following co-curricular learning outcomes:

1. **Social Awareness and Cultural Sensitivity.** Demonstrate awareness of and responsiveness to social and cultural differences by adapting behaviors appropriately and using effective interpersonal skills.
2. **Professionalism and Advocacy.** Demonstrate professional behavior and effective interactions with other healthcare professionals, community members, and/or patients and advocate for initiatives to improve patient care, health outcomes, and the profession of pharmacy.
3. **Self-Awareness and Learning.** Demonstrate self-awareness through reflection and the development of appropriate plans for self-directed learning and development.
4. **Innovation and Entrepreneurship.** Demonstrate innovation and creativity to develop novel strategies to accomplish professional goals, or students demonstrate an understanding for how innovation and creativity influence the development of novel strategies to accomplish professional goals.
5. **Public Health and Education.** Apply skills learned in the classroom to create and effectively deliver public health initiatives and health-related education to the community.
6. **Service and Leadership.** Demonstrate the ability to lead and work collaboratively with others to accomplish a shared goal that improves healthcare.

Program Competencies and Learning Outcomes Mapping

CNUCOM has adapted the six ACGME competencies to the vision and mission of the school and have adopted those as expected program learning objectives (PLO's). These six general competencies reflect the knowledge, skills, behaviors, and attitudes that medical students will be expected to exhibit as evidence of their achievement. Medical students will demonstrate competency in these six areas as a requirement for graduation. For each of the six general competencies, there are a series of educational learning objectives (learning outcomes) which define the competency.

Map of CNUCOM Competencies to ACGME Competencies

ACGME CNUCOM	Patient Care	Med/Sci Knowledge	Communication/ Interpersonal Skills	Professionalism	Health Care Systems	Reflective Practice/ Personal Development
Patient Care						
Medical/Science Knowledge						
Communication/ Interpersonal Skills						
Professionalism						
Practice-Based Learning & Improvement						
System-Based Practice						

CNUCOM Program Learning Objectives

The Curriculum Committee has developed and approved specific expectations about students' advancement towards achievement (mastery) of the PLOs for each academic phase of our curriculum.

1) Patient Care [PC]

Scope: Students must provide evidence-based care that is compassionate, appropriate, and effective for the promotion of health and the treatment of illness. Students should be able to evaluate relevant diagnostic information.

Spectrum of assessment methods to evaluate the achievement of the "Patient Care" competency:

- Faculty feedback in pre-clerkship settings including Clinical Cases Sessions, Masters Colloquium and Medical Skills courses.
- Faculty and resident direct observation and evaluations during clinical clerkships.
- Patient case logs.
- Standardized Patient Examination (SPE).
- Medical Skills Lab: Standardized patient, simulation exercises
- Objective Structured Clinical Examination (OSCE)
- Self-assessment and Peer assessment.
- USMLE Step 2 Clinical Knowledge Exam and Clinical Skills Exam.

Sub-Competency Category	Educational Program Objective(s) Mapped & Hyperlinked to PCRS	Outcome Measure(s)
PC1: Clinical History Taking	Gather essential and accurate information about patients and their conditions through history-taking and demonstrates the ability to organize all relevant clinical history in a timely manner (1.2)	<ul style="list-style-type: none"> • Faculty feedback in pre-clerkship settings including Clinical Cases Sessions and Medical Skills courses • Faculty and resident direct observation and evaluations during clinical clerkships • OSCE
	Able to identify alternative sources and or intuitively fill in the history gaps (1.2)	<ul style="list-style-type: none"> • Faculty feedback in pre-clerkship settings including Clinical Cases Sessions and Medical Skills courses • Faculty and resident direct observation and evaluations during clinical clerkships • OSCE • USMLE Step 2 Clinical knowledge Exam and Clinical Skills Exam
	Shares knowledge in topics of disease prevention with patient (1.7,1.9)	
	Documents how psychological/social/cultural situations have impacted the health, disease, care-seeking, care compliance, and barriers to and attitudes toward care (1.2, 2.5)	
	Demonstrates ability to inquire (non-judgmentally) about alternative medical practices being utilized by the patient at the time of presentation (1.2)	
PC2: Patient Examination	Perform a full or focused physical exam on an adult patient in a logical sequence appropriate for the scheduled visit in a timely manner for pediatric, adolescent, adult and elderly patients (1.1, 1.2)	<ul style="list-style-type: none"> • Faculty feedback in pre-clerkship settings including Clinical Cases Sessions and Medical Skills courses • Faculty and resident direct observation and evaluations during clinical clerkships • OSCE • USMLE Step 2 Clinical knowledge Exam and Clinical Skills Exam
	Can perform a complete, full mental and functional assessment of an elderly patient (1.1, 1.2)	
	Can fully assess a pediatric patient for developmental delay and genetic abnormalities (1.2)	
	Can identify pertinent positives and negatives in the exam to accurately determine stage of medical condition (1.2)	
	Can utilize clinical findings to prioritize additional anatomic or physiologic testing (1.3, 1.5)	
PC3: Medical Notes	Can accurately complete a written H&P in a timely fashion with a well-developed differential diagnosis using the CP clinical algorithms to develop a differential diagnosis (1.2, 4.5)	<ul style="list-style-type: none"> • Faculty feedback in pre-clerkship settings including Clinical Cases Sessions and Medical Skills courses • Faculty and resident direct observation and evaluations during clinical clerkships • OSCE
	Can complete a SOAP note using CP clinical algorithms to assist in developing a problem list (1.2, 4.2)	

	<p>Can utilize the problem list to develop a well thought out plan for ongoing treatment. (1.6)</p> <p>Integrates periodic evaluation of the care plan to re-evaluate the efficacy of the plan to ensure treatment success (1.2, 1.3, 1.5, 1.6, 2.1)</p>	<ul style="list-style-type: none"> • USMLE Step 2 Clinical knowledge Exam and Clinical Skills Exam
PC4: Oral Presentations	<p>Can accurately and professionally present a H&P or SOAP note to an attending in a timely fashion indicating when to use "not relevant" or "no pertinent positives" (1.2, 4.2)</p> <p>Includes a differential or problem list with treatment updates (1.2, 1.5, 1.6)</p> <p>Includes accurate assessments with prioritized diagnosis or problem list using relevant CP clinical algorithms (1.6)</p> <p>Can participate in a discussion of prioritized diagnostic approaches and is able to identify where patient teams and consultants are needed (1.3, 1.4, 1.5, 1.6, 1.8, 4.2, 4.3)</p>	<ul style="list-style-type: none"> • Faculty feedback in pre-clerkship settings including Masters Colloquium, Clinical Cases Sessions, and Medical Skills courses • OSCE • Self-assessment and peer assessment • Faculty and resident direct observation and evaluations during clinical clerkships • USMLE Step 2 Clinical Skills Exam
PC5: Medical Skills	<p>Perform all medical, diagnostic, and surgical procedures considered essential for the area of practice (1.1)</p> <p>Can describe and practice the basic principles of universal precautions in all settings (1.3)</p> <p>Has achieved certification in BLS (1.1, 6.6)</p> <p>Has achieved certification in ACLS (1.1, 6.6)</p>	<ul style="list-style-type: none"> • Faculty feedback in pre-clerkship settings including Medical Skills Courses • Medical Skills Lab: Standardized patient, simulation exercises • OSCE • Passing BLS and ACLS certification exam • Faculty and resident direct observation and evaluations during clinical clerkships. • USMLE Step 2 Clinical knowledge Exam and Clinical Skills Exam
PC6: Patient Care Teams	<p>Can explain how the composition of an adult and pediatric outpatient/hospital Patient Care Team (PCT) differs on each clinical service and can recognize and evaluate when their services should be ordered to facilitate recovery (1.3, 1.5, 1.8, 1.6, 4.2, 6.1)</p> <p>Make appropriate patient referral decisions and follow up the care outcome to ensure continuity of care while the patient moves between different providers/settings. (1.8)</p>	<ul style="list-style-type: none"> • Faculty feedback in pre-clerkship settings including Medical Skills Courses • Faculty and resident direct observation and evaluations during clinical clerkships
PC7: Patient Management	<p>Can describe a well thought out plan of management of all patients with acute and chronic illnesses in the adult population (1.5, 1.6)</p> <p>With appropriate supervision, participate in counselling & education of patients and their families enabling them to share in decision making and the care plan. (1.7)</p> <p>With appropriate supervision, participate in providing preventive and health maintenance services. (1.9)</p> <p>With appropriate supervision can construct a detailed patient management plan utilizing appropriate PCT members (1.6, 6.2)</p>	<ul style="list-style-type: none"> • Faculty feedback in pre-clerkship settings including Clinical Cases sessions and Medical Skills courses • Faculty and resident direct observation and evaluations during clinical clerkships • OSCE
PC8: Cost Effective Comparison in Treatment	<p>Is able to recognize that there are differences in the cost of treatment options (1.3, 1.5, 1.6, 6.3)</p> <p>Can discuss treatment costs in the context of efficacy, social and cultural factors (1.3, 1.5, 1.6, 6.3)</p> <p>Can use the cost effectiveness information to recommend a stepped approach to the treatment of common medical conditions in the adult patient (1.3, 1.5, 1.6, 6.3)</p>	<ul style="list-style-type: none"> • Faculty feedback in pre-clerkship settings including Masters Colloquium, Clinical Cases Sessions, and Medical Skills courses • Faculty and resident direct observation and evaluations during clinical clerkships

2) Medical and Scientific Knowledge [MSK]

Scope: Students must demonstrate knowledge about established and evolving biomedical and clinical sciences. They must showcase an ability to apply this knowledge to the practice of medicine. Students should be able to appraise and assimilate scientific evidence into their own ongoing learning, research, and patient care.

Spectrum of assessment methods to evaluate the achievement of the “Medical & Scientific Knowledge” competency:

- Written examinations (both individual and team-based) in basic science courses and clinical clerkships
- NBME shelf exams
- Faculty feedback in pre-clerkship settings including small groups, Clinical Cases Sessions, Masters Colloquium and Medical Skills courses
- Self-Directed Student Scholarly Project
- Faculty and resident evaluations during clinical clerkships
- Written and oral case presentations
- Objective Structured Clinical Examination (OSCE)
- Peer assessment and self-assessment
- USMLE Step 1 and Step 2
- Institutionally developed written examinations in system based courses and clinical clerkships
- NBME shelf exams

Sub-Competency Category	Educational Program Objective(s) Mapped & Hyperlinked to PCRS	Outcome Measure(s)
MSK1: Knowledge of Medical Practices	Can evaluate how the major organ systems contribute to both health and disease (2.1, 2.2, 2.3, 2.4)	<ul style="list-style-type: none"> ➤ Institutionally developed written examinations in system based courses and clinical clerkships ➤ NBME shelf exams
	Can explain how the organ system pathophysiology is reflected in the CP clinical algorithms and can relate this information to a clinical team (2.1, 2.2, 2.3, 2.4)	<ul style="list-style-type: none"> • Faculty feedback in pre-clerkship settings including Clinical Cases, Master Colloquium, and Medical Skills courses • Faculty and resident evaluations during clinical clerkships • OSCE • Peer assessment and self-assessment • USMLE Step 1 and Step 2
	Apply clinical reasoning to construct CP clinical algorithms to propose differential diagnosis (2.1, 2.3, 1.2, 1.3, 1.4)	<ul style="list-style-type: none"> • Faculty feedback in pre-clerkship settings including Clinical Cases, and Medical Skills courses • Faculty and resident evaluations during clinical clerkships • OSCE • USMLE Step 2
	Can explain the anticipated clinical response to correctly selected medications for a specific number of medical conditions to patients, family members and team members (2.1, 2.3, 1.3, 1.4, 1.7, 4.1)	<ul style="list-style-type: none"> • Faculty feedback in pre-clerkship settings including Clinical Cases, Master Colloquium, and Medical Skills courses • OSCE • Faculty and resident evaluations during clinical clerkships
	Recognizes the most common drug interactions and their likely signs of presentation in the elderly and can explain them to patient and family (2.1, 2.2, 2.3, 1.2, 1.3, 1.4, 1.7, 4.1)	<ul style="list-style-type: none"> ➤ Institutionally developed written examinations in system based courses and clinical clerkships • Faculty feedback in pre-clerkship settings including Clinical Cases, Master Colloquium, and Medical Skills courses • OSCE • Faculty and resident evaluations during clinical clerkships • USMLE Step 1 and Step 2
	Recognizes what types of medical knowledge is required for each individual members of the PCT (patient care team) (2.1, 2.3, 6.1, 6.2)	<ul style="list-style-type: none"> • Faculty feedback in pre-clerkship settings including Clinical Cases, and Medical Skills courses. • Faculty and resident evaluations during clinical clerkships

		<ul style="list-style-type: none"> • OSCE • Peer assessment and self-assessment • USMLE Step 1 and Step 2
MSK2: Problem Solving & Diagnosis	Can correlate the findings of a patient at clinical presentation with specific CP clinical algorithms and prioritize the conditions in the order of most to least likely <u>(2.1, 2.3, 1.2, 1.3)</u>	<ul style="list-style-type: none"> ➤ Institutionally developed written examinations in system based courses and clinical clerkships ➤ NBME shelf exams • Faculty feedback in pre-clerkship settings including Clinical Cases, and Medical Skills courses • Faculty and resident evaluations during clinical clerkships • OSCE • Peer assessment and self-assessment • USMLE Step 1 and Step 2
	Recognizes and is able to explain both typical as well as atypical presentations for commonly seen clinical conditions in clerkships <u>(2.1, 2.3, 1.2, 2.1, 2.3)</u>	
	Can construct comprehensive problem lists categorized as both acute versus chronic conditions and prioritize therapeutic interventions <u>(2.1, 2.3, 2.4, 1.5, 1.6)</u>	
	Can order appropriate diagnostic tests needed to facilitate both diagnosis and evaluate response to therapy in a cost and time effective manner <u>(2.1, 2.3, 1.2, 1.4, 1.5)</u>	
	Can analyze and evaluate diagnostic tests in regards to sensitivity/specificity <u>(2.1, 2.3, 1.2, 1.4)</u>	<ul style="list-style-type: none"> ➤ Institutionally developed written examinations system based courses and clinical clerkships ➤ NBME shelf exams • USMLE Step 1 and Step 2
MSK3: Medical Treatment	Can identify preventive, curative, and palliative therapeutic strategies <u>(2.12.2, 2.3, 2.4, 2.5, 2.6, 1.5, 1.6)</u>	<ul style="list-style-type: none"> ➤ Institutionally developed written examinations in system based courses and clinical clerkships ➤ NBME shelf exams • Faculty feedback in pre-clerkship settings including Clinical Cases, and Medical Skills courses • Faculty and resident evaluations during clinical clerkships • OSCE • USMLE Step 1 and Step 2
	Can identify and judge, from direct observation/experience, how cost and social/cultural issues affect the selection of therapeutic interventions <u>(2.1, 2.3, 2.4, 2.5, 1.3, 1.5, 6.3)</u>	<ul style="list-style-type: none"> ➤ Institutionally developed written examinations in system based courses and clinical clerkships • Faculty feedback in pre-clerkship settings including Clinical Cases, Masters Colloquium, and Medical Skills courses • NBME shelf exams • Faculty and resident evaluations during clinical clerkships • OSCE • USMLE Step 1 and Step 2
	Can select and defend basic therapeutic recommendations for preventive, curative and palliative therapies seen in the clerkships <u>(2.1, 2.2, 2.3, 2.4, 2.5, 1.5, 1.6, 3.4, 3.5, 3.6)</u>	<ul style="list-style-type: none"> ➤ Institutionally developed written examinations in system based courses and clinical clerkships ➤ NBME shelf exams • Faculty feedback in pre-clerkship settings including Clinical Cases, and Medical Skills courses • Faculty and resident evaluations during clinical clerkships • OSCE • USMLE Step 1 and Step 2
	Effectively utilizes ongoing diagnostic tests to modify recommended therapeutic strategies <u>(2.1, 2.3, 1.4, 1.5, 1.6)</u>	<ul style="list-style-type: none"> • Faculty feedback in pre-clerkship settings including Clinical Cases, and Medical Skills courses

		<ul style="list-style-type: none"> • Faculty and resident evaluations during clinical clerkships • OSCE • Peer assessment and self-assessment
MSK4: Life-Long Learning	Can discuss the study design, data analysis and scientific findings of a journal article relevant to their patient's medical condition <u>(2.1, 2.2, 2.3, 3.6)</u>	<ul style="list-style-type: none"> • Successful completion of a scholarly project • Faculty feedback in pre-clerkship settings including Clinical Cases and Masters Colloquium • Faculty and resident evaluations during clinical clerkships
	Routinely reads medical journals <u>(2.1, 3.3, 3.7)</u>	
	Organizes a self-educating approach for life-long learning through observation, research, and analysis <u>(2.1, 2.6, 3.1, 3.2, 3.3, 3.5, 3.6, 3.7, 3.10)</u>	<ul style="list-style-type: none"> • Successful completion of a scholarly project • Faculty feedback in pre-clerkship settings including Clinical Cases and Masters Colloquium • Faculty and resident evaluations during clinical clerkships • Peer assessment and self-assessment
MSK5: Research or Knowledge Expansion	Through research and/or community service, in the context of the "Self-Directed Student Scholarly Project", the student will develop, apply, translate and/or communicate medical knowledge to their peers and/or community <u>(2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 3.8)</u>	<ul style="list-style-type: none"> • Successful completion of a scholarly project • Faculty feedback in pre-clerkship settings including Clinical Cases and Masters Colloquium • Faculty and resident evaluations during clinical clerkships • OSCE • Peer assessment and self-assessment

3) Communication and Interpersonal Skills [C]

Scope: Students must demonstrate compassionate and effective interpersonal communication skills toward patients and families necessary to deliver effective medical care and promote shared decision making. Students must be able to articulate information and ideas (written and oral) in an organized and clear manner to educate or inform patients, families, colleagues, and community.

Spectrum of assessment methods to evaluate the achievement of “Communication & Interpersonal Skills” competency:

- Faculty feedback in pre-clerkship settings including Clinical Cases Sessions, Masters Colloquium and Medical Skills course
- Faculty and resident direct observation and evaluations during clinical clerkships
- Patient case logs
- Presentation of written and oral clinical information
- Standardized patient evaluations, simulation and inter-professional exercises
- Objective Structured Clinical Examination (OSCE)
- Peer assessment, self-assessment
- USMLE Step 2 Clinical Skills Exam
- Multiple choice questions (MCQ's)

Sub-Competency Category	Educational Program Objective(s) Mapped & Hyperlinked to PCRS	Outcome Measure(s)
C1: Doctor-Patient Communication	Utilizes communication strategies involving nonverbal, verbal and written modalities to communicate with patients (4.1) Demonstrates how to ask clarifying questions in a way that is socially and culturally sensitive (4.1, 1.2) Creates rapport with the patient in order to generate an effective environment for counseling on wellness and disease prevention strategies (4.1) Effectively uses health coaching strategies (3.8, 4.1) Can effectively communicate medical errors to patients (4.6)	<ul style="list-style-type: none"> • Faculty feedback in pre-clerkship settings including Clinical Cases, Medical Skills, and Masters Colloquium • Faculty and resident evaluations during clinical clerkships • OSCE • Peer assessment and self-assessment
C2: Communication with family members	Utilizes effective communication strategies involving nonverbal, verbal and written skills to communicate with patient's family members (4.1) Can recognize and effectively communicates his/her legal limitations due to patient privacy (4.1, 4.2, 4.3, 5.3) Can ask for the support/assistance of patient's family members for encouraging changes in disease prevention or wellness strategies (4.1) Can effectively communicate medical errors to family members (4.6)	<ul style="list-style-type: none"> • Faculty feedback in pre-clerkship settings including Clinical Cases, Medical Skills, and Masters Colloquium • Faculty and resident evaluations during clinical clerkships • OSCE • Peer assessment and self-assessment
C3: Communication with Medical Team	Can effectively communicate a H&P and SOAP note in both written and oral format (4.2, 4.3) Can effectively communicate new patient problems or complaints in healthcare to the medical team (4.2, 4.3) Can question medical decisions in a non-confrontational manner (4.2, 4.3, 4.4, 3.9, 7.1) Effectively shares relevant information with the team (4.2, 4.3, 4.4, 3.9)	<ul style="list-style-type: none"> • Faculty feedback in pre-clerkship settings including Medical Skills • Faculty and resident evaluations during clinical clerkships • OSCE • Peer assessment and self-assessment
C4: Communication with Faculty	Identifies gaps or deficiencies in understanding on each clerkship and can effectively communicate educational needs to the interns, residents, and faculty to increase knowledge (4.2, 4.3, 4.4, 3.1, 3.3) Can discuss personal ethical/social or cultural issues with faculty members to resolve any personal conflicts that may arise in the	<ul style="list-style-type: none"> • Faculty and resident evaluations during clinical clerkships • Faculty feedback in pre-clerkship settings including Medical Skills • OSCE • Peer assessment and self-assessment

	management or treatment decisions made for the benefit of the patient <u>(4.2, 4.3, 4.7, 7.1)</u>	
C5: Communication with Community	Can communicate medical knowledge to the community at large in a professional manner <u>(4.1, 3.8)</u>	<ul style="list-style-type: none"> • Faculty and resident evaluations during clinical clerkships • Faculty feedback in pre-clerkship settings including Medical Skills • OSCE • Peer assessment and self-assessment

4) Professionalism [P]

Scope: Students must demonstrate a commitment to the highest standards of professional responsibility and adherence to ethical principles. Students must display the personal attributes of compassion, honesty, integrity, and cultural competence in all interactions with patients, families, and the medical community.

Spectrum of assessment methods to evaluate the achievement of the “Professionalism” competency:

- Faculty feedback in pre-clerkship settings including Clinical Cases Sessions, Masters Colloquium and Medical Skills courses
- Faculty and resident direct observation and evaluations during clinical clerkships
- Presentation of clinical information
- Completion of HIPAA training
- Standardized patient evaluations
- Simulation and inter-professional exercises
- Objective Structured Clinical Examination (OSCE)
- Praise/concern professionalism incident reports
- Peer assessment
- Self-assessment
- USMLE Step 2 Clinical Skills Exam
- Institutionally developed written examinations in system based courses and clinical clerkships
- NBME shelf exams

Sub-Competency Category	Educational Program Objective(s) Mapped & Hyperlinked to PCRS	Outcome Measure(s)
P1: Ethical Behavior	Demonstrates respect, compassion and honesty in his/her approach to all patients and family members (5.1)	<ul style="list-style-type: none"> • Faculty feedback in pre-clerkship settings including Clinical Cases, Masters Colloquium, and Medical Skills courses • Faculty and resident direct observation and evaluations during clinical clerkships • Presentation of clinical information • Completion of HIPAA training • OSCE • Praise/concern professionalism incident reports • Peer & self-assessment
	Recognizes and discloses one's errors to appropriate residents/Clerkship Directors and when they involve patient care, seeks guidance on how and with whom that disclosure will be made to the patient or family (5.4, 5.6, 4.6)	
	Always displays professional attire and behavior (1.10)	
	Demonstrates the ability to maintain professional behavior in encounters with quarrelsome, hostile, abusive, arrogant or dismissive patients, family members or clinical staff (5.6, 4.7, 7.1)	
	Uses clinical hygiene for the prevention of nosocomial infection transmission (5.4, 5.5, 3.10, 1.3)	
P2: Ethical Responsibility	Obtains patient consent for all therapies and/or procedures in which s/he is involved (5.6)	<ul style="list-style-type: none"> • Faculty feedback in pre-clerkship settings including Clinical Cases, Masters Colloquium, and Medical Skills • Faculty and resident direct observation and evaluations during clinical clerkships • Presentation of clinical information • Completion of HIPAA training • Standardized patient evaluations • Simulation and inter-professional exercises • OSCE • USMLE Step 2 Clinical Skills Exam • Masters Colloquium on professionalism
	Can identify and relate full disclosure of the risks and benefits of a therapy or procedure (5.6, 1.5)	<ul style="list-style-type: none"> • Faculty and resident direct observation and evaluations during clinical clerkships • Presentation of clinical information • Completion of HIPAA training • Standardized patient evaluations • Simulation and inter-professional exercises • OSCE • USMLE Step 2 Clinical Skills Exam
	Can discuss alternative therapies/procedures with their relevant risks and benefits (5.1, 5.6)	

		<ul style="list-style-type: none"> • Institutionally developed written examinations in system based courses and clinical clerkships • NBME shelf exams
	Can identify and adhere to institutional standards involved in patient care (5.6, 6.1)	<ul style="list-style-type: none"> • Faculty and resident direct observation and evaluations during clinical clerkships • Presentation of clinical information • Standardized patient evaluations • Simulation and inter-professional exercises • OSCE
P3: Ethical Principles and Boundaries	Recognize his/her role as the patient's advocate for clinical care (5.2, 5.4, 7.2)	<ul style="list-style-type: none"> • Faculty and resident direct observation and evaluations during clinical clerkships • Presentation of clinical information • Standardized patient evaluations • Simulation and inter-professional exercises • OSCE
	Demonstrates evidence of maintaining patient privacy (5.3)	<ul style="list-style-type: none"> • Faculty feedback in pre-clerkship settings including Clinical Cases, Masters Colloquium, and Medical Skills • Faculty and resident direct observation and evaluations during clinical clerkships • Presentation of clinical information • Completion of HIPAA training • Standardized patient evaluations • Simulation and inter-professional exercises • OSCE
	Demonstrates ability to treat all patients with dignity even when the approach is not reciprocated (5.1, 5.5)	<ul style="list-style-type: none"> • Faculty feedback in pre-clerkship settings including Clinical Cases, Masters Colloquium, and Medical Skills • Faculty and resident direct observation and evaluations during clinical clerkships • Presentation of clinical information • Standardized patient evaluations • Simulation and inter-professional exercises • OSCE • Masters Colloquium on professionalism
	Recognizes his/her legal limits on imposing medical care that is considered to be in the best interest of the patient when it is being refused (5.6)	<ul style="list-style-type: none"> • Faculty and resident direct observation and evaluations during clinical clerkships. • Presentation of clinical information • Standardized patient evaluations • Simulation and inter-professional exercises • OSCE
P4: Professional Relationships	Demonstrates integrity, honesty, and authenticity in interactions with faculty and the medical community (5.4, 5.6, 7.1, 7.3, 8.5)	<ul style="list-style-type: none"> • Faculty feedback in pre-clerkship settings including Clinical Cases, Masters Colloquium, and Medical Skills • Faculty and resident direct observation and evaluations during clinical clerkships
	Can identify conflicts of interest in financial and organizational arrangements in the practice of medicine (5.6, 6.5)	
	Can identify and utilize standards established by specific professional societies (5.6)	<ul style="list-style-type: none"> • Faculty feedback in pre-clerkship settings including Clinical Cases, Masters Colloquium, and Medical Skills • Faculty and resident direct observation and evaluations during clinical clerkships • Presentation of clinical information • Standardized patient evaluations • Simulation and inter-professional exercises

		<ul style="list-style-type: none">• OSCE• Institutionally developed written examinations in system based courses and clinical clerkships• NBME shelf exams
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5) Health Care Systems [HC]

Scope: Students must demonstrate knowledge of and responsibility to the larger context of health care (social, behavioral, economic factors). They should have the ability to effectively call on system resources to provide optimal care.

Spectrum of assessment methods to evaluate the achievement of the “Healthcare Systems” competency:

- Faculty feedback in pre-clerkship settings including Clinical Cases, Masters Colloquium, and Medical Skills
- Faculty and resident direct observations and evaluations during clinical clerkships
- Patient case logs
- Presentation of written and oral clinical information
- Standardized patient evaluations, simulation center evaluations
- Objective Structured Clinical Examination (OSCE)
- Peer assessment, Self-assessment
- NBME shelf exams

Sub-Competency Category	Educational Program Objective(s) Mapped & Hyperlinked to PCRS	Outcome Measure(s)
HC1: Healthcare Delivery Systems	Can identify all members and their roles in a patient care team (PCT) and explain which are specific to certain specialty areas of medical practice (6.1, 6.2, 7.2)	<ul style="list-style-type: none"> • Faculty feedback in pre-clerkship settings including Clinical Cases, Masters Colloquium, and Medical Skills • Faculty and resident direct observations and evaluations during clinical clerkships • Standardized patient evaluations, simulation center evaluations • OSCE • NBME shelf exams
	Can identify the major components of a healthcare system and understands how they can impact access, cost and compliance (6.1, 6.2, 6.3, 7.2)	
	Can navigate different hospital/clinic infrastructures in providing patient care (6.1)	<ul style="list-style-type: none"> • Faculty and resident direct observations and evaluations during clinical clerkships • Patient case logs • Presentation of written and oral clinical information • Standardized patient evaluations, simulation center evaluations
	Can identify major monetary investment and legal needs in designing a student-run free clinic (6.3)	<ul style="list-style-type: none"> • Faculty and resident direct observations and evaluations during clinical clerkships • Peer assessment, Self-assessment
	Can interpret and use multiple forms of health information technologies including electronic medical records, patient registries, computerized order entry and prescribing systems (6.1, 3.7)	<ul style="list-style-type: none"> • Faculty feedback in pre-clerkship settings including Clinical Cases, Masters Colloquium, and Medical Skills • Faculty and resident direct observations and evaluations during clinical clerkships • Patient case logs • Standardized patient evaluations, simulation center evaluations • OSCE
HC2: Delivery Systems Improvement	Recognizes the importance of current models of medical practice performance evaluation (6.6, 3.5)	<ul style="list-style-type: none"> • Faculty feedback in pre-clerkship settings including Clinical Cases, Masters Colloquium, and Medical Skills • Faculty and resident direct observations and evaluations during clinical clerkships • Patient case logs • Presentation of written and oral clinical information • Standardized patient evaluations, simulation center evaluations • OSCE
	Recognizes the importance of quality assessment and benchmarking in practice improvement (6.6, 3.1, 3.2, 3.3, 3.5, 3.10)	
	Uses system approaches to prevent common medical errors and hazards (6.1, 6.4)	<ul style="list-style-type: none"> • Faculty feedback in pre-clerkship settings including Clinical Cases, Masters Colloquium, and Medical Skills • Faculty and resident direct observations and evaluations during clinical clerkships • Patient case logs • Presentation of written and oral clinical information

		<ul style="list-style-type: none"> • Standardized patient evaluations, simulation center evaluations • OSCE • Peer assessment, Self-assessment
	Participates in Phase B and/or C clinic rotation quality assessment for education performance improvement <u>(6.6, 3.1, 3.2, 3.3, 3.4, 3.5)</u>	<ul style="list-style-type: none"> • Faculty and resident direct observations and evaluations during clinical clerkships • Presentation of written and oral clinical information • Standardized patient evaluations, simulation center evaluations • OSCE

6) Reflective Practice and Personal Development [RP]

Scope: Student must be able to reflect upon their experiences with the goal of continual improvement. They must also demonstrate habits of analyzing experiences that affect their well-being, relationships with groups and individuals. They must demonstrate self-motivations, and awareness and responsiveness to their own limitations.

Spectrum of assessment methods to evaluate the achievement of the “Reflective Practice and Personal Development” competency:

- Self-assessment
- Patient case logs/journal
- Evaluation by team members and peers in small group activities/clinical teams
- Faculty feedback in pre-clerkship settings including Clinical Cases Sessions, Masters Colloquium and Medical Skills courses
- Faculty and resident evaluations during clinical clerkships
- Objective Structured Clinical Examination (OSCE)

Sub-Competency Category	Educational Program Objective(s) Mapped & Hyperlinked to PCRS	Outcome Measure(s)
RP1: Personal Assessment	Can accept and respond appropriately to suggestions/constructive criticisms of performance including changing when necessary and discarding inappropriate feedback (3.5, 8.1)	<ul style="list-style-type: none"> • Self-assessment • Evaluation by team members and peers in small group activities/clinical teams • Faculty feedback in pre-clerkship settings including Clinical Cases Sessions, Masters Colloquium and Medical Skills • Faculty and resident evaluations during clinical clerkships • OSCE
	Demonstrates the use of self-assessment and reflection skills for growth and development (3.1, 3.2., 3.3, 8.1)	<ul style="list-style-type: none"> • Self-assessment • Evaluation by team members and peers in small group activities/clinical teams • Faculty feedback in pre-clerkship settings including Clinical Cases Sessions, Masters Colloquium and Medical Skills • Faculty and resident evaluations during clinical clerkships
	Uses self-assessment to identify gaps in knowledge and skill sets and finds an approach to fill such gaps (3.1, 3.2, 3.3, 8.1)	<ul style="list-style-type: none"> • Self-assessment • Patient case logs/journal • Evaluation by team members and peers in small group activities/clinical teams • Faculty feedback in pre-clerkship settings including Clinical Cases Sessions, Masters Colloquium and Medical Skills • Faculty and resident evaluations during clinical clerkships
	Can give a balanced description of personal performance in a confident and skillful manner (3.1, 3.3, 8.1)	<ul style="list-style-type: none"> • Self-assessment • Evaluation by team members and peers in

		<p>small group activities/clinical teams</p> <ul style="list-style-type: none"> • Faculty feedback in pre-clerkship settings including Clinical Cases Sessions, Masters Colloquium and Medical Skills • Faculty and resident evaluations during clinical clerkships
RP2: Time Management	Can develop realistic plans and timelines to achieve desired outcomes (3.2, 3.3)	<ul style="list-style-type: none"> • Evaluation by team members and peers in small group activities/clinical teams • Faculty feedback in pre-clerkship settings including Clinical Cases Sessions, Masters Colloquium and Medical Skills • Faculty and resident evaluations during clinical clerkships
	Can refine and implement correction to timelines when appropriate (3.5, 3.10)	
	Can implement corrective actions/changes to correct deficiencies and/or promote personal growth (3.5, 8.1, 8.4)	
RP3: Stress/Wellness Management	Works to identify a passion within the field of medical practice (8.1)	<ul style="list-style-type: none"> • Self-assessment • Evaluation by team members and peers in small group activities/clinical teams • Faculty feedback in pre-clerkship settings including Clinical Cases Sessions, Masters Colloquium and Medical Skills • Faculty and resident evaluations during clinical clerkships
	Able to identify an outlet for personal stress and anxiety (8.2)	
	Is able to identify the signs, symptoms and triggers of personal stress and anxiety (8.1, 8.2)	
	Capable of developing a personalized program for physical/mental health (8.2, 8.4)	
	Can recognize and identify when to seek help (8.1)	
RP4: Conflict Resolution	Demonstrates open-mindedness to the opinions and approaches of others (8.3, 8.4)	<ul style="list-style-type: none"> • Faculty feedback in pre-clerkship settings including Clinical Cases Sessions, Masters Colloquium and Medical Skills • OSCE • Patient case logs/journal • Evaluation by team members and peers in small group activities/clinical teams • Faculty and resident evaluations during clinical clerkships
	Can articulate opinions in a non-confrontational manner (8.3, 8.6)	
	Can formulate strategies to diffuse confrontational situations between team members and/or patient/family members and the patient care team (8.3, 8.6, 8.7)	
	Can effectively negotiate with patients/family members to gain cooperation in the medical plan of treatment (1.7, 3.8, 4.1, 8.6)	

Admission to the MD Program

Applications to the California Northstate University College of Medicine (CNUCOM) are through the American Medical College Application Service (AMCAS) administered by the American Association of Medical Colleges (AAMC) at www.aamc.org/amcas.

Requirements

Applicants are expected to meet the minimum requirements listed below:

- CNUCOM prefers a baccalaureate degree from a regionally accredited, four-year institution within the United States; or a non-U.S. equivalent institution.
- Be a US citizen or a legal resident with a Green Card.
- Required minimum coursework
 - 2 semesters/ 3 quarters/ 1 year of college level English
 - 2 semesters/ 3 quarters/ 1 year of Biology with Laboratory¹
 - 2 semesters/ 3 quarters/ 1 year of Inorganic (General) Chemistry with Laboratory¹
 - 2 semesters/ 3 quarters/ 1 year of Organic Chemistry with Laboratory¹
 - 2 semesters/ 3 quarters/ 1 year of Physics¹
 - 2 semester/ 3 quarters of college level Math (Statistics and/or Calculus preferred¹)
 - 1 semester/1 quarter/ or 3 units of Biochemistry¹
- Recommended coursework (not required):
 - Social sciences
 - Behavioral sciences
 - Foreign Languages
 - Anatomy
 - Physiology
 - Microbiology
 - Immunology
- Preferred MCAT & GPA for competitive candidates:
 - GPA: 3.20
 - New MCAT²: 504
- Minimum MCAT & GPA requirements acceptable
 - GPA: 2.80
 - New MCAT²: 497

¹ IB or AP credits are not accepted.

²Only scores from the new MCAT exam from within the past three years are accepted.

An applicant is not required to have completed all the above requirements when applying for admission to the College; however, they must be completed prior to the first day of Orientation.

Applicants are required to meet the College of Medicine Technical Standards for admissions to the College.

If there is a question about the level of English proficiency of an applicant whose first language is not English, and the applicant is otherwise qualified for admission, the respective Committee may require that the student submit scores from the Test of English as a Foreign Language (TOEFL) examination and the Test of Spoken English (TSE).

Foreign Graduates/Coursework

CNUCOM accepts applications from graduates of foreign institutions provided they hold either US citizenship or US Permanent Resident status at the time of application. Foreign residents with F1 status should not apply.

In addition, the CNU will not accept foreign transcripts prior to being accepted. Transcripts and coursework from foreign institutions must be evaluated by WES, ECE or IERF. Evaluations must be sent directly to AMCAS and must include semester units and letter grades for each course, as well as a cumulative GPA and, if possible, a science GPA. If accepted, you must provide an official copy of your transcript directly to the Office of Admission. If a copy of your official transcript is not received, prior to the start of school, the offer of admission will be revoked and the seat will be offered to another candidate.

Applicants who receive their degree from a non-English speaking country may be requested to submit scores from the TOEFL Examination or the TSE. This will not apply, if an additional degree is obtained at a U.S. institution.

If there is a question about the level of English proficiency, you may be requested to submit scores from the TOEFL Examination (minimum TOEFL score: CBT " 213) or the TSE (minimum TSE score: 50).

Foreign students who do not have a Bachelor's degree from a U.S. institution must complete one year of English composition, and the public speaking, economics, and psychology prerequisite courses at a U.S. college.

Application Process

AMCAS Application

Applications are managed through the online AMCAS (American Medical College Application Service) portal.

There is a non-refundable fee for the application unless the applicant has applied for and receives a fee waiver by the AAMC Fee Assistance Program (FAP).
<https://www.aamc.org/students/applying/amcas/>

The AMCAS application deadline is November 1st.

Official Transcripts

An applicant must request that a set of official transcripts be forwarded directly to AMCAS by the Registrar of each institution the applicant has attended.

Letters of Recommendation

CNUCOM requires three letters of recommendation, including one (1) from a professor in the sciences (i.e. Biology, Chemistry, Physics), one (1) from a professor not in the sciences, and one (1) from someone who has known the applicant for a substantial amount of time (e.g. research

principal investigator, shadowed physician, volunteer coordinator, organization leader, work supervisor). Applicants are encouraged to submit two (2) additional letters from any source. A Pre-med Committee Packet may be submitted in lieu of both of the professor letters.

All letters of recommendation should address the applicant's preparedness to become a doctor. It is recommended that you submit letters written within the past three years and that each letter be written by an individual with whom the applicant has formed a strong ongoing relationship, and not simply someone who has given the applicant a high grade. CNUCOM is particularly interested in references to the applicant's work ethic, integrity, compassion, emotional stability, and judgment. Please consider, among others, professors who have taught in your upper-division courses, or individuals who have seen you interact in professional health settings or have witnessed your personal development.

Submit all letters of recommendation to the AMCAS letter service only.

Supplemental Application

Upon receipt of the AMCAS application packet, the material will be reviewed by the Office of Student Affairs, Admissions and Outreach. Candidates, who are qualified on the basis of their completion, or likelihood of completing the requirements for admission, will be invited to submit a Supplemental Application. There is a \$100 non-refundable fee for processing the Supplemental Application. CNUCOM is not accepting fee waiver for supplemental application fee.

Interviews

Highly qualified candidates will be invited to an on-campus interview with faculty and staff. Invitations are made on the basis of a review academic preparation, personal statement, letters of recommendations, and any other supporting documentation. Applicants will receive their invitation to Interview Day via email. Only applicants who have completed an on-campus interview are offered admission to the College of Medicine.

Interviews are conducted at the College of Medicine campus in Elk Grove, California. Only individuals who have received an invitation from the Office of Student Affairs, Admissions and Outreach will be interviewed.

The interview process includes orientation meetings and interviews with faculty and staff at California Northstate University. The process takes about one day.

During the period when interviews are taking place, the Admissions Committee will meet on a regular basis to consider applicants who have interviewed with the College of Medicine. Applicants are notified of the decision of the College of Medicine regarding their application as soon as possible.

Please review our website for more information about Interview Day at <http://medicine.cnsu.edu/admissions-com/admissions/interview-day>.

Decision Notification

Notification of the decision of the Admissions Committee continues until the class is filled. Accepted applicants may reserve their positions in the incoming class with a \$100 non-refundable deposit. All admission decision are final. Requests for admission decision appeals will not be accepted.

Deferred Matriculation

CNUCOM does not offer options of deferred matriculation at this time.

Early Decision Program

CNUCOM participates in the Early Decision Program. Please visit our website for dates at <http://medicine.cnsu.edu/students-com/admissions/admissions-timeline>.

Transferring from Other Institutions

CNUCOM is currently not accepting any transfer students from other medical program. In addition, the Doctor of Medicine program does not have any articulation or transfer agreements with any other college or university at this time.

Technical Standards

The Technical Standards describe the essential abilities required of all candidates:

- Reasonable accommodation in achievement of the standards is defined under U.S. federal statutes applied to individuals with disabilities. Such accommodations are intended to support the successful completion of all components of the MD degree.
- Standards in five areas must be met by all candidates: Observation, Communication, Motor Function, Cognitive, and Professional.

1. Observation. Candidates are reasonably expected to:

- Observe demonstrations and participate in experiments in the basic sciences
- Observe patients at a distance and close at hand.
- Demonstrate sufficient use of the senses of vision, hearing, and smell and the somatic sensation necessary to perform a physical examination.
- Integrate findings based on these observations and to develop an appropriate diagnostic and treatment plan.

2. Communication

- Communicate in verbal and written form with health care professionals and patients, including eliciting a complete medical history and recording information regarding patients' conditions.
- Perceive relevant non-verbal communications such as changes in mood, activity, and posture as part of a physical examination of a patient.
- Establish therapeutic relationships with patients.
- Demonstrate reading skills at a level sufficient to individually accomplish curricular requirements and provide clinical care for patients using written information.

3. Motor Function

- Perform physical examinations and diagnostic procedures, using such techniques as inspection, percussion, palpation, and auscultation.
- Complete routine invasive procedures as part of training, under supervision, using universal precautions without substantial risk of infection to patients.
- Perform basic laboratory tests and evaluate routine diagnostic tools such as EKGs and X-rays.
- Respond in emergency situations to provide the level of care reasonably required of physicians.
- Participate effectively in physically taxing duties over long hours and complete timed demonstrations of skills.

4. Cognitive

- Measure, calculate, analyze, synthesize, extrapolate, and reach diagnostic and therapeutic judgments.
- Recognize and draw conclusions about three-dimensional spatial relationships and logical sequential relationships among events.
- Formulate and test hypotheses that enable effective and timely problem-solving in diagnosis and treatment of patients in a variety of clinical modalities.
- Understand the legal and ethical aspects of the practice of medicine.
- Remain fully alert and attentive at all times in clinical settings.

5. Professionalism

- Demonstrate the judgment and emotional stability required for full use of their intellectual abilities.
- Possess the perseverance, diligence, and consistency to complete the Pre-Med Post-Baccalaureate curriculum and prepare to enter the independent practice of medicine.
- Exercise good judgment in the diagnosis and treatment of patients.
- Complete all responsibilities attendant to the diagnosis and care of patients within established timelines.
- Function within both the law and ethical standards of the medical profession.
- Work effectively and professionally as part of the health care team.
- Relate to patients, their families, and health care personnel in a sensitive and professional manner.
- Participate effectively in physically taxing duties over long work hours, function effectively under stress, and display flexibility and adaptability to changing and uncertain environments.
- Maintain regular, reliable, and punctual attendance for classes and clinical responsibilities.
- Contribute to collaborative, constructive learning environments, accept constructive feedback from others, and respond with appropriate modifications.

By signing the Enrollment Agreement, the student is acknowledging that the catalog, disclosures, and information located on the website have been made available to the student to read and review.

Any questions or concerns regarding the Student Enrollment Agreement should be directed to the college or university department.

Catalog, Performance Fact Sheet, and Website

Before signing the Student Enrollment Agreement, the prospective student is strongly urged to visit the University and College website at www.cnsu.edu, and to read and review the CNU General Catalog and School Performance Fact Sheet (SPFS). The SPFS contains important performance data for the institution. The Catalog contains important information and policies regarding this institution.

Student's Right to Cancel, Withdraw, and Refund

You have the right to cancel the Student Enrollment Agreement until 12:01 AM on the first calendar day after the first classroom instruction session attended, or until 12:01 AM on the eighth calendar day after a student has signed the Enrollment Agreement, whichever is later.

Cancellation shall occur when you give written notice of cancellation to the Admission Office at the University's address shown at the top of the first page of the Enrollment Agreement. You can do this by hand delivery, email, facsimile, or mail. Written notice of cancellation sent by hand delivery, email, or facsimile is effective upon receipt by the University. Written notice of cancellation sent by mail is effective when deposited in the mail properly addressed with postage prepaid.

After the cancellation period described above, you have the right to withdraw from the University at any time. Withdrawal shall occur when you give written notice of withdrawal to the Registrar at the University's address shown at the top of the first page of the Enrollment Agreement. When withdrawing from the college/university, please complete the Official College Withdrawal form available from the Registrar's request form website: <http://www.cnsu.edu/office-of-the-registrar/registrar-services>. Do not use this form to indicate your intent to cancel your enrollment agreement.

For information on refund calculations due to cancellation or college withdrawal, please see the FINANCIAL SERVICES & DISCLOSURES on page 149 of this catalog.

Student Enrollment Agreement

The Student Enrollment Agreement must be completed and submitted to the college in order to show intent to enroll in the program. The Student Enrollment Agreement is a legally binding contract when it is signed by the incoming student and accepted by the institution.

Tuition & Fees

All tuition, fees, expenses, and policies listed in this publication are effective as of August 2017 and are subject to change without notice by California Northstate University.

In the tables below, M1, M2, M3, and M4 indicate the student's year in the program (e.g. M1 is a first-year student; M2 is a second-year student, etc.).

Tuition is charged on a full-time, semester basis. Generally, tuition and fees are charged to a student's account thirty (30) days prior to the start of each semester term. The above is based on the assumption that a student will attend each semester term on a full-time basis, which allows for a student to graduate after successfully completing four (4) years of coursework consisting of 150 semester credit hours.

International students are not charged additional fees or charges associated with vouching for student status.

Payment deadlines, loan obligations, refund calculations due to cancellation and withdraw, and the Student Tuition Recovery Fund (STRF) disclosures are located in FINANCIAL SERVICES & DISCLOSURES (page 148).

2018-2019 MD Tuition & Fees

Tuition & Fees (T&F)	Amount	Class
Enrollment Fee (refundable; applied to tuition)	\$100.00	M1
Tuition	\$57,900.00	M1, M2, M3, M4
Student Association/Support Fee	\$500.00	M1, M2, M3, M4
Student Disability/Liability Coverage Fee	\$91.00	M1, M2, M3, M4
Technology Fee	\$50.00	M1, M2, M3, M4
Medicine Lab Fee (Anatomy, Medical Skills, and Research)	\$500.00	M1, M2
CPR Fee	\$40.00	M1, M3
Books and Supplies (estimate) ¹	\$1,000.00	M3, M4
Orientation Fee	\$50.00	M1
Medicine Kit ²	\$100.00	M1
USMLE Step 1 Preparation Package	\$239.00	M2
Background Check Fee	\$71.00	M3
Graduation Fees ³	\$300.00	M4
STRF Fee per \$1000 ⁴	\$0.00	M1, M2, M3, M4
M1 Total Estimated Tuition & Fees per Year ⁵	\$59,231.00	
M2 Total Estimated Tuition & Fees per Year ⁵	\$59,280.00	
M3 Total Estimated Tuition & Fees per Year ⁵	\$59,652.00	
M4 Total Estimated Tuition & Fees per Year ⁵	\$59,841.00	

Total estimated cost for the entire 4-year Doctor of Medicine program ranges from \$245,000 to \$257,500.00⁵

Estimated Other/Optional Educational Related Costs ⁶	Amount	Class
Health Insurance premium ⁷	\$3,200.00	M1, M2, M3, M4
Laptop ⁸	\$1,100.00	M1
Room and Board (housing and food costs, not paid to CNU) ⁸	\$23,272.00	M1, M2, M3, M4
Transportation (not paid to CNU) ⁸	\$4,648.00	M1, M2, M3, M4
Books and Supplies (estimate)	\$1,000.00	M1, M2
USMLE – Step 1 (M2), Step 2 CK (M3) ⁹	\$600.00	M2, M3
USMLE – Step 2 CS ⁹	\$1,275.00	M4
Remediation Fee (only if participant)	\$300.00	
M1 Total Estimated Cost per Year ¹⁰	\$92,851.00	
M2 Total Estimated Cost per Year ¹⁰	\$92,300.00	
M3 Total Estimated Cost per Year ¹⁰	\$91,372.00	
M4 Total Estimated Cost per Year ¹⁰	\$92,236.00	

¹ Books and supplies are provided and charged differently for M1 and M2 students than M3 and M4.

² Kit includes one stethoscope, one pen light, one pocket eye chart, tuning fork (c-128), adult Babinski reflex hammer, sphygmomanometer (pocket aneroid) and the case.

³ Covers regalia, graduation dinner, diploma cover, transcripts, etc.

⁴ The STRF fee is \$0.00 per \$1000 of institutional charges.

⁵ Based on estimate annual tuition increases of 3% to 5%. This estimate is not binding to CNU.

⁶ Includes estimated cost and expenses a student may incur during applicable year of attendance, whether or not paid directly to CNU, and includes estimated out-of-pocket cost of living expenses.

⁷ Provided and charged by outside healthcare plan insurance company; optional, estimated, and may increase or decrease based on number of participants and other factors.

⁸ Estimated amounts of individual housing, food, and transportation costs, not operated by, charged by, or paid to CNU

⁹ USMLE fees, estimated based on USMLE fee schedule.

¹⁰ Total of both Tuition and Fees and Estimated Other/Optional Educational Related Costs Charts.

Scholarships

Information regarding various scholarships can be found the College of Medicine's website, medicine.cnsu.edu, Financial Aid, Types of Assistance, Grants and Scholarships as well as within the Grants and Scholarships section of this catalog, page 148.

General Policies

Orientation and Registration

First year professional Orientation is mandatory for all students. If a student is not able to attend the scheduled orientation, due to illness or emergency, the Office of Student Affairs, Admissions and Outreach must be notified of the absence immediately. The student is required to complete a make-up orientation as soon as practical.

Registration for classes requires:

1. All admission contingencies be fulfilled.
 - a. Admission contingencies include proof of medical insurance coverage, all required immunizations, a cleared background check, and any other institutional requirements. Students may enroll in the Student Health Insurance Plan to satisfy the insurance requirement. For a complete list of required immunizations, please review the requirements at: <http://medicine.cnsu.edu/students-com/admissions/admission-steps>
2. Completion of all new student paperwork.
3. Financial aid clearance from the Financial Aid Office.

New students must submit the Emergency Contact and Medical Information Form to the Office of the Registrar by the end of Orientation. To make updates, a new form must be submitted to the Registrar. The Office of the Registrar requires submission of the Authorization to Release Student Records if a student desires to grant a personal third-party (such as a parent, spouse, etc.) access to his/her student record. Please refer to the ["Directory Information and Access to Student Records"](#) section of this catalog for more information.

New students should review their local, home, and billing contact information via the Student Portal and update as needed. It is the student's responsibility to maintain valid contact information throughout their enrollment at CNU. Instructions for accessing the Student Portal is sent by the CNU IT department to the student's CNU email address.

Registration is conducted by the Registrar prior to the start of each semester for new and continuing students. Students with business, financial, or other registration holds on their account will not be registered until the Registrar is notified that the hold has been cleared. Students who are in compliance with institutional requirements or who have a hold on their student account at the time of registration are required to satisfy the requirement and may also be required to submit the Course Add/Drop form by the end of the Add/Drop period to register or make schedule changes.

License Information for U.S. or Canadian Medical School Graduates

Completion of Program and Licensing

Completion of the educational program leading to a degree and/or diploma is dependent upon student performance and success. The requirements for licensure in the profession are established by the state where licensure is

sought. Completion of the educational program and obtaining a degree or diploma does not by itself guarantee licensure. Students are expected to remain current with other licensing requirements, including but not limited to the licensure examination and technical standards they may be required to meet in order to be licensed by the state in which they seek to practice. In addition, maintaining such technical standards is a condition for continued enrollment in this program; reasonable accommodations as defined and required by law may apply to persons with disabilities.

Licensure Eligibility

Information regarding the Medical Board of California Physician Licensure eligibility can be found at: http://www.mbc.ca.gov/Applicants/Physicians_and_Surgeons/

To be eligible for a Physician's and Surgeon's license, applicants must have received all of their medical school education from and graduated from a medical school recognized or approved by the Medical Board of California or must meet the requirements of Business and Professions Code section 2135.7. The medical school's name must exactly match the name on the Board's list of recognized medical schools. Prior to submitting an application, please refer to the Board's website to verify your medical school is recognized:

Medical Schools Recognized by the Medical Board of California

If you did not attend or graduate from a recognized or approved medical school you may be eligible for licensure pursuant to [section 2135.7 of the Business and Professions Code](#) (effective 1/2013).

[California Business and Professions Code section 30](#) requires mandatory disclosure of a Social Security Number (SSN), Individual Taxpayer Identification Number (ITIN), or Federal Employer Identification Number (FEIN). The number is used for tax enforcement purposes, for purposes of compliance with any judgment order for family support in accordance with [Section 17520 of the Family Code](#), or for verification of licensure or examination status by a licensing examination entity which uses a national examination and where licensure is reciprocal with the requesting state.

Address Where Instruction Will Be Provided

Class sessions are conducted at 9700 West Taron Drive, Elk Grove CA 95757. Experiential education and clinical rotations and service learning activities are conducted at assigned professional clinical locations and community sites as established by agreement among the student, professional preceptor, and College.

Instructions/Course Delivery

The College of Medicine offers innovative medical education integrated by organ system instead of the typical discipline based education. Students learn by using a mixture of lectures, small group sessions, Clinical Cases and Case Based Learning. In the pre-clinical years, students receive at least 130 hours of instruction regarding history and physical examination. The clerkships are conducted at a variety of

community based hospitals in the Sacramento area and surrounding Central Valley. CNUCOM also has affiliations in the Bay area and Southern California. All courses are delivered in English and English language services are not provided.

Awards: Non-Academic

During the academic year, students are notified in class, by email or a posting to the CNUCOM News bulletin board, of criteria, dates, nomination information, and deadlines of certain awards, scholarships, or honors. The College of Medicine Awards Committee coordinates selection of recipients of the College of Medicine honors, scholarships and awards. The Office of Student Affairs, Admissions and Outreach coordinates an Award and Scholarship Ceremony at the end of each academic year. Recipients and their friends and family are invited by formal invitation to attend this event to receive an official recognition of their achievement.

Policy on Stress & Fatigue Management

Purpose

In medical education, and specifically in clinical care settings, patient safety, as well as the personal safety and well-being of the student, mandates implementation of an immediate and proper response sequence. Student excess fatigue and/or stress may occur in patient care settings or in non-patient care settings. In non-patient care settings, responses may vary depending on the severity of and the demeanor of the student. The following is intended as guidelines for recognizing and observing excessive student fatigue and or stress in non-patient care and patient care settings.

All students will be trained on stress, fatigue, and burnout. Any release from duty assignments due to stress/fatigue that exceed the requirements for completion of educational objectives must be made up in order to meet curriculum requirements.

Responsibility of the Supervising Faculty: Classroom Setting

- In the classroom setting, if a faculty recognizes a student is demonstrating evidence for excess fatigue and/or stress, the faculty should notify the student's College Master, who, in turn, should discuss the possible reasons and opportunities for support.
- The College Master may recommend that the student meets with the Assistant Dean of Student Affairs and Admissions to identify available support.

Responsibility of the Supervising Faculty: Clinical Setting

- If a student in a clinical setting demonstrates evidence of excessive fatigue and/or stress, faculty supervising the student should immediately release the student from further clinical duties and responsibilities. If the student exhibits signs of excessive fatigue, the supervising faculty should advise the student to rest for at least a 30- minute period before operating a motorized vehicle. The student may also call someone to provide transportation back home.
- The faculty and/or supervising resident should privately discuss with the student the possible causes

of stress/fatigue in order to identify ways to reduce fatigue/stress.

- The faculty and/or supervising resident must immediately notify the Clerkship Director of the decision to release the student from further clinical duties.
- A student who is released from further clinical duties due to stress or fatigue cannot resume clinical duties without permission by the Clerkship Director.

Student Responsibility

- Students who perceive they are manifesting excess fatigue and/or stress have the professional responsibility to immediately notify their attending/precepting faculty and Clerkship Director without fear of reprisal.
- Students who recognize a peer student exhibiting excess fatigue and/or stress must immediately report their observations and concerns to the attending/precepting faculty and the Clerkship Director.

Clerkship Director Responsibility

- Upon removal of a student from duties, the Clerkship Director must determine the need for immediate change in duty assignments for peer students in the clerkship and/or the clinical site.
- The Clerkship Director will notify the departmental chair to discuss methods to reduce student fatigue.
- The Clerkship Director will meet with the student in person. If discussion with the Clerkship Director is judged to be inadequate, the student will be referred to the Director of Student Affairs and Admissions for provision of appropriate services and/or counseling.

Student Mistreatment Policy

Purpose

The purposes of this policy are to outline expectations of behaviors that promote a positive learning environment for CNUCOM medical students and other learners and to identify grievance procedures to address alleged violations. This policy offers a definition of these expectations through its Learning Environment Statement, provides examples of unacceptable treatment of medical students, and describes the procedures available to report incidents of mistreatment in a safe and effective manner.

Policy

CNUCOM is committed to assuring a safe and supportive learning environment that reflects the institution's values: professionalism, respect for individual rights, appreciation of diversity and differences, altruism, compassion, and integrity. Mistreatment of medical students is unacceptable and will not be tolerated.

Procedures

1. Distribution by the Student and Faculty Handbooks as outlined by this policy are to be shared with all students (new and continuing), all new residents and faculty teachers, and on an annual basis with all current instructors (e.g. residents, faculty, nurses, administrators).

2. Examples of Mistreatment—Students should use this Mistreatment Policy to address discriminatory, unfair, arbitrary or capricious treatment by faculty or staff. CNUCOM defines mistreatment as behavior that is inconsistent with the values of the university's Anti-Discrimination Policy Statement noted below and which unreasonably interferes with the learning process. When assessing behavior that might represent mistreatment, students are expected to consider the conditions, circumstances, and environment surrounding such behavior.
3. Examples of discriminatory, unfair, arbitrary or capricious treatment include, but are not limited to:
 - a. Verbally abusing, belittling, or humiliating a student.
 - b. Intentionally singling out a student for arbitrary treatment that could be perceived as punitive.
 - c. Unwarranted exclusion from reasonable learning opportunities.
 - d. Assignment of duties as punishment rather than education.
 - e. Pressuring students to exceed established restrictions on work hours.
 - f. Exploitation of students in any manner, e.g. performing personal errands.
 - g. Directing students to perform an unreasonable number of "routine hospital procedures", i.e. "scut" on patients not assigned to them or where performing them interferes with a student's attendance at educational activities, e.g. rounds, classes.
 - h. Pressuring a student to perform medical procedures for which the student is insufficiently trained (i.e. putting a student in a role that compromises the care of patients).
 - i. Threatening a lower or failing grade/evaluation to a student for inappropriate reasons.
 - j. Committing an act of physical abuse or violence of any kind, e.g. throwing objects, aggressive violation of personal space.
 - k. Making unwelcome sexual comments, jokes, or taunting remarks about a person's protected status as defined in the University's Anti-Discrimination Policy Statement.

Reporting Concerns of Possible Mistreatment

Medical students who themselves experience or observe other students experiencing possible mistreatment are encouraged to discuss it with someone in a position to understand the context and address necessary action. The individual considering making a report of mistreatment should first, if possible, attempt to resolve the matter directly with the alleged offender. Suggested options for medical students include:

1. DISCUSS it with their College Master, the Assistant Dean of Student Affairs, Admissions and Outreach, or the clerkship/course/sequence director.
2. REPORT it (utilizing one of three options below and hopefully prevent such behavior in the future):
 - a. File a formal report with the Assistant Dean of Student Affairs, Admissions and Outreach.
 - b. File an anonymous report via the CNUCOM website. This mechanism includes options for

prompt attention OR withholding the report until a future date.

- c. File an identified or anonymous report on campus using the College's official Student Complaint /Grievance Form located outside the Office of the Student Affairs, Admissions and Outreach.
 - Medical Students requesting complete anonymity should be made aware that doing so may interfere with the university's ability to investigate the concern and their ability to receive information about the follow-up investigation. Medical Students may also choose to pursue claims of unlawful discrimination or harassment in compliance with the University's Anti-Discrimination Policy Statement: "California Northstate University College of Medicine (CNUCOM) is committed to cultivating a diverse community that recognizes and values inherent worth in individuals, fosters mutual respect, and encourages individual growth. The College believes that diversity enhances and enriches the quality of our academic program. CNUCOM provides equal opportunity in education and employment and does not discriminate on the basis of race, color, creed, religion, national origin, ethnicity, gender identity, gender expression, age, sexual orientation, political affiliation, veteran status, or disability."

Responding to Concerns of Mistreatment

Every effort is made to respond to concerns of mistreatment in a professional manner to minimize the risk of retaliation. The Assistant Dean of Student Affairs, Admissions and Outreach and the Associate Dean of Faculty Affairs and Assessment will be provided with written notice of reported concerns of mistreatment of Medical Students (corresponding with the date indicated on the report), and conduct an initial inquiry into the circumstances. Consistent with Faculty Handbook guidelines on Disruptive or Inappropriate Behavior, and depending on the identity of the alleged offending party, the Assistant Dean of Student Affairs, Admissions and Outreach will engage the appropriate process channels for implementing notice to the offending party, and for investigation and implementation of potential corrective action. Aggregate and de-identified data on reports of mistreatment of Medical Students will be shared with the Curriculum Committee and the President's Executive Council at least quarterly.

No Retaliation

Retaliation is strictly prohibited against persons who in good faith report, complain of, or provide information in a mistreatment investigation or proceeding. Individuals who believe they are experiencing retaliation are strongly encouraged to contact the Assistant Dean of Student Affairs, Admissions and Outreach. Alleged retaliation will be subject to investigation and may result in disciplinary action up to and including termination or expulsion.

Academic Policies and Procedures

Please visit medicine.cnsu.edu, Student Services, to view all of our academic policies.

Academic Calendar

The academic calendar consists of two didactic course semesters lasting from 16—20 weeks long for first and second-year students. Third-year students complete clinical clerkships throughout the calendar year. Fourth-year students complete electives throughout the calendar year.

Credit Hour Policy

1 credit is assigned per hour each week of classroom or direct 1 credit for every 15 lecture hours and 30 preparation/homework hours (LEC). 1 credit for every 25 workshop hours and 25 preparation/homework hours (AL). 1 credit for every 30 laboratory hours and 30 preparation/homework hours (LAB). 1 credit hour for every week with scheduled at least 40 hours in an integrated curriculum, including (a) mixed methods of teaching [e.g., lecture, small group, TBL, flipped classroom, clinical skills, patient encounter, etc.] and (b) assigned self-preparation time (LAL). 1 credit hour for every week with assigned at least 36 clinical hours during clerkship or other clinical rotations (EL).

Code	Course Type	Code	Course Type
AL	Active Learning course	LAL	Lecture & Active Learning course
EL	Experiential Learning	LEC	Lecture course
LAB	Laboratory course		

Grading Convention

	Definition		Definition
H	90-100%, Pass with Honors	I	Incomplete, but work of passing quality (temporary grade)
HP	80-89%, High Pass*	Y	Provisional, requiring remediation (temporary grade)
P	70-89%, Pass	W	Official Withdrawal
F	<70%, Fail	IP	In Progress

*HP (High Pass) grade is issued only for M3 clerkship courses effective: 9/1/2017.

The work of all students in any of the required courses for the MD degree is reported in terms of the following grades: H (Pass with Honors), P (Pass) or F (Fail), or as two provisional marks: I (incomplete but work of passing quality), or Y (provisional, requiring remediation). Exceptions include Self-Directed Student Scholarly Project course and some electives that are graded P/F. Grade point average is not computed and is not available.

The provisional mark of Incomplete (I) is assigned only when the student's work is of passing quality, but is incomplete for good cause, as determined by the Course Director. The student is entitled to replace the "I" with a "P" or "H" grade and to receive course credit provided he/she satisfactorily completes the work of the course in a way specified by the Course Director. If course requirements have not been completed within the six weeks' time limit the Instructor of Record submits the "F" grade. Remediation of a "Y" grade must be completed within 6 weeks. Students remediating a "Y" grade are not eligible for Honors (H).

Course grades are determined by performance on the following:

- Summative Exam
- Written assignments
- Professionalism
- Other rubrics as assigned by the Course Director

For a passing grade, students are expected to score 70% or above or pass all scored/graded exams (except formative) and assignments as well as pass the requirements for professionalism according to the course specific rubrics. Percentages will be rounded to the nearest integer.

The Course Director must assign the final grade within 21 calendar days of the end of the course or the remediation examination. The grade assigned following completion of the reexamination is to be based either solely on the results of the reexamination or on an aggregate of all examinations as specified in the syllabus. If the student decides not to take the reexamination within six weeks, the Course Director must submit the "F" grade.

Numeric Scoring

During the progression of the course, faculty use numeric scoring to help quantify a student's achievements within the course. The Course Director assigns a total numeric score for the course, which translates to recording a passing grade if 70% or above, and an honors grade if 90% or above. The numeric score is kept for administrative, student progression and ranking purposes, and is not revealed to the student.

Narrative

Where possible (e.g. small group activities), all grades should be accompanied by a narrative.

Grade Appeal

A student can file an appeal if there is a disagreement with a final course grade. The appeal must be submitted within ten (10) business days of online grade posting.

The student must initiate a formal grade appeal process in writing and present the appeal to the course coordinator. The grade appeal form is located on the school's website.

The faculty member will respond to the student in writing within ten (10) business days. If the appeal cannot be resolved, the student has two (2) business days to appeal in writing to the appropriate Department Chair who renders a decision in writing within ten (10) business days of receipt of the formal appeal. (If the course Coordinator is the Department Chair, then the student may appeal the decision directly to the Senior Associate Dean of Medical Education and Accreditation. The student has two (2) business days to submit an appeal in writing to the Senior Associate Dean of Medical Education and Accreditation. The Senior Associate Dean of Medical Education and Accreditation will render a decision in writing within ten (10) business days of receipt of the formal appeal).

If the Department Chair cannot resolve the appeal, the student has two (2) business days to submit an appeal in writing to the Senior Associate Dean of Medical Education and Accreditation. The Committee will render a decision in writing within ten (10) business days of receipt of the formal appeal.

If the Senior Associate Dean of Medical Education and Accreditation cannot resolve the appeal, the student has two (2) business days to submit an appeal in writing to the Dean. The Dean will render the final decision in writing within ten (10) business days of receipt of the formal appeal.

If a grade appeal is approved, the professor must complete a Grade Change Form and submit the form to the Senior Associate Dean of Medical Education and Accreditation for final approval. The form must then be submitted to the Registrar so that the grade can be changed on the transcript.

The same process will be used at the conclusion of any required clerkship. The review will be conducted by the Associate Dean of Clinical Medicine instead of the Senior Associate Dean of Medical Education.

Graduation Requirements

Students are recommended and approved for the Doctor of Medicine degree from CNUCOM by the Student Promotions Committee provided that the following requirements are satisfied:

1. A maximum of four years are required to complete Phase A which includes passing USMLE Step 1.
2. Students must complete a minimum of 150 credit hours in the medical program, including all Phase A courses, all required clerkships in Phase B, and necessary Phase C sub-I and electives. No more than 27 credit hours of electives can count towards the 150 credit hours for graduation. Phase B and C must be completed within a maximum of four years.
3. Students must pass USMLE Step 1 and present supporting documentation by Feb 1st in the winter of their third year of training.
4. Total time from matriculation to graduation cannot exceed 7 years.
5. Students must pass USMLE Step 2 CK and Step 2 CS exams to qualify for graduation. It is strongly recommended but not required that Step 2 CK is passed by the end of the 1st semester of Phase C.
6. Failure to meet these requirements will result in review by the Student Promotions Committee.
7. Students must attain the knowledge and skills, and develop capacity and behaviors required of a physician.
8. Students must attain a level of clinical judgment which warrants entrustment by the Faculty as required for entry to residency.
9. Students must demonstrate a sense of responsibility and social accountability to patients and the community.
10. Students must comply with the School's standards of conduct, professionalism, and academic integrity.
11. Students must comply with the laws of the United States; the laws of the State of California; local city, county, and municipal ordinances; the policies, rules and regulations of the California Northstate University and the COM.
12. All academic requirements must be completed at least 10 days before the date of graduation. Failure to comply may lead to delayed graduation.
13. Only students in good academic standing are eligible for graduation. Students must have satisfied all conditions for resolution of probation before graduation.

In the clinical portion of the curriculum, students are required to complete 46 credits of required clerkships, 4 credits of required AI (Acting Internship) and 27 elective credits for graduation. Standard electives have one credit assigned for each week of training.

All students may take more than the required number of elective credits.

Exit Interview

Exit interviews will be conducted during the last academic year. COM does not issue grades, grant degrees, or furnish academic transcripts until all financial obligations have been met and all University property has been returned.

Commencement

Every student is required to attend commencement and wear traditional academic regalia consisting of cap, gown, and academic hood. Hoods of academics regalia are conferred upon the graduates at commencement by faculty. The hood is lined with the California Northstate University colors of cabernet (red) and gold, and is adorned with Kelly green, denoting Doctor of Medicine.

Any ornamentation must signify recognized College organizations and must be approved in advance of commencement by the Assistant Dean of Student Affairs, Admissions and Outreach.

Academic Progression Policy

Purpose

This policy can be found in its entirety on our website medicine.cnsu.edu under the "Current Students" tab.

The purpose of the policy is to ensure students reach and maintain high standards of learning throughout the medical program, accomplish all learning objectives and reach recommended competency levels. Students must demonstrate that they have attained a mastery of knowledge and skills, and developed capacity and behaviors required to practice medicine. The work of all students in any of the required courses for the MD degree is reported in terms of the following grades: H (Pass with Honors), HP (High Pass), P (Pass) or F (Fail), or as two provisional marks: I (incomplete but work of passing quality) or Y (provisional, requiring remediation). Exceptions include Self-Directed Student Scholarly Project course and some electives that are graded P/F. HP is only issued to M3 clerkships. A grade of F (Fail) in a course indicates a lack of understanding of the fundamental concepts of the course material necessary for progression.

Scope/Coverage

This progression policy applies to all medical students. This policy will be reviewed at least every three (3) years.

Policy

1. Good Academic Standing

A student who is advancing in the program as planned, is not placed on Probation and is not in Proceedings for Dismissal, is considered in Good Academic Standing. For students in good academic standing a standard (template) letter may be issued for verification purposes (academic and non-academic needs). If a student has been notified of probation or dismissal but a formal appeal is pending, a standard letter of good standing will still be issued.

2. Serving in Elective or Appointed Positions

For purposes of holding elective office at the class or the college level, serving on college or university committees, or representing the college to outside organizations, either on or off campus, a student shall be in a good academic standing.

For a student to assume elected or appointed position, both the Assistant Dean of Student Affairs and the Chair of the Student Promotions Committee must determine, based on the student's documented history of academic performance and professional behavior that assuming such responsibilities would be in the best interest of either the student or the college. Review of candidates for elected or appointed positions will be done before the announcement about filling in such positions.

If a probationary or dismissal procedures occur during an already started service term, the student will be allowed to complete the term; voluntary resignation will be accepted.

3. Medical Student Performance Evaluation (MSPE)

MSPE is the student's academic identity card. It is completed before October 1 of Phase C (Year 4). Its content includes, but is not limited to, the following:

- A descriptive narrative of student's performance over the length of the program till the date of MSPE issuance
- Student's academic standing, past and present probationary status and other disciplinary actions
- Student's class rank
- Student's class quartile
- Grades and narratives for completed courses/clerkships in Phases A, B, and C at the time of issuance
- For certain specialties (e.g., Internal Medicine residency programs), class rank within the related clerkship
- College Master/Advisor note/letter(s)
- Notes about research projects and service learning activities
- Any other information that might be considered important to residency programs (students will be notified about changes).

7.

Academic Notification

a. Academic Alert

This is not considered an adverse action. Academic Alert is issued by the Office of Student Affairs and applies to students in good academic standing that may have failed one or more formative assignments. Since the student is in good academic standing, this designation is not recorded in the Medical Student Performance Evaluation (MSPE) or in outside requests for documentation (e.g.—visiting student elective applications, other degree program applications, license requests, etc.). Academic alerts are shared with the student, the course director and the respective college master.

b. Behavioral Alert

Behavioral alert is not considered an adverse action. Behavioral Alert when warranted after incident report, fact finding and deliberation, is issued by the Office of Student Affairs for significant infraction of professionalism which will be shared with the student and the respective college master.

Student will be required to undertake behavioral improvement as outlined in the alert. Repeated incidence of unprofessional conduct may lead to disciplinary review at the Student Promotion Committee. Student must appear at the review session to defend, to explain, or to provide behavioral improvement plan.

Provisional Academic Status

The Y grade is a temporary transcript grade and can be replaced by a passing grade (P) if the course/clerkship requirements are met within six weeks after the course/clerkship ends. If Y has been assigned due to failing on a summative examination, such deficiency must be corrected within two attempts during remediation. Such remediation and all allowed attempts at remediation must occur within six weeks from the course/clerkship's end. Students remediating a "Y" grade are not eligible for Honors (H) in that course, and upon successful remediation a grade of P may be recorded.

When a student fails the initial summative exam, s/he will not be eligible for Honors even if the remediation happens before the final grade for the course is registered in the Registrar's office.

If the course/clerkship requirements are not met or the student is unable to pass a summative exam within two attempts during the remediation period, a grade of F (Fail) will be recorded.

Upon the recording a failing grade (F), the student will be required to appear in front of the Student Promotions Committee. The student's academic record will be reviewed and a personalized study plan, which must include retaking of the summative examination if that was the reason for the F grade, will be designed by the Student Promotions Committee with the help of the respective Course Director; the remediation study plan will be sent for approval to the Assistant Dean of Student Affairs, Admissions and Outreach. Upon successful completion of the study plan, a passing grade (P) may be recorded. If the student's performance is not satisfactory, the course grade will remain recorded as a Fail (F). The student will be allowed to repeat the course in its entirety if the student remediation plan assigned by the Student Promotions Committee is not met.

Provisional academic status will not be noted in the Medical Student Performance Evaluation (MSPE).

Extended remediation period may be requested for certain documented conditions or a leave of absence may be sought. A request for extended remediation period must be in writing and submitted by the student to the Student Promotions Committee, whose recommendation and accompanying documentation will be forwarded for approval to the Assistant Dean of Student Affairs, Admissions and Outreach.

Probationary Academic Status (Academic Probation)

A student may be placed on academic and/or disciplinary probation due to conditions such as but not limited to:

- a. Receiving two failing grades within one academic year
- b. Receiving a failing grade when repeating a course as a remediation of a previously recorded F in same course
- c. Documented unprofessional behavior that has not been corrected with remediation

A student may be placed on probation upon a written notice from the Assistant or Associate Dean of Student Affairs per recommendation by the Student Promotions Committee.

Probationary status is recorded in the Medical Student Performance Evaluation (MSPE) and in outside requests for documentation (e.g. -visiting student elective applications, other degree program applications, licensure requests, etc.). Students, who are on probation, are not eligible to assume new class, college or university-related positions, such as running for officer positions at student organizations, and applying for other elected or appointed positions.

Students on Probation must appear in front of the Student Promotions Committee, who will prepare a plan of action with specific timelines in accordance with the requirements to meet graduation deadlines. The plan of action may include but is not limited to repeating the failed courses, repeating an academic year or designing a study plan to extend the content of one academic year over two academic years, should the timing for graduation permit. This list is not all-inclusive. The plan for student remediation may not extend the maximum allowed time for graduation from the program (7 years). The plan of action must be in writing; the Student Promotions Committee's plan and accompanying documentation will be forwarded for approval to the Assistant Dean of Student Affairs, Admissions and Outreach.

Repeating Courses

Adverse actions such as repeating a portion of or a whole course, a semester, or an academic year will be determined by the Student Promotions Committee, following procedure and due process.

USMLE Step Examinations

Students are required to pass Step 1 and both components of Step 2, Clinical Knowledge (CK) and Clinical Skills (CS), of the United States Medical Licensing Examination (USMLE) prior to graduation. Performance on these examinations provides one method of comparing our students to those at other medical schools and thereby assessing performance relative to a national peer group. The successful completion of all three steps of the USMLE is necessary for obtaining a license to practice medicine.

Important Dates**USMLE Step 1**

Students must pass USMLE Step 1 by Feb 1 in the winter of their 3rd year. If the student has not passed Step 1 by Feb 1 of their third year, they will be allowed to complete the clerkship in which they are currently engaged. They will not be allowed to continue with subsequent clerkships, they will be placed on academic probation, and they will be required to appear before the Student Promotions Committee.

USMLE Step 2 CK and CS

Students must complete all required third year clerkships prior to taking the USMLE Step 2 CK and CS examinations. Students are required to register for the Step 2 CK and CS examinations no later than July 30, of their Phase C year. A failure to comply will be reported to the Student Promotions Committee.

Students are required to take Step 2 CK and CS before December 1st of their Phase C year, if graduation in May is anticipated. No student may defer the Step 2 CK and CS examinations beyond December 1st without appropriate approval from the Associate Dean of Student Affairs, Admissions and Outreach.

Students have, with the approval of the Student Promotions Committee, a maximum of 12 months after completion of their clinical course work to record a passing score on the USMLE Step 2 CK and CS examinations. Delay in presenting passing scores for Step 2 examinations may warrant delay in graduation and therefore affect start of residency.

Implications if Examination is Failed

Students who do not pass the USMLE examinations are reviewed by the Student Promotions Committee. Students are expected to develop a study plan for retaking Step 1, and should retake it as soon as possible before continuing in the clinical curriculum. Generally, if a student is not having academic difficulty in the curriculum, she or he is permitted to attempt the examination again. If a student has had difficulty in the basic science curriculum, the Student Promotions Committee may recommend dismissal if Step 1 is failed twice.

If a student fails Step 1, s/he should contact the Assistant Dean of Student Affairs, Admissions and Outreach to discuss the timing of retaking the examination in relation to his/her clinical schedule. With the Step 1 examination being given essentially year-round, the student is usually permitted to complete the clerkship in which s/he is currently enrolled.

For students who are having difficulty both in the curriculum and with the USMLE examinations, the Student Promotions Committee will take a more active role in the determination of the student's academic program and may require the student to develop an independent study program of three to six months in duration.

If either component of Step 2 is failed in the summer of the senior year, the student's clinical schedule needs to be modified to allow time for studying and retaking the exam within a timeframe that allows a passing score to be reported prior to the student entering his/her residency rank order list. The status of completion of either component of Step 2 is included in the Dean's MSPE. If Step 2 is failed a second time and if the student has had difficulty in the curriculum, the Student Promotions Committee may recommend dismissal.

If either Step 1 or either component of Step 2 is failed three times, the Student Promotions Committee will consider a dismissal recommendation.

The USMLE program recommends to medical licensing boards that they require that the dates of passing the Step 1, Step 2, and Step 3 examinations occur within a seven-year period.

For purposes of medical licensure in the United States, any time limit to complete the USMLE is established by the state medical boards. Many require completion of the full USMLE sequence within seven years from the date the first Step or Step Component is passed or, in some cases, from the date of the first attempt at any Step or Step Component. Students should understand the implications of time limits for licensure.

Policy on Assignment of Clerkship Grades

For all required clerkships, the Clerkship Director is responsible for assigning the final grade and narrative as the Clerkship Director bears ultimate responsibility for the clerkship and students assigned to the required clerkships. Grading for geographic sites that are remote from the main clerkship director should be done with consultation from the appropriate site director(s).

Policy on Deficient Grades

When a student receives a deficient grade in a course, it is a course director's responsibility to outline what will be expected to remediate the deficiency, as close to the time that the grade is given as possible. This should be as specific as possible, e.g., retake the course at California Northstate University, College of Medicine or in a summer remediation course at another institution approved by the course director, or retake XXX exam by YYYY date, etc. This should be communicated to the student directly by the course director, and should include a phrase at the end of the communication similar to the following:

"If you are on probation, receive, or have received other previous deficient grades, this remediation will require the approval of the Grades Committee in order to proceed. The Grades Committee considers performance across the entire curriculum in making recommendations for promotion or dismissal which may impact course-specific remediation."

It is fair to students to provide as much information as possible, and as early as possible, about what is expected to remediate a deficient grade. This information needs to be reported to the Registrar as well.

Academic Suspension

A student may be placed on academic suspension if the terms required to resolve Academic Probation are not successfully met. In these cases, the student must meet with the Student Promotion Committee where several options will be addressed, including the possibility of dismissal from the College of Medicine.

Dismissal

A student will be dismissed from CNUCOM if any of the following conditions exist and the Student Promotions Committee determines that dismissal is warranted:

- Failure to meet the requirements for academic progression as stated above for Repeating Courses, Remediation, Probation, or Academic Suspension;
- Failure to meet any other terms described above or otherwise imposed for Repeating Courses, Remediation, Probation, or Academic Suspension;
- Conduct subject to dismissal as described in the Academic Honesty: Honor Code section of the Student Handbook (See Appendix II);
- Foregoing an academic semester without obtaining an approved leave of absence;
- Failure to complete the degree requirements in seven (7) consecutive academic years from the date of the first day the student begins the program.

Appeal

With the exception of dismissal, the student may appeal all actions of the Student Promotions Committee to the Senior Associate Dean of Medical Education and Accreditation, in writing, within fourteen (14) days of notification of the action. The Senior Associate Dean of Medical Education and Accreditation renders a decision in writing within fourteen (14) days of the receipt of the formal written appeal. The decision of the Senior Associate Dean of Medical Education and Accreditation is final in these matters.

Students dismissed from the College may appeal the decision in writing within thirty (30) days of notification of dismissal to the Dean of the College. The Dean renders a decision in writing within thirty (30) days of receipt of the formal written appeal. The Dean's decision is final.

There is no appeal process for students placed on academic probation.

Attendance

Regular class attendance is expected of all students. The college recognizes that circumstances may cause a student to miss an occasional class. The student may make up the missed work, providing that it is an excused absence. What constitutes an acceptable rate of class attendance is a matter between students and their instructors, although the college expects instructors to maintain reasonable standards. If a student misses more than five percent (5%) of any class he/she needs to meet with the assigned College Master and/or Student Promotions Committee to discuss the situation. The College Master may refer the student to tutoring or if too much time is missed, the College Master in discussions with the faculty member may suggest that the student repeat the course. Students should refer to the Excused Absence Policy and Leave of Absence Policy for illness, family death, emergency or other serious personal issues.

Laboratory exercises and all Medical Skills sessions are mandatory. If a student misses a laboratory session or a Medical Skills session through an Excused Absence, s/he must make arrangements with the Course Director to make up the work that was missed.

Excused Absence Policy

A student may request an excused absence from required educational class/medical practice experiences for personal, emergency, compassionate, professional, or health-related reasons. To protect the confidentiality of students, all excused absence requests are initiated in writing through the Assistant Dean of Student Affairs, Admissions and Outreach (College of Medicine). Absences are generally for a short duration of a day or two, not generally longer than five academic days. Absences greater than five academic days may require a student to request a leave of absence or a personal withdrawal.

Process

Students should complete a Request for an Excused Absence Form posted online under the "Student Services" tab. Requests should be submitted to the Assistant Dean of Student Affairs at least 14 days in advance except in cases of emergency. Students also involved in off-campus programs should submit written requests as well.

Conditions and Requirements

On Campus Students:

Students on campus should complete a Request for Excused Absence form and submit it to the Assistant Dean of Student Affairs, Admissions and Outreach (College of Medicine) for approval.

Once approved, faculty and students are expected to make reasonable accommodations for make-up exams and assignments for excused absences. If the activity cannot be made-up, then the missed activity will not count against the student's final grade. Since course coordinators determine arrangements for missed coursework, students must contact course coordinators within 24 hours upon approval of an excused absence. Disputes or disagreements between a student and the faculty member concerning an excused absence should be submitted to the Assistant Dean of Student Affairs, Admissions and Outreach (College of Medicine) in writing for resolution.

Off Campus Students (Clinical Years 3 and 4):

General Principles

- Medicine is a profession of service. We are routinely called upon to subordinate our own priorities, needs, and desires to those of our patients. This applies to physicians-in-training as well.
- The faculty believes that increased involvement and assumption of progressive responsibility by students for patient care is essential to their development as future physicians. Students who

limit their participation in this process and do not fully immerse themselves in the care of patients significantly diminish their educational experience.

- Patients should be protected from communicable disease
- Attending to our own needs in a healthy way will in the long run improve our ability to be of sustained useful service to our patients.
- Required activities in all clerkships/rotations/electives in which you are enrolled must be completed satisfactory to pass.
- Attendance and punctuality are essential aspects of professional behavior and required for successful progress through a clinical rotation. Clinical performance and exam scores depend on your time and effort put into rotations. Absences or tardiness, whether for illness or other reasons, can affect your grade. In some cases, a student may be required to repeat all or a portion of a rotation because of excessive absence or tardiness. Unexcused absences or tardiness will not be permitted.

Practical Considerations

- Students should request time off for planned absences as far in advance as possible; three months or more is preferred, but no less than one month before the start of the clerkship. You must make this request to the contact listed for the clerkship in the Course Selection Book.
- Any student who anticipates needing multiple absences over the clerkship period, and particularly over the academic year, is directed to discuss their situation with the Assistant Dean for Student Affairs, Admissions and Outreach who can then interface with clerkship directors to facilitate appropriate scheduling adjustments. Examples include: regularly scheduled medical therapies, counseling, or personal/family needs
- When a medical student is to be absent from assigned duties on clinical services, for any reason, it is the responsibility of the individual student to notify the attending faculty physician, the director of any ongoing experiences (e.g. longitudinal Family Medicine lecture series) of his/her absence AND the clerkship director with as much prior notice as possible. Prospective arrangements for absences should not unduly inconvenience other members of the team including students, house officers, faculty, or staff. When asking for time off for medical or personal reasons, the utmost professionalism is expected of students.

Time Off During Clerkships

- Any time off from clinical rotations is at the discretion of the clerkship director. The clerkship director may decline to grant time off and/or may require remediation.
- Any time off allowed by the clerkship director should not materially change the rotation.

- Students may not miss more than 1 day in a 5 week clerkship and may not miss more than 2 days in clerkships greater than 5 weeks without being required to make up that time. All days off are tracked and followed centrally.
- Time off provided prior to the NBME subject exam will be determined within each clerkship. However, it is critical that the time allotted be the same across all hospital sites with that clerkship.
 - Example: The Internal Medicine Clerkship Director decides to allow for 1 day off prior to the NBME subject exam. All Internal Medicine rotations at each hospital site MUST allow for the same time off schedule for their students.

M4 Interviewing

Senior medical students have ample credit time available to be able to plan for periods of time off in the fourth year to accommodate residency interviewing. Because interviewing for a house officer position is time-consuming, students are expected to schedule blocks of time off for this purpose. Time off during the M4 year is governed by the same policy as above.

Extended Illness

On rare occasions when a prolonged illness causes a student to miss more than 1 day in a less than 5 week clerkship, or more than 2 days in a greater than 5 week clerkship, the student should:

1. Visit Student Health Services to obtain written documentation regarding duty restrictions, if any. You should provide this documentation to your Clerkship Director
2. Upon recovery, you should consult with the Clerkship Director regarding the viability of successfully completing the clerkship as planned. Consultation with the Assistant Dean of Student Affairs, Admissions and Outreach may be necessary.

Medical or Personal Reasons

Excused absences for health reasons of more than one (1) day must be verified by the student's physician using the Medical Excuse form. The Medical Excuse form must be signed by a physician and returned to the Assistant Dean of Student Affairs, Admissions and Outreach (College of Medicine) before an official excused absence can be given to the clinical preceptor, course coordinator, and/or instructor(s). Excused absence requests for health-related reasons not of an acute nature (scheduled procedures, out-of-town appointments with specialists) or personal reasons that are not an emergency must be presented to the Assistant Dean of Student Affairs, Admissions and Outreach (College of Medicine) two weeks prior to the date of the excused absence.

Conferences

CNUCOM supports the learning and professional development opportunities national or local

conferences can provide students; thus CNUCOM allows student participation and attendance on a limited basis.

If an absence from class does not interfere with the academic work of other students or does not result in the student missing a class assignment or rotation which cannot be remediated (as determined by the course coordinator), a student in good academic standing (no conditional grades and not on academic probation) may be allowed excused absence for a qualifying professional conference. In addition, if the aforementioned conditions are met, there may be additional days made available for the CMA, AMA, and other major medical organization for Student Presidents, members of the Student Organization Leadership Council, alumni association representatives, students holding a nationally-ranked position, students pre-approved to present research, or club officers. The Senior Associate Dean of Medical Education and Accreditation determines student eligibility and which conferences qualify. Approval of the Senior Associate Dean of Medical Education and Accreditation or designee is required for any other conference absences. Students are accountable for their academic performance and so must weigh the advisability of attending such conferences.

Students must obtain an excused absence form and submit it to the Office of the Senior Associate Dean of Medical Education, a minimum of 14 academic days prior to the conference. If the academic status of the student changes prior to departure for the conference and is failing a course, the permission to attend the conference will be revoked.

A limited amount of funding is available through the college for assisting students who plan to represent their organization or club at approved meetings (as described above). Travel requests to attend other types of meetings must be approved by the organization's advisor and the Senior Associate Dean of Medical Education and Accreditation. A request to attend an off-campus professional conference must be made by submitting a Request for an Excused Absence form while a request for funding must be made by submitting a Student Organization Travel Request form. Both forms must be filled out completely, including all required signatures, and submitted to the Senior Associate Dean of Medical Education a minimum of 14 days prior to the meeting or conference. Students requesting travel funds must: 1) be in good academic standing; 2) be a full-time student; and 4) be able to attend all student functions offered at the meeting/conference or have the ability to complete any and all other assignments as specified by the officer's and advisor of the organization the student is representing.

Professional Meetings

A goal of the College is to graduate competent physicians who will improve health care to a diverse population through medical expertise. The College appreciates the value, and encourages the participation

of all its students in professional organizations. The College recognizes that attendance at professional meetings is beneficial but may also interfere with the students' pursuits of academic excellence. Students desiring to attend professional meetings must obtain a written approval at least three weeks prior to the meeting from the Senior Associate Dean of Medical Education and Curriculum. Any student on academic probation will not be allowed to attend.

Leave of Absence

Purpose

The purpose of the policy is to provide guidelines for approved extended leaves of absences for medical students at CNUCOM.

Procedure

It is the responsibility of the student to ensure that a LOA request form is submitted in a timely manner. Non-attendance does not constitute notification of intent to apply for LOA status. It is the responsibility of the student to continue coursework (barring an emergency) until the LOA is approved.

In order to request a planned absence, students should first contact their individual College Master, and also immediately contact the appropriate course director(s) or clerkship director(s). After consultation with the College Master, an official LOA request must be submitted that specifically states the reason for the request. The LOA request must also be signed by both the Director of Student Financial Aid and the Registrar prior to being submitted to the Assistant Dean of Student Affairs. The Assistant Dean of Student Affairs will review the academic standing of the student in determining whether a LOA will be granted. Final approval of a LOA is required by the Senior Associate Dean of Medical Education. LOA forms can be found on the CNUCOM website and in the CNUCOM Student Handbook. All requests for planned absences must be submitted to the Assistant Dean of Student Affairs at least two months prior to the planned absence.

A LOA is approved for a specific period of time, not to last more than one calendar year. Due to the integrated curriculum at CNUCOM, a LOA causing a student to miss more than one course during the first two years of instruction will result in the student needing to repeat the entire year.

Likewise, a single clinical rotation missed due to a LOA may result in the student repeating that year. In general, a student is eligible for one LOA request during their tenure at CNUCOM. Requests for a second LOA are highly discouraged and unlikely to be approved due to the disruption it would cause to the student's chances of progression through the curriculum.

Students considering leaves of absence should consider the fact that an LOA can have a significant financial impact, and that the timing of the leave is therefore critical. A student may not receive a full refund of tuition

if a LOA is submitted after the first day of instruction. A leave may affect financial aid, health insurance and malpractice insurance coverage. University health insurance is good only through the last semester for which a student has been registered. Malpractice coverage is in effect only when a student is registered and participating in clinical activities that are approved as part of the curriculum. Therefore, clinical activities are not authorized by the school during an LOA. In addition, a student may not serve elected office or represent the school to another organization while on LOA unless the Senior Associate Dean of Medical Education has specifically granted an LOA with that provision. These factors should be carefully considered along with the timing and benefits of a planned LOA.

If a student is approved for a LOA, that student is eligible to return without reapplication if the absence is within the approved time frame. Prior to return, the student must submit an Intent to Return from Leave of Absence Form, which must be approved by the Assistant Dean of Student Affairs at least four weeks before the return of the student. If a student was granted a LOA with prerequisites for return to the College, the student must submit written proof of completion of the prerequisites with the Intent to Return Form. The Student Promotions Committee will review the academic progress of the student to determine the status of the student upon return from a LOA.

Failure of a student to adhere to the indicated policies for returning from a LOA may result in a terminal separation of the student with California Northstate University.

Leave of Absence Duration for Military Personnel

A LOA will be granted for all uniformed service members called to duty (whether voluntary or involuntary) for the duration of their time served. The student must fill out a Request for LOA form and provide the Registration and Records office with a copy of their written orders. Service members will be re-admitted to the university upon their return under the same re-admittance policies as all students who have been on a LOA from the university. Service members will not experience any added penalties from the University for fulfilling their military obligations.

Return from Leave of Absence

The student is to submit the Intent to Return Form or the Official College Withdrawal form at least four weeks prior to the planned return date. Submission of the completed Intent to Return Form to the Office of the Registrar is required to be eligible for course and rotation registration.

The student must meet Associate Dean of Student Affairs at least 30 days prior to the first day of class to review course and performance expectations for the upcoming the remainder of the student's educational career at CNUCOM.

If a student does not return within one year of approved LOA they are no longer eligible to return as a continuing student and must reapply to the University/College for admission (See Readmission to the University/College section below)

Withdrawal from University/College

Students may voluntarily withdraw from the University/College at any time during the academic semester. The student will earn a "W" grade for a course(s) that is (are) not complete at the time the withdrawal is initiated. Informing CNUCOM, your academic department or your instructor does not constitute official withdrawal from the program. All withdrawals must be processed by the Office of the Registrar.

Students must submit an Official College Withdrawal Form to the Office of the Registrar. A student must meet with and receive signatures from the following departments before the form can be filed with the Office of the Registrar: Office of Academic Affairs, Business Office, Financial Aid, and Office of the Registrar. A student that officially withdraws from the college is entitled to apply for readmission.

Readmission to the University/College

If a student has withdrawn from the University, the student may reapply to the College. If accepted, the student may be required to return as a first-year student.

Complaint/Grievance Policy

For complaints related to accreditation standards, please see Accreditation Information on page 9 of this catalog.

Internal complaints/grievances: A grievance is defined as a matter not falling under the progression policy for academic or non-academic due-process.

Procedure:

1. The student shall file a written complaint using the Student Complaint/Grievance Form.
2. The completed Student Complaint/Grievance Form should be submitted to any member of the CNU Office of Student Affairs in a sealed envelope.
3. The Associate Dean of Student Affairs will handle the complaint in accordance with the policies of the California Northstate University College of Medicine, will review the facts surrounding the issue and will attempt to resolve the complaint.
4. The complaint will be answered in writing by the Associate Dean of Student Affairs within four weeks of receipt of the complaint, excluding holidays/university breaks.
5. If the complaint relates to the Associate Dean of Student Affairs, the matter will be handled by

the Assistant Dean of Student Affairs following the same procedure.

6. If the Associate Dean of Student Affairs cannot resolve the complaint satisfactorily, the matter will be referred to an ad hoc committee formed on a case-by-case basis. This will include 3-5 individuals one of whom will have a legal background. Otherwise the committee will be constituted of CNU faculty and staff.
7. If the ad hoc committee cannot resolve the complaint satisfactorily, the matter will be transferred to the Dean for appropriate action.
8. Students may appeal decisions by filing an appeal with the Dean within five days of receipt of the complaint/grievance resolution. The Dean's decision is final.

A record of the student complaints is kept on file in the Associate Dean of Student Affairs office.

All aspects of student complaints shall be treated as confidential.



COM Course Descriptions

Department of Medical Education

COM 501 Foundations of Clinical Medicine (6 cr)

The Foundations of Clinical Medicine course will introduce the practice of using clinical presentations (CPs) to frame the delivery of the basic and clinical sciences. The CPs within this first course will be focused on common situations and presentations that a primary care physician will experience. Each week consists of 1 to 2 clinical presentations that are accompanied by clinical algorithms, clinical reasoning guides, and objectives lists. Medical science faculty and clinical faculty from the community will walk the students through the clinical algorithm(s) emphasizing critical decision points and setting the framework for the integration of the basic sciences. Following the clinical algorithm presentation by the medical science faculty or clinical faculty from the community, basic science faculty will present the fundamental principles from the traditional basic sciences (e.g. anatomy, biochemistry, cell biology, genetics, immunology, microbiology, nutrition, pathology, pharmacology, physiology etc.) to ensure adequate knowledge and skills required to arrive at a correct diagnosis. These basic science sessions will highlight the normal structures and functions of the system as a whole, immediately followed by an examination of various disease states including care and treatment options. Students will participate in clinical case example sessions as well as take part in a Medical Skills course that runs concurrently with the systems-based courses.

COM 511 Integumentary and Musculoskeletal Systems (7 cr)

The Integumentary and Musculoskeletal Systems course contains twelve clinical presentations that reflect commonly encountered situations affecting the integumentary and musculoskeletal systems. The course is focused on providing students with a detailed understanding of normal structure, function and pathologic dysfunction of the two systems. Each week of the seven weeks consists of 1 to 3 clinical presentations, which are accompanied by clinical algorithms, clinical reasoning guides, and detailed objectives lists. Medical science faculty or clinical faculty from the community will lead the students through the clinical algorithms emphasizing critical decision points and setting the framework for the integration of the basic and clinical sciences. Following the clinical algorithm presentation by the medical science faculty or clinical faculty from the community, basic science faculty will present the fundamental principles from the traditional basic sciences (e.g. anatomy, histology, embryology, biochemistry, immunology, microbiology, nutrition, pathology, pharmacology, and physiology) to ensure adequate knowledge and skills required to arrive at a correct diagnosis. These basic science lectures will highlight the normal structures and functions of the system as a whole, followed by presentations of various disease states including management and treatment

options. In addition to the lectures, library resources, and other learning activities that support each clinical presentation, students will attend anatomy labs and perform appropriate cadaver dissection activities and review prosected materials to reinforce learning of structures and relationships described in lecture. Traditional X-rays, CT scans and MRIs will be presented to illustrate normal and abnormal structures related to disease processes as well to illustrate some management techniques. In addition, students will participate in clinical case example sessions with medical science faculty or clinical faculty from the community and take part in a Medical Skills course that runs concurrently and supports content covered.

COM 521 Gastrointestinal System (5 cr)

This course will cover the structures and functions of the organs of the gastrointestinal tract, as well as the auxiliary organs critical for digestive processes including the pancreas and liver. The behavior of this complex system of organs will be considered in normal health and in a variety of GI, hepatic, and metabolic disorders. The clinical presentations (CPs) within the GI course will be focused on common situations and presentations that a primary care physician will experience such as swallowing difficulty, vomiting, diarrhea, jaundice, abdominal pain and distension, abdominal mass and GI bleeding. Each week consists of 1 to 2 CPs that are accompanied by clinical algorithms, clinical reasoning guides, and objectives lists. Clinical faculty will walk the students through the clinical algorithm(s) emphasizing critical decision points and setting the framework for the integration of the basic and clinical sciences. Following the clinical algorithm presentation by the clinical faculty, basic science faculty will present the fundamental principles from the traditional basic sciences (e.g. anatomy, biochemistry, cell biology, genetics, immunology, microbiology, nutrition, pathology, pharmacology, physiology, etc.) to ensure adequate knowledge and skills required to arrive at a correct diagnosis. These basic science lectures will highlight the normal structures and functions of the system as a whole, immediately followed by an examination of various disease states including care and treatment options. Students will participate in clinical case example sessions as well as take part in a Medical Skills and Masters Colloquium course that runs concurrently.

COM 526 Hematology (4 cr)

This course deals with components of the hematopoietic system – bone marrow, blood, and lymphoid tissues – emphasizing basic structures (of cells, tissues, organs) and functions (from molecular to tissue to whole organ level) in health and disease. Clinical presentations within the Hematology course are focused on common situations and presentations that a primary care physician is most likely to encounter, such as anemia, polycythemia, abnormal white cells, lymphadenopathy, abnormal bleeding (bleeding diatheses), and hypercoagulable states. Each week consists of 1 to 2

clinical presentations accompanied by clinical algorithms, clinical reasoning guides, and lists of learning objectives. Medical science faculty or clinical faculty from the community will introduce students to the clinical algorithm(s) for each clinical presentation, emphasizing critical decision points and setting the framework for integration of the basic and clinical sciences to each topic. Following the clinical algorithm presentation, medical science faculty will present fundamental principles from the basic sciences (e.g., anatomy, biochemistry, cell biology, genetics, histology, immunology, microbiology, nutrition, pathology, pharmacology, physiology) that underlie understanding of the schematic algorithms and provide knowledge and skills required to arrive at a correct diagnosis. Basic science sessions will highlight normal/homeostatic structure and function, followed by examination of relevant disease states, including introduction to care and treatment options. Students will actively participate in clinical case example sessions tied to each clinical presentation and will take part in Medical Skills and Masters Colloquium courses that run concurrently.

COM 531 Cardiovascular and Pulmonary Systems (9 cr)

The Cardiovascular and Pulmonary (CVP) Systems course deals with components of Cardiovascular and Pulmonary systems, which includes – the heart and major vessels, peripheral vascular system, lungs and its vessels and their integrated functions under normal and abnormal conditions. This course teaches the main components of the CVP system at a molecular, cellular, tissue and organ level, both in health and disease as well as their treatment and prophylactic strategies. The course consists of 16 clinical presentations (CPs) spread over 9 weeks, which were selected on the basis of the clinical importance and the frequency at which they are presented to a health care system. They are cough, hemoptysis and pulmonary nodules, pleural effusion, wheezing, acute and chronic dyspnea, peripheral swelling, mediastinal mass, abnormal pulse, palpitation, syncope, chest pain, cyanosis, abnormal heart sounds, shock and cardiac arrest. Students will be exposed to one to three clinical presentations every week followed by active learning sessions (such as small group discussions, TBL and flipped classes) relevant to the clinical presentation/s demonstrated during that week. The clinical faculty will be responsible for conducting those CPs with a logical approach to arriving at a clinical diagnosis using clinical algorithms and clinical reasoning guides, which are algorithms developed based on clinical information and probabilities of signs and symptoms for a particular disease condition. Students will also undergo preliminary training in the medical skills course where they will learn about physical examination and basic clinical and laboratory skills such as checking blood pressure, electrocardiography, spirometry and Gram staining. Each week, students will also be exposed to 2 hours of clinical case examples, where they will be given 4 clinical cases with necessary information to arrive at a clinical diagnosis using both their clinical and basic science knowledge. Here too, students will be using a combination of clinical

algorithms, an acquired knowledge base and course objectives for a logical deduction of a possible diagnosis. In addition, 2 hours of Masters Colloquium session performed every other week will teach students about socio-economic, community and global health issues from a more integrated perspective. The students will be evaluated using 4 formative examinations conducted every other week and a final summative examination at the end of the course.

COM 541 Renal System (5 cr)

This course will highlight the renal system's contribution to maintaining homeostatic levels of fluids, electrolytes, pH, and blood pressure. The behavior of this intricate system will be considered in normal health and in a variety of disorders. The clinical presentations (CPs) within the Renal course will focus on common situations and presentations that a primary care physician will experience such as hypertension, abnormal levels of different electrolytes, metabolic acidosis and alkalosis, polyuria, proteinuria and hematuria, renal calculi, renal mass, acute and chronic renal failure, and edema. Each week consists of 1 to 2 CPs that are accompanied by clinical algorithms, clinical reasoning guides, and objectives lists. Clinical faculty will walk the students through the clinical algorithm emphasizing critical decision points and setting the framework for the integration of the basic and clinical sciences. Following the clinical algorithm presentation by the clinical faculty, basic science faculty will present the fundamental principles from the traditional basic sciences (e.g. anatomy, biochemistry, cell biology, genetics, immunology, microbiology, nutrition, pathology, pharmacology, physiology etc.) to ensure adequate knowledge and skills required to arrive at a correct diagnosis. These basic science lectures will highlight the normal structures and functions of the system as a whole, immediately followed by an examination of various disease states including care and treatment options. Students will participate in clinical case example sessions as well as take part in a Medical Skills course that runs concurrently.

COM 551 Neuroscience (9 cr)

The Neuroscience course spans nine weeks and contains twenty clinical presentations that reflect commonly encountered situations affecting the nervous system. The course is focused on providing students with a detailed understanding of normal structure, function and pathologic dysfunction of the nervous system and special senses. Depending on the week, 1 to 5 clinical presentations will be covered, each one of them accompanied by clinical algorithms, clinical reasoning guides, and detailed objectives lists. Clinical faculty will lead the students through the clinical algorithms emphasizing critical decision points and setting the framework for the integration of the basic and clinical sciences. Following the clinical algorithm presentation, basic science faculty will present the fundamental principles from the traditional basic sciences (e.g., anatomy, histology, embryology, biochemistry, immunology, microbiology, nutrition, pathology, pharmacology, and physiology) to ensure adequate

knowledge and skills required to arrive at a correct diagnosis. These basic science lectures will highlight the normal structures and functions of the nervous system as a whole, including special senses, followed by presentations of various disease states including management and treatment options. In addition to the lectures, library resources, and other learning activities that support each clinical presentation, students will attend anatomy labs and perform appropriate cadaver dissection activities and review prosected materials to reinforce learning of structures and relationships described in lecture. Traditional X-rays, CT scans and MRIs will be presented to illustrate normal and abnormal structures related to disease processes as well to illustrate some management techniques. In addition, students will participate in clinical case example sessions with medical science faculty physicians and take part in a Medical Skills course that runs concurrently and supports content covered, emphasizing the skills that the students need to acquire to diagnose and for the management of different clinical cases.

COM 561 Behavioral Medicine (3 cr)

This course focuses on the etiology, diagnosis, and management of psychopathologic disorders. The clinical presentations (CPs) within the Behavioral Medicine course will focus on common situations and presentations that a primary care physician will experience. Each week consists of 1 to 2 CPs that are accompanied by clinical algorithms, clinical reasoning guides and objectives lists. Clinical faculty will walk the students through the clinical algorithm emphasizing critical decision points and setting the framework for the integration of the basic and clinical sciences. Following the clinical algorithm presentation by the clinical faculty, basic science faculty will present the fundamental principles from the traditional basic sciences (e.g. anatomy, biochemistry, cell biology, genetics, immunology, microbiology, nutrition, pathology, pharmacology, physiology etc.) to ensure that adequate knowledge and skills required to arrive at a correct diagnosis are communicated. These basic science lectures will highlight the normal structures and functions of the systems, immediately followed by an examination of various disease states including care and treatment options. Students will participate in clinical case example sessions as well as take part in a Medical Skills course that runs concurrently.

COM 571 Endocrine System (5 cr)

The endocrine system acts to coordinate the body's activities using chemical messengers (hormones) that are transported by the circulatory system to influence every cell, organ, and function of our bodies. The foundations of this system are the glands and the hormones they produce. Hormones, as the body's chemical messengers, transfer information and instructions from one set of cells to another and are thereby instrumental in regulating mood, growth and development, cellular and tissue function, metabolism, sexual function and reproductive processes. The course covers the endocrine system and its hormonal products, including (a) the hormone producing cells, (b) synthesis,

release and transport of the hormones, (c) the effects of hormones on target cells covering hormone receptors, signal transduction and the mechanisms of hormone action, (d) the intricacies of the hormonal and metabolic feedback regulatory mechanisms, (e) the effects of hormones on physiological processes as well as (f) the diseases caused by inappropriate hormone secretion and function. The basic science structure of the course (covering anatomy, embryology, histology, biochemistry, genetics, microbiology, immunology, physiology, pathophysiology and pathology) is integrated with clinical correlates through the introduction of Clinical Presentations (CP's) that focus on common presenting clinical situations/complaints that primary care physicians will encounter in their daily practice. The course will also introduce therapeutic principles in treating endocrine disorders. Instructional methods employed in this course will rely on active-learning techniques where students are involved in doing meaningful activities while being stimulated to think about what they are doing. The active learning methodologies incorporating self-directed learning that are employed throughout the course include: Team-Based Learning; Case-Based Learning; Flipped Classrooms; Inquiry-Based Learning; Problem-Based Learning; Oral Presentations; and Role Playing. All learning methods will be reinforced with the use of a variety of self-assessment techniques, including iRAT's and audience response system-supported tRAT's, aimed at furnishing real-time feedback.

COM 581 Reproductive System (5 cr)

The reproduction course is designed to teach each medical student the medical and scientific knowledge pertinent to the male and female human reproductive systems in both health and disease. The course consists of thirteen clinical presentations dispersed over the course of seven weeks. Each clinical presentation is accompanied by a clinical algorithm. The clinical algorithm consists of a branching diagram designed to aid the student in reaching a diagnosis via deductive reasoning. The branches of the clinical algorithm represent reductive diagnostic groups that narrow the range of diagnoses under consideration. Each clinical algorithm is accompanied by a clinical reasoning guide. The "Clinical Presentations" for this course were designed to capture the most common and medically significant chief complaints pertinent to the reproductive system in health and disease.

Following a given clinical presentation and the accompanying basic science content, students will participate in clinical case example sessions. Clinical case examples consist of clinical vignettes pertinent to a given clinical presentation. Students will assemble in small group classrooms, and will be mentored by a clinical faculty member. Four clinical vignettes, usually based on real patient cases, will be provided to the students. Students will be initially presented only with patient demographics and chief complaint. Students then will use the clinical algorithm and clinical reasoning guide to work through the case, eliciting the appropriate clinical history, physical examination findings, and ordering and interpreting any necessary imaging, clinical

laboratory studies, and/or biopsy/resection findings. Clinical case examples will provide students with an opportunity to employ the clinical algorithms and clinical reasoning guides to arrive at a diagnosis. Faculty clinicians, mentoring the clinical case example sessions, will provide feedback on a variety of topics including but not limited to: cost-effectiveness in arriving at a diagnosis and/or treatment, communication skills, and ethics. Concurrently, students will participate in Masters Colloquium, a course designed to cover complex, multidisciplinary aspects of professional development. Masters Colloquium content is designed to integrate with the reproduction course. Masters Colloquium topics scheduled during the reproductive course include the following: 1) Rape 2) Abortion 3) Ethical Issues in Reproduction. These topics were chosen as both critical topics for medical students to establish appropriate professional attitudes and behaviors, as well as critical topics pertinent to human reproductive health care. Concurrently, students will participate in the Medical Skills course. For example, following the clinical presentation and basic science sessions pertinent to an "abnormal Papanicolaou smear" students will practice performing Papanicolaou smears during their medical skill session.

COM 591 Stages of Life (5 cr)

(Birth, Growth, Development, Aging) This course spans the life cycle beginning with birth and infancy and concludes with the dying patient. The Stages of Life course contains 16 clinical presentations (CPs) that are focused on the most frequently encountered CPs that a primary care physician may experience. Each CP starts with a clinical algorithm that is presented by the clinical faculty. Each CP will be introduced by a brief definition and a statement of its clinical significance along with a list of potential causes. Clinical faculty will walk the students through the clinical algorithm emphasizing critical decision points and setting the framework for the integration of the basic and clinical sciences. Basic scientific concepts will be interwoven within each CP providing the necessary basis for understanding relationships and causal entities. Each CP is accompanied with a clinical reasoning guide that contains details of the thought process that follows the related CP. Clinical relevance and appropriate application of basic scientific knowledge will be reinforced with clinical case examples related to that CP.

COM 601 Medical Skills (1 cr)

Medical Skills course is designed to teach each medical student the basic clinical skills needed for medical practice. These skills include: communication, physician-patient rapport, history taking, physical examination, interpretation of diagnostic studies, note writing, oral presentations, use of patient care teams, application of medical and scientific knowledge in patient management, cost effective comparisons in treatment approaches, mastery of selected procedures and professionalism. In addition, we expect them to understand the use of counseling and feedback both in their own growth as future physicians as well as how to use this with their future patients.

Learning will be accomplished using a combination of: 1) preparatory self-directed learning materials, 2) surface anatomy sessions with body painting 3) hands-on demonstrations, 4) paired or standardized patient practice sessions, 5) simulated clinical procedures, 6) team-based problem solving exercises, 7) small group training using partial task simulators, 8) interactions with real patients with real medical problems or physical findings when appropriate and available 9) experiential education on relevant topics in nutrition, and 10) journal club. Formative feedback/assessment will include: 1) self-reflection, 2) self-assessment (video tapes), 3) faculty observation with checklist assessment, 4) peer feedback, and 5) standardized patient assessment.

The mini-OSCE (formative exam) and medium-OSCE (summative exam) will be used to: 1) familiarize them with the process used in USMLE step 2 CS exams, 2) facilitate improved efficiency in the basic clinical history and physical exam skills needed for 3rd and 4th year clerkships, and 3) objectively identify areas that need improvement.

COM 602 Medical Skills (1 cr)

Medical Skills course is designed to teach each medical student the basic clinical skills needed for medical practice. These skills include: communication, physician-patient rapport, history taking, physical examination, interpretation of diagnostic studies, note writing, oral presentations, use of patient care teams, application of medical and scientific knowledge in patient management, cost effective comparisons in treatment approaches, mastery of selected procedures and professionalism. In addition, we expect them to understand the use of counseling and feedback both in their own growth as future physicians as well as how to use this with their future patients.

Learning will be accomplished using a combination of: 1) preparatory self-directed learning materials, 2) surface anatomy sessions with body painting 3) hands-on demonstrations, 4) paired or standardized patient practice sessions, 5) simulated clinical procedures, 6) team-based problem solving exercises, 7) small group training using partial task simulators, 8) interactions with real patients with real medical problems or physical findings when appropriate and available 9) experiential education on relevant topics in nutrition, and 10) journal club. Formative feedback/assessment will include: 1) self-reflection, 2) self-assessment (video tapes), 3) quizzes, 4) faculty observation with checklist assessment, 5) peer feedback, and 6) standardized patient assessment.

The mini-OSCE (formative exam) and medium-OSCE (summative exam) will be used to: 1) familiarize them with the process used in USMLE step 2 CS exams, 2) facilitate improved efficiency in the basic clinical history and physical exam skills needed for 3rd and 4th year clerkships, and 3) objectively identify areas that need improvement.

COM 603 Medical Skills (1 cr)

Medical Skills course is designed to teach each medical student the basic clinical skills needed for medical practice. These skills include: communication, physician-

patient rapport, history taking, physical examination, interpretation of diagnostic studies, note writing, oral presentations, use of patient care teams, application of medical and scientific knowledge in patient management, cost effective comparisons in treatment approaches, mastery of selected procedures and professionalism. In addition, we expect them to understand the use of counseling and feedback both in their own growth as future physicians as well as how to use this with their future patients.

Learning will be accomplished using a combination of:

1) preparatory self-directed learning materials, 2) surface anatomy sessions with body painting 3) hands-on demonstrations, 4) paired or standardized patient practice sessions, 5) simulated clinical procedures, 6) team-based problem solving exercises, 7) small group training using partial task simulators, 8) interactions with real patients with real medical problems or physical findings when appropriate and available 9) experiential education on relevant topics in nutrition, and 10) journal club. Formative feedback/assessment will include: 1) self-reflection, 2) self-assessment (video tapes), 3) faculty observation with checklist assessment, 4) peer feedback, and 5) standardized patient assessment.

The mini-OSCE (formative exam) and medium-OSCE (summative exam) will be used to: 1) familiarize them with the process used in USMLE step 2 CS exams, 2) facilitate improved efficiency in the basic clinical history and physical exam skills needed for 3rd and 4th year clerkships, and 3) objectively identify areas that need improvement.

COM 604 Medical Skills (1 cr)

Medical Skills is a course designed to teach each medical student the basic clinical skills needed for medical practice. These skills include: communication, physician-patient rapport, history taking, physical examination, interpretation of diagnostic studies, note writing, oral presentations, use of patient care teams, application of medical and scientific knowledge in patient management, cost effective comparisons in treatment approaches, mastery of selected procedures and professionalism. In addition, we expect them to understand the use of counseling and feedback both in their own growth as future physicians as well as how to use this with their future patients.

Learning will be accomplished using a combination of:

1) preparatory self-directed learning materials, 2) hands-on demonstrations, 3) paired or standardized patient practice sessions, 4) simulated clinical procedures, 5) team-based problem solving exercises, 6) small group training using partial task simulators, 7) interactions with real patients with real medical problems or physical findings when appropriate and available 8) experiential education on relevant topics in nutrition, and 9) journal clubs. Formative feedback/assessment will include: 1) self-reflection, 2) self-assessment (video tapes), 3) faculty observation with checklist assessment, 4) peer feedback, and 5) standardized patient assessment.

The mini-OSCE (formative exam) and full-OSCE (summative exam) will be used to: 1) familiarize them with the process used in USMLE step 2 CS exams, 2) facilitate improved efficiency in the basic clinical history

and physical exam skills needed for 3rd and 4th year clerkships, and 3) objectively identify areas that need improvement.

COM 611 Masters Colloquium (1 cr)

The purpose of the Masters Colloquium course is to address important issues that the students will encounter in the practice of medicine and to prepare them to become compassionate, trustworthy, well-informed medical doctors who understand the challenges of this profession and can face them with confidence and honor. The Masters Colloquium course is a biweekly 2 hour seminar presented to medical students in Years 1 and 2. At the beginning of Year 1, students will be divided into groups of 10-20 and each group will constitute a college. Students will stay in their assigned college for the first two years of Medical School. Colleges will be led by College Masters. College Masters will be responsible for delivering the content of the Masters Colloquium course to their college. Changing the college will only be allowed in exceptional circumstances and only if appropriate exchange is done. Any requests to change the college should be well grounded, documented and submitted to the Office of Student Affairs, Admissions and Outreach. The colloquia are conducted in a discussion or workshop format, and cover complex, multidisciplinary aspects of professional development. Invited presentations by experts will be followed by discussion. Each Masters Colloquium session will be evaluated by the students of each college via an anonymous survey. Feedback from these surveys will be sent to the corresponding College Masters, the person that delivered the session (if different) and the Course Director. College Masters will assist in identifying and clarifying ambiguities within the presentations and will provide the first line of student evaluation and possible intervention. Areas that will be covered in the first year are:

- Fundamental Ethical Principles in Patient Care and Medical Practice
- Patient-Physician Relationship: Confidentiality, truth-telling and withholding information
- Breaking bad news; talking about genetic testing
- Communicating knowledge, interpretation, and recommendations orally and/or in writing to a wide range of professional or lay audiences in culturally appropriate ways.
- Scientific Methods for Gathering Information
- Principles of Evidence-Based Medicine
- Conflict of Interest
- Professional Honesty
- Informed Consent and Malpractice
- Providing Culturally Appropriate Care
- Population, Resources and the Environment
- Describe the components of social structure (eg family, neighborhood, community) and the role each plays in health behavior, disease prevention and the treatment for illness
- Health Implications of Travel, Migration and Displacement
- Complementary and Alternative Medicine

COM 612 Masters Colloquium (1 cr)

The purpose of the Masters Colloquium course is to address important issues that the students will encounter in the practice of medicine and to prepare them to become compassionate, trustworthy, well-informed medical doctors who understand the challenges of this profession and can face them with confidence and honor. The Masters Colloquium course is a biweekly 2 hour seminar presented to medical students in Years 1 and 2. At the beginning of year 1, students will be divided into groups of 10-20 and each group will constitute a college. Students will stay in their assigned college for the first two years of Medical School. Colleges will be led by College Masters. College Masters will be responsible for delivering the content of the Masters Colloquium course to their college. Changing the college will only be allowed in exceptional circumstances and only if appropriate exchange is done. Any requests to change the college should be well grounded, documented and submitted to the Office of Student Affairs, Admissions and Outreach. The colloquia are conducted in a discussion or workshop format, and cover complex, multidisciplinary aspects of professional development. Invited presentations by experts will be followed by discussion. Each Masters Colloquium session will be evaluated by the students of each college via an anonymous survey. Feedback from these surveys will be sent to the corresponding College Masters, the person that delivered the session (if different) and the course director. College Masters will assist in identifying and clarifying ambiguities within the presentations and will provide the first line of student evaluation and possible intervention. Areas that will be covered in the first year are:

- Fundamental Ethical Principles in Patient Care and Medical Practice
- Patient-Physician Relationship: Confidentiality, truth-telling and withholding information
- Breaking bad news
- Evidence-Based Medicine Principles
- Patient's Social Structure
- Conflicts of Interest
- Complementary and Alternative Medicine
- Chronic Disease
- Persistent Vegetative State
- Preserving Patient Dignity
- Providing Culturally Appropriate Care
- Health Implications of Travel, Migration and Displacement
- Population, Resources and the Environment
- Globalization of Health and Healthcare
- Informed Consent and Malpractice
- Professional Honesty

COM 613 Masters Colloquium (1 cr)

The purpose of the Masters Colloquium course is to address important issues that the students will encounter in the practice of medicine and to prepare them to become compassionate, trustworthy, well-informed medical doctors who understand the challenges of this profession and can face them with confidence and honor. The Masters Colloquium course is a biweekly 2 hour seminar presented to medical

students in Years 1 and 2. At the beginning of year 1, students will be divided into groups of 10-20 and each group will constitute a college. Students will stay in their assigned college for the first two years of Medical School. Colleges will be led by College Masters. College Masters will be responsible for delivering the content of the Masters Colloquium course to their college. Changing the college will only be allowed in exceptional circumstances and only if appropriate exchange is done. Any requests to change the college should be well grounded, documented and submitted to the Office of Student Affairs, Admissions and Outreach. The colloquia are conducted in a discussion or workshop format, and cover complex, multidisciplinary aspects of professional development. Invited presentations by experts will be followed by discussion. Each Masters Colloquium session will be evaluated by the students of each college via an anonymous survey. Feedback from these surveys will be sent to the corresponding College Masters, the person that delivered the session (if different) and the Course Director. College Masters will assist in identifying and clarifying ambiguities within the presentations and will provide the first line of student evaluation and possible intervention. Areas that will be covered in the second year are:

- The National Health System
- Healthcare in Low Resource Settings
- Allocating Resources in Low Resource Settings
- Human Rights in Global Health
- Use and Abuse of Steroids
- Use of Social Media Sites
- Time Management for Medical Students
- Taking Responsibility and Dealing with Errors
- The Doctor as a Patient
- Refusal of Care
- Advocacy for the Patient
- Ethical Issues in Reproduction
- Sexual Assault
- Abortion
- Respect for the Beliefs, Opinions and Privacy
- Parental/Surrogate Decision Making
- Approach to family violence, abuse, neglect and harassment
- Age-appropriate care and advanced care planning
- End of life issues and termination of life-sustaining treatment
- Our Beliefs, Opinions Prejudices and Religion as a Barrier to Providing Healthcare

COM 614 Masters Colloquium (1 cr)

The purpose of the Masters Colloquium course is to address important issues that the students will encounter in the practice of medicine and to prepare them to become compassionate, trustworthy, well-informed medical doctors who understand the challenges of this profession and can face them with confidence and honor. The Masters Colloquium course is a biweekly 2 hour seminar presented to medical students in Years 1 and 2. At the beginning of year 1, students will be divided into groups of 10-20 and each group will constitute a college. Students will stay in their assigned college for the first two years of Medical School. Colleges will be led by College Masters. College

Masters will be responsible for delivering the content of the Masters Colloquium course to their college. Changing the college will only be allowed in exceptional circumstances and only if appropriate exchange is done. Any requests to change the college should be well grounded, documented and submitted to the Office of Student Affairs, Admissions and Outreach. The colloquia are conducted in a discussion or workshop format, and cover complex, multidisciplinary aspects of professional development. Invited presentations by experts will be followed by discussion. Each Masters Colloquium session will be evaluated by the students of each college via an anonymous survey. Feedback from these surveys will be sent to the corresponding College Masters, the person that delivered the session (if different) and the Course Director. College Masters will assist in identifying and clarifying ambiguities within the presentations and will provide the first line of student evaluation and possible intervention. Areas that will be covered in the second year are:

- The National Health System
 - Healthcare in Low Resource Settings
 - Allocating Resources in Low Resource Settings
 - Human Rights in Global Health
 - Use and Abuse of Steroids
 - Use of Social Media Sites
 - Time Management for Medical Students
 - Taking Responsibility and Dealing with Errors
 - The Doctor as a Patient
 - Refusal of Care
 - Advocacy for the Patient
 - Ethical Issues in Reproduction
 - Sexual Assault
 - Abortion
 - Respect for the Beliefs, Opinions and Privacy
 - Parental/Surrogate Decision Making
 - Approach to family violence, abuse, neglect and harassment
 - Age-appropriate care and advanced care planning
 - End of life issues and termination of life-sustaining treatment
 - Our Beliefs, Opinions Prejudices and Religion as a Barrier to Providing Healthcare
- Department of Medical Education and Affiliated Institutions

Office of Research

COM 623 Self-Directed Student Scholarly Project (1 cr)

The required Self-Directed Student Scholarly Project (hereafter referred to as the Scholarly Project) is a one-year, research-based program to be completed during the 2nd year of medical school. Students will assemble in groups of 3 to reinforce teamwork and development of collaborative skills. The Scholarly Project will allow students to hone their analytical and investigative skills by participating in an active research project under a faculty mentor to produce usable data sets, public presentations, and abstracts suitable for publication. The requirements for the project will be explained to students during the Orientation. Students will then be encouraged to find an area of interest that they wish to

pursue further and to identify faculty and other students that have similar research interests. The following are examples of broader categories that are considered to be suitable for a scholarly project:

- Translational Research
- Clinical Research
- Basic Research
- Global Health
- Medical Education
- Epidemiology
- Public and Environmental Health
- History of Medicine

The students will choose their project and mentor during the first year in Medical school. The student group will develop a hypothesis/question and devise the methods and steps appropriate to answering the question/hypothesis with the guidance of their chosen mentor. They will then generate a suitable research project proposal with corresponding planned analysis and outcomes.

A final project proposal will be submitted to the Course Committee for review and approval. The project will be reviewed for its feasibility and for the level of critical thinking and if suitable, approved.

Approval by the Course Committee will allow the project to proceed. Depending on the type of project, the students may have to complete required training (for example, laboratory biosafety training, blood-borne pathogen training, radiation safety training, IRB and HIPAA training for working with human subjects or accessing patient data, or IACUC training for working with laboratory animals). Projects that include human research subjects will require approval by the CNU IRB. Similarly, if laboratory animals are used, approval by the CNU IACUC will be required.

COM 624 Self-Directed Student Scholarly Project (1 cr)

The required Self-Directed Student Scholarly Project (hereafter referred to as the Scholarly Project) is a one-year, research-based program to be completed during the 2nd year of medical school. Students will assemble in groups of 3 to reinforce teamwork and development of collaborative skills. The Scholarly Project will allow students to hone their analytical and investigative skills by participating in an active research project under a faculty mentor to produce usable data sets, public presentations, and abstracts suitable for publication. The requirements for the project will be explained to students during the Orientation. Students will then be encouraged to find an area of interest that they wish to pursue further and to identify faculty and other students that have similar research interests. The following are examples of broader categories that are considered to be suitable for a scholarly project:

- Translational Research
- Clinical Research
- Basic Research
- Global Health
- Medical Education

- Epidemiology
- Public and Environmental Health
- History of Medicine

The students will choose their project and mentor during the first year in Medical school. The student group will develop a hypothesis/question and devise the methods and steps appropriate to answering the question/hypothesis with the guidance of their chosen mentor. They will then generate a suitable research project proposal with corresponding planned analysis and outcomes.

A final project proposal will be submitted to the Course Committee for review and approval. The project will be reviewed for its feasibility and for the level of critical thinking and if suitable, approved.

Approval by the Course Committee will allow the project to proceed. Depending on the type of project, the students may have to complete required training (for example, laboratory biosafety training, blood-borne pathogen training, radiation safety training, IRB and HIPAA training for working with human subjects or accessing patient data, or IACUC training for working with laboratory animals). Projects that include human research subjects will require approval by the CNU IRB. Similarly, if laboratory animals are used, approval by the CNU IACUC will be required.

M3 Clerkships

COM 701 Family Medicine Clerkship (6 cr)

Each student will spend six weeks on a family practice rotation working directly with a family practice physician in one of the community preceptor's office. In these settings the students will have the opportunity to hone their skills in: patient care, medical knowledge, communication, professionalism, health care systems and personal development in the context of adult primary or inpatient care. Special emphasis will be placed on learning about preventative care, end of life issues, and health screening programs. In addition, we expect the students to be provided opportunities to participate in the common medical conditions seen in a family practice. The student's participation/exposure will be tracked by using a checklist of medical conditions and procedure skills that are expected to be seen/done during the rotation and which require the signature of the supervision physician.

COM 711 Internal Medicine Clerkship (8 cr)

Each student will spend four weeks on an internal medicine inpatient rotation working directly with an internist and family practice resident in one of the hospitals listed above. Additionally, the student will spend four weeks in an ambulatory (outpatient) setting working with a primary care internist. In these settings the students will have the opportunity to hone their skills in: patient care, medical knowledge, communication, professionalism, health care systems and personal development in the context of adult primary or inpatient care. Special emphasis will be placed on providing

opportunities to participate in the common medical conditions seen in internal medicine which will be tracked by each student having a checklist of medical conditions and procedure skills that are expected to be seen/done during the rotation and which require the signature of the supervising physician.

COM 721 Neurology Clerkship (4 cr)

Each student will spend four weeks at one of the institutions listed above working rotation working directly with a neurologist and possible family practice resident in either an inpatient or outpatient setting. In these settings the students will have the opportunity to hone their skills in: patient care, medical knowledge, communication, professionalism, health care systems and personal development in the context of neurologic problems. Special emphasis will be placed on honing a comprehensive neurologic history and physical exam including cognitive testing. To ensure adequate exposure to common neurologic conditions, each student will be provided with a checklist of conditions they are expected to see and participate in their care. A skills checklist for signatures will also be provided to ensure adequate skills practice.

COM 731 Obstetrics and Gynecology Clerkship (6 cr)

Each student will spend three weeks on an ob/gyn inpatient rotation working directly with an ob/gyn physician and family practice resident in one of the hospitals listed above. Additionally, the student will spend three weeks in an ambulatory (outpatient) setting. In these settings the students will have the opportunity to hone their skills in: patient care, medical knowledge, communication, professionalism, health care systems and personal development in the context of adult primary or inpatient care. Special emphasis will be placed on having a good working knowledge of pelvic female anatomy as it related to reproduction, labor and delivery as well as infectious and oncologic issues. Each student will have a checklist of conditions/skills they are expected to participate in and obtain signatures validating their participation. These include uncomplicated labors and deliveries as well as the steps/screening of uncomplicated pregnancies. They should have an opportunity to participate in counseling women about contraception, abortion and sterilization options.

COM 741 Pediatrics Clerkship (6 cr)

Each student will spend three weeks on a pediatric inpatient rotation working directly with pediatrician attending and family practice resident in one of the hospitals listed above. Additionally, the student will spend three weeks in an ambulatory (outpatient) setting. In these settings the students will have the opportunity to hone their skills in: patient care, medical knowledge, communication, professionalism, health care systems and personal development in the context of pediatric primary or inpatient care. Special emphasis will be placed on having a good working knowledge of normal infant/toddler milestones and adolescent development. In addition, they will be able to experience counseling

the adolescent in such issues as birth control, sexual behavior, social acceptance etc. Each student will have a checklist of conditions/skills they are expected to participate in and obtain signatures validating their participation.

COM 751 Psychiatry Clerkship (4 cr)

Each student will spend four weeks on a psychiatry rotation working directly with a family practice resident and psychiatry attending in one of the community hospitals or preceptor office listed above. In these settings the students will have the opportunity to hone their skills in: patient care with patients which psychiatric disorders, medical knowledge, communication, professionalism, health care systems and personal development in the context of adult primary or inpatient care. Special emphasis will be placed on learning psychiatric diagnoses, mental health testing, and communication with individuals with mental illness. In addition, we expect the students to be provided opportunities to participate in the common psychiatric conditions seen in a psychiatry including suicidal ideation and suicidal attempts. The student's participation/exposure will be tracked by using a checklist of medical conditions and procedure skills that are expected to be seen/done during the rotation and which require the signature of the supervision physician.

COM 771 Emergency Medicine Clerkship (4 cr)

Each student will spend four weeks on an Emergency Medicine Rotation at one of the hospitals listed above. In this setting the students will have the opportunity to hone their skills in: patient care, medical knowledge, communication, professionalism, health care systems and personal development in the context of adult primary or inpatient care. Special emphasis will be placed on expedient history/physical examinations, developing an appropriate differential, identifying urgent from routine patient needs. Each student will be expected to participate in the most common medical emergencies routinely seen in an emergency department. To ensure adequate exposure, each student will be asked to complete a checklist of conditions and skills they have participated in and obtain a supervising physician's signature. This will be routinely shared with the Clerkship Director to better determine the adequacy of the learning environment.

COM 761 Surgery Clerkship (8 cr)

Each student will spend four weeks on a general surgery inpatient rotation working directly with a general surgeon and family practice resident in one of the hospitals listed above. Additionally, the student will spend two, two week rotations in surgical specialty rotations. In these settings the students will have the opportunity to hone their skills in: patient care, medical knowledge, particularly anatomy, communication, professionalism, health care systems and personal development in the context of surgical care. Special emphasis will be placed on having a good working knowledge of anatomy as it relates to the surgical specialty, pre and post-operative care, operative risk assessment and informed consent procedures. Each

student will have a checklist of conditions/skills they are expected to participate in and obtain signatures validating their participation.

M4 Sub-Internships

For the following Sub-Internships, please see the specialty area within the section M4 Electives.

EME 801 Emergency Medicine Sub-Internship (4 cr)

INT 801 Internal Medicine Sub-Internship (4 cr)

INT 802 Inpatient Medicine Sub-Internship (4 cr)

PED 801 Pediatric Sub-Internship (4 cr)

PUL 801 Pulmonary & Critical Care Medicine Sub-Internship (4 cr)

OBG 801 Ob/Gyn Sub-Internship (4 cr)

SUR 801 Surgery Sub-Internship (4 cr)

FAM 801 Family Medicine Sub-Internship (4 cr)

M4 Electives

EXTERNAL/AWAY ROTATIONS

On the transcript, away rotations are indicated as xxx899. For example, EME 899 indicates an Emergency-area external/away rotation. Students apply independently for placement typically through VSAS or by separate application.

ALLERGY/IMMUNOLOGY (AAI)

AAI 810 Allergy, Asthma, Immunology (4 cr)

Sponsor(s): Dept. of Med. Ed. & Affiliated Institutions
Location(s): Kaiser South Sacramento

4-week rotation. Office based allergy practice that will help the learner to manage allergic diseases from rhinitis, asthma, food allergies, primary immunodeficiency, angioedema, and anaphylaxis. Additional areas for longer options (if multiple rotation lengths are offered) include spirometry, skin testing, allergy injections, drug desensitization, and care of anaphylaxis. Students will demonstrate knowledge pertaining to the management of allergic diseases including rhinitis, asthma, food allergies, primary immunodeficiency, angioedema and anaphylaxis.

AAI 812 Allergy & Immunology (4 cr)

Sponsor(s): Dept. of Med. Ed. & Affiliated Institutions
Location(s): Allergy Medical Group of Northern Area - Sacramento Clinic; Roseville Clinic

4-week rotation. This elective rotation is a four (4) weeks structured clinical experience under direct supervision of an endocrinology attending designed to orient students how to obtain problem focused history from patients with atopic disease focused physical exam. Students will also be exposed to patients with atopic disease. This intensive month will provide an opportunity for the

students to do more in-depth reading about the various atopic diseases and conditions they see. Students are expected to attend and participate in all scheduled educational activities at the host institution. Students will learn basic information of following diseases: basic atopic diseases, allergic rhinitis, sinusitis, asthma, urticarial, angioedema, food allergy/intolerance, drug allergy, insect allergy, environmental sensitivity. Students will perform a comprehensive history and physical examination in a timely manner and will gain experience in generating more specialized differential diagnoses, assessments, and diagnostic and treatment plans.

ANESTHESIA (ANE)

ANE 810 Anesthesia (4 cr)

Sponsor(s): Dept. of Med. Ed. & Affiliated Institutions

Location(s): Kaiser South Sacramento

4-week rotation. Students seeking to increase their knowledge of anesthesiology and perioperative medicine will actively participate in the anesthetic care of surgical patients. Progressive and increased responsibility for pre-, intra-, and postoperative patient management will be assumed by the student under the direction of an anesthesiologist. The student will participate fully in the perioperative anesthetic care of a healthy patient during uncomplicated surgery. Students will participate in the department's didactic conferences; reading is required to meet learning objectives. Students will learn to perform pre-anesthetic evaluation, present an organized summary of findings, develop a rational plan of anesthetic management -Discuss effects of surgery and anesthesia on common medical conditions and execute plans to manage these conditions perioperatively, conduct the intraoperative administration of anesthesia demonstrating knowledge of anesthetic pharmacology, perform peripheral venous, cannulation, bag and mask airway management, endotracheal intubation.

ANE 811 The Art and Practice of Anesthesiology and Pain Medicine (4 cr)

Sponsor(s): Dept. of Med. Ed. & Affiliated Institutions

Location(s): Sutter Roseville Medical Center

4-week rotation. Students will be assigned to an attending anesthesiologist each day and may rotate to another anesthesiologist depending on cases and anesthetic techniques used. Special emphasis is given to airway management, pre-operative evaluation, intra-operative and post-operative care of patients. Students will rotate to the ambulatory surgery centers, hospital inpatient surgical and obstetric department. Exposure to ICU and trauma patients will be included when students work alongside an on-call trauma anesthesiologist when available. Three didactic sessions will be given per week emphasizing the learning objectives. In addition, clinical and basic science articles will be critically reviewed and discussed. Complicated cases will also be analyzed and discussed. Students will learn:

1) Clinical skills include basic airway management, physiological monitoring, sedation and pain management.

2) Knowledge of basic anesthetic agents, intra-operative and pain medications.

3) Critical review of basic and clinical anesthesia literature.

4) Exposure to different anesthetic techniques from lines placement to regional and neuraxial anesthesia.

5) Techniques in stabilizing an unstable patient.

CARDIOLOGY (CAR)

CAR 810 Cardiology Clinical Rotation (4 cr)

Sponsor(s): Dept. of Med. Ed. & Affiliated Institutions

Location(s): Sutter Medical Center, Sacramento

4-week rotation. Students will be exposed to a wide range of cardiology experiences including inpatient consultation and procedures, as well as advanced heart failure and transplant clinical committee meetings, and outpatient office setting. They will be expected to have some initiative and ask questions and as such will "get out of it what they put into it." Students will be quizzed on differential diagnoses and treatment plans. (Pre-req: M4 standing & ICU Req.)

CAR 880 Cardiovascular Surgery (4 cr)

Sponsor(s): Dept. of Med. Ed. & Affiliated Institutions

Location(s): Sutter Medical Center Sacramento

4-week rotation. Students will understand cardiovascular pathophysiology and develop basic surgical skills. Pre assessment, operative experience, and post-operation care. This intensive month will provide an opportunity for the students to do more in-depth reading about the various atopic diseases and conditions they see. Students are expected to attend and participate in all scheduled educational activities at the host institution. Specialty Area(s): Cardiology; Surgery.

CAR 811 Cardiology Elective (4 cr)

Sponsor(s): Dept. of Med. Ed. & Affiliated Institutions

Location(s): SMG Cardiology Sacramento Sutter Medical Center, Sacramento, CA.

4-week rotation. Diagnosis and therapy of common cardiac diseases. Fundamentals of cardiac anatomy and physiology – working knowledge of common cardiac disease states – cardiac pharmacology interpretation of cardiac diagnostic studies (ECG, ECHO, Stress testing, and Nuclear Imaging) – cardiac history and physical examination. Experience in viewing cardiac procedures; EP studies, ablations, heart cath intervention, device implantation, transesophageal echo, cardio version. 12 lectures: ECG, ECHO, coronary anatomy and physiology, methods for evaluating cardiac disease, valvular heart disease, guideline: lipids, hypertension, risk factors, arrhythmia including ablation therapy, atrial fibrillation, peripheral vascular disease (arterial and venous), devices including resynchronization therapy, CAD diagnosis and treatment, treatment of CHF.

CAR 815 Cardiothoracic (4 cr)

Sponsor(s): Dept. of Med. Ed. & Affiliated Institutions

Location(s): Mercy San Juan Hospital

4-week rotation. Lung Cancer, Esophageal Cancer, Thymus cancer, Airway Disease, Esophageal Reflux Disease, Diaphragm Disease, Chest wall issues, critical

care for surgery, Lung Screening, Management of Stage IV cancers, Interventional Bronchoscopy and Esophagostomy. Clinical experiences includes rounds, seeing patients, consults, and surgery.

DERMATOLOGY (DER)

DER 810 Dermatology (4 cr)

Sponsor(s): Dept. of Med. Ed. & Affiliated Institutions

Location(s): Kaiser South Sacramento

4-week rotation. Students will learn about medical surgical dermatology. The student will be exposed to medical dermatology encounters with patients having primary skin disease, to include immunobullous diseases, contact dermatitis, connective tissue diseases, congenital skin disease, skin cancer, and infectious diseases, as well as medically-complicated patients displaying dermatologic manifestations of systemic disease or therapy. Clinical experiences includes working with other residents/fellows.

EMERGENCY MEDICINE (EME)

EME 801 Emergency Medicine Sub-Internship (4 cr)

Sponsor(s): Dept. of Med. Ed. & Affiliated Institutions

Location(s): Multiple

4-week rotation. Students will take a higher level of responsibility in the evaluation and management of emergency medicine or related specialty. Students will also be exposed to disaster medicine, wilderness medicine, and ultrasound in emergency care. In addition to primary care responsibilities, there will be daily lectures and/or conferences. Students are expected to attend and participate in all scheduled educational activities. Students will be managing patients as primary caregivers, under direct supervision by an attending physician. Students will learn how to perform a focused history and physical examination and will gain experience in generating differential diagnoses, assessments, and diagnostic and treatment plans at a level above the completed Emergency Medicine internship. Students will participate in a number of procedures including wound closure, reduction and splinting, incision and drainage etc. with guidance from experienced residents and faculty members. In addition, students will actively participate in both medical and trauma resuscitations during their rotation at Bellevue. (Pre-requisite: M4 standing; COM 771)

EME 810 Emergency Medicine (4 cr)

Sponsor(s): Dept. of Med. Ed. & Affiliated Institutions

Location(s): Kaiser South Sacramento

4-week rotation. Exposure of the medical student to patients with complaints covering all age and all subspecialties who present to the Emergency Department. Will have first contact responsibility to perform a history and physical exam on each of his/her patients. Will discuss each case with an Emergency Department physician prior to ordering lab work, x-rays, medicines or consultation. Will discuss each case with an Emergency Department physician prior to patient's treatment and disposition. Will be actively involved in patient's education concerning discharge instruction

(prescription, home care, etc.), and appropriate physician follow up.

ENDOCRINOLOGY (END)

END 810 Endocrinology (4 cr)

Understand real life experiences of an endocrinologists and learn the clinical utilities and techniques related to endocrinology and metabolism. Students will 1) Describe the disease process in patients by integration of clinical findings (history and physical) with laboratory tests, 2) Explain the pathogenesis and pathophysiology of diseases of the pituitary, thyroid, parathyroid, adrenal, pancreas (endocrine), and reproductive organs, 3) Outline the function of the endocrine organ and explain the metabolism of their hormones and their effects on the body, 4) Develop adequate experience with the use of insulin, thyroid hormones, corticosteroids, and other related therapeutic agents, and 5) Develop adequate experience in endocrine related surgery and diagnostic procedures such as thyroid needle biopsy, vascular ultrasound in diabetic patients, and bone mineral density testing.

FAMILY MEDICINE (FAM)

FAM 801 Family Medicine Sub-Internship (4 cr)

Sponsor(s): Dept. of Med. Ed. & Affiliated Institutions

Location(s): Multiple

4-week rotation. The clerkship gives medical students experience in an urban Family Medicine office, which serves a multi-ethnic, medically indigent population, as well as addressing child and women's health issues. Students will also see patients at our adolescent high school clinics and school for pregnant girls. Lecture series will concentrate on Public Health, Health Policy, and Managed Care. Students will have exposure to procedures such as Minor Surgery, Flex Sigmoidoscopy, Sports Medicine, and Colposcopy/Endometrial Biopsies.

FAM 810 Family Medicine Elective (4 cr)

Sponsor(s): Dept. of Med. Ed. & Affiliated Institutions

Location(s): Elevation Physicians

4-week rotation. In hospital and office-based contact with patients in a primary care setting, students develop: 1) adequate experience to competently approach and initially manage patients with acute and chronic medical problems that present to the outpatient office setting, 2) adequate experience to competently approach and conduct wellness visits for patients of any age, 3) adequate experience to proficiently gather and record patient data via history taking and the performance of physical examinations, and 4) proficient reasoning and communication skills relevant to the medical management of patients. Students attend weekly Family Medicine didactics. (Prerequisite: COM 701)

GASTROENTEROLOGY (GST)

GST 810 Gastroenterology (4 cr)

Sponsor(s): Dept. of Med. Ed. & Affiliated Institutions

Location(s): Mercy San Juan Medical Center

4-week rotation. Students will gain experience and knowledge about the specialty of Gastroenterology and

the conditions that specialists in this field are involved in diagnostic, management and treatment of. Demonstrate the pertinent aspects of the history and physical exam findings in patients with gastroenterological conditions. Explain the appropriate evaluative steps for patients with gastroenterological symptoms. Illustrate knowledge about common gastroenterological diseases and their treatment and management.

HEMATOLOGY & ONCOLOGY (HEM)

HEM 810 Hematology and Oncology (4 cr)

Sponsor(s): Dept. of Med. Ed. & Affiliated Institutions
Location(s): TBD

4-week rotation. Approach to a patient with hemonc ailments, history taking, relevant physical exam, interpretation of common blood tests, reviewing smears if needed, discussing imaging results and making a sound provisional diagnosis. Outline the pertinent history and physical exam considerations in patients with hematologic and oncologic diseases. Demonstrate knowledge about patients with hematology and oncology related diseases. Interpret common blood test results and their indications. Demonstrate knowledge about blood smear findings. Clinical experiences are predominately by seeing patients.

INFECTIOUS DISEASE (INF)

INF 810-01 Infectious Disease (4 cr)

Sponsor(s): Dept. of Med. Ed. & Affiliated Institutions
Location(s): Kaiser South Sacramento
4-week rotation. The student will be able to: 1. Understand the pathophysiology of common infectious diseases 2. Understand the clinical presentation and diagnostic approach to patients with Infectious Diseases. 3. Understand the approach to management and the use of antimicrobials or antivirals in patients with infectious diseases. Students will learn how to identify, diagnose and treat various bacterial, viral, fungal infections, Infer how to diagnose and treat various orthopedic/bone infections, neutropenic fevers, bacteremias, Demonstrate an understanding of management of infections in an immunocompromised host, Infer how to manage and counsel HIV patients, Show an understanding of the principles behind antimicrobial stewardship.

INF 810-02 Infectious Diseases – 2 Wk (2 cr)

Sponsor(s): Dept. of Med. Ed. & Affiliated Institutions
Location(s): Kaiser Sacramento and Morse Avenue
2-week rotation. Students will learn common infectious diseases and how to treat them. Learn about HIV care. Understand the importance of antimicrobial stewardship and the judicious use of antimicrobials. To show an understanding of how to identify, diagnose and treat various bacterial, viral, fungal infections Infer how to diagnose and treat various orthopedic/bone infections, neutropenic fevers, bacteremias. Demonstrate an understanding of management of infections in an immunocompromised host. Infer how to manage and counsel HIV patients. Show an understanding of the

principles behind antimicrobial stewardship. (Prerequisite: COM 711)

INF 812 California Northstate University College of Medicine M4 Infectious Diseases Clerkship

Sponsor(s): Dept. of Med. Ed. & Affiliated Institutions
Location(s): Kaiser Permanente Medical Center, Modesto
4-week rotation. This Infectious Disease clerkship is scheduled with a preceptor who is an expert in this field. The student will experience the day to day activities of clinicians as he/she assists in the care of their patients. Exposure to patients in the clinic and hospital setting will give the student opportunity to practice interview and documentation skills. The student may be given the opportunity to participate in procedures as the preceptor determines his/her readiness. The curriculum for this rotation is based on nationally recognized curriculum modified for fourth year elective focus from the Clerkship Directors for Internal Medicine. Clinical rotations for California Northstate University College of Medicine are developed in a community training model. Community training involves placing students in a busy physician's practice with learning objectives that direct the student's focus. It is the student's job to learn rather than the physician's job to teach. Learning is "just in time" taking advantage of educational opportunities that present and augmenting learning opportunities with reading or modules to complete the objectives. In this model, students are expected to develop lifelong learning patterns of accessing appropriate resources rather than being told what to do and when to do it (prescriptive learning). The required texts will provide information necessary for successfully studying in this rotation, but some students may prefer suggested texts or others. Preceptors may direct the student to their favorite texts or online resources.

INTERNAL MEDICINE (INT)

INT 801 Internal Medicine Sub-Internship (4 cr)

Sponsor(s): Dept. of Med. Ed. & Affiliated Institutions
Location(s): Highland Hospital, Alameda Health System
4-week rotation. Students will assume responsibilities quite similar to those of an intern, although with fewer patients. The student will be a member of a general medicine ward service consisting of an attending physician, residents, interns, and usually one "third year" student. Attending Rounds are made daily. Students will be able to gather a medical history, perform a physical examination, interpret common diagnostic tests, prioritize a differential diagnosis, and recommend and execute a management plan for common in-patient internal medicine patient presentations. Students will be able to organize and communicate their clinical thinking both in the form of written notes and oral presentations. Students will be able to communicate and collaborate in an inter-professional team of other healthcare providers, out-patient providers, consultants, RNs, and ancillary staff. Students will be able to communicate effectively with patients and caregivers. Students will transition patients safely across the healthcare system. (Prerequisite: COM 711)

INT802 Inpatient Medicine Sub-Internship (4 cr)

Sponsor(s): Dept. of Med. Ed. & Affiliated Institutions

Location(s): Kaiser South Sacramento

4-week rotation. The major goal of this sub-internship is to construct the clinical environment for the senior student to develop inpatient case management responsibilities in the broad field of internal medicine that will allow confident transition to resident level responsibilities in all disciplines.

INT 810 Palliative Medicine (2 or 4 cr)

Sponsor(s): Dept. of Med. Ed. & Affiliated Institutions

Location(s): Kaiser Permanente Modesto Medical Center

2 or 4-week rotation. Variable credit based on duration of rotation. Palliative Medicine is an essential component of medical care for patient with a life limiting illness. This course provides medical students and residents a framework in which to effectively to acquire Palliative Care knowledge and skill sets necessary to care for serious ill patients and their families. Clinical experiences includes Inpatient and outpatient Palliative Care experiences, pain management, disclosing serious news, offering prognostic information, disease trajectory, addressing goals of care, conducting family conference, home visits (optional). Mandatory Palliative Care didactic lecture given by preceptor in the first week of the rotation. (Pre-requisite: COM 711 or COM 701)

INT 811 Introduction to Palliative Medicine (4 cr)

Sponsor(s): Dept. of Med. Ed. & Affiliated Institutions

Location(s): Kaiser Sacramento and Roseville Hospitals

4-week rotation. Course goals are to provide the medical student with a foundation in the principles of Palliative Medicine, particularly communication skills, pain and symptom management, and care of the dying patient. Students will demonstrate proper communication skills, particularly between providers and patients/families, the ability to organize and conduct a family meeting. Students will discover the basics of pain and symptom management and improve prognostic awareness. Students will perform the basic skills of care for the dying patient. Clinical experiences includes Hospital-based care, following patients on the in-patient Palliative Medicine team and Hospice-based care, spending several days with hospice care providers in the community.

NEUROLOGY (NEU)**NEU 810 Clinical Neurosciences (4 cr)**

Sponsor(s): Dept. of Med. Ed. & Affiliated Institutions

Location(s): CNUCOM

4-week rotation. Build the understanding of neurology through better understanding of more basic clinical neurosciences. 1) Apply and demonstrate basic neurosciences theory and principles in clinical application. 2) Utilize the literature and apply the knowledge for evidence based practice. 3) Apply self-directed learning methodologies to clinical practice. 4) Create and propose teaching sessions and tutorials for other medical students. Regular meeting with the preceptor to discuss learning and teaching activities.

Regular self-directed learning activities with literature search and understanding.

NEU 811 Clinical Neurology Elective (2-4 cr)

Sponsor(s): Dept. of Med. Ed. & Affiliated Institutions

Location(s): CNUCOM

2-4-week rotation. Variable credit determined by duration of rotation. Student goals: Improve the understanding of neurology in the clinical setting, inpatient and/or ambulatory. Deepen and expand Neurology skills and knowledge acquired in 3rd year clerkship in areas of: history taking, physical exam, formulating differential diagnosis and management plan, improve skills in oral and written presentations, and procedural skills (when available). Will explore selected subspecialties in Neurology in more depth and continue to refine skills in professionalism, communication and collaboration. Students acquire skills in patient management as part of the neurology team under supervision by the preceptor.

NEU 812 Neuroradiology (4 cr)

Sponsor(s): Dept. of Med. Ed. & Affiliated Institutions

Location(s): Kaiser and others

4-week rotation. Students will understand and learn neuroradiology as an extension of general radiology. Students will apply and understand neuroanatomy through neuroimaging, understand theories and practice of different neuroradiological entities. Students will perform and understand neuropathology through neuroimaging and Analyze cost-effectiveness of different neuroimaging entities. Clinical experiences includes regular learning and interaction on clinical sites with the preceptors.

NEU 880 Neurosurgery (4 cr)

Sponsor(s): Dept. of Med. Ed. & Affiliated Institutions

Location(s): Mercy General Hospital, Sutter General Hospital

4-week rotation. The student will be exposed to the breadth of neurosurgery pathologies such as brain tumors, vascular lesions, pain syndromes, spinal deformities, trauma of the brain or spine. The student will have the opportunity to work in the clinic as well as in the operating room and assist on neurosurgical operations. It is recommended that the student has a strong interest in the surgical specialties for this rotation. Students will learn to: 1) Apply knowledge of neuroanatomy to describe etiopathogenesis and management of neurosurgical disorders. 2) Apply knowledge of neuroanatomy to interpret neuro-radiological findings. 3) Explain the mechanisms of traumatic brain injuries and outline their management. 4) Outline the clinical course including management of common neurosurgical problems including tumors, stroke, and spinal disease. Clinical experiences includes assisting in surgery, round in the hospitals, and evaluate patient in the clinic. Specialty Area(s): Neurology; Surgery.

OBSTETRICS GYNECOLOGY (OBG)

OBG 801 Ob/Gyn Sub-Internship (4 cr)

Sponsor(s): Dept. of Med. Ed. & Affiliated Institutions

Location(s): Multiple

4-week rotation. This is a course that exposes the student to general obstetrics and gynecology. The student will rotate through obstetrical services including labor and delivery, the gynecological services, and ambulatory clinics. There will be one call day. This rotation is designed to prime and prepare the student for an OBGYN internship. Medical students interested in an OBGYN residency are encouraged to experience this course.

OBG 810 Clinical OB/GYN Elective (2-4 cr)

Sponsor(s): Dept. of Med. Ed. & Affiliated Institutions

Location(s): CNUCOM

2-4-week rotation. Variable credit determined by duration of rotation. Students will apply knowledge of basic & clinical sciences into medical practice; obtain and deliver a complete concise, clear and concise oral and written presentation of a patient's history and examination in a more complex setting; distinguish normal from abnormal findings and the ability to localize the likely sites of lesion in the Ob-Gyn system from available clinical information; utilize and interpret common tests used in diagnosing common condition in Ob-Gyn; Formulate a differential diagnosis based on clinical information and relevant history; Demonstrate a systematic approach to the diagnosis and management of common Ob-Gyn conditions and formulate a logical management plan; understand Ob-Gyn Subspecialties and their applications; and function as a "contributor" to the team managing the Ob-Gyn disorders. (Pre-requisite: COM 731)

OPHTHALMOLOGY (OPH)

OPH 810 Ophthalmology Clerkship (4 cr)

Sponsor(s): Dept. of Med. Ed. & Affiliated Institutions

Location(s): Martel Eye Medical Group, Retinal Consultants

4-week rotation. Students are expected to develop the basic skills of medical problem solving, basic science integration, case management, procedural competence, and professional behavior as it pertains to the field of ophthalmology. They will accomplish this by: Refining history taking, Refining the physical examination, Developing a reasonable differential diagnosis, and Outlining an initial diagnostic and treatment plan. Clinical Experiences: Students will observe, participate, and manage in the care of clinical patients. Surgical Experiences: Students will observe and assist the preceptor in surgeries.

ORTHOPEDIC (ORT; SPM)

ORT 881 Orthopedic Surgery (4 cr)

Sponsor(s): Dept. of Med. Ed. & Affiliated Institutions

Location(s): Office, Mercy San Juan Hospital, surgery center

4-week rotation. General observations and interactions with patients. Rounds in the hospital and observation in surgery. Extend knowledge in orthopedic anatomy and physical exam skills of the extremities. Build basic surgical skills. Clinical experiences includes Office, OR, rounding, surgery center. Specialty Area(s): Orthopedics; Surgery.

ORT 882 Ortho Spine (4 cr)

Sponsor(s): Dept. of Med. Ed. & Affiliated Institutions

Location(s): Office, operating room, hospital (Sutter General)

4-week rotation. Students will see and evaluate patients in office, observe surgery, and make rounds. Develop experience in understanding medical and surgical options for patients with spine disorders. Evaluate patients with spine conditions. Understand decision making in operative and non-operative care. Specialty Area(s): Orthopedics; Surgery.

ORT 883 Orthopedic and Podiatry (4 cr)

Sponsor(s): Dept. of Med. Ed. & Affiliated Institutions

Location(s): Kaiser South Sacramento

4-week rotation. The student will be able to develop skills in the Orthopedic Surgery Department by examining and supporting the residents and faculty. The student will be able to make use of the outpatient clinic, emergency room, ambulatory surgery, and the main operating room. To show students to the field of orthopedics and its various subspecialties and research opportunities. To demonstrate a general feel for the training involved in Orthopedics. To show basic orthopedic skills such as x-ray interpretation, splinting and casting techniques, suturing techniques, physical exam. To extend the student knowledge of anatomy as it applies to musculoskeletal conditions, and to introduce student to orthopedic treatments and the medical decision making process. Specialty Area(s): Orthopedics; Surgery.

SPM 814 First Degree Care Sports Medicine

Sponsor(s): Dept. of Med. Ed. & Affiliated Institutions

Location(s): Rocklin Family Practice and Sports Medicine
Improve and acquire high skills in MSK exams / OX / Injections / Fracture & concussion management / XRAY interpretation. Students will: demonstrate and describe basic structures and functioning of body joints, demonstrate proper injections technique, observe and manage fractures and concussions, and acquire high skills in XRAY interpretation.

OTOLARYNGOLOGY-ENT (OTO)

OTO 813 Otolaryngology Elective (4 cr)

Sponsor(s): Dept. of Med. Ed. & Affiliated Institutions

Location(s): Sacramento, Roseville, & Carmichael.

4-week rotation. Develop an understanding of the diagnosis and treatment of many common otolaryngology diseases. Students will learn to: Improve examination skills, Develop recognition of head and neck pathology, Demonstrate the understanding of when to refer for specialty opinion. Clinical experiences includes on-site experience at one of three SacENT

offices as well as surgery centers and hospitals in Sacramento and Roseville areas.

OTO 881 Otolaryngology – Head and Neck Surgery

Sponsor(s): Dept. of Med. Ed. & Affiliated Institutions

Location(s): Kaiser Modesto and Stockton

4-week rotation. The objective of this course is to give a broad exposure to the clinical and surgical aspects of otolaryngology. Students will become acquainted with the experience of outpatient office, operating room care, and overall integrated care between patients, general otolaryngologists, and other health care providers including primary care, audiology, and speech therapy. In the office, students will have the opportunity to obtain focused history, perform a complete head and neck exam, formulate differential diagnosis, and management plan. In the operating room, students will perform chart reviews prior to surgery and be knowledgeable about relevant surgical anatomy and treatment options for common surgical disorders like otitis media, sinusitis, pediatric obstructive sleep apnea, and thyroid disorders. At the end of the rotation, the student will be expected to present a topic that was encountered during the rotation. The course setting includes Kaiser Stockton Medical offices (with a potential opportunity for facial plastics exposure), Modesto and Manteca Kaiser Hospitals. The hours may potentially run from 7 AM to 7 PM without overnight call. Clinical experiences includes Outpatient clinic, outpatient clinic procedures, operating room, audiology, lunch sessions, interdepartmental monthly meetings (Head and Neck surgery, audiology, and speech therapy). Specialty Area(s): Otolaryngology-ENT; Surgery. (Pre-requisite: COM 761)

PATHOLOGY (PTH)

PTH 810 Pathology (4 cr)

Sponsor(s): Dept. of Med. Ed. & Affiliated Institutions

Location(s): Hospital laboratory

4-week rotation. Students will understand the role of pathology, appropriate utilization of lab tests. Understand the behind the scenes work that is involved in clinical laboratory result reporting. Demonstrate the functions of a community pathologist: Anatomic pathology: frozen sections, intraoperative consultation, hospital slide review and special studies, gross examination of surgical specimens. Clinical lab management: take part in the hematology, blood bank, chemistry, attend hospital lab meetings as appropriate, lab management. The field of pathology differs from the more traditional fields of medicine. The rotation will be modified to accommodate for the interest of the student in the field of pathology. Patient care will include gross examination of surgical specimens, intraoperative consultations and slide review of hospital cases. These results will be correlated with the clinical information.

PEDIATRICS (PED)

PED 801 Pediatric Sub-Internship (4 cr)

Sponsor(s): Dept. of Med. Ed. & Affiliated Institutions

Location(s): Multiple

4-week rotation. The medical students will function as interns. Each student will meet with Dr. Khaira on the first day to determine how the rotation is to be structured with educational goals and objective. Rotations are based on the individual interests and needs of the student. Students will care for patients of all socioeconomic backgrounds and with a mix of pathology ranging from bread and butter problems to tertiary care inpatient pediatrics.

PEDS 810 Pediatric Cardiology (4 cr)

Sponsor(s): Dept. of Med. Ed. & Affiliated Institutions

Location(s): Capital Pediatric Cardiology Associates

4-week rotation. During the pediatric cardiology rotation, students will be under the direct supervision of pediatric cardiologists in both outpatient and inpatient setting. Students will attend either morning or afternoon clinic, participate in obtaining a history and perform a physical examination on patients in clinic. In addition, they will participate in the selection of appropriate tests and participate in the interpretation of those tests. Students will join pediatric cardiologists on their inpatient rounds seeing patients in Nursery, NICU, Pediatric Ward, and PICU. Students will also have the opportunity to observe cardiac catheterization for diagnostic and interventional procedures as well as observe pediatric electrophysiology studies and catheter ablations of rhythm disorders. Students will also have the opportunity to observe cardiothoracic surgery of neonates, infants, children and adolescents and adults with congenital heart disease. In addition to clinics, students will have the opportunity to attend pediatric cardiovascular presurgical and catheterization conferences in addition to participating in teaching conferences. Specialty Area(s): Cardiology; Pediatrics.

PEDS 811 Otolaryngology (2 cr)

Sponsor(s): Dept. of Med. Ed. & Affiliated Institutions

Location(s): Kaiser Roseville Women & Children's Center

2-week rotation. Rotation includes the analyzing of pediatric otolaryngology problems presented to specialist for diagnosis and treatment. The student develop skills in the clinic, hospital and operating room. Specialty Area(s): Pediatrics; Otolaryngology.

PED 812 Pediatric Neurology Elective (2-4 cr)

Sponsor(s): Dept. of Med. Ed. & Affiliated Institutions

Location(s): CNUCOM

2-4 week rotation. Variable credit determined by duration of rotation. Improve the understanding of neurology with expansion to Pediatric Neurology in the clinical setting, inpatient and/or ambulatory. Deepen and expand Neurology skills and knowledge acquired in 3rd year clerkship in areas of: history taking, physical exam, formulating differential diagnosis and management plan, improve skills in oral and written presentations, and procedural skills (when available). Continue to refine skills in professionalism, communication and collaboration. Acquire skills in patient management as part of the neurology team under supervision by the preceptor. Prerequisite: COM 741. Specialty Area(s): Pediatrics; Neurology.

PED 813 Pediatric Neurology with Clinical Neurology Subspecialty (2-4 cr)

Sponsor(s): Dept. of Med. Ed. & Affiliated Institutions

Location(s): CNUCOM

2-4 week rotation. Variable credit determined by duration of rotation. Clinical experience in Pediatric Neurology with the option to explore selected subspecialties/adult Neurology in more depth. Improve the understanding of neurology in the clinical setting, inpatient and/or ambulatory. Deepen and expand Neurology skills and knowledge acquired in 3rd year clerkship in areas of: history taking, physical exam, formulating differential diagnosis and management plan, improve skills in oral and written presentations, and procedural skills (when available). Continue to refine skills in professionalism, communication and collaboration. Acquire skills in patient management as part of the neurology team under supervision by the preceptor.

PHYSICAL MEDICINE (PMR)

PMR 810 Physical Medicine and Rehabilitation PM&R (4 cr)

Sponsor(s): Dept. of Med. Ed. & Affiliated Institutions

Location(s): Kaiser Sacramento and Roseville

4-week rotation. This rotation allows students to understand the diversity and scope of PM&R practice (neurologic rehab, musculoskeletal, spine, interventional procedures, electrodiagnostic tests, inpatient and outpatient care); Understand basic principles involved in the above. Clinical experiences includes: 1) Spine clinic appointments (Kaiser Sacramento and Roseville); Injection Risk Orientation (Kaiser Roseville); and outpatient physical therapy appointments, 2) Interventional spine procedures – fluoroscopy and ultrasound-guided (Kaiser Ros), 3) Electrodiagnostic clinic appointments (Kaiser Sac, Ros), 4) Neurorehab clinic appointments (Kaiser Sac, Ros); amputee clinic; and outpatient physical, occupational, speech therapy appointments, and 5) Hospital consultations, neuro-ICU and stroke rounds, inpatient therapy sessions (Kaiser Sac).

PMR 811 Physical Medicine and Rehabilitation (4 cr)

Sponsor(s): Dept. of Med. Ed. & Affiliated Institutions

Location(s): Kaiser South Sacramento

4-week rotation. This elective provides a custom designed experience in the field of Physical Medicine and Rehabilitation based on the interests of the individual student. Students can elect for a broad exposure to the field, or concentrate in a specific area including outpatient, acute inpatient, subacute inpatient, trauma, and electromyography testing. This elective is recommended for students contemplating a career in physical medicine and Rehabilitation as well as those anticipating a career in primary care.

PLASTIC SURGERY (PLS)

PLS 880 Plastic Surgery (2 or 4 cr)

Sponsor(s): Dept. of Med. Ed. & Affiliated Institutions

Location(s): AHMC San Gabriel Valley Hospital

2-4-week rotation. Variable credit determined by duration of rotation. The specialty of plastic and reconstructive surgery is that branch of surgery concerned with the restoration of normal form and function. It is a varied specialty involving adults and children and encompassing a wide range of conditions in different parts of the body. A major proportion of the workload involves take part in urgent or emergency cases including: Hand trauma, Burns and scalds, Soft tissue injuries involving face, trunk or limbs. Elective surgery includes demonstration of the following major areas: Head and neck. This includes excisional and reconstructive surgery for congenital and acquired abnormalities, and for malignancy involving the face and mouth. Cleft lip and palate and other craniofacial abnormalities. Breast: including surgery for reconstruction, reduction and augmentation. Hand and upper limb: including congenital and acquired conditions. Skin and soft tissue tumors. Congenital and acquired deformities of the trunk and urogenital system. Aesthetic or cosmetic surgery. One of the most interesting aspects of the specialty is the frequency with which plastic surgeons relate with surgeons from other specialties such as general surgery, orthopedics, otorhinolaryngology, and maxillofacial surgery. In these cases, the reconstructive techniques that plastic surgeons have at their disposal are recognized. The specialty is also closely associated with aesthetic surgery where body parts are surgically altered to bring about an improvement in appearance.

PLS 881 UC Davis Plastic Surgery Acting Internship (4 cr)

Sponsor(s): Dept. of Med. Ed. & Affiliated Institutions

Location(s): UC Davis Medical Center

4-week rotation. Gain a greater appreciation of Plastic Surgery, as the surgical specialty that restores, reconstructs, or alters the human body in response to congenital or acquired deformities following trauma, weight changes, or the natural aging process. It encompasses many specialty areas including craniofacial, hand, microsurgery, breast and aesthetic surgery. Elective is flexible with primary emphasis on reconstructive and aesthetic surgery at the University Hospital with opportunities for assisting in the operating room. The rotation also includes Trauma call to provide experience with the evaluation and management of maxillofacial and hand trauma with opportunities for suturing of lacerations as well as closed reduction and splinting of common hand fractures.

PULMONARY (PUL)

PUL 801 Pulmonary & Critical Care Medicine Sub-Internship (2 or 4 cr)

Sponsor(s): Dept. of Med. Ed. & Affiliated Institutions

Location(s): Sutter Sacramento/Roseville Med/Mercy San Joan

2 or 4 week rotations. Variable credit determined by duration of rotation. This rotation offers an opportunity for a 4th-year student to work jointly with a faculty attending to evaluate and manage critically ill medical and surgical patients. Typical patient diagnoses include

myocardial infarction and cardiac arrest, acute respiratory failure (asthma, COPD, pneumonia, ARDS), delirium and coma, stroke, severe sepsis, toxic ingestions, diabetic ketoacidosis, cardiogenic and septic shock, renal and hepatic failure, and post-operative co-management. A comprehensive evidence-based management approach based in physiology will be taught. Students will be responsible for patient evaluations and notes and will progress to performance of diagnostic and therapeutic procedures as appropriate. Students will become familiar with basic mechanical ventilator management and arterial blood gas interpretation, and the value of a multi-professional team approach to the care of the critically ill.

PUL 810 Pulmonary & Critical Care

Sponsor(s): Dept. of Med. Ed. & Affiliated Institutions

Location(s): Kaiser South Sacramento

4-week rotation. General Description: This rotation offers an opportunity for a 4th-year student to work jointly with a faculty attending to evaluate and manage critically ill medical and surgical patients. Typical patient diagnoses include myocardial infarction and cardiac arrest, acute respiratory failure (asthma, COPD, pneumonia, ARDS), delirium and coma, stroke, severe sepsis, toxic ingestions, diabetic ketoacidosis, cardiogenic and septic shock, renal and hepatic failure, and post-operative co-management. A comprehensive evidence-based management approach based in physiology will be taught. Students will be responsible for patient evaluations and notes and will progress to performance of diagnostic and therapeutic procedures as appropriate. Students will become familiar with basic mechanical ventilator management and arterial blood gas interpretation, and the value of a multi-professional team approach to the care of the critically ill.

PUL 811 Pulmonary & Critical Medicine

Sponsor(s): Dept. of Med. Ed. & Affiliated Institutions

Location(s): Simi Valley Hospital & Los Robles Regional Medical Center

4-week rotation. Students will learn how to manage respiratory diseases both inpatient and outpatient. Students will build the skill to manage COPD, asthma, pneumonia and the skill to manage critical patients in the ICU. Students manages sepsis, stroke, and many other critical illnesses in the ICU.

RADIOLOGY/NUCLEAR MEDICINE

(RAD)

RAD 810 Radiology (4 cr)

Sponsor(s): Dept. of Med. Ed. & Affiliated Institutions

Location(s): Kaiser South Sacramento

4-week rotation. Students will gain experience and knowledge about the specialty of Radiology, its indications, interpretations, and common interpretation errors. After the 4-week rotation through various sections of the department, student(s) should be able to:

- 1) Explain the basic principles of radiography and identify basic daily routine clinical radiographic examinations and interpretation of common diseases-

pathologies. 2) Explain the basic principles of computed tomography (CT) and magnetic resonance imaging (MRI) its daily routine clinical examinations including appropriate indications and grasp basic cross-sectionally anatomy as well as common pathologic conditions/diseases. 3) Explain the basic principles of fluoroscopy and basic daily routine clinical fluoroscopic examinations and procedures. 4) Explain the basic principles of nuclear medicine and its daily routine clinical examinations and interpretation. 5) Explain the basic principles of interventional radiography and its daily routine clinical examinations and procedures.

RAD 811-01 Interventional Radiology (4 cr)

Sponsor(s): Dept. of Med. Ed. & Affiliated Institutions

Location(s): Kaiser South Sacramento

4-week rotation. Students will understand the basic technical principles of image-guided procedures using fluoroscopy, ultrasound, and CT and application into intervention in organ systems. Students are exposed to a wide range of procedures performed by a practicing Interventional Radiologist. Students will understand the clinical principles of interventional radiography as applied to disease processes and importance of active patient management. Students will develop mastery of arterial, venous anatomy, mastery of Seldinger technique, advanced understanding of interventional oncology especially in treatment of hepatocellular carcinoma, and understanding of clinical role of IR in caring for patients in the outpatient setting. Students will perform the familiarity with use of ultrasound and ultrasound guided needle access, use of guide wires, catheters, and microcatheter systems. Students will demonstrate familiarity with angioplasty equipment, stents, and embolic agents, the understanding of clinical role of IR in caring for the critically ill patient, and familiarity with venous and arterial interventions.

RAD 811-02 Interventional Radiology (4 cr)

Sponsor(s): Dept. of Med. Ed. & Affiliated Institutions

Location(s): AHMC Whittier Hospital

4-week rotation. Designed to provide the student with a better understanding of the central role of interventional radiology in the evaluation and management of patients through participation in reading room readouts, radiology call, case presentations, interactive labs, and observation of the various imaging modalities and procedures. Students will construct the appropriate sequencing of exams and the limitations of diagnostic imaging tests, including cost-effectiveness of imaging studies. Apply basic interpretive skills to evaluate common imaging studies – predominantly plain films and CT. Take part in imaging interpretation, including basic study identification, recognition of normal radiographic and cross-sectional anatomy, and common pathology as depicted on common studies. Utilize the PACS system to retrieve and review images.

RAD 816-01 Nuclear Medicine, Molecular Imaging and Theranostics (4 cr)

Sponsor(s): Dept. of Med. Ed. & Affiliated Institutions

Location(s): Kaiser Hospital-Roseville, Sacramento

4-week rotation. Students will demonstrate knowledge of Nuclear Medicine items which pertain to USMLE Step 2. and the ability to tackle what is the next step imaging test asked on standardized examinations. Students will perform the ability to manage Hyperthyroid patients and gather a focused history on patients with Hyperthyroidism. Students will be able to describe the appropriate utilization of cardiac imaging guidelines and Fleischner criteria for management of pulmonary nodules (both solid and subsolid). Students will show knowledge of basics of PET, molecular imaging and theranostics. (Pre-requisite: COM 711; COM 761)

RAD 816-02 Nuclear Medicine, Molecular Imaging and Theranostics (2 cr)

Sponsor(s): Dept. of Med. Ed. & Affiliated Institutions
Location(s): Kaiser Hospital-Roseville, Sacramento
2-week rotation. Students will demonstrate knowledge of Nuclear Medicine items which pertain to USMLE Step 2. and the ability to tackle what is the next step imaging test asked on standardized examinations. Students will perform the ability to manage Hyperthyroid patients and gather a focused history on patients with Hyperthyroidism. Students will be able to describe the appropriate utilization of cardiac imaging guidelines and Fleischner criteria for management of pulmonary nodules (both solid and subsolid). Students will show knowledge of basics of PET, molecular imaging and theranostics. (Pre-requisite: COM 711; COM 761)

RENAL

REN 810 Nephrology (2 cr)

Sponsor(s): Dept. of Med. Ed. & Affiliated Institutions
Location(s): Kaiser Medical Center, Roseville
2-week rotation. Basics of Renal disease, Acute Kidney Injury, Chronic Kidney Disease, Hypertension, Electrolyte abnormalities and introduction to dialysis and kidney transplant

RHEUMATOLOGY (RHE)

RHE 810-01 Rheumatology (4 cr)

Sponsor(s): Dept. of Med. Ed. & Affiliated Institutions
Location(s): Roseville Rheumatologists, Roseville, CA
4-week rotation. Rheumatology is a study of autoimmune disease and in this specialty students would learn clinical signs and symptoms of some of the most common rheumatologic autoimmune diseases like Rheumatoid arthritis, Lupus, Psoriatic Arthritis, Ankylosing spondylitis and various other autoimmune disease. Evaluate history and physical examination specific for rheumatologic disease process. Maximize basic knowledge about most common disease like Rheumatoid arthritis, Osteoarthritis, lupus and gout.

RHE 810-02 Rheumatology (2 cr)

Sponsor(s): Dept. of Med. Ed. & Affiliated Institutions
Location(s): Roseville Rheumatologists, Roseville, CA
2-week rotation. Rheumatology is a study of autoimmune disease and in this specialty students would learn clinical signs and symptoms of some of the most common rheumatologic autoimmune diseases like

Rheumatoid arthritis, Lupus, Psoriatic Arthritis, Ankylosing spondylitis and various other autoimmune disease. Evaluate history and physical examination specific for rheumatologic disease process. Maximize basic knowledge about most common disease like Rheumatoid arthritis, Osteoarthritis, lupus and gout.

RHE 810-03 Rheumatology (2 cr)

Sponsor(s): Dept. of Med. Ed. & Affiliated Institutions
Location(s): TBD

2-week rotation. Rheumatology is a study of autoimmune disease and in this specialty students would learn clinical signs and symptoms of some of the most common rheumatologic autoimmune diseases like Rheumatoid arthritis, Lupus, Psoriatic Arthritis, Ankylosing spondylitis and various other autoimmune disease. Evaluate history and physical examination specific for rheumatologic disease process. Maximize basic knowledge about most common disease like Rheumatoid arthritis, Osteoarthritis, lupus and gout.

RHE 811 Rheumatology (4 cr)

Sponsor(s): Dept. of Med. Ed. & Affiliated Institutions
Location(s): TBD

4-week rotation. Rheumatology is a study of autoimmune disease and in this specialty students would learn clinical signs and symptoms of some of the most common rheumatologic autoimmune diseases like Rheumatoid arthritis, Lupus, Psoriatic Arthritis, Ankylosing spondylitis and various other autoimmune disease. Students will demonstrate how they examine and analyze patients with rheumatic diseases. When appropriate they should analyze laboratory assessment and radiographic characteristics of the diseases. Clinical experiences includes seeing patients with history and physical exam followed by review of labs and images with further discussion.

SURGERY (SUR)

SUR 801 Surgery Sub-Internship (4 cr)

Sponsor(s): Dept. of Med Ed. & Affiliated Institutions
Locations: Multiple

4-week rotation. Students will take a higher level of responsibility for the evaluation and management of various acute surgical disorders. Students are expected to attend and participate in all scheduled educational activities at the host institution. Students will learn how to perform comprehensive history and physical examinations in a timely manner and will gain experience in generating differential diagnoses, assessments, and diagnostic and treatment plans at a level similar to a person doing a surgery internship. They will have a greater opportunity to hone their surgical skills in the OR as well as hone skills in the pre-surgical evaluation of patients and post-operative and their management.

SUR 881 Head and Neck Surgery (4 cr)

Sponsor(s): Dept. of Med. Ed. & Affiliated Institutions
Location(s): Kaiser Roseville

4-week rotation. Designed to provide the student with a better understanding common head and neck

pathologies and management strategies. Develop competency with the head and neck exam and identification of normal anatomy. Demonstrate understanding of head and neck surgical anatomy. Show familiarity with common head and neck pathology and basic management strategies. Demonstrate familiarity with common head and neck emergencies basic management strategies. Specialty Area(s): Surgery; Otolaryngology.

SUR 882 Trauma Surgery (4 cr)

Sponsor(s): Dept. of Med. Ed. & Affiliated Institutions

Location(s): Mercy San Juan Hospital

4-week rotation. The Trauma Team responds to trauma resuscitations and is involved with immediate evaluation and management of critically injured patients in the emergency department.

Students should demonstrate the initial evaluation and management of the trauma patient and basic principles of resuscitation in the emergency department and in the ICU/trauma ward. The student will also demonstrate the familiarity with physiology, management and outcome of multiple organ dysfunctions. They will gain exposure to procedure: central access, chest tube placement, wound debridements, tracheostomies, laceration repairs, etc. The will be make use of the exposure to complex and difficult decision making involving the injured patient.

Interdisciplinary Electives

COM 901 Honors Medical Research (1 cr)

This elective research course is designed to enhance student's skills and interest in an academic career. Students will focus on developing a research question and will conduct a review of current literature to assist with the answering or further development of that question. The course will allow students to hone their analytical and investigative skills by participating in an active research project under a faculty mentor to produce usable data sets, public presentations, and abstracts suitable for publication. (Prerequisites: COM623)

COM 903 Being a Leader (2 cr)

Given the complex and demanding environment of healthcare, effective leadership is often required to meet these challenges. This course is designed to provide you with tools to give you access to being who you need to be, to be a leader, and to exercise leadership effectively as you encounter each of these challenges.

This course is a leadership laboratory in which you will discover that leadership does not always mean a position, a title, time, money, influence, or any of the traits typically "required" to be a leader or produce the results of a leader. Instead of more knowledge about leadership, you will gain access to actually begin a leader and effectively exercising leadership as your natural self-expression, in any situation and under any circumstances. During the course your current conventional thoughts will be challenged, new ways of thinking will emerge, and you will leave with new actions to create even greater success in the areas of life and

leadership that matter most to you. The purpose of this course is to inquire into the meaning and being of leader and leadership in order to empower each of us to be leaders in our lives, communities, and societies. It is not an academic inquiry to theories, models, and case studies about leadership. The promise of this course is that, if you participate fully, you will leave the course being a leader and exercising leadership effectively as your natural self-expression. By the end of the semester, these terms will be clear to you and you will be a leader in ways you never conceived of before. (Prerequisites: M1-M4 in good standing; Repeatable for max of 4 credits)

COM 904 The Healers Art (0.5 cr)

The Healers Art course is an elective course consisting of 5 three-hour sessions. It is available to all CNU COM students. The course will be offered 1-2 times per year in the Fall and/or Spring semester. Each session will have both large group presentations and small group discussions. The small groups will consist of 1 faculty member and 5 students, and students will remain with the same small group (including faculty member) throughout the course. The maximum number of students will be based on faculty available for small group facilitation for a particular course and will be 5 times the number of faculty available (1:5 ratio faculty to students). The Healers Art course is a defined curriculum created in 1991 by Dr. Rachel Remen (Professor, UCSF School of Medicine) is currently being taught in over 90 medical schools. The purpose of the course is to explore the human dimension of health care including learning self-care strategies and recognizing the value of service. Topics covered will include defining an individual's purpose and commitment in medicine, tools to deal with grief and loss, recognizing awe and mystery in the practice of medicine, and open dialogue about mission and service. The course and its small group discussions offer an opportunity for open dialogue, depth of discussion and interaction with faculty that is unique and not available in other areas of the curriculum. (Prerequisites: M1-M4 in good standing)

COM 905 Mindfulness-Based Stress Reduction (1 cr)

This course is a Phase A elective course consisting of 9 two-hour sessions and a one-hour orientation which can be taken either as an M1 or M2. Each session will include a formal 30-45 minute meditation practice as well as other mindfulness exercises and facilitated group discussions, including a discussion of research articles on the top of mindfulness. This elective course is modeled after the MBSR program created by Dr. Jon Kabat-Zinn at the University of Massachusetts. As described by Dr. Kabat-Zinn, mindfulness is "paying attention on purpose" and remaining in the present in a nonjudgmental way. Research has shown that participation in an MBSR course can lead to reductions in chronic pain, anxiety, depression, headaches, and improved quality of life and prevent fatigue and burnout in physicians. By participating in the this MBSR course, students will be introduced to the idea of mindfulness as a tool to improve their lives as future physicians as well

as knowledge base that can be shared with future colleagues and patients who may benefit from the program. The course requires at least 8 attendees with a maximum of 30 attendees. The course will be offered 1-2 times per year in the Fall and/or Spring semester. (Prerequisite: M1 or M2 in good standing)

COM 906 Military Officer Training (Variable Credit)

Varies slightly by branch of service. For Army: This course will last 6 weeks in duration and will require duty through weekends. 1. To obtain information about the AMEDD Basic Officer Leader Course, go to <http://www.cs.amedd.army.mil/BOLC/index.htm>. This web site contains key information for students to be successful at BOLC, to include: frequently asked questions (FAQ) page, field packing lists, recommended uniform items, and key dates during the course. 2. Officers will be assigned to A Company, 187th Medical Battalion, Fort Sam Houston, Texas. See A Company's website: <http://www.cs.amedd.army.mil/BOLC>. This website contains the Commander's welcome letter, frequently asked questions, and command policy letters. Check it frequently since the information is often updated. 3. Officers are to bring their uniforms to Fort Sam Houston. There will be an opportunity to purchase more uniforms while attending the course. 4. It is highly recommended that officers bring computer/laptop and printer, as many homework assignments require the use of a computer and printer. There are computer labs in the AMEDD Center and School, but the hours may be limited. CRITICAL TASK:

Students are required to meet all course graduation requirements and WILL SPECIFICALLY MEET ALL STANDARDS FOR THE FOLLOWING TASKS: four-man litter carry.

HLT 810 Wellness – Leadership, Healers Art, Mindfulness and Compassionate Conversations (4 cr)

This elective offers students an exposure to the art of medicine - a new style of leadership where leadership becomes your natural self- expression, experience with several mindfulness practices and engagement and reflection with challenging conversations that can arise for oneself and with patients and other staff/faculty in the midst of the practice of medicine.

HLT 812 You and Your Patients are What You Eat and More – How Slow Food & Slow Medicine Work Together (4 cr)

To cover nutrition thru the life cycle of your future patients: anemia, cancer, hypertension, cardiovascular disease, diabetes, infancy, pediatrics, pregnancy and lactation, aging and chronic disease, obesity, sports, stress and nutrition support, and supplements.

COM 810 OSCE Program Assistance (4 cr)

Review and improve history taking, physical exam and presentation skills by teaching and mentoring M1 & M2 students during their Medical Skills courses. (Prerequisite: M1, M2, or M4 standing)

COM 2018-2019 Academic Calendar

MS1-Phase A

Fall semester:08/06/2018 – 12/11/2018			
course	Start Date	End Date	
foundations of Clinical Medicine	08/06/2018	09/21/2018	
Hematology	09/24/2018	10/26/2018	
Integumentary and Musculoskeletal systems	10/29/2018	11/20/2018	
Spring Semester:01/07/2019-05/31/2019			
Neuroscience	01/07/2019	03/15/2019	
cardiovascular and Pulmonary systems	03/25/2019	05/31/2019	

MS2 – Phase A

Fall semester:08/06/2018-12/21/2018			
course	Start Date	End Date	
Renal System	08/06/2018	09/14/2018	
Gastrointestinal System	09/17/2018	11/02/2018	
Endocrine system	11/05/2018	11/14/2018	
Spring Semester:01/07/2019-05/17/2019			
Reproductive system	01/07/2019	02/15/2019	
Behavioral Medicine	02/18/2019	03/15/2019	
Stages of Life	03/25/2019	05/03/2019	

Longitudinal Courses-M1 & M2

	FALL 2018		SPRING 2019	
course	start Date	End Date	start Date	End Date
Medical Skills – t1	08/06/2018	12/12/2018	01/07/2019	06/31/2019
Medical Skills – M2	01/06/2019	12/21/2018	01/07/2019	05/17/2019
Masters' Orientation – M1	01/06/2019	12/21/2018	01/07/2019	05/31/2019
Masters' Orientation – M2	01/06/2019	12/21/2018	01/07/2019	05/17/2019
SDS5P – will start in the Spring of 2019; continue for M1 and continue into the fall of 2019; return of M2-year.				

MS3-Phase B-(Clinical Clerkships)

Fall semester:07/09/2018-12/21/2018	spring;
Clinical Rotation schedule	Clinical Rotation Schedule

MS4-Phase C - Electives

summer Semester:06/04/2018-06/10/2018	Early start for Deferred M3 clerkships
Fall semester:06/11/2018-12/21/2018	spring;
Rotation schedule	Rotation Schedule

Key Events

Event	Start Date	End Date	Exam/Review	Start Date	End Date
Clinical Orientation-M3	07/05/2018	07/06/2018	Kaplan – M5.2	12/17/2018	12/21/2018
Orientation – M1	08/01/2018	08/03/2018	Case #1 – M2	02/14/2019	
White coat ceremony	08/18/2018		Case #2 – M2	02/21/2019	
CNU Research Day	12/14/2018		Case #3 – M2	05/02/2019	
Graduation Clearance Day	05/10/2019		Case #4 – M2	05/30/2019	
Graduation Ceremony	05/11/2019		Case #5 – M2	06/01/2019	

*1st 2 students required to take the first 3 Case type exams, with potential for qualifying SCDN on 11/11/2019

University Holidays

Holiday	Date	Holiday	Date
4th of July	07/04/2018	Martin Luther King	01/21/2019
Labor Day	09/03/2018	President's Day	02/19/2019
Thanksgiving	11/22-11/23/2018	Spring Break – t1 & M2	11/23-12/02/2018
Winter Break	12/24/2018 – cohort t1: date	Memorial Day	05/27/2019

Dates may be subject to change: ver. 7/20/2018

COLLEGE OF PHARMACY

Mission, Vision, and Values

Mission: To advance the Art and Science of Pharmacy.

Vision: To utilize innovative active learning strategies in educating students and practitioners, advance the practice of pharmacy, and improve the health of Californians and beyond.

Values: Advancing our College, our goals, and our discipline. Caring about our students, our staff, our faculty, and our profession. Teamwork in teaching, learning, research, scholarship, and service.

Goals:

Student Learning:

1. An academic program that fosters critical thinking, problem-solving, clinical reasoning, and self-directed learning skills.
2. A didactic curriculum that is based on an active learning and team-based pedagogy.
3. An experiential program that progressively develops student skills, attitudes, values, judgment, professional behavior, and expertise in patient-centered care.

Research and Scholarship:

1. A research infrastructure that promotes collaboration, innovation, and discovery.
2. A faculty engaged in discipline-related research and other scholarly activities.
3. A faculty development program that nurtures and supports a learning-centered curriculum and the scholarship of teaching.

Service:

1. Faculty engaged in professional and community activities.
2. A continuing education program responsive to the needs of alumni, pharmacy practitioners, and other healthcare professionals.
3. An operation system that supports teaching, learning, research, scholarship, and professional development.

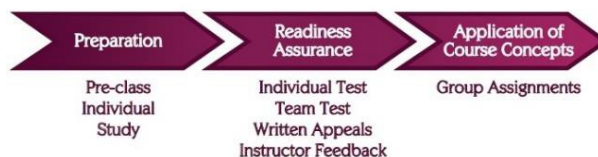
Educational Philosophy

The CNUCOP curriculum is designed to help students become active, self-directed and lifelong learners. The four (4) year curriculum is designed to facilitate and optimize student learning in a progressive and integrated manner both in didactic and experiential courses.

Team-Based Learning

Team-Based Learning (TBL) is a well-defined educational strategy that CNUCOP employs throughout the first three years of the curriculum. TBL promotes judgment, mastery of content, communication, teamwork skills, problem-solving, and critical thinking. TBL emphasizes the importance of individual accountability, group collaboration, and the application of basic concepts to work through team

assignments. The role of the instructor is to clearly articulate the learning objectives, create challenging problems for students to solve, and probe their reasoning in reaching conclusions. All students are accountable for their individual and group work. At the beginning of each course, the Office of Academic Affairs forms teams comprised of 5 to 6 students based on various criteria that will help achieve an even distribution of resources across all teams. Students remain with the same team throughout the semester for each course. The format for TBL is comprised of three phases as shown in the diagram below.



In Phase 1, learners study independently outside of class to learn identified objectives. This may involve audio-taped slide presentations, reading assignments, or other activities. In Phase 2, individual learners complete a multiple choice exam to assure their readiness to apply the concepts learned during Phase 1. This is referred to as the Individual Readiness Assurance Test (IRAT). Then the teams retake the same multiple choice test exam and reach a consensus on the answer for each question. This is referred to as the Team Readiness Assurance Test (TRAT). Written appeals may be submitted by any team who would like to challenge the instructor on the correct answer or the adequacy of Phase 1 assignments. The instructor will provide immediate feedback on the concepts covered on the exam and will consider giving additional points to teams if their appeals are upheld. In Phase 3, which makes up most of the class time, teams will complete in-class assignments by applying the knowledge and skills learned in phases 1 and 2 to promote critical thinking, integration of knowledge and mastery of the topics. Peer evaluations are performed twice a semester.

Learning Outcomes

Program Learning Outcomes

Upon successful completion of the CNUCOP Doctor of Pharmacy program, students will be able to demonstrate the following learning program learning outcomes:

PLO 1: Foundational Knowledge. Demonstrate the knowledge, skills, abilities, behaviors, and attitudes necessary to apply the foundational sciences to the provision of patient-centered care.

PLO 2: Essentials for Practice and Care. Demonstrate the knowledge, skills, abilities, behaviors, and attitudes necessary to provide patient-centered care, manage medication use systems, promote health and wellness, and describe the influence of population-based care on patient-centered care.

PLO 3: Approach to Practice and Care. Demonstrate the knowledge, skills, abilities, behaviors, and attitudes necessary to solve problems; educate, advocate, and collaborate,

working with a broad range of people; recognize social determinants of health; and effectively communicate verbally and nonverbally.

PLO 4: Personal and Professional Development. Use the knowledge, skills, abilities, behaviors, and attitudes necessary to demonstrate self-awareness, leadership, innovation, entrepreneurship, and professionalism.

PLO 5: Interprofessional Competence. Use the knowledge, skills, abilities, behaviors, and attitudes necessary to demonstrate appropriate values and ethics, roles and responsibilities, communication, and teamwork for collaborative practice.

Co-Curricular Learning Outcomes

Upon successful completion of the CNUCOP Doctor of Pharmacy program, students will be able to demonstrate the following co-curricular learning outcomes:

1. **Social Awareness and Cultural Sensitivity.** Demonstrate awareness of and responsiveness to social and cultural differences by adapting behaviors appropriately and using effective interpersonal skills.
2. **Professionalism and Advocacy.** Demonstrate professional behavior and effective interactions with other healthcare professionals, community members, and/or patients and advocate for initiatives to improve patient care, health outcomes, and the profession of pharmacy.
3. **Self-Awareness and Learning.** Demonstrate self-awareness through reflection and the development of appropriate plans for self-directed learning and development.
4. **Innovation and Entrepreneurship.** Demonstrate innovation and creativity to develop novel strategies to accomplish professional goals, or students demonstrate an understanding for how innovation and creativity influence the development of novel strategies to accomplish professional goals.
5. **Public Health and Education.** Apply skills learned in the classroom to create and effectively deliver public health initiatives and health-related education to the community.
6. **Service and Leadership.** Demonstrate the ability to lead and work collaboratively with others to accomplish a shared goal that improves healthcare.

Experiential Educational Expectations

Experience in real pharmacy practice settings teaches judgment and California Northstate College of Pharmacy is committed to developing and maintaining a robust experiential component to the Doctor of Pharmacy program.

Pharmacy practice experience is designed to develop a foundation of competencies that students will build upon as they progress through the program. By the end of the introductory pharmacy practice experiences (IPPE), students should be able to demonstrate competencies in basic practitioner skills at a fundamental level. During advanced pharmacy practice experiences (APPEs), students should demonstrate IPPE outcomes at an advanced and progressive manner that emphasize clinical judgment, professional behavior, and personal responsibility. Achievement of these

competencies allows student pharmacists to embark on an independent and collaborative practice upon graduation. The following experiential outcomes were developed by a collaborative group representing seven of the California Colleges and Schools of Pharmacy.

1) Communication and Professional Behavior

A. Communicate effectively.

1. Communicate accurate and appropriate medical and drug information to a pharmacist, preceptor or other health care professional in a clear and concise manner.
2. Determine the appropriate means of communication for the situation.
3. Actively listen to patients, peers, and other health care professionals.
4. Use proper grammar, spelling, and pronunciation in communications.
5. Explain medication information to patients in understandable terms.
6. Adjust communication based on contextual or cultural factors, including health literacy, language barriers, and cognitive impairment.
7. Routinely verify patient or recipient understanding of communicated information.
8. Demonstrate effective public speaking skills and the appropriate use of audio-visual media when communicating with groups of patients, peers, and other health care professionals.
9. Develop effective written materials for patients, peers, and other health care professionals.

B. Interact with patients & the health care team.

1. Articulate the pharmacist's role as a member of the health care team.
2. Establish professional rapport with patients and healthcare professionals.
3. Demonstrate sensitivity to and respect for each individual's needs, values, and beliefs, including cultural factors, religious beliefs, language barriers, and cognitive abilities.
4. Demonstrate empathy and caring in interactions with others.
5. Maintain patient confidentiality and respect patients' privacy.
6. Demonstrate ability to resolve conflict in the pharmacy practice setting.

C. Behave in a professional and ethical manner.

1. Dress professionally and appropriately for the practice setting.
2. Arrive punctually and remain until all responsibilities are completed.
3. Use time effectively and efficiently.
4. Distinguish professional interests from personal interests and respond appropriately.
5. Demonstrate awareness of personal competence and limitations, and seek guidance or assistance from preceptors when appropriate.
6. Accept responsibility for one's actions.

7. Respond appropriately to feedback from preceptors, patients, peers, and other health care professionals.
8. Show initiative in interactions with patients, peers, and other health care professionals.
9. Demonstrate passion and enthusiasm for the profession.
10. Be aware of and work appropriately within the culture of the assigned practice setting.
11. Demonstrate awareness of site or institutional policies and procedures.
12. Prioritize workload appropriately.
13. Identify issues involving ethical dilemmas.
14. Weigh and balance different options for responding to ethical dilemmas.
15. Propose steps to resolve ethical dilemmas.
16. Adhere to all state and federal laws and regulations as a pharmacy intern in the practice setting.

2) The Practice of Pharmacy

A. Organize and evaluate information.

1. Assess prescription or medication orders for completeness, authenticity, and legality.
2. Verify that dose, frequency, formulation, and route of administration on prescription or medication orders are correct.
3. Obtain any pertinent information from the patient, medical record, or prescriber, as needed, for processing prescription or medication orders (e.g., allergies, adverse reactions, diagnosis or desired therapeutic outcome, medical history).
4. Review the patient profile or medical record for any allergies or sensitivities.
5. Determine the presence of any potential medication-related problems.
6. Determine if it is legal and appropriate to refill a prescription and to contact the prescriber for authorization, if necessary.

B. Prepare and dispense medications.

1. Accurately enter patient information into the patient's pharmacy profile or medication record.
2. Select the correct drug product, manufacturer, dose, and dosage form and prepare it for dispensing.
3. Assure that the medication label is correct and conforms to all state and federal regulations.
4. Assure that the label conveys directions in a manner understandable to the patient and that appropriate auxiliary labels are attached.
5. Select an appropriate container for storage or use of medications with special requirements (e.g., child-resistant containers, compliance devices).
6. Accurately perform and document the necessary calculations to correctly prepare the medication.
7. Perform the required technical and basic compounding steps to produce a pharmaceutically elegant product.
8. Demonstrate aseptic technique during the preparation of parenteral medications.
9. Document the preparation of any medication that has been compounded, repackaged or relabeled.
10. Adjudicate third-party insurance claims using established billing systems.

11. Determine the appropriate storage of medications before and after dispensing.
12. Comply with all legal requirements and professional scope of practice.

C. Provide patient counseling.

1. Communicate pertinent information to the patient to encourage proper use and storage of medications.
2. Discuss any precautions or relevant warnings about medications or other therapeutic interventions.
3. Assure the patient comprehends the information provided.
4. Assess and reinforce the patient's adherence to the prescribed therapeutic regimen.

D. Maintain accurate records.

1. Document the preparation and dispensing of medications.
2. Maintain manual or computerized files for prescription records that conform to state and federal laws and regulations.
3. Adhere to state and federal laws and regulations related to inventory control (e.g., controlled substances, investigational drugs).

E. Assist patients seeking self-care.

1. Assess a patient's self-identified problem (e.g., common cold, fever, pain, gastrointestinal problems) to determine if the problem is appropriate for self-care or requires referral.
2. Discuss options for treatment and, if indicated, recommend appropriate non-prescription product(s).
3. Counsel the patient about the proper use of self-care products.
4. Instruct a patient about the proper use of a diagnostic agent or device, including directions for obtaining accurate results and how to interpret the results.
5. Teach a patient the proper and safe use of commonly-used health products (e.g., condoms, thermometers, blood pressure monitoring devices, blood glucose meters, metered-dose devices, ear syringes, and adherence devices).

F. Contribute to and monitor the optimal use of medications.

1. Articulate the pharmacist's role in medication use oversight (e.g. formulary management, practice guidelines).
2. Participate in established medication safety and quality improvement activities (e.g., adverse drug reaction reporting, medication reconciliation).
3. Access, select, utilize, and cite appropriate references for health information and patient education materials.
4. Demonstrate proficiency with the technology used at assigned experiential sites.
5. Formulate evidence-based pharmaceutical care plans based upon sound pharmacotherapeutic principles that take into account individual patient health beliefs, attitudes, and behaviors.

3) Public Health

A. Participate in health education programs and community-based health interventions.

1. Raise public awareness about the role of a pharmacist as a public health educator.
2. Participate in activities that promote health, wellness, and the use of preventive care measures.
3. Articulate the concept of advocacy - what it means both professionally and personally.

B. Demonstrate public health-related practice skills.

1. Administer subcutaneous, intramuscular or intradermal injections, including immunizations.
2. Screen for common medical conditions and make appropriate referrals.
3. Conduct smoking-cessation interventions when appropriate.

Professional Standards

Communication Skills

Pharmacists must be able to effectively communicate with individuals from within and outside of the health care professional environment to engender a team approach to patient care. Those individuals may include other health care providers such as physicians and nurses; non-health care providers, such as patients, family members, caregivers; and other community members, such as policy makers. Influential communication focuses on the ability to adapt language style and vocabulary to meet the health-care literacy needs of each individual or unique community. Pharmacists must display an in-depth knowledge of medications and be able to convey pharmaceutical information in a clear and concise manner to ensure safe and effective medication use.

Students at CNUCOP must exhibit in-depth medication knowledge, effective interpersonal communications skills, the ability to work as an effective member of a health care team, and the ability to collaborate with all members of the health care team to ensure continuous quality patient care.

Patient Care Commitment

To provide patients with unparalleled health care, pharmacists must focus on disease treatment and management as well as wellness and disease prevention. Pharmacists must practice on inter-professional teams that focus on patients, patient populations, and outcomes. Pharmacists, in collaboration with patients and other health care providers, can ensure proper medication use by focusing on evidence-based medicine, quality improvement, cultural competence, health care disparities, and advocacy.

Students at CNUCOP should advocate for patient-centered pharmacist care to ensure safe and effective medication use.

Knowledge of the Profession

Revelation occurs when wisdom of the past is combined with current reality. Pharmacists must be aware of the evolutionary

steps within the profession and continue to advocate for improved patient-centered care.

Students at CNUCOP are required to attend didactic, laboratory, discussion, and experiential programs. They should understand how the practice of pharmacy has continually evolved to benefit the needs of society and develop visionary thinking capabilities to continue to advance the science and art of pharmacy.

Technical Abilities

All students will be certified in cardiopulmonary resuscitation (CPR), first aid, and immunizations. Therefore, student pharmacists are required to perform immunizations, cardiopulmonary resuscitation, and physical assessments suitable for medication therapy management to fulfill all academic requirements of the College.

General Abilities

Students should have the cognitive ability to critically and analytically think, to make compassionate and ethical decisions, and to engage in self-assessment and self-directed learning.

Licensure

Completion of Program and Licensing

Completion of the educational program leading to a degree and/or diploma is dependent upon student performance and success. The requirements for licensure in the profession are established by the state where licensure is sought. Completion of the educational program and obtaining a degree or diploma does not by itself guarantee licensure. Students are expected to remain current with other licensing requirements, including but not limited to the licensure examination and technical standards they may be required to meet in order to be licensed by the state in which they seek to practice. In addition, maintaining such technical standards is a condition for continued enrollment in this program; reasonable accommodations as defined and required by law may apply to persons with disabilities.

California Intern Pharmacist

Registration Requirements

To register as an intern pharmacist in California, candidates must be currently enrolled in a school of pharmacy recognized by the Board or accredited by the Accreditation Council for Pharmaceutical Education (ACPE) and have fingerprint and background clearances. Complete registration instructions can be downloaded from the California State Board of Pharmacy website at: http://www.pharmacy.ca.gov/forms/intern_app_pkt.pdf.

California Pharmacist

The standard processing time for Pharmacist Examination and Licensure Applications by the California Board of Pharmacy is approximately 30 days after submission; however, the Board will process applications submitted by schools within 10 business days if these applications are submitted as a batch by the school. Students interested in participating in the batch processing of applications must submit their completed

applications to the Office of Student Affairs and Admissions by May 1st, prior to graduation. The Office of Student Affairs and Admissions reviews each application prior to submission to the Board; however, it is the responsibility of the applicant to ensure all information is correct and that all required application materials have been included as part of the final application packet. These applications will then be hand-delivered to the Board of Pharmacy after graduation, since official transcripts, which are a component of the application, are not complete until after graduation has occurred.

To qualify for a pharmacist license, you must submit one of the following to document your education (A or B).

A. Graduate of a School of Pharmacy - If you are a graduate from an ACPE accredited college of pharmacy or a school of pharmacy recognized by the board, please request an official transcript to be sent directly to the board by your school. The official transcript must indicate your degree earned and date conferred.

Eligibility Requirements

To be licensed in California you must pass the North American Pharmacist Licensure Examination (NAPLEX) and the California Pharmacist Jurisprudence Exam (CPJE).

To be eligible to take the licensure examination for California, you must:

- Be at least 18 years of age
- Be a graduate of a domestic school of pharmacy or be a graduate of foreign school of pharmacy and be certified by the Foreign Pharmacy Graduate Examination Committee (FPGEC)
- Have completed at least 150 semester hours of collegiate credit, 90 of which must be from a school of pharmacy
- Have earned at least a baccalaureate degree in a course of study devoted to pharmacy
- Have completed 1,500 hours of approved pharmaceutical experience as a registered intern or one year of experience as a licensed pharmacist in another state
- Have fingerprint and background clearances.

The registration instructions, requirements, and application form for licensure as a pharmacist in California may be obtained and downloaded at the California State Board of Pharmacy website:
http://www.pharmacy.ca.gov/forms/rph_app_pkt.pdf.

NAPLEX/MPJE

The MPJE exam is for students pursuing licensure out of the state of California.

To take the NAPLEX and/or MPJE, candidates must meet the eligibility requirements of the board of pharmacy from which they are seeking licensure. The board will determine your eligibility to take the examinations in accordance with the jurisdiction's requirements. If the board determines that you are eligible to take the examinations, it will notify the National Association of Boards of Pharmacy (NABP) of your eligibility. If you have questions concerning eligibility requirements,

contact the board of pharmacy in the jurisdiction from which you are seeking licensure.

Registration instructions, requirements, and application form can be obtained and downloaded from the National Association of Board of Pharmacy (NABP) website at <http://www.nabp.net>.

Admission to the PharmD Program

The California Northstate University College of Pharmacy (CNUCOP) utilizes the national Pharmacy College Application System (PharmCAS). Applicants for admission to the Doctor of Pharmacy program at CNUCOP are required to complete and submit an official online application at www.PharmCAS.org. Applicants must also electronically submit a completed supplemental application and associated processing fee.

The admissions team evaluates applicants for admission on an individual basis. Candidates are required to meet all prerequisites prior to entering the program. Prerequisites may be substituted with courses the admissions committee evaluates to be equivalent. One or more members of the admissions committee review and evaluate each completed admission packet to determine an invitation for an interview.

The interview is conducted on campus. A modified multiple mini interview (MMIs) approach is used. A writing sample is also a required component of the onsite interview. The interview is designed to assess a variety of factors including: interest, oral and written communication skills, maturity, dedication, critical thinking, and an assessment of the applicant's ability to complete the program successfully and advance in the field of pharmacy. The interview may also be used to determine if the student has the English language proficiency to complete instruction in the English language since English is the only language of instruction.

All accepted students who matriculate must have all official transcripts for all courses taken since high school on record in the Admissions Office by September 30th. All qualifying applicants must interview for admission into the pharmacy program. Please note financial assistance may be limited for non-U.S. applicants. Personal transportation, such as a vehicle, will be necessary to participate in experiential education at clinical sites.

Pre-Pharmacy Requirements

Applicants seeking admission to the four-year Doctor of Pharmacy program must, prior to matriculation, have:

- Earned a high school diploma, GED, or its equivalent;
 - A Bachelor's degree is not required, however a Bachelor's degree is preferred;
- A cumulative GPA of 2.60 or greater on a 4.00 scale; A 2.6 science GPA is recommended.
- Completed a minimum of 51 semester units (73 quarter units) with a grade of C or better of non-GE prerequisite credit from a regionally accredited US institution or its equivalent abroad as outlined in the table below;
 - Science and math prerequisite coursework must be designed for science majors;
- Public speaking and science courses requiring a lab component (biology, general chemistry, and organic chemistry) cannot be taken online or through distance education;
- Science and math courses, along with any AP exams, must have been completed no greater than nine years from the planned date of matriculation;

- Completed a minimum of 12 semester units (18 quarter units) of general education courses as indicated on the table below;
- Met the Professional and Technical Standards;
- Completed a successful admission interview; and
- Received approval of acceptance for admission by the admissions committee.

The PCAT is not required for admission.

The pre-pharmacy requirements ensure that applicants have the primary academic background necessary to complete a rigorous professional curriculum, as well as adequate exposure to a broad range of academic coursework. Applicants must receive a C grade or better in each prerequisite with a minimum cumulative GPA of 2.60 on a 4.00 grade scale. The courses may not be taken on a pass/no pass or credit/no credit basis. The specific pre-pharmacy course requirements are:

EREQUISITE COURSEWORK		
Course(s)	Semester Hours	Quarter Hours
General Chemistry I and II with lab components	8	12
Organic Chemistry I and II with lab components	8	12
Biochemistry or Cell & Molecular Biology	3	4
General Biology I and II with one lab or lab equivalent	8	12
Microbiology	3	4
Human Physiology*	3	4
Physics	3	4
Calculus	3	4
Statistics	3	4
Public Speaking	3	4
English Composition I and II	6	9
General Education Requirements**: Psychology, Economics, and two additional courses in the Humanities or Social and Behavioral Sciences	12	18
Total	63	91 (est.)

*If taking a combined Anatomy and Physiology course, both Anatomy and Physiology I and II must be taken to fulfill the Physiology course requirement.

** General Education requirements are waived for applicants who have or will be receiving a Bachelor's degree or US equivalent prior to matriculation in the pharmacy program.

For an in-depth overview of admission requirements, how to apply, and key dates visit the Admissions website at <http://pharmacy.cnsu.edu> and the PharmCAS School Pages at www.pharmcas.org.

Advanced Placement Exams (AP)

AP exam scores of 3 or higher, with 4 being preferred, will be accepted for prerequisite coursework and/or general education requirements. AP credit must be reported by subject and credit and must be mailed directly from your institution or testing services to the College of Pharmacy. Additionally, the AP exam must have been taken no greater than nine years from the date of matriculation. Please note, AP exam scores will only count towards the first course in a series of science courses. For instance, an AP exam score of 3 or higher for chemistry would only count towards the General Chemistry I requirement.

CNUCOP College Board AP Code is 7306.

Professional and Technical Standard Requirements

CNUCOP endeavors to select applicants who have the ability to become highly competent pharmacists. The college adheres to the guidelines promulgated by the American Council for Pharmacy Education in its "Guidelines for Accreditation Standards." Within these guidelines, the college has the freedom and ultimate responsibility for the selection of students; the design, implementation, and evaluation of its curriculum; the evaluation of students; and the determination of who should be awarded a degree. Admission and retention decisions are based not only on satisfactory academic achievement, but also on non-academic factors that serve to ensure that the candidate can complete the essential functions of the academic program required for graduation. The professional and technical standards, as distinguished from academic standards, refer to those physical, cognitive, and behavioral abilities required for satisfactory completion of all aspects of the curriculum, and the development of professional attributes required by the faculty of all students at graduation. The essential abilities required by the curriculum are in the following areas: Motor, sensory, verbal and written communication, intellectual (conceptual, integrative, and qualitative abilities for problem solving and decision-making), and the behavioral and social aspects for the performance of the profession of pharmacy.

Pharmacy is a physically and mentally demanding profession in which practitioners are asked to place the interests of their patients above their own which requires commitment to a life of service and dedication to continuous learning. The rigorous four year pharmacy school curriculum is where Students begin to develop the qualities necessary for the practice of pharmacy. It is during this period of professional pharmacy education that the candidate acquires the foundation of knowledge, attitude, skills and behaviors that he or she will need throughout his or her professional career. The abilities that pharmacists must possess to practice safely are reflected in the technical standards that follow. Students to the CNUCOP program must be able to meet these standards.

Technical Standards

Visual

Students must be able to observe and participate in experiments in the basic sciences. In order to make proper clinical decisions, Students must be able to observe a patient accurately. Students must be able to acquire information from

written documents, films, slides or videos. Thus, functional use of vision is necessary (close and at a distance).

Oral-Auditory

Students must be able to communicate effectively and sensitively and rapidly with patients (must be able to speak and hear) and members of the health care team (both verbal and written). Students must be fluent in English. In emergency situations Students must be able to understand and convey information essential for the safe and effective care of patients in a clear unambiguous and rapid fashion. In addition, Students must have all the ability to relate information to and receive from patients in caring and confidential manner.

Motor

Students must possess the motor skills necessary to perform palpation, percussion, auscultation, and other diagnostic maneuvers. Motor skill demands require reasonable endurance, strength, and precision. A candidate should be able to execute motor movements reasonably required to provide general care and emergency treatment to patients as well as complete the CPR and First Aid component of the program. Such actions require coordination of both gross and fine muscular movements, equilibrium and functional use of senses, of touch, and vision.

Sensory

Students need enhanced sensory skills including accuracy within specific tolerances and functional use for laboratory, classroom, and clinical experiences. Students who are otherwise qualified but who have significant tactile sensory or productive disabilities must be evaluated medically. These disabilities included individuals who were injured by significant burns, have sensory motor deficits, or cicatrix formation.

Professional Standards

Students must demonstrate the judgment and emotional stability required for full use of their intellectual abilities. Possess the perseverance, diligence, and consistency to complete the College of Pharmacy curriculum and prepare to enter the profession of pharmacy.

Students must: exercise good judgment in the treatment of patients; function within both the law and ethical standards of a healthcare professional; be able to work effectively and professionally as part of a team during the pharmacy curriculum and as a member of a health care team after graduation.

Students must be able to participate in a culturally diverse classroom and practice environments; be sensitive and behave in a professional manner during interactions with patients, their families, and with health care personnel; maintain regular, reliable, and punctual attendance for classes, experiential education and clinical responsibilities; and be responsible for contributing to collaborative, constructive learning environments, accept constructive feedback from others, and respond with appropriate modification in a professional manner.

Strength and Mobility

Students must have sufficient posture, balance, flexibility, mobility, strength and endurance for standing, sitting, and participating in the laboratory, classroom and clinical sites.

Cognitive

In order to effectively solve clinical problems, Students must be able to measure, calculate, reason, analyze, integrate and synthesize in a timely fashion. In addition, they must be able to comprehend three-dimensional relationships and to understand the spatial relationships of others.

Social

Students must possess the emotional health required for the full utilization of their intellectual abilities, the exercise of good judgment for the prompt completion of all responsibilities, and for the development of effective relationships with patients. Students must be able to tolerate physically taxing workloads and function effectively under stress. They must be able to adapt to changing environments, display flexibility and learn to function in the face of uncertainties inherent in the clinical problems of patients.

The unpredictable needs of patients are at the heart of becoming a pharmacist. Academic and clinical responsibilities of students must require their presence during day and evening hours. Students will be considered not only for their scholastic accomplishments, but also on their physical and emotional capacities to meet the full requirements of the school's curriculum, and to graduate as skilled and effective practitioners of pharmacy.

Transferring from Other Institutions

Transfer requests for entry to the Doctor of Pharmacy program at California Northstate University College of Pharmacy (CNUCOP) will be reviewed and determined for acceptance on a case-by-case basis, based on specific provisions and contingent on space/seat availability. Students interested in transferring to CNUCOP must complete a Transfer Student Application available on the CNUCOP webpage. COP does not have any articulation or transfer agreements with any other college or university at this time to accept students into the CNUCOP PharmD program.

Credit for coursework completed at other institutions for recognition of advanced standing at CNUCOP will be transferred subject to the following considerations.

- The comparability of the completed coursework with CNUCOP coursework;
- The appropriateness of the completed coursework towards meeting CNUCOP PharmD degree requirements.
- COP does not grant credit for prior experiential learning other than IPPEs completed at an ACPE accredited School/College of Pharmacy that have been deemed equivalent to COP degree requirements and eligible for transfer.
- Determination of both the institutional source and quality of professional coursework, as reflected by the accreditation standing of the originating institution.

A student approved to transfer does not guarantee that the transferring student will be granted entry into the same

academic year of standing as that of the pharmacy school/college of origin.

Acceptance of transfer courses and the award of University transfer credit shall not express nor imply that all transfer credits will be fully accepted towards advanced standing for the PharmD degree requirements at CNU.

The total number of credits transferred shall not exceed the maximum allowable units as defined by accrediting institutions.

Transfer applicants must meet the same eligibility and progression policy standards required of students enrolled at CNUCOP.

The institutional residency requirement for a transferring student includes a minimum of two years of enrollment as a full-time student at CNUCOP to receive the PharmD degree from CNUCOP.

International Applicants

California Northstate University College of Pharmacy accepts applications from international students provided they meet the same prerequisite requirements as U.S. applicants. CNUCOP will work with international students admitted to the PharmD program to complete the I-20 and will report the student's status to SEVIS. Please see the International Student Handbook available on the CNUCOP website for detailed instructions and timeline.

International (including Canadian) applicants must submit all prerequisite coursework taken from non-US institutions to the World Education Services (WES), Inc. for an evaluation of coursework. The foreign coursework evaluation must be submitted directly to PharmCAS. International applicants must complete all of the prerequisite course requirements.

International applicants who have not completed at least two years and at least 48 semester units (72 quarter units) at a US college or university are required to take the TOEFL or IELTS exam. Exam scores are valid for a two year period from the date of the exam.

The minimum total TOEFL IBT score is 88 with minimum section score requirements of

- Reading: 20
- Listening: 20
- Speaking: 25
- Writing: 23

The minimum total IELTS score is 6.5 with minimum section score requirements of:

- Reading: 6.5
- Listening: 6.5
- Speaking: 7.5
- Writing: 6.0

The "two semesters of English Composition" requirement will be considered as met for foreign applicants who take English Composition at an English-speaking institution as part of their degree program.

Visa services information is located under International Students (Visa Services)**Error! Reference source not found.** (pg. **Error! Bookmark not defined.**).

FINANCIAL SERVICES & DISCLOSURES on page 149 of this catalog.

Student Enrollment Agreement

The Student Enrollment Agreement must be completed and submitted to the college in order to show intent to enroll in the program. The Student Enrollment Agreement is a legally binding contract when it is signed by the incoming student and accepted by the institution.

By signing the Enrollment Agreement, the student is acknowledging that the catalog, disclosures, and information located on the website have been made available to the student to read and review.

Any questions or concerns regarding the Student Enrollment Agreement should be directed to the college or university department.

Catalog, Performance Fact Sheet, and Website

Before signing the Student Enrollment Agreement, the prospective student is strongly urged to visit the University and College website at www.cnsu.edu, and to read and review the CNU General Catalog and School Performance Fact Sheet (SPFS). The SPFS contains important performance data for the institution. The Catalog contains important information and policies regarding this institution.

Student's Right to Cancel, Withdraw, and Refund

You have the right to cancel the Student Enrollment Agreement until 12:01 AM on the first calendar day after the first classroom instruction session attended, or until 12:01 AM on the eighth calendar day after a student has signed the Enrollment Agreement, whichever is later.

Cancellation shall occur when you give written notice of cancellation to the Admission Office at the University's address shown at the top of the first page of the Enrollment Agreement. You can do this by hand delivery, email, facsimile, or mail. Written notice of cancellation sent by hand delivery, email, or facsimile is effective upon receipt by the University. Written notice of cancellation sent by mail is effective when deposited in the mail properly addressed with postage prepaid.

After the cancellation period described above, you have the right to withdraw from the University at any time. Withdrawal shall occur when you give written notice of withdrawal to the Registrar at the University's address shown at the top of the first page of the Enrollment Agreement. When withdrawing from the college/university, please complete the Official College Withdrawal form available from the Registrar's request form website: <http://www.cnsu.edu/office-of-the-registrar/registrar-services>. Do not use this form to indicate your intent to cancel your enrollment agreement.

For information on refund calculations due to cancellation or college withdrawal, please see the

Tuition & Fees

All tuition, fees, expenses, and policies listed in this publication are effective as of August 2018 and are subject to change without notice by California Northstate University.

In the tables below, P1, P2, P3, and P4 indicate the student's year in the program (e.g. P1 is a first-year student; P2 is a second-year student, etc.).

Tuition is charged on a full-time, semester basis, except during the fourth program year in which tuition is charged on a full-time, annual basis. Generally, tuition and fees are charged to a student's account thirty (30) days prior to the start of each semester term. The above is based on the assumption that a student will attend each semester term on a full-time basis, which allows for a student to graduate after successfully completing four (4) years of coursework consisting of 147 semester credit hours.

International students are not charged additional fees or charges associated with vouching for student status.

Payment deadlines, loan obligations, refund calculations due to cancellation and withdraw, and the Student Tuition Recovery Fund (STRF) disclosures are located in FINANCIAL SERVICES & DISCLOSURES (page 148).

2018-2019 PharmD Tuition & Fees

Tuition & Fees	Amount	Class
Enrollment Fee (nonrefundable)	\$250.00	P1
Tuition	\$48,660.00	P1, P2, P3, P4
Student Activity Fee	\$300.00	P1, P2, P3
Pharmacy Lab Fee / Skill Lab Fee	\$300.00	P1, P2, P3
Technology Fee	\$50.00	P1, P2, P3
Orientation Fee	\$75.00	P1
Immunization Fee	\$95.00	P1
BCLS/CPR Certification Fee	\$40.00	P1
BCLS/CPR Certification Fee	\$30.00	P3
NAPLEX Review	\$250.00	P3
Graduation Fee ¹	\$250.00	P4
STRF Fee per \$1000 ²	\$0.00	P1, P2, P3, P4
P1 Total Estimated Tuition & Fees per Year ³	\$49,770.00	
P2 Total Estimated Tuition & Fees per Year ³	\$49,310.00	
P3 Total Estimated Tuition & Fees per Year ³	\$49,590.00	
P4 Total Estimated Tuition & Fees per Year ³	\$48,910.00	

Total estimated cost for the 4-year Doctor of Pharmacy program ranges from \$200,000 to \$220,000.

Estimated Other Educational Related Costs ⁴	Amount	Class
Health Insurance premium ⁵	\$3,200.00	P1, P2, P3, P4
Books and Supplies (estimate)	\$1,600.00	P1, P2, P3, P4
Room and Board ⁶	\$17,454.00	P1, P2, P3
Transportation ⁶	\$3,485.00	P1, P2, P3
Room and Board ⁶	\$23,272.00	P4
Transportation ⁶	\$4,648.00	P4
P1 Total Estimated Cost per Year ⁷	\$75,509.00	
P2 Total Estimated Cost per Year ⁷	\$75,049.00	
P3 Total Estimated Cost per Year ⁷	\$75,329.00	
P4 Total Estimated Cost per Year ⁷	\$81,630.00	

¹ Covers regalia, graduation dinner, diploma cover, transcript, etc.

² The STRF fee is \$0.00 per \$1,000 of institutional charges.

³ Based on estimated annual tuition increases of 3% to 5%. Range amounts are estimated and nonbinding on CNU.

⁴ Costs and expenses a student may incur during the applicable year of the PharmD program, whether or not paid directly to CNU or CNUCOP. These expenses include estimated out-of-pocket cost of living expenses for the year.

⁵ Provided and charged by outside healthcare plan insurance company; optional, estimated, and may increase or decrease based on number of participants and other factors.

⁶ Estimated amounts of individual housing, food, and transportation costs, not operated by, charged by, or paid to CNU.

⁷ Includes tuition, fees, and educational related costs from Tuition & Fees chart.

Scholarships

In the past, several companies have helped California Northstate University's students finance their education through scholarships. Some of these companies include: Albertson's, CVS, Pharmacist Mutual Insurance Company, Safeway, SuperValu Drug Stores, and Walgreen's. These scholarships range from \$500 to \$2,000. Criteria for scholarships vary by the specific donors and are awarded in the late fall and early spring.

The Northern California Education Foundation and the College of Pharmacy award various scholarships to students during the academic year. The scholarships are awarded on the basis of financial need, academic performance, leadership, and promoting diversity in the profession.

Information regarding various scholarships can be found on the CNU Student Financial Aid Tools webpage, <http://www.cnsu.edu/student-financial-aid-office/student-financial-aid-tools/student-financial-aid-tools>, as well as within the Grants and Scholarships section of this catalog, page 148.

General Policies

Orientation and Registration

First year professional orientation is mandatory for all new students. The Office of Student Affairs and Admissions must be notified of any absence due to illness or emergency, if a student is not able to attend the scheduled orientation. The student will be required to provide documentation for the absence and complete a make-up orientation within the first week of school, in addition to attending scheduled classes and maintaining course requirements.

Registration for classes requires:

1. All admission contingencies be fulfilled.
 - a. Admission contingencies include proof of medical insurance coverage, all required immunizations, a cleared background check, and any other institutional requirements. Students may enroll in the Student Health Insurance Plan to satisfy the insurance requirement. For a complete list of required immunizations, please review the [COP Student Handbook](#)
2. Completion of all new student paperwork.
3. Financial aid clearance from the Financial Aid Office.

Students who are not in compliance with institutional requirements or who have a financial hold at the time of registration are required to satisfy the requirement and submit an approved Add/Drop form by the end of the Add/Drop period.

New students must submit the Emergency Contact and Medical Information Form to the Office of the Registrar by the end of Orientation. To make updates, a new form must be submitted to the Registrar. The Office of the Registrar requires submission of the Authorization to Release Student Records if a student desires to grant a personal third-party (such as a parent, spouse, etc.) access to his/her student record. Please refer to the ["Directory Information and Access to Student Records"](#) section of this catalog for more information.

New students should review their local, home, and billing contact information via the Student Portal and update as needed. It is the student's responsibility to maintain valid contact information throughout their enrollment at CNU. Instructions for accessing the Student Portal is sent by the CNU IT department to the student's CNU email address.

Registration is conducted by the Registrar prior to the start of each semester for new and continuing students. Students with business, financial, or other registration holds on their account will not be registered until the Registrar is notified that the hold has been cleared. Students who are in compliance with institutional requirements or who have a hold on their student account at the time of registration are required to satisfy the requirement and may also be required to submit the Course Add/Drop form by the end of the Add/Drop period to register or make schedule changes.

All accepted students who matriculate must have all official transcripts for all courses taken since high school as well as evidence of high school diploma or equivalent on record in

the Admissions Office by September 30 of the Fall semester that they matriculate.

Intern License

Enrolled CNU students must have a valid, current California Pharmacy Intern License. Incoming students are required to apply for a Pharmacy Intern License at the start of the Professional Year 1 (P1). Accepted students must download the application and complete the requirements prior to the orientation program. During orientation week these applications are collected by the Office of Experiential Education and submitted to the California Board of Pharmacy. Once the applications are received and processed, the California Board of Pharmacy mails the Intern License to the Office of Experiential Education where a copy is kept in the student's permanent file.

It is not possible to participate in the experiential component (the IPPE or APPE rotations) without a current California Pharmacy Intern License.

Address Where Instruction Will Be Provided

Class sessions are conducted at 9700 West Taron Drive, Elk Grove CA 95757. Experiential education, clinical rotations, and service learning activities are conducted at assigned professional clinical locations and community sites as established by agreement among the student, professional preceptor, and College.

Catalog, School Performance Fact Sheet, and Website

Before signing the Student Enrollment Agreement, students are strongly encouraged to visit the College website at <http://pharmacy.cnsu.edu/> and to read and review the CNU General Catalog and School Performance Fact Sheet (SPFS). The SPFS contains important performance data for the institution. The Catalog contains important information and policies regarding this institution.

By signing the Enrollment Agreement, the student is acknowledging that the catalog, disclosures, and information located on the website have been made available to the student to read and review.

Instruction/Course Delivery

The College of Pharmacy offers a didactic component of the curriculum that is in a classroom instruction setting comprised of an initial sequence of biomedical, clinical, pharmaceutical, and social and administrative science courses, followed by a series of organ-system based modules that integrate pathophysiology, pharmacology, medicinal chemistry, and pharmacotherapy concepts into the management of acute and chronic conditions.

The experiential component of the curriculum includes 300 hours of introductory pharmacy practice experience over the first three academic years and 1440 hours of advanced

pharmacy practice experience in the final academic year. Students complete the pharmacy practice experience throughout various offsite locations.

The College of Pharmacy provides learning experiences through the use of team-based learning to deliver the

curriculum. Team-based learning (TBL) prepares students to play a key role in a multidisciplinary team setting.

All courses are delivered in English and English language services are not provided.

Academic Policies & Procedures

Academic Calendar

The academic calendar consists of two didactic course semesters lasting approximately 15 weeks long and a summer term lasting approximately 11 weeks. Second and third-year students complete IPPE and fourth-year students complete APPE experiential education modules throughout the calendar year as assigned.

Credit Hour Policy

For each 15 week semester, 1 credit is assigned per hour each week of classroom or direct faculty didactic instruction (that is, per hour of lecture or student in class time) and a minimum of 2 hours of out-of-class student work (homework) (TBL). 1 credit is assigned per 3 hours each week of student time spent for courses that include workshop and/or laboratory time, and for experiential education (AL/LAB/EL). Students complete 300 hours of IPPE and 1440 hours of APPE as part of their experiential education training (EL).

Code	Course Type	Code	Course Type
AL	Active Learning course	LEC	Lecture course
EL	Experiential Learning	TBL	Team- Based Learning course
LAB	Laboratory course		

Grading

A letter grade equal to or greater than a C is considered satisfactory performance (passing) for completion of a course. In order to progress from one semester to the next, students must pass all courses with a letter a grade of C or higher and maintain a minimum cumulative grade point average (GPA) of 2.0. The breakdown for assignment of letter grades and grade points for each letter grade are as follows:

Grade	Definition	GPA Unit
A	90.0- 100%	4.00
B	80.0- 89.9%	3.00
C	70.0- 79.9%	2.00
D	60.0-69.9%	1.00
F	<60%	0.00
I	Incomplete	Not in GPA
W	Official Course Withdrawal	Not in GPA

Note: Individual course coordinators reserve the right to change the grading scale for a specific course and/or round percentages as they see fit for their specific course.

Incomplete or Withdrawal from a Course

During a semester, a student may withdraw or fail to complete all required assignments and/or examinations due to extenuating circumstances, such as, but not limited to, an illness or a family emergency. In such cases, the course coordinator may give a grade of Incomplete for the course.

All missed assignments and exams must normally be completed within 10 business days after the end of the semester in which the Incomplete was received, or within a timeframe determined by the course coordinator. Failure to

successfully complete the course will result in an earned F grade for the course and placement on Academic Probation.

Withdrawal from a course must first be approved by the course coordinator and the Office of Academic Affairs. Where a student has had to withdraw from a course a grade of W will be applied and the student will have to repeat the course next time it is offered.

GPA Calculation

To calculate cumulative GPA, letter grades will be converted to their numeric grade point value using the grading convention table above, and then added together. The sum is then divided by the number of courses taken. Grades received in retaken classes will be used in determining cumulative GPA. The grade initially received in the course will not be included in the calculation, but is recorded on the transcript.

Academic Honors

The Registrar compiles a list of full-time P1-P3 students who have demonstrated academic excellence in each didactic semester. Honors are noted on the student's transcript for each qualifying semester.

President's List: 3.75-4.00 GPA

Dean's List: 3.50-4.00 GPA

Rho Chi Honor Society – Invitation requires a minimum 3.50 cumulative GPA and class standing within the top twenty percent (20%) determined after the first semester of the student's second (P2) year. New members will be inducted into Rho Chi in the Spring semester of their P2 year. Any P2 or P3 students who become newly eligible in subsequent semesters will be inducted in the spring semester of their P3 year.

Course Grade Appeal Policy

Students may file an appeal if there is a disagreement with a final course grade. Students wishing to appeal a grade received in a College of Pharmacy course must follow the six steps listed below.

First Step - Student statement to course coordinator

A student can initiate the formal grade appeal process in writing using the Course Grade Appeal Form. The student must complete sections I and II and submit the form to the Course Coordinator within 3 business days of online grade posting.

The Course Coordinator, in collaboration with the Department Chair, will respond to the student's grade appeal in writing within 5 business days of receipt of the appeal. The Course Coordinator will return copies of the grade appeal form, with section III completed, to the Designated Academic Official for Academic Affairs and the Registrar, while returning the original copy to the student in case they wish to pursue the matter further. If the appeal is approved by the Course Coordinator and Department Chair, the Course Coordinator

returns the completed grade appeal form to the Office of the Registrar along with a completed Grade Change Form. If the appeal is denied, and the student accepts the outcome, the process ends here.

Second Step - Appeal to the Designated Academic Official for Academic Affairs

If the appeal is denied by the course coordinator/department chair, and the student wishes to pursue the matter further, the student has 3 business days from the date the Course Coordinator returns the form to sign and complete section IV of the form and submit it to the Designated Academic Official for Academic Affairs.

The Designated Academic Official for Academic Affairs will render a decision in writing to the student within 5 business days of receipt of the formal appeal. If the appeal is approved by the Designated Academic Official for Academic Affairs, the form will be returned to the Office of the Registrar with a completed Grade Change Form. If the appeal is denied, and the student accepts the outcome, the process ends here.

In the event the Course Coordinator is the Designated Academic Official for Academic Affairs, the student may appeal the decision directly to the Dean.

Third Step - The Dean of the College

If the Designated Academic Official for Academic Affairs denies the appeal, and the student wishes to pursue the matter further, the student has 3 business days from receipt of the decision from the Designated Academic Official for Academic Affairs to submit an appeal in writing to the College Dean. The Dean will render the final decision in writing within 5 business days of receipt of the formal appeal. The final Course Grade Appeal form must be submitted to the Office of the Registrar for processing.

Milestone and Capstone Exams

An examination on course material presented during the previous program years will be administered yearly. The exam for the P1 and P2 classes is referred to as the Milestone Exam while the exam for the P3 class is referred to as the Capstone Exam. Each exam is made of multiple choice questions developed by faculty, practitioners, or outside trainers. Exam questions cover all courses offered up to the students' present status in the program. The P1 Milestone Exam covers the content of the first year courses including the top 100-200 drugs and pharmacy calculations. The P2 Milestone Exam primarily covers material presented in courses offered during the immediate previous year with some general concept questions from first year curriculum, including calculations. The P3 Capstone Exam primarily covers pharmacotherapeutic content presented in all three didactic years at CNUCOP, including calculations and is designed to introduce and help develop the skills necessary for taking the NAPLEX and CJPE Academic.

Alert Policy

An Academic Alert is designed to allow a course coordinator to refer a student for academic support at any point during the semester. Such a step may be taken based on a quantifiable assessment such as an exam grade or a

cumulative iRAT score. It could also be based on observation of behavior, such as participation in team work.

Process

The course coordinator activates the academic alert and requests to meet with the students within 5 business days. A plan for academic support will be determined by the course coordinator and the student. The completed Academic Alert form will be submitted to the Office of Academic Affairs (OAA) which then notifies the student's academic advisor. The OAA may request to meet with students who have alerts in multiple courses. The Office of Student Affairs (OSA) will also be notified to provide tutoring assistance if requested by the student. The student is encouraged to work with the course coordinator, academic advisor, the OAA, and OSA, to assure all resources are being utilized to improve academic performance.

Academic Progression

The purpose of the Academic Progression policy is to ensure students reach and maintain high standards of learning throughout their time at COP and accomplish all course learning objectives. A grade of D or below in a course indicates a lack of understanding of the fundamental concepts of the course material necessary for progression. The policy is intended to allow students opportunity to remediate or repeat when they do not pass a course first time. A student must complete the program within 5 years (60 calendar months) from the time they registered and attended their first core course.

For a student to successfully progress through the COP PharmD program they must pass all courses each semester with at least a grade of C and maintain a minimum grade point average (GPA) of 2.0. Students will only have the opportunity to remediate a maximum of four courses throughout the didactic Program; hence more than 4 D grades will result in dismissal. Failing more than two courses will also result in dismissal. Students will not be allowed to take a course if prerequisite course(s) have not been passed. The consequence if a student earns a letter grade lower than C in any course in the curriculum, is shown in the table below:

	Consequence
1 or 2 Ds	Remediated all courses graded D; optional Academic Probation if remediation is unsuccessful, provided the course is not a prerequisite for future course(s)
3 or 4Ds	Remediate all courses graded D; mandatory Academic Probation if remediation is unsuccessful in three or more courses
5 or more Ds	Dismissal
1 or 2 Fs	Repeat failed course(s); mandatory Academic Probation
3 or more Fs	Dismissal
Students will only be allowed to remediate a maximum of 4 courses in any one semester and over the duration of the PharmD program; further Ds will result in dismissal; students will be dismissed if cumulative GPA at the end of year 1 or later falls below 2.0; the GPA will be calculated on completion of remediation; failed	

courses must be repeated; a failed course can only be repeated once.

Remediation

In the event of a student receiving a D or F grade in a course the instructor will complete a Remediation Form which will be used to notify Instructors of a student's eligibility to remediate or repeat a course. Eligibility is determined by the Office of Academic Affairs based on the number of courses where an F or D grade is achieved in a semester. If eligible, Instructors will make arrangements with the student to remediate.

- a. Remediation will consist of taking a comprehensive remedial examination that covers the material presented throughout the course. Only a course grade of D is eligible for remediation. A course grade of F must be repeated next time it is offered.
- b. The format of the remediation examination is at the discretion of the course coordinator.
- c. Preparation for remedial examinations is the sole responsibility of the student, and may consist of, but is not limited to, self-study, tutoring, and/or meetings with the course instructor(s) as the student and instructor(s) feel necessary for the student to gain a fundamental understanding of the course material.
- d. Satisfactory mastery of the material will be decided by the course coordinator/director/instructor(s), but generally will be a score of at least 70 percent on the comprehensive remedial examination.
- e. Remediation must be completed within 10 business days after the last exam to ensure timely submission of grades to the Registrar. Failure to remediate within this timescale will result in dismissal, unless there are exceptional circumstances making remediation within this time frame impossible.
- f. Faculty will report a grade of C to the Registrar for the course for which the remedial comprehensive examination was satisfactorily completed.
- g. The grade of C earned as a result of passing the remedial examination will be used in the calculation of the student's cumulative GPA. A minimum cumulative GPA of 2.0 must be maintained even if remediation is successful.
- h. If the course is not successfully remediated, the initial D recorded for the course will remain on the transcript and be used in the calculation of the student's GPA.
- i. Any student who receives an F or fails to remediate a D will be placed on Academic Probation.
- j. Remediation is not a substitute for lack of full course participation. To be eligible for remediation a student must have taken all exams, course assessments, and any graded activities (unless excused absences for these have been permitted).

Academic Probation

If a student fails a course, or if remediation of a D in three or more courses is unsuccessful, the office of Academic Affairs will automatically place the student on academic probation and notify them in writing of the action. When a student has been placed on academic probation the following apply:

- a. Academic Probation may mean a student is placed on a five-year schedule to complete the program. The program must be completed within five consecutive years of the date of the first day the student begins the program.
- b. A student on Academic Probation will not be allowed to progress to any course that requires the unsuccessfully completed course as a prerequisite.
- c. Within one week of the date that the student receives notification of his/her academic probation, the student will meet with the Office of Academic Affairs, or designated individual, to discuss their academic probation and to develop their curricular plan.
- d. Once the plan has been agreed the Office of Academic Affairs (or designated individual) will draw up documentation outlining details of the academic plan, which the student must sign. Failure to sign will mean the student will not be allowed to continue in the program. A copy of the plan will be shared with the Office of the Registrar, the Business Office, and the Office of Experiential Education.
- e. While on academic probation the student may not hold office in any College or University organization.
- f. In the case of a failed course, the student must successfully pass the course the next time it is offered to continue on the Program.

A student who achieves a grade of F in any course may repeat the course only once. Thus, failure to pass a repeated course will result in dismissal from the program.

Appeal of Academic Probation

There is no appeal process for students placed on Academic Probation.

IPPES and APPEs

A failed IPPE or APPE cannot be remediated except by retaking the rotation. If the IPPE or APPE is not successfully remediated the student will be dismissed from the program. If more than one Block is failed the student will be dismissed. Having to retake an IPPE may delay entry into the fourth year of the program, while having to retake an APPE block may delay graduation from the program. Students should refer to the EE Handbook for specific requirements regarding progression through IPPES and APPEs.

Dismissal

A student may be dismissed from CNUCOP if any of the following conditions exist and the Professional and Academic Standards Committee determines that dismissal is warranted:

- a. Failure to meet any terms of **Remediation** or **Academic Probation**
- b. Conduct subject to dismissal as described in the Honor Code section of the Student Handbook
- c. Foregoing an academic semester without obtaining an approved leave of absence
- d. Failure to complete the degree requirements in five consecutive academic years from the date of the first day the student begins the program.

Appeal of Dismissal

Students dismissed from the College may appeal the decision in writing within ten (10) business days of notification of

dismissal to the Dean of the College. The Dean will render a decision in writing within 10 business days of receipt of the formal written appeal. The Dean's decision is final.

Graduation & Commencement

Graduation Requirements

Students at CNUCOP are approved to receive the Doctor of Pharmacy degree by the COP faculty and the Board of Trustees (BOT). Students must meet the following requirements:

- Has conducted oneself in an ethical, moral, professional, and lawful manner;
- Has satisfactorily completed all of the CNUCOP curricular requirements in a timely fashion, not to exceed five (5) years from the date of initial enrollment (including approved leave of absence);
- Has fulfilled all tuition and financial requirements and completed all necessary paperwork for CNUCOP;
- Attends graduation and commencement ceremonies in person. Students cannot attend commencement if they have not fulfilled all the above requirements. Under special circumstances the Dean of the College may excuse the attendance requirement.

Students must file a completed Petition to Graduate with the Office of the Registrar by the semester deadline.

Degree Honors

Students who meet the cumulative GPA listed below will be honored with special recognition at graduation. The honor is noted on the degree.

Summa Cum Laude: CGPA of 3.90 or higher

Magna Cum Laude: CGPA of 3.70- 3.89

Cum Laude: CGPA 3.50-3.69

Commencement

Each student is required to attend commencement and wear traditional academic regalia consisting of a cap, gown, and academic hood. Hoods of academics regalia are conferred upon the graduates at commencement by faculty. The hood is lined with the California Northstate University colors of cabernet and gold, and is adorned with olive green denoting Doctorate of Pharmacy. Honor cords and/or medallions will distinguish honor graduates. Any additional ornamentation must signify recognized College organizations and must be approved in advance of commencement.

Attendance Policy

Students are required to attend all classes and all courses, including laboratory sessions, IPPES, and APPEs, on a regular basis. The University/College recognizes that circumstances may cause a student to miss an occasional class. The student may make up the work missed if the absence has been excused. What constitutes an acceptable rate of class attendance is a matter between students and their instructors, although the University/College expects instructors to maintain reasonable standards. Students requiring absence during a semester should refer to the Excused Absence Policy and the Leave of Absence Policy.

Pharmacy Practice Experience

Refer to Introductory Pharmacy Practice Experience and Advanced Pharmacy Practice Experience manuals for attendance information.

Excused Absence Policy

The College of Pharmacy expects students to attend and participate in all classes, participate in all introductory and advanced practice experiences, and complete all exams and assessments as scheduled (together defined as "coursework"). Missed coursework has the potential to disrupt individual and team learning, invalidate assessment of learning outcomes, create unfair advantages, and divert faculty and student resources away from teaching and learning. However, occasionally an absence from coursework will be unavoidable.

A student may request an excused absence for personal, emergency, compassionate, professional, or health-related reasons. Please refer to detailed policy for a full list of reasons for which an excused absence may be requested.

High stakes absence requests will be held to the highest standard for documentation and communication. A student requesting to receive an excused High Stakes Absence must satisfy FIVE criteria described in the detailed policy available on the website.

A student may request no more than three academic days of excused absences per semester or APPE Block. In total, excused and unexcused absences shall not exceed five academic days per semester or three per APPE Block. Absences exceeding five academic days per semester may require a student to request a leave of absence or a withdrawal. Please contact the Office of Academic Affairs for further information.

A student seeking an excused absence should complete the Excused Absence Request Form (available from the CNUCOP website) and seek the Course Coordinator's signature for each missed course within 3 business days upon return to courses or campus. The Course Coordinator will determine if an absence will be excused or unexcused for their course based on the categories and criteria outlined in the detailed policy; the completed form should be emailed or handed in to the Office of Academic Affairs for final approval.

Professional Conferences

California Northstate University College of Pharmacy supports the learning and professional development opportunities professional conferences can provide students; thus the college has a policy to allow student participation and attendance. A student in good academic standing, and not on Academic Alert, may submit an excused absence request to attend a professional conference. The request must be submitted at least 10 business days in advance of the professional conference attendance.

Approved Absences

A student may request an excused absence for the following circumstances:

- Medical (self or immediate family)

- Military Duty
- Immigration & Naturalization
- Emergency
- Jury Duty
- Legal
- Bereavement (Immediate Family)
- Professional Conference (requires verification of academic standing)
- Involvement in traffic accident documented by law enforcement report

Course Add /Drop Policy

Changes in course registration may be made without penalty up to the end of the first week (5 class days) for fall and spring terms. Specific add/drop deadlines will apply for courses offered during the summer and winter terms (e.g. IPPE courses, research courses). These deadlines can be found in the IPPE/APPE Handbook, but will generally be five (5) days from the deadline for registration.

Students must obtain permission from the course director or coordinator for each course added to their official registration during the add/drop period. Permission will be signified by the course director or coordinator's signature on the add/drop form. Students must also obtain approval from the Office of Academic Affairs. Approval from the Office of Academic Affairs will be indicated by the signature on the Course Add/Drop form.

Even though a student obtains approvals and signatures, the completed Course Add/Drop form must be submitted to the Registrar during the add/drop time period in order to be valid. Students may not make changes in their course registration after the add/drop period has ended.

For experiential education courses, please refer to the experiential education manuals. Students are not allowed to drop a rotation once it has begun. The student must file for a Leave of Absence.

Leave of Absence

A leave of absence is approved for a specific period of time, not to exceed more than a year, and the institution agrees to permit the student to return to the University/College without formally reapplying for admission to the University/College.

The student will be required to return to the University/College at the beginning of the semester in which the leave was granted. All students requesting a Leave of Absence should fill out a Leave of Absence Form after discussing their decision with the Designated Academic Official for Academic Affairs. If a student is requesting a leave of absence, the Designated Academic Official for Academic Affairs must sign the form. If the student is approved for a leave of absence, the student is eligible to return without reapplication if the absence is within the approved time frame. A student requesting a leave of absence should also meet with the Financial Aid Manager and Business Office to determine impact of their decision and any requirements needing fulfillment prior to the leave.

Non-attendance does not constitute notification of intent to apply for leave of absence status. The date of leave status is the date the Registrar receives the signed form.

Return from Leave of Absence

The Office of the Registrar will contact a student on Leave of Absence (LOA) approximately 90 days before the LOA expires via certified US mail and the email addresses on record. The student will receive the Intent to Return Form and instructions for re-enrollment and for withdrawing from the University. Submission of the completed Intent to Return Form to the Office of the Registrar is required to be eligible for course and APPE/IPPE registration.

The student will have 30 days of the date of the notice to reply to the Office of Registrar with their intent to return to the University/College or officially withdraw.

If a student does not return within 1 year of approved LOA they are no longer eligible to return as a continuing student and must reapply to the University/College for admission (See Withdrawal/Readmission in this handbook).

Withdrawal from the College/University

Students may voluntarily withdraw from the University/College at any time during the academic semester. The student will earn a "W" grade for a course(s) that is (are) not complete at the time the withdrawal is initiated. Informing CNUCOP, your academic advisor or instructor does not constitute official withdrawal from the program.

All withdrawals must be processed by the Office of the Registrar. Students must submit a completed Official University/College Withdrawal form to the Office of the Registrar. The form is available online at <http://www.cnsu.edu/office-of-the-registrar/registrar-services> and in the Office of the Registrar.

A student must meet with and receive signatures from the following departments before the form can be filed with the Office of the Registrar: Office of Academic Affairs, Business Office, Financial Aid, and Office of the Registrar.

A student who officially withdraws from the University/College is entitled to apply for readmission.

Readmission to the College/University

Students who fail to return from a leave of absence, who are dismissed, or withdraw from the program can reapply for admission. Candidates seeking readmission must apply through PharmCAS and adhere to the guidelines for all new applicants. Applicants for readmission will be evaluated by the admissions committee. The committee's decision is final. Applicants will not be given special consideration over new applicants and will be evaluated equally on their overall academic record.

If readmitted, the student may be required to restart the program beginning with the first professional year, regardless of their professional standing prior to dismissal or withdrawal.

Complaint/Grievance Policy

All academic related complaints regarding a course, courses or a faculty member should be filed with the Associate/Assistant Deans of Academic Affairs or Student

Affairs. An electronic Grievance/Complaint form is available at <http://pharmacy.cnsu.edu/forms>.

For complaints related to accreditation standards, please see Accreditation Information on page 9 of this catalog.

COP Course Descriptions

Clinical & Administrative Sciences (CAS)

CAS 606 Biostatistics and Pharmacoepidemiology (3 cr)

This course is designed to introduce major concepts in biostatistics and pharmacoepidemiology. Students will develop the ability to interpret and critically evaluate medical literature and to identify findings that have implications for their practice. Emphasis will be placed on an examination of how observational study designs draw upon epidemiologic techniques to address drug effectiveness, safety, outcome assessment and regulatory decision making. Students will also acquire skills in applying statistical analysis concepts learned throughout this course with the use of common computer software. (Prerequisite: none)

CAS 608 Self Care (4 cr)

Self-Care is an interactive course designed to introduce a systematic approach for evaluating a patient's self-care needs, including assessing, triaging and making appropriate treatment recommendations. This course also provides an introduction to over-the-counter medications used for self-treating common medical conditions in the community setting. Students will be expected to understand how and why obtaining a comprehensive patient history are necessary to objectively recommend appropriate over-the-counter medications that are safe and effective. Students will begin to appreciate the role of a pharmacist and how educating and empowering patients is a cornerstone in community pharmacy practice. (Prerequisites: IPP607, PRC609)

CAS 702 Communications (2 cr)

The course is designed to teach student pharmacists the skills and techniques necessary to have productive communication encounters with patients and healthcare professionals using verbal and non-verbal skills. Utilizing techniques that evolve around oral and written communication, the students will begin to develop the skills necessary to conduct effective patient interviewing/counseling encounters, initiate problem solving & conflict management techniques, and expand their awareness regarding cultural competence and health literacy. (Prerequisite: none)

CAS 703 Drug Literature Evaluation & Drug Information (3 cr)

This course will provide a systematic approach to drug information and literature evaluation to formulate and implement appropriate drug therapy decisions. This includes effective searching, retrieval, evaluation and dissemination of electronic and print resources. Students will utilize skills learned in this course to effectively communicate and tailor drug information at the appropriate level for providers, other health professionals, caregivers, patients and the public. Additionally, this course will provide introductory knowledge on the state of the art in pharmacy informatics and decision support systems needed to implement patient-centered care. Students will be able to define basic terminology used in health informatics and describe the benefits and current

constraints in using information and communication technology in health care. (Prerequisite: CAS606)

CAS 705 Pharmacotherapy I (6 cr)

This course will focus on the clinical foundations of pharmacotherapy, integration of pathophysiological and pharmacological mechanisms, and the pharmacotherapeutic interventions used in the management of disorders that are specific to or have a high prevalence in psychiatry or neurology. (Prerequisite: PBS602)

CAS 706 Pharmacotherapy II (6 cr)

This course focuses on the development of highly skilled clinical pharmacists. Students are taught to integrate knowledge of therapeutic interventions with the pathophysiological and pharmacological mechanisms and patient specific data to optimally management cardiovascular, pulmonary, and endocrine disorders. Students will gain understanding of disease state management through the interpretation of case reports, laboratory findings, application of pharmacologic principles and evidence based guidelines. (Prerequisites: PBS701 & CAS703)

CAS 801 Pharmacy and the Health Care System (3 cr)

This course will introduce the major healthcare stakeholders and elucidate the manner by which their interests and interactions have shaped the current US healthcare financing and delivery system, and set the stage for healthcare reform. Students will learn how to use this information as a framework to identify existing and future healthcare needs, and develop potential pharmacist-driven initiatives to improve value and patient care in general. (Prerequisite: none)

CAS 802 Pharmacy Law and Ethics (3 cr)

This course is designed to prepare student pharmacists to evaluate through critical thinking and problem solving skills and techniques necessary to identify, analyze, and evaluate the legal and ethical issues pertaining to the practice of pharmacy. Upon completion, a student will have an understanding of requirements for preparing and dispensing medications in a manner compliant with pharmacy rules/regulations and laws, as well as preparing and maintaining records that respect a patient's privacy interests and comply with the law, along with an appreciation for a pharmacist's duty to avoid harm while practicing the profession within the allocation of health resources, patient autonomy, and interactions with other healthcare providers. (Prerequisite: IPP607)

CAS 804 Pharmacy Management and Economic Principles (3 cr)

The objective of this course is to provide an opportunity to pharmacy students to learn important management, organizational, accounting, entrepreneurial, and marketing skills that are useful for pharmacy practice. To provide optimum care and services as a healthcare professional, pharmacists should understand the basic principles of managerial, organizational, and financial management. On a day-to-day basis pharmacists have to deal with people,

change, structural demands, and organizational behavior. Therefore, more emphasis will be given to planning, organization, motivation, control, and marketing as they relate to community and health-system pharmacy management. This course will also provide a basic introduction of pharmacoeconomic principles and its application to improve patient outcomes. Course material will provide the students with an understanding of the methods to choose a cost-effective drug therapy for patient populations in order to achieve quality clinical, economic and humanistic outcomes. A combination of classroom mini-lectures, class discussion, required readings, and in-class learning assignments will be used to facilitate the student's understanding of important concepts related to pharmacy management and pharmacoeconomics. (Prerequisite: CAS801)

CAS 805 Pharmacotherapy III (6 cr)

This course will cover the pathophysiology and treatment of bacterial, viral, and fungal infections, as well as the principles of antimicrobial regimen selection and antimicrobial prophylaxis. By the end of this course the student should be able to: identify the principles of the practice of infectious diseases, identify the impact of the use of antimicrobial agents on the population, describe basic properties of common pathogenic microorganisms, list pharmacological properties of selected antimicrobial agents, identify likely pathogens responsible for a particular infectious disease process, select first line and alternative antimicrobial agents for selected disease states, and identify appropriate actions to monitor for efficacy and toxicity. (Prerequisites: PBS604, CAS703, CAS706 & PBS803)

CAS 806 Pharmacotherapy IV (6 cr)

This course covers several topics of pharmacotherapy: renal, nutrition, gastrointestinal and hepatic disorders as well as hematology and oncology with a focus on patient care. The student will need to integrate physiologic, pathophysiologic, pharmacologic, pharmacodynamic, pharmacokinetic, laboratory monitoring, and pharmacotherapeutic principles to assess and/or formulate disease specific pharmacotherapy care plans. The course will focus on optimizing drug therapy through the design, recommendation, implementation, monitoring, and modification of individualized pharmacotherapeutic plans using updated pharmacologic principles, clinical recommendations, and evidence based guidelines. (Prerequisite: PBS704 & CAS706)

Pharmaceutical & Biomedical Sciences (PBS)

PBS 601 Cell and Molecular Biology and Biochemistry (5 cr)

This course is designed to provide the pharmacy students with a fundamental understanding of current concepts of cellular and molecular biology, and human biochemistry. Students are provided an overview of eukaryotic carbohydrate, lipid and protein metabolism, cellular signal transduction, biomedical aspects of human nutrition, genetic regulation, the molecular basis of inherited genetic diseases and acquired diseases like cancer, principles of commonly used biotechnologies, drug targets screening, and biopharmaceutical products generation. (Prerequisite: none)

PBS 602 Pathophysiology and Pharmacology I: Neuro & Psychiatric (6 cr)

This course introduces the basic mechanisms of pathophysiology and pharmacology, and then integrates these disciplines through the study of the etiology, pathogenesis, clinical manifestations, treatment and prevention of major neurologic, psychiatric, and neuroendocrine diseases/disorders. Following an introduction to normal tissue types and adaptive responses, the course will cover basic etiological and pathophysiological mechanisms; mechanisms of injury will be reviewed; the central and peripheral nervous systems (CNS & PNS) are reviewed, major CNS, PNS and neuroendocrine diseases and disorders are covered. Students will learn the mechanism(s) of action and common or serious adverse effects of pharmacological agents and identify appropriate pharmacological treatments or adjust pharmacotherapy in the face of adverse effects. In addition, each student team will research a topic in depth, including a systematic search of peer-reviewed literature, to develop and present a formal case study, given at a level appropriate for an audience of healthcare professionals. To promote information literacy, teams will use systematic PubMed searches using MESH terms to identify and incorporate current literature reviews, guidelines, or other advanced professional sources, and carefully cite the information and sources on their slides. (Prerequisites: PBS601 & PBS 603)

PBS 603 Medicinal Chemistry & Physical Pharmacy (5 cr)

The course consists of four components: (1) drug structure-relationships, prediction of the physico-chemical properties of a drug, basic knowledge of the major pathways of drug metabolism and factors that can contribute to drug-drug interactions; (2) the solubility, metabolism and pharmacological activity/potency of drugs classes based on the contribution of their functional groups to their structures; (3) drug assay and the application of chemical and physico-chemical methods of analysis to pharmaceutical substances; (4) active constituents of natural medicines with emphasis on the top selling medicinal herbs. (Prerequisite: none)

PBS 604 Pharmacokinetics (5 cr)

This course focuses on understanding and applying pharmacokinetic principles for optimizing drug dosage. It is divided in to three modules: (1) descriptive, quantitative, and pharmacokinetics of special population. Descriptive pharmacokinetics provides a basic introduction to the key pharmacokinetic principles; it enables the student to conceptualize principles such as drug bioavailability, distribution, clearance, and excretion; concepts of drug absorption, metabolism, protein binding, and pharmacokinetic drug interactions will be discussed as well. (2) Quantitative pharmacokinetics covers the mathematical aspects, including the calculation of pharmacokinetic parameters following drug administration and compartment modeling. (3) the process of using pharmacokinetic principles to optimize drug dose in individuals and in patients with altered physiology is covered last. (Prerequisite: PBS 605)

PBS 605 Biopharmaceutics, Drug Delivery and Calculations (5 cr)

This course is designed to give students an appreciation of the formulation, manufacture, and testing of dosage forms as well as an understanding of the interactions between complex

drug delivery systems and biological systems. The course covers all the basic dosage forms and drug delivery systems as well as the routes of administration, absorption, and bioavailability. The course will also cover pharmaceutical calculations and some elements of compounding. It presents an overview of drug quality control and regulation. (Prerequisite: none)

PBS 701 Pathophysiology and Pharmacology II: Cardiovascular, Diabetes, Thyroid (6 cr)

This course describes and evaluates underlying pathogenesis of major cardiovascular disorders and cardiovascular pharmacology. Upon completion of this course students gain an understanding of major cardiovascular disease states, drug targets based on understanding the pathophysiology, and the mechanism of action and adverse effects of drugs used to treat cardiovascular disorders. Selected topics include: hypertension, dyslipidemia, thrombosis, arrhythmia, ischemic heart diseases, heart failure, venous thromboembolism, peripheral arterial diseases, valvular disease and cardiovascular shocks. In addition, this course describes the pathophysiology of two of the endocrine glands: thyroid and pancreas. Students gain an understanding of underlying pathogenesis of hypothyroidism, hyperthyroidism and Diabetes Mellitus, and the mechanism of action and adverse effects of pharmacological classes and agents to treat these endocrine disorders. (Prerequisites: PBS601, PBS602, PBS603, & PBS604)

PBS 704 Pathophysiology and Pharmacology III: Pulmonary/ Renal/GI/GU (6 cr)

In this course, students will learn to identify drug targets based upon an understanding of the pathophysiology of major diseases of the respiratory, renal, gastrointestinal, genitourinary, and endocrine systems. Students will learn to recognize the major disorders of these systems, the mechanism of action and adverse effects of pharmacological classes of drugs used in the treatment of these disorders. In addition, students will learn the alternative pharmacological agents for patients who exhibit significant adverse effects to existing pharmacological therapy of these disorders. (Prerequisite: PBS602)

PBS 803 Immunology and Rheumatology (4 cr)

The course will initially focus on an overview of innate and adaptive immunity as well as basic principles of cellular immunology. A special emphasis will then be placed on integrating the underlying pathophysiological and applicable pharmacological mechanisms, which can be used in the intervention and management of immunological-based diseases. These disease states include: Rheumatoid Arthritis, Psoriasis, Crohn's Disease, Systemic Lupus Erythematosus, and Multiple Sclerosis. Other topics covered in the course include organ transplantation, vaccination for disease, immunodeficiency and AIDS, as well as interactions between the immune system and cancer. Students are provided with an overview of immunity, cells and proteins of the immune system, along with their specific roles and interactions in human disease. (Prerequisites: PBS601, PBS603, & PBS704)

Experiential Education (EED) - IPPE

IPP 607 Introduction to Pharmacy Practice (2 cr)

This didactic class prepares students for their IPPEs. It covers introductory and contemporary pharmacy issues, practice history, pharmacy organizations and medical terminology, and certificate programs as required by experiential practice experiences. Additionally, students will be introduced to pharmacy law and professionalism issues, and they will be provided with an opportunity to develop introductory knowledge of the top 100 dispensed prescription medications. (Prerequisite: none)

IPP 707 Introduction to Pharmacy Practice Experience: Community Practice (4 cr)

This is an introductory Pharmacy Practice Experience (IPPE) in a community practice setting. This IPPE requires 150 hours on site in a community practice setting. Summer placement is strongly encouraged, and the work schedule suggested should incorporate 4 x 40 hour weeks. (Prerequisites: IPP607)

IPP 807 Introductory Pharmacy Practice Experience: Institutional Practice (2 cr)

This is an introductory Pharmacy Practice Experience (IPPE) in an institutional practice setting. This IPPE requires 75 hours on site in this practice setting. (Pre-requisite: IPP607)

IPP 808 Introductory Pharmacy Practice Experience: Specialty Practice (2 cr)

This is an introductory Pharmacy Practice Experience (IPPE) in specialty practice setting. This IPPE requires 75 hours on site in this practice setting. (Prerequisite: IPP607)

Experiential Education (EED) - APPE

Advanced Pharmacy Practice Experiences

APPE prerequisite: students must successfully complete all P1-P3 courses before commencing APPEs. Collectively, APPEs provide students with the opportunity to hone the practice, skills, professional judgement, behaviors, attitudes, values, confidence and sense of personal and professional responsibility required for each student to practice independently and collaboratively in an inter-professional, team-based environment.

APP 901 Advanced Pharmacy Practice Experience: Community (6 cr)

In the Community Pharmacy Practice APPE, the student will have an opportunity to practice contemporary pharmacy in a community setting, balancing the changing demands of the healthcare system with those of the retail market. Whether in the large chain or independent pharmacy, activities will include managing the prescription verification process, selecting over-the-counter products for patient-specific needs, patient counseling, and delivering medication therapy management services. (Prerequisite: P4 standing)

APP 902 Advanced Pharmacy Practice Experience: Hospital/Health Systems (6 cr)

Students in the Hospital/Health System APPE will apply knowledge of sterile technique, pharmaceutical calculations, pharmaceutical compounding, medication use evaluation and pharmacokinetic monitoring in activities that enhance

the safe and effective use of medications in the hospital environment. (Prerequisite: P4 standing)

APP 903 Advanced Pharmacy Practice Experience:

General Medicine (6 cr)

Students in the General Medicine APPE apply critical thinking skills and drug information knowledge to evaluate a patient's medical information, identify drug therapy problems, design therapeutic interventions, and communicate medication therapy recommendations to other healthcare providers. (Prerequisite: P4 standing)

APP 904 Advanced Pharmacy Practice Experience:

Ambulatory Care (6 cr)

In the Ambulatory Care APPE, students apply drug knowledge and communication skills with both patients and other healthcare team members to formulate and implement pharmacotherapy care plans, including monitoring and follow-up to assure the best possible outcomes for their patients. (Prerequisite: P4 standing)

APP 905 Advanced Pharmacy Practice Experience:

Specialty I (6 cr)

This rotation allows students to explore areas of interest and focus in pharmacy practice. Specialty APPE offered in the CNUCOP curriculum include (but are not limited to) Infectious Disease, Critical Care, Emergency Medicine, Geriatrics, Pediatrics, Academia, Management, Leadership, Compounding, Home Infusion and Long-term Care. (Prerequisite: P4 standing)

APP 906 Advanced Pharmacy Practice Experience:

Specialty II (6 cr)

This rotation allows students to explore areas of interest and focus in pharmacy practice. Specialty APPE offered in the CNUCOP curriculum include (but are not limited to) Infectious Disease, Critical Care, Emergency Medicine, Geriatrics, Pediatrics, Academia, Management, Leadership, Compounding, Home Infusion and Long-term Care. (Prerequisite: P4 standing)

Longitudinal Practicum Education

PRC 609 Longitudinal Practicum I (1 cr)

Longitudinal Practicum I is the first in a series of six practicums designed to provide students with the opportunity to practice essential skills, and use knowledge learned in didactic courses to build and develop these skills in a sequential and integrated way. Longitudinal I provides a hands-on introduction to bench-top pharmaceutical compounding and calculations. Practicum I will provide an overview of the value of compounded dosage forms, and their limitations and relationship to FDA-approved drugs. Some insight will be given to the use of compounding pharmacies for the preparation of clinical trial materials, and various compounded preparations will be made. This practicum involves three pre-lab sessions, four wet lab sessions and nine hours of calculation sessions. (Prerequisite: none)

PRC 610 Longitudinal Practicum II (1 cr)

Using the sterile IV hood, Practicum II will provide students with a hands-on introduction to aseptic techniques, and personal safety measures. Patient counseling and interviewing skills will be introduced and practiced. In

addition, students will learn how to conduct a physical assessment of patients, with a focus on smoking cessation, blood pressure monitoring, and blood glucose assessment. Students will get the opportunity to practice physical assessment techniques on a simulated patient. In addition, students will participate in an immunization certification program, and the concept of Medication Therapy Management (MTM) and SOAP notes will be introduced. Practicum II emphasizes oral presentation skills, and introduces key concepts such as leadership, professionalism, and ethics. (Prerequisites: IPP607 & PRC609)

PRC 709 Longitudinal Practicum III (2 cr)

The third in the series this Practicum will enable students to apply their knowledge of pharmacotherapy to clinical scenarios through the use of Objective Structured Clinical Exams (OSCEs) and debates. Basic laboratory elements will be introduced and skill sets related to conducting MTM/motivational interviewing will be further refined. Students will also have the opportunity to enhance their oral communication skills through patient counseling exercises and debates on topics related to psychiatry and/or neurology. Professionalism, including behaviors and attitudes that are consistent with being a health care professional, will be reinforced. (Prerequisite: PRC610; Co-requisite: CAS705)

PRC 710 Longitudinal Practicum IV (2 cr)

This Practicum will provide students with an opportunity to develop and practice clinical skills through the assessment of case reports laboratory findings, pharmacologic principles and evidence based guidelines. Students will be exposed again to OSCE which were first introduced in Practicum III. Journal Clubs, MTM, SOAP Notes and Care Plans will all be revisited, using various cardiovascular, endocrinologic, and pulmonologic disease states as a platform. Students will learn to demonstrate clinical skills relevant to providing patient care in simulated learning activities with other health care professional students. Evidence-based patient case discussion and patient therapeutic treatment plan recitation will be developed throughout the practicum. Students will be expected to continue to demonstrate the professional skills, attitudes, and values necessary to enter a clinical service. (Co-requisite: CAS706)

PRC 809 Longitudinal Practicum V (2 cr)

Practicum V will help students practice their clinical skills and to understand the different roles and responsibilities pharmacist can have in various practice settings. Emphasis will be placed on infectious disease case scenarios in this practicum, related to this semester's pharmacotherapeutic course. Throughout Practicum V, students will be exposed to simulations in community, hospital, and ambulatory care environments, and reinforcing their skills in disease state management. The students will also be exposed to patient case scenarios and tasked to assess, evaluate, and prioritize patient problems, by providing appropriate treatment recommendations. Students will also have continued exposure to practice their skills in the areas of leadership, MTM, patient care and inter-professional practice. (Prerequisite: PBS 604; Co-requisites: PBS803 & CAS 805)

PRC 810 Longitudinal Practicum VI (2 cr)

The sixth and final Practicum will provide students with practice in nutritional calculations, MTM review of cases using

specific topics such as renal, gastroenterologic and oncologic disease from this semester's pharmacotherapeutic course. In particular, this longitudinal practicum will build on skills developed in previous didactic courses and practicums in order to optimize personal performance going into the Advanced Pharmacy Practice Experiences (APPEs). Students will be provided with an opportunity to participate in an additional Inter-Professional Education (IPE) Simulation exercise; and there will be team-based topic presentations to solidify communication skills. Overall, students will be provided with sufficient exposure to learn and practice their skills in the area of leadership, MTM, patient care and inter-professional practice. (Prerequisite: CAS703; Co-requisite: CAS806)

Elective Courses

P2 and P3 students must choose one from a number of elective topics that will be offered each academic year. P2 elective courses (ELC 7XX) are offered during the Spring semester and P3 elective courses (ELC 8XX) are offered in the Fall semester. Topics vary each year. Students may complete an approved an Independent Study in lieu of an elective course offered. Completion of a minimum of 4 credits of elective coursework is required. P2 elective offerings will be distributed as an addendum.

ELC 750/850: Independent Study (1-2 cr)

The purpose of independent study is to provide interested students with an opportunity to collaborate with faculty on research or specialty projects. The interested student meets with the appropriate faculty member, and the student and the faculty determine the nature and scope of the project to be completed. In collaboration the student and the faculty member design the course, the scope of the project, project specific assignments, methods of evaluation, timeline, and expectations. Prior to starting the project/course, the student and the faculty member complete the independent study form and submit the completed form to the appropriate Department Chair for approval. Once approved by the appropriate Department Chair, the completed form is subsequently submitted to the Office of Academic Affairs for final approval. Once final approval has been granted, the form will be sent to the Office of the Registrar to officially enroll the student in the course. Request form and instructions available online: <http://pharmacy.cnsu.edu/independent-study>. (Prerequisites: P2/P3 standing and minimum 2.80 cumulative GPA; Faculty, Department Chair, and Office of Academic Affairs approval)

ELC 851 Demystifying Formulary Decisions: An Evidence Based Approach (2 cr)

This course will focus on common disease states affecting the pediatric and geriatric population and their management. These specific patient populations require special consideration as a result of their varying pharmacokinetic and pharmacodynamic profiles. Pathophysiological and pharmacological principles of each disease state and their respective treatments will be reviewed. The course will be based on team-led topic presentations and class discussions to enhance students' knowledge base and improve oral and written communication skills. (Prerequisite: P3 standing)

ELC 853 Preventing the Misuse & Abuse of Prescription Medications (2 cr)

This course is designed to raise awareness among the students about the misuse and abuse of prescription medications. Students will develop knowledge and understanding of drugs and substances of abuse, how to promote appropriate use of controlled substances, and minimize their abuse and diversion. (Prerequisite: P3 standing)

ELC 861 Pharmacogenomics and Genetics (2 cr)

The Pharmacogenomics (PGx) and Genetics course is designed to provide pharmacy students with a fundamental understanding of current concepts and application of genetics and genomics in light of the relevance and the scope of pharmacy practice. The course is designed with a learner-centered perspective, leading step-wise through introductory content emphasizing PGx research design including utilization of key knowledge from the human genome and genome projects and Big "Omics" data such as genomic, transcriptomics, and proteomic approaches to patient care. Students are provided an application of pharmacogenomics in drug discovery, disease diagnosis, and the value of phenotyping/genotyping in guiding drug therapy of individual patients. Examples of clinical applications will be included and will examine the relationship between PGx and personalized medicine. This course uses a combination of lectures, discussions of assigned literature, projects, and student-led presentations. (Prerequisite: P3 standing; PBS604; PBS701; PBS704; CAS705; & CAS706)

ELC 863 Frontiers in Translational Medicine: From Bench to Bedside (2 cr)

Translational medicine is the practice of transferring scientific knowledge "from bench to bedside" (B2B), translational medicine builds on basic research advances and uses them to develop new therapies or medical procedures. Translational medicine transforms scientific discoveries arising from laboratory, clinical or population studies into new clinical tools and applications that improve human health. This course provides students with insight into state-of-the art research and research application in the medical field. The emphasis is the dynamic relationship between laboratory research and bedside application with the purpose of providing optimal patient therapies. Students will learn how research results guide clinical therapies, and vice versa. This course will provide real-life examples of translational medicine practices and give students exposure to analyzing and developing diagnostic tools and treatment protocols. Students will be required to actively participate in individual journal clubs and develop a review of literature presentations. Finally, each team will write a review literature on a selective topic appropriate for peer-review publication. (Prerequisite: P3 standing; PBS601)

ELC 859 Postgraduate Pharmacy Residency and Fellowship Training Preparation (2 cr)

The post-graduate pharmacy residency and fellowship training preparation elective is an interactive course designed to provide students with the tools and skill sets necessary to obtain a residency or a fellowship position following graduation. This course will introduce students to the basic elements of residency and fellowship, identifying programs based on one's interest, developing application materials (CV,

letter of intent), and preparing for Personal Placement Service (PPS) and/or onsite reviews (interview preparation, mock interviews, and topic presentation). In addition, students preparing for a residency will gain the skills necessary to

navigate the application and residency match processes and students preparing for a fellowship will gain the skills necessary to remain a competitive candidate for onsite interviews following PPS. (Prerequisite: P3 standing)

COP PharmD Curriculum 2018-2019

Course #	COURSE TITLE	Credits
Semester I		
PBS 601	Cell and Molecular Biology and Biochemistry	5
PBS 603	Medicinal Chemistry & Physical Pharmacy	5
PBS 605	Pharmaceutics and Calculations	5
IPP 607	Introduction to Pharmacy Practice and Professionalism	2
PRC 609	Longitudinal Practicum I	1
Semester total		18
Semester II		
PBS 602	Pathophysiology & Pharmacology I: (Neuro & Psychiatric)	6
PBS 604	Pharmacokinetics	5
CAS 606	Biostatistics and Pharmacoepidemiology	3
CAS 608	Self-Care	4
PRC 610	Longitudinal Practicum II	1
Semester total		19
Semester III		
PBS 701	Pathophysiology & Pharmacology II: (CV, Diabetes Mellitus & Thyroid)	6
CAS 703	Drug Literature Information & Evaluation	3
CAS 705	Pharmacotherapy I	6
PRC 709	Longitudinal Practicum III	2
Semester total		17
Semester IV		
ELC 7XX	Elective I	2
CAS 702	Communications	2
PBS 704	Pathophysiology & Pharmacology III: (Pulmonary, Renal, GI & GU)	6
CAS 706	Pharmacotherapy II	6
PRC 710	Longitudinal Practicum IV	2
Semester total		18
Semester V		
ELC 8XX	Elective II	2
CAS 801	Pharmacy and the HealthCare System	3
PBS 803	Immunology and Rheumatology	4
CAS 805	Pharmacotherapy III	6
PRC 809	Longitudinal Practicum VI	2
Semester total		17
Semester VI		
CAS 802	Pharmacy Law and Ethics	3
CAS 804	Pharmacy Management and Economic Principles	3
CAS 806	Pharmacotherapy IV	6
PRC 810	Longitudinal Practicum VI	2
Semester total		14
*IPPE Requirements (available in Summer, *Fall, Winter, or Spring Term)		
IPP 707	Introductory Pharmacy Practice Experience I	4
IPP 807	Introductory Pharmacy Practice Experience II	2
IPP 808	Introductory Pharmacy Practice Experience III	2
IPPE total		8
Semester VII and VIII		
APP 901	Advanced Pharmacy Practice Experience: Community	6
APP 902	Advanced Pharmacy Practice Experience: Hospital/Health System	6
APP 903	Advanced Pharmacy Practice Experience: General Medicine	6
APP 904	Advanced Pharmacy Practice Experience: Am Care	6
APP 905	Advanced Pharmacy Practice Experience: Specialty I	6
APP 906	Advanced Pharmacy Practice Experience: Specialty II	6
Year total		36
Program Total Credits		147
*Denotes Fall starting 2nd year or after successful completion of IPP 607		

COP 2018-2019 Academic Calendar

California Northstate University College of Pharmacy					
2018-2019 Academic Calendar					
Description	Start Date	End Date	Description	Start Date	End Date
SUMMER 2011					
Summer Term	Thursday, May 3, 2018	Sunday, August 19, 2018			
Holiday- Independence Day		Wednesday, July 4, 2018			
FALL 2011					
PJ Ori JLtatio Week	Tuesday, August 14, 2018	Friday, August 17, 2018			
First Bite Coat Ceremony		Saturday, August 18, 2018			
F1UTum	Monday, August 20, 2018	Wednesday, December 12, 2018			
Iml:nlctiouL Period	Monday, August 20, 2018	Wednesday, December 5, 2018			
Cours.e Add/Drop Period	Monday, August 20, 2018	Friday, August 24, 2018			
Holiday — Labor Day		Monday, September 3, 2018			
Holiday —	Wednesday, November 21, 2018	Friday, November 23, 2018			
Thallksr:iriiJL: Friuls	Thursday, December 6, 2018	Wednesday, December 12, 2018			
Exam Period	Thursday, December 13, 2018	Wednesday, December 19, 2018			
R mtdiatioL en.m period	Thursday, December 13, 2018	Thursday, January 1, 2019			
Winter Break					
RtmtdiatioL Grades Due		Friday, December 28, 2018			
WINTER 2011					
WiDU Term (IPPEs only)	Thursday, December 13, 2018	Wednesday, January 1, 2019			
SPRING 2011					
SpriDg Term	Wednesday, January 2, 2019	Friday, April 26, 2019			
Iml:nlctiouL Period	Wednesday, January 2, 2019	Friday, April 19, 2019			
Cours.e Add/Drop Period	Wednesday, January 2, 2019	Wednesday, January 9, 2019			
Holiday — Martin Luther Jr.		Monday, January 21, 2019			
Holiday — President's Day		Monday, February 18, 2019			
Spring:	Friday, March 8, 2019	Tuesday, March 12, 2019			
Final Exam Period	Monday, April 22, 2019	Friday, April 26, 2019			
Midstate Exam (P1 & P2)	Friday, April 26, 2019				
Capstone/PS 3111 Part 1 (P3)	Friday, April 26, 2019				
Remediation Exam Period	Monday, April 29, 2019	Friday, May 3, 2019			
Law Review (P1) SAPLEX Board	Monday, April 29, 2019				
RnMw (P3 & P4)	Tuesday, April 30, 2019	Saturday, May 4, 2019			
PCOA (P3)		Monday, May 6, 2019			
Remediation Grades Due		Friday, May 10, 2019			
Graduation Clearance Date		Friday, May 10, 2019			
Graduation Ceremony		Saturday, May 11, 2019			
APPE Rotation Calendar 2018-2019			IPPE Rotation Calendar 2018-2019		
Description	Start Date	End Date	Description	Start Date	End Date
Amort	Monday, May 21, 2019	Friday, May 25, 2019	SIIMDU IPPE	Monday, May 3, 2018	Sunday, August 19, 2018
BBIKk	Monday, July 2, 2018	Friday, August 10, 2018	FaU IPPE	Monday, August 20, 2018	Wednesday, December 5, 2018
cmort	Monday, August 20, 2018	Friday, September 21, 2018	WilluiIPPE	Thursday, December 13, 2018	Wednesday, January 2, 2019
Dmort	Monday, October 1, 2018	Friday, November 2, 2018	SpriIPPE	Monday, January 1, 2019	Wednesday, April 24, 2019
EBiodt	Monday, November 12, 2018	Friday, December 21, 2018			
Fmexk	Monday, January 7, 2019	Friday, February 15, 2019			
G Bl<k	Monday, February 15, 2019	Friday, March 21, 2019			

VB:ion: November 2018/1 dat .1 may be subjert to change. Revisi011s will be . postl.

Appendix 2-2 CNU General Catalog

Dates may be subject to change. Revisions will be reposted: <http://pharmacy.cnsu.edu/schedules-and-calendars>.

COLLEGE OF PSYCHOLOGY

Mission, Vision, and Values

Mission: To advance the science and practice of psychology by developing clinicians trained to promote health through knowledge, research, service, and social responsibility.

Vision: To provide training to future psychologists using the latest scientific research to promote health, illness prevention, consultation, assessment, and the treatment of psychological and health-related disorders.

Values: To pursue six guiding principles: 1) curiosity towards clinical work and scholarship; 2) integrity as scholars, professionals, and clinicians; 3) diversity of people, ideas and beliefs; 4) accountability as professionals; 5) respect for the work, colleagues, clients, and ourselves; and 6) recognizing relationships as the foundation of psychology.

Educational Philosophy

The College of Psychology curriculum provides the knowledge and training necessary for students to diagnose and treat behavioral conditions in diverse and varied populations.

The Practitioner/Scholar model prepares practitioners for entry into the profession by requiring both practical clinical experience and guided research opportunities. Those in our program learn to critically examine and evaluate scientific research as it applies to practical application while adapting information gained through classroom instruction and during their practicum placements.

Because the College of Psychology is committed to ensuring that those enrolled in the program gain the knowledge and skills needed to become licensed psychologists, students will meet with their faculty academic advisor twice per semester to both monitor their academic and practicum performance and elicit feedback regard students' experience in the college.

To assist students in both dissertation and internship preparation, class loads are reduced in the fourth year and replaced by workshops designed to provide students with the support needed to obtain their professional goals and to facilitate graduation by the end of the program.

Learning Outcomes

Program Learning Outcomes (PLOs)

Upon successful completion of the doctor of psychology program, students will be able to demonstrate the following program learning outcomes:

1. **Scientific Orientation:** Students will utilize scientific methods in their research and practice to predict and plan treatments for psychological conditions.
2. **Assessment and Intervention:** Students will implement interventions informed by current scientific literature, assessment findings, diversity characteristics, and contextual variables.

3. **Relational and Cultural Competence:** Students will interact with clients and professionals in a respectful and culturally appropriate manner considering societal context and human diversity.
4. **Professionalism:** Students will identify and observe their boundaries of competence through reflective practice and considering meaningful feedback from colleagues and professionals.
5. **Ethical Practice:** Students will resolve complex moral and ethical situations by acting in accordance to relevant rules, laws, and regulations governing the profession of psychology.
6. **Collaboration and Consultation:** Students will learn to work in collaboration with professionals and the public providing consultation regarding treatment and program effectiveness.

Discipline Specific Knowledge

Along with program learning outcomes, the curriculum also addresses the discipline specific knowledge and professional competencies expected by the American Psychological Association:

1. **History and Systems of Psychology:** Students gain a knowledge of the discipline of psychology by examining historical precedents in the profession and the social/cultural factors that contributed to the advent of various theories and interventions. They will also learn about the changes that have occurred in the profession over time, its expanding role in healthcare, and its current position as a profession rooted in scientific inquiry.
2. **Affective Aspects of Behavior:** Students learn about affective response, mood, feeling states, and the interplay between behavior and emotion. They will have gained knowledge regarding arousal, intensity, and interaction.
3. **Biological Aspects of Behavior:** Before graduating the program students will know the biological underpinnings of behavior including neural, physiological, anatomical, and genetic influences.
4. **Cognitive Aspects of Behavior:** This class examines ways humans learn through factors such as memory, categorization of thoughts, and decision making.
5. **Developmental Aspects of Behavior:** This knowledge is focused on human transitions through various stages of growth and the intellectual and behavioral changes that occur across an individual's lifespan.
6. **Social Aspects of Behavior:** The study of social behavior includes group process, attributions, discrimination, societal attitudes, and the interface between the subjects of sociology and psychology.
7. **Advanced Integrative Knowledge of Basic Discipline-Specific Content Areas:** The integration of classroom knowledge into practical applications is formalized both during the dissertation process and throughout practicum training. It is also evaluated through the Comprehensive Exam.
8. **Research Methods:** These skills include the ability to critically read research, understand the mathematical underpinnings of assessment measures, and to begin

work on their own research. They will learn the strengths and limitations, means of interpretation, and the technical aspects of a rigorous case study. They will also learn the difference between correlational, descriptive, and experimental research designs while studying measurement techniques such as sampling, replication, and theory testing.

9. **Quantitative Methods:** In the statistics and research classes students will learn about meta-analysis, quasi-experimentation, modeling, data analysis, description, inference, univariate and multivariate analysis, null-hypothesis testing, power, and estimation.
10. **Psychometrics:** This course reviews theory and techniques of psychological measurement, scale and inventory construction, reliability, validity, evaluation of measurement quality, classical and contemporary measurement theory, and standardization.

Profession-Wide Competencies

1. **Research:** Psychology doctoral students will demonstrate the ability to formulate and carry out research that will contribute to the scientific, psychological, and professional knowledge base. They will be able to critically evaluate the scholarly activities of others and engage in meaningful debate with fellow students and professional colleagues.
2. **Assessment:** Students will conduct evidence-based assessments applying appropriate measures and tools, utilizing the best available literature from multiple sources, and factoring diversity characteristics into their treatment plans. They will be able to interpret assessment results and write reports using current professional standards to conceptualize, classify, and make both oral and written recommendations regarding a wide range of disorders and patient issues.
3. **Intervention:** Different theoretical orientations will be learned by students to maximize their treating potential. Students will establish and maintain effective relationships with recipients of psychological services and develop evidence-based intervention plans specific to the service delivery goals. They will be able to implement interventions informed by current scientific literature, assessment findings, diversity characteristics, and contextual variables. They will be able to modify and adapt evidence-based approaches in evaluating intervention effectiveness and adapt goals and methods with continuous evaluation of patient care outcomes.
4. **Ethical and Legal Standards:** Students must be able to respond professionally to complex moral and ethical situations using the current version of the APA Ethical Principles of Psychologists; the APA Code of Conduct; and relevant laws, regulations, rules, and policies governing the practice of psychology. They must be able to employ sophisticated decision-making processes in order to resolve issues related to patient care and always conduct themselves in a professional and ethical manner.
5. **Individual and Cultural Diversity:** Students must conduct professional activities with the appropriate knowledge, awareness, sensitivity, and skills with regard to individuals and communities of varying cultural and personal backgrounds. It is important that students understand how their own personal/cultural history,

attitudes, and biases may affect their interactions with others. They must also have knowledge of current theoretical and empirical research regarding diversity as it relates to interventions, training, supervision/consultation, and service.

6. **Professional Values and Attitudes:** Students will behave in ways that reflect the values and attitudes of psychology, including integrity, deportment, professional identity, accountability, lifelong learning, and concern for the welfare of others. They will engage in self-reflection regarding their personal and professional functioning. They will also engage in activities to maintain and improve performance, well-being, and professional effectiveness. They will actively seek and demonstrate openness and responsiveness to feedback and supervision.
7. **Communication and Interpersonal Skills:** Students are expected to develop and maintain effective relationships with a wide range of individuals, colleagues, communities, organizations, supervisors, and clients. They must produce and comprehend oral, nonverbal, and written communications that are informative and appropriate for the given audience. They must demonstrate a thorough grasp of professional language and concepts and utilize effective interpersonal skills to relay relevant information to clients, families, and other professionals.
8. **Supervision:** In the course of their professional careers psychologists will need to pass on their knowledge and experience to others. It is the responsibility of all psychologists to learn the basic techniques and ethical responsibilities regarding supervision so that the practice of psychology continues to grow organically through shared experience.
9. **Consultation and Interprofessional/ Interdisciplinary Skills:** Students will find few times in their scholastic and professional careers when they are truly working alone. Understanding other health professions, their areas of expertise, and the collaborative nature of modern case formulation is imperative to ensure that patients are receiving optimal care. Students will demonstrate knowledge and respect for the roles and perspectives of other professions and learn how best to utilize the skills and knowledge of a psychologist when working in a team environment.

Program Overview and Licensure

The PsyD in the College of Psychology is a 5-year program that will prepare students for entry into the profession of psychology.

The first year of the program will involve classroom instruction with clinical training, including the use of professional actors (standardized patients) so that students can learn interview, assessment, and intervention skills while under the direct guidance of their professors.

In the second through fourth years, students will continue their classroom instruction, but will now perform clinical service in the surrounding community in environments approved by the College of Psychology. These practicums

vary in setting, patient population, and difficulty as the student progresses through the program. Each practicum lasts between 9-12 months. Students may apply to potential practicum sites based on their developmental level and practicum sites will select potential practicum students. The Field Placement Office has final approval on practicum selection.

Year 3 students will be taking the Comprehensive Exam. This requirement is comprised of questions covering course information conveyed during the first two and a half years of study.

Year 4 students are provided workshops designed to assist in the completion of their dissertation and in preparing for the applications and interviews required to obtain an internship.

It is the expectation of the College of Psychology that students will make every attempt to complete their dissertation by the end of the fourth year. Dissertations are the culmination of students' work in the PsyD program and are done under the supervision of faculty. These are independent, original works of publishable quality reviewed by a faculty chair and a dissertation committee. Along with the written work, students will also provide an oral, public defense of their research.

Year 5 students are no longer on campus but are engaged full time at an internship site. There are various levels of training offered during this year with the highest being an APA accredited internship. All students will be required by the College of Psychology to apply for APA accredited internships.¹

When a student has completed their internship year and all other program requirements (dissertation, etc.) they have officially graduated from the program and will be granted their doctorate.

Each state has separate requirements regarding licensure as a psychologist. In California, students must have a minimum of 1,500 pre-doctoral hours. California Northstate University requires an additional 500 pre-doctoral hours. This requirement will be fully satisfied by the internship requirements of the PsyD program.

After a student has been awarded their doctorate they may take the next step towards licensure and sit for the national psychology test called the Examination for the Professional Practice of Psychology (EPPP). This is a requirement for California licensure and can be taken any time after the student has been awarded their PsyD.

After graduation, California also requires that students obtain an additional 1,500 post-doctoral hours. These may be gained through a formal post-doctoral fellowship or a psychological assistantship. Once all 3,000 hours have been obtained, the doctorate degree awarded, and the EPPP passed, a candidate may sit for the California Psychology Law and Ethics Examination (CPLEE). After passing this test a candidate will be issued a license to practice in the state of California and they have earned the right to call themselves a psychologist.

¹APA requires that applicants to their internships must be from programs that have either Accredited, on contingency or full Accredited status. It is the expectation of the College of Psychology that we will reach Accredited, on contingency status prior to students applying for internship. Please refer to the timeline described in the The College of Psychology curriculum provides the knowledge and training necessary for students to diagnose and treat behavioral conditions in diverse and varied populations.

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Because the College of Psychology is committed to ensuring that those enrolled in the program gain the knowledge and skills needed to become licensed psychologists, students will meet with their faculty academic advisor twice per semester to both monitor their academic and practicum performance and elicit feedback regard students' experience in the college.

To assist students in both dissertation and internship preparation, class loads are reduced in the fourth year and replaced by workshops designed to provide students with the support needed to obtain their professional goals and to facilitate graduation by the end of the program.

Accreditation

Senior Colleges and Universities of the Western Association of Schools and Colleges (WASC)

California Northstate University is accredited WASC). On March 16, 2018 the California Northstate University proposal for the Doctorate of Psychology degree was granted final approval by the WSCUC Commission.

Bureau for Private Postsecondary Education (BPPE)

BPPE completed its review of the PsyD program and granted the program state approval on June 12, 2018.

American Psychological Association (APA)

The College of Psychology will be pursuing American Psychological Association accreditation. This takes place in three phases. The first is "Intent to Apply" status. This step can now be initiated in Summer 2018. It involves the submission of a self-study report reviewed by the APA to determine whether or not the program is on track to meeting requirements for accreditation.

Within three years after the PsyD program is granted "Intent to Apply" status and no sooner than when two classes are enrolled in the program and one has completed a term of practicum service may the program submit for "Accredited, on contingency" status. This requires a second self-study and a site visit by APA.

Within three years after receiving "Accredited, on contingency" status and after the inaugural class has completed internship, the College of Psychology can apply

for full accreditation from APA. This requires a third self-study with proximal and distal data and a second site visit.

Admission to the PsyD Program

Through our website (www.psychology.cnsu.edu), students seeking admission to the College of Psychology can access the APA's centralized application service for psychology graduate programs called PSYCAS.

Minimum requirements:

1. An undergraduate degree from an accredited college or university;
2. Overall undergraduate GPA of 3.0 or higher or an overall graduate GPA of 3.3 or higher;
3. An undergraduate/ graduate degree in psychology; OR coursework in General Psychology, Abnormal Psychology, Statistics, and Developmental Psychology.

If an applicant does not meet the minimum GPA requirements, they may submit a petition for exemption if they feel that extenuating circumstances have adversely impacted their academic performance. Petitions should include a brief personal statement explaining the factors involved and the reasons why an exemption from the GPA requirement should be considered. The GPA Exemption Request Form can be downloaded and submitted on our website.

A complete application consists of the following:

- Completed PsyD program application
- Curriculum vitae or resume;
- All official college transcripts
- Three (3) letters of recommendation

While not required, clinical or research experience and the GRE General Test are recommended.

International Coursework

If the student has attended an international university with instruction in a language other than English, they must demonstrate proficiency by obtaining a score above 80 on the TOEFL or a score of 6.5 or higher on the IELTS. If transcripts are in a language other than English, they must be translated before review. A request for such services can be made through the PSYCAS system.

Decisions

Applicants will be notified by email and subsequent written communication if they have been selected for invitation to attend an onsite interview. Skype interviews are available for applicants who are unable to travel. Applicants who have not been selected for an interview will be notified that their application is no longer being considered. Interviews will take place at the CNU College of Psychology campus in Elk Grove. Offers of admission and notice of waitlist status will be sent by email and subsequent written communication.

Each application will be thoroughly reviewed by the admissions committee and all areas of the application will be carefully considered. It is important that the student body at the College of Psychology represents the best of future clinicians and the admissions committee will pay particular attention to professional, research, education, and life experiences. Along with academic excellence, the Admissions

Committee will be looking for students with diverse cultural, socioeconomic, work, and educational backgrounds. We are a diverse faculty and student body and it is the admissions policy of the University and the College of Psychology that no applicant will be discriminated against on the basis of disability, gender, religion, military obligations, veteran status, marital status, race, creed, ethnicity, color, sex, gender expression, age, physical or mental ability, sexual orientation, national identity, or national origin.

The CNU College of Psychology reserves the right to withdraw an offer of admission if false statements are made on the application materials, academic performance of the applicant drops significantly or they fail to earn an undergraduate degree, or the applicant engages in behavior prior to matriculation that violates legal, professional, or ethical standards or otherwise raises concerns about the applicant's judgement or integrity.

Deadlines

The CNU College of Psychology follows the Council of Graduate Departments of Psychology Guidelines for Graduate School Offers and Acceptances.

The application process will be opened on our website and through PSYCAS on September 1. If students wish to be considered for early admittance, they must have their applications submitted by December 1. All remaining applications must be received by February 2 of the admitting year. Interviews will begin in January for early admission candidates and in March for the remaining submissions. The admissions committee will use the interview to evaluate the candidate's critical thinking, interpersonal skills, and level of commitment and motivation to the process of obtaining a doctorate degree.

Initial offers of admission are made to students no later than April 1. Students are not required to respond to the College of Psychology regarding the offer of admission before April 15. However, students may accept or reject the enrollment offer at any time.

Transferring Credits from Other Institutions

The College of Psychology currently does not accept credits from other graduate institutions.

International Applicants

The College of Psychology currently does not accept international students.

Student Enrollment Agreement

The Student Enrollment Agreement must be completed and submitted to the college in order to show intent to enroll in the program. The Student Enrollment Agreement is a legally binding contract when it is signed by the incoming student and accepted by the institution.

By signing the Enrollment Agreement, the student is acknowledging that the catalog, disclosures, and information located on the website have been made available to the student to read and review.

Any questions or concerns regarding the Student Enrollment Agreement should be directed to the college or university department.

Catalog, Performance Fact Sheet, and Website

Before signing the Student Enrollment Agreement, the prospective student is strongly urged to visit the University and College website at www.cnsu.edu, and to read and review the CNU General Catalog and School Performance Fact Sheet (SPFS). The SPFS contains important performance data for the institution. The Catalog contains important information and policies regarding this institution.

Student's Right to Cancel, Withdraw, and Refund

You have the right to cancel the Student Enrollment Agreement until 12:01 AM on the first calendar day after the first classroom instruction session attended, or until 12:01 AM on the eighth calendar day after a student has signed the Enrollment Agreement, whichever is later.

Cancellation shall occur when you give written notice of cancellation to the Admission Office at the University's address shown at the top of the first page of the Enrollment Agreement. You can do this by hand delivery, email, facsimile, or mail. Written notice of cancellation sent by hand delivery, email, or facsimile is effective upon receipt by the University. Written notice of cancellation sent by mail is effective when deposited in the mail properly addressed with postage prepaid.

After the cancellation period described above, you have the right to withdraw from the University at any time. Withdrawal shall occur when you give written notice of withdrawal to the Registrar at the University's address shown at the top of the first page of the Enrollment Agreement. When withdrawing from the college/university, please complete the Official College Withdrawal form available from the Registrar's request form website: <http://www.cnsu.edu/office-of-the-registrar/registrar-services>. Do not use this form to indicate your intent to cancel your enrollment agreement.

For information on refund calculations due to cancellation or college withdrawal, please see the FINANCIAL SERVICES & DISCLOSURES on page 149 of this catalog.

Tuition & Fees

All tuition, fees, expenses and policies listed in this publication are effective as of May 2018 and are subject to change without notice by California Northstate University.

In the tables below, Psy1, Psy2, Psy3, Psy4, and Psy5 indicate the student's year in the program (e.g. Psy1 is a first-year student; Psy2 is a second-year student, etc.).

Tuition is charged on a full-time, semester basis. Generally, tuition and fees are charged to the student's account thirty (30) days prior to the start of each semester term. The above is based on the assumption that a student will attend each semester term on a full-time basis and meets all program requirements, which allows for a student to graduate after successfully completing four (4) years of coursework and one (1) year Internship for a total of five (5) years consisting of 146 credit hours.

Payment deadlines, loan obligations, refund calculations due to cancellation and withdraw, and the Student Tuition Recovery Fund (STRF) disclosures are located in FINANCIAL SERVICES & DISCLOSURES (page 148).

2018-2019 Doctor of Psychology (PsyD)

Tuition & Fees	Amount	Class
Enrollment Fee (nonrefundable)	\$200.00	Psy1
Tuition	\$33,500.00	Psy1, Psy2, Psy3
Tuition	\$14,000.00	Psy4, Psy5
Student Activity Fee	\$320.00	Psy1, Psy2, Psy3, Psy4, Psy5
Orientation Fee	\$50.00	Psy1
Technology Fee	\$50.00	Psy1, Psy2, Psy3, Psy4, Psy5
Graduation Fee ¹	\$350.00	Psy5
STRF Fee per \$1000 ²	\$0.00	Psy1, Psy2, Psy3, Psy4, Psy5
Psy1 Total Estimated Tuition & Fees per Year ³	\$34,120.00	
Psy2 Total Estimated Tuition & Fees per Year ³	\$33,870.00	
Psy3 Total Estimated Tuition & Fees per Year ³	\$33,870.00	
Psy4 Total Estimated Tuition & Fees per Year ³	\$14,370.00	
Psy5 Total Estimated Tuition & Fees per Year ³	\$14,720.00	

Total estimated cost for the 5-year Doctor of Psychology program ranges from \$136,000 to \$142,000.³

Estimated Other Optional Educational Related Costs ⁴	Amount	Class
Health Insurance Premium ⁵	\$3,200.00	Psy1, Psy2, Psy3, Psy4, Psy5
Books and Supplies ⁶	\$2,500.00	Psy1, Psy2, Psy3, Psy4, Psy5
Room and Board ⁶	\$23,272.00	Psy1, Psy2, Psy3, Psy4, Psy5
Transportation ⁶	\$4,648.00	Psy1, Psy2, Psy3, Psy4, Psy5
Psy1 Total Estimated Cost per Year ⁷	\$67,740.00	
Psy2 Total Estimated Cost per Year ⁷	\$67,490.00	
Psy3 Total Estimated Cost per Year ⁷	\$67,490.00	
Psy4 Total Estimated Cost per Year ⁷	\$47,990.00	
Psy5 Total Estimated Cost per Year ⁷	\$48,340.00	

¹ Covers regalia, transcriptions, etc.

² The STRF fee is \$0.00 per \$1,000 of institutional charges.

³ Based on estimated annual tuition increases of 3% to 5%. This is not binding on the University. Completion of the program in more than the prescribed 5 years could result in additional tuition and fees for the additional time of attendance, including, but not limited to, a Dissertation Extension Fee currently at \$4,187.50 per semester.

⁴ Costs and expenses a student may incur as part of participation in the applicable year of the PsyD program, whether or not paid directly to CNU College of Psychology. These expenses include estimated costs of living.

⁵ Optional, estimated, and will vary based on number of insured members.

⁶ Estimated amounts.

⁷ Includes tuition, fees, and other estimated educationally related costs. Some practicum or internship sites may require students to have a background check, fingerprinting, and/or CPR class.

General Policies

Orientation and Registration

First year orientation is mandatory for all new students. The Office of Student Affairs and Admissions must be notified of any absence due to illness or emergency if a student is not able to attend the scheduled orientation. The student will be required to provide documentation for the absence and complete a make-up orientation within the first week of school in addition to attending scheduled classes and maintaining course requirements.

Registration for classes requires:

1. All admission contingencies be fulfilled.
 - a. Admission contingencies include proof of medical insurance coverage and any other institutional requirements. Students may enroll in the Student Health Insurance Plan to satisfy the insurance requirement.
2. Financial aid clearance from the Financial Aid Office.
3. Completion of all new student paperwork.

New students must submit the Emergency Contact and Medical Information Form to the Office of the Registrar by the end of Orientation. To make updates, a new form must be submitted to the Registrar. The Office of the Registrar requires submission of the Authorization to Release Student Records if a student desires to grant a personal third-party (such as a parent, spouse, etc.) access to his/her student record. Please refer to the Directory Information and Access to Student Records section of this catalog for more information.

New students should review their local, home, and billing contact information via the Student Portal and update as needed. It is the student's responsibility to maintain valid contact information throughout their enrollment at CNU. Instructions for accessing the Student Portal is sent by the CNU IT department to the student's CNU email address.

Registration is conducted by the Registrar prior to the start of each semester for new and continuing students. Students with business, financial, or other registration holds on their account will not be registered until the Registrar is notified that the hold has been cleared. Students who are in compliance with institutional requirements or who have a hold on their student account at the time of registration are required to satisfy the requirement and may also be required to submit the Course Add/Drop form by the end of the Add/Drop period to register or make schedule changes.

Address Where Instruction Will Be Provided

Class sessions are conducted at 9700 West Taron Drive, Elk Grove CA 95757. Experiential education and clinical rotations and service learning activities is conducted at assigned professional clinical locations and community sites as established by agreement among the student, professional preceptor, and College.

Catalog, School Performance Fact Sheet, and Website

Before signing the Student Enrollment Agreement, students are strongly encouraged to visit the College website at <http://psychology.cnsu.edu/> and to read and review the CNU General Catalog and School Performance Fact Sheet (SPFS). The SPFS contains important performance data for the institution. The Catalog contains important information and policies regarding this institution.

By signing the Enrollment Agreement, the student is acknowledging that the catalog, disclosures, and information located on the website have been made available to the student to read and review

Instruction/Course Delivery

The PsyD program at the College of Psychology is designed to be completed in 5 years. Students will be in residency at California Northstate University full-time for their first 4 academic years. During the fifth year, students will be attending a full-time one-year internship. Students may elect to also do a two-year part-time internship.

Year 1 students will take 5 courses each semester. This provides the foundation necessary to begin practicum work. Year 2 and Year 3 students will take 4 courses each semester and attend a practicum. Year 4 students take a "Preparation for Internship" workshop and "Dissertation Research" seminar the first semester and in the second semester they will only take the "Dissertation Research" seminar. Year 4 students will also be attending a practicum.

Year 5 students will be attending a full-time internship. Because internships can take place anywhere in the country, there are no in class course requirements for this year and students are not expected to attend University functions.

All courses are delivered in English and English language services are not provided.

Academic Policies and Procedures

Academic Calendar

The academic calendar consists of two semesters lasting approximately 15 weeks long didactic coursework. Practicum and internship hours are completed throughout the calendar year. Students are required to complete a total of 1500 hours in practicum training and a 2000 hour clinical internship.

Credit Hour Policy

For each 15-week semester, 1 hour of credit is assigned per hour each week of classroom or direct faculty didactic instruction (that is, per hour of lecture or student in-class time) and a minimum of 2 hours of out-of-class student work (homework) (LEC/SEM). For practicum and internship time, 1 hour of credit is assigned approximately 3 hours each week of student time spent in this activity (AL/EL).

Code	Course Type	Code	Course Type
AL	Active Learning	LEC	Lecture course
EL	Experiential Learning	SEM	Seminar

Grading Policy

Students must maintain a min. cum. grade point average (GPA) of 3.0.

	Definition	Grade Points		Definition	Grade Points
A	90.00-100%	4.00	P	≥70%, Pass*	Not in GPA
B	80.00-89.99%	3.00	NP	<70% No Pass	Not in GPA
C	70.00-79.99%	2.00	I	Incomplete	Not in GPA
D	60.00-69.99%	1.00	W	Withdrawal	Not in GPA
F	<60.00%	0.00			

*The grades of P and NP are only available to practicum and internship courses.

Course Withdrawal

With the written permission of the instructor, it is possible to withdraw from a course until the last day of class in each semester. Withdrawal from a course may impact the student's ability to graduate in five years so students should discuss their decision with their academic advisors. Course withdrawal and course registration changes may have financial implications and as such, students are encouraged to discuss their decision and options with the CNU Financial Aid Office. Officially withdrawn courses appear on the student's transcript with the grade of W. Failure to officially withdraw from a course by the last day of class will result in an issuance of an earned course grade.

Incomplete Course

In Incomplete (I) on the transcript is a preliminary, non-permanent notation indicates that work in the course was satisfactory but not completed by the time grades were due.

If the instructor gives a grade of Incomplete, the missing work is to be submitted to the instructor by the last day of class the following semester. If a student is unable to complete the coursework by this second due date, the instructor may grant an extension of the Incomplete. This extension can last no

longer than an additional semester. In this way all work towards the removal of an Incomplete grade must be completed no later than one year after the completion of the course, and then only with the instructor's permission. If a student does not complete all coursework required within the timeframe specified by the instructor, but no later than one year after the course, the Incomplete is changed automatically to an F.

GPA Calculation

To calculate cumulative GPA, letter grades will be converted to their numeric grade point value using the table above, and then added together. The sum is then divided by the number of courses taken. Practicums are not included in this calculation as they are taken on a pass/no pass basis. Grades received in retaken classes will be used in determining cumulative GPA. The grade initially received in the course will not be included in the calculation.

Degree Honors

Students who meet the cumulative GPA (CGPA) listed below will receive degree honors. The honor is noted on the degree.

High Distinction: CGPA of 3.90 or higher

Distinction: CGPA of 3.70- 3.89

Grade Appeal Procedure

If a student is not satisfied with a grade received or an academic evaluation, they should first approach the professor with their concerns. It is the policy of the College of Psychology that disagreements should be handled at the lowest level possible.

A student may file an appeal if there is continued disagreement regarding their academic performance. The appeal must be submitted within 10 business days of the online grade posting or receipt of the evaluation. The appeal must be in writing and submitted to the Assistant Dean of Academics or a representative. The Assistant Dean will respond to the appeal in writing within 10 business days of receipt.

If the appeal is not resolved to the student's liking, it can be resubmitted within 2 business days of receipt of response from the Assistant Dean of Academics to the Dean of the College who will render a decision within 10 business days. The Dean's decision is final.

A record of the final decision concerning the appeal will be kept on file in the Dean of Academics' office.

Course Repeat Policy

Each course can only be repeated once. Students who receive a D or F in a course are required to repeat the course. Students may elect to repeat any course in which they have received a C.

The grade initially received in the course will not be included in the cumulative GPA calculation. The grade received in the

retaken class will be used in calculating the student's cumulative GPA. Both the grade from the initial attempt and the repeated course will appear on the official transcript.

Each course can be repeated only once. Repeating courses may extend the students expected graduation date and may have financial implications. Students considering repeating a course are encouraged to discuss their decision with the CNU Financial Aid Office.

Course Add/Drop

Courses in PsyD program are sequential and progressive in difficulty. Students must take all courses offered in a given semester. Students may not add or drop required courses during the semester.

Students may make changes to elective course registration. The deadline to make changes to elective course registration is the fifth day of instruction for the semester.

Students have the right to withdraw or take a leave of absence from the program.

Academic Progression

To remain in good standing in the College of Psychology a student must:

1. Maintain a 3.0 grade point average.
2. Pass their first year readiness for practicum screening;
3. Receive satisfactory evaluations from their practicum sites and Academic Advisor;
4. Pass the Comprehensive Exam;
5. Finish their internship;
6. Complete their dissertation paperwork and submittals within the appropriate timeframes; and
7. Act in a manner that is consistent with the professional standards established by the American Psychological Association.

To support students in maintaining the necessary degree of academic excellence to remain in good standing, students will be meeting with their designated academic advisor. Although it is the student's responsibility to monitor and calculate their cumulative GPA throughout the course of their studies in the PsyD program, the academic advisor will inform students of their current cumulative GPA at each meeting.

A grade of D or F in a course indicates a lack of understanding of the fundamental concepts of the course material necessary for progression. Unless on an approved leave of absence, students must retake any class in which they have earned a grade of D or F in the following academic year. Each course can be repeated only once.

Practicum Readiness

Readiness for practicum is based on academic performance and feedback from the practicum preparation instructor.

The Practicum Preparation instructor completes a Practicum Readiness form that is forwarded to the Academic Advisor. The advisor can then choose to approve the student for advancement to practicum or recommend dismissal from the graduate program.

If the student is deemed unprepared for practicum placement by their Practicum Placement instructor or Advisor, their case will be presented to the Psychology faculty and a ballot issued. In rare cases the faculty may decide that there were extenuating circumstances leading to the student falling below the requirements for advancement.

If a majority of the faculty upholds the advisor's decision the student will be dismissed from the program.

Length of Program

Unless given written approval by the Dean, a student must complete the program within seven (7) years (84 calendar months) from the time they initially registered and attended their first course in the PsyD program.

Advancement to Candidacy

Requirements for advancement to candidacy include:

1. A 3.0 grade point average and completion of all coursework
2. Passing of the Comprehensive Exam
3. Approval from Academic Advisor
4. Removal of any probationary status
5. Completion and acceptance by the College of the student's dissertation
6. Completion of all practicum requirements
7. Completion of 1st semester of Internship

Once the above conditions have been met a student can apply for advancement to candidacy to obtain the doctorate degree. The student's record will be reviewed and a contract created stipulating that once the student completes their internship they will have graduated from the doctorate program.

Academic Probation and Dismissal

Probation

If a student fails to meet the "good standing" minimum requirements, they will be placed on probation.

Probation formally begins with a written notification to the student by their Advisor. It will include the reason for probation, probationary conditions, and the duration of probation. Students can return from probation by addressing the area of concern. For example, they may bring their GPA to 3.0 or they may speak to their practicum site and obtain a specialized contract to address their deficiencies.

Dismissal

A student may be dismissed from the program if they:

1. Fail to return from probation in the timeframe allotted;
2. Act in a manner that violates the ethical and professional standards of the APA as determined by faculty vote;
3. Fail to return from a leave of absence by the date specified; or
4. Their academic or professional actions have created a situation for which a warning or probation is inappropriate or impossible.

5. Have a cumulative GPA that falls below 2.0, or when it becomes mathematically impossible to graduate (i.e. a situation in which it is impossible to salvage an unacceptable GPA).

In the event that a student is dismissed from the PsyD program, the student may petition for readmission to the program with an endorsement from their Advisor. The petition will be voted on by full-time faculty and the approval must be unanimous. The petition is then sent to the Dean for final approval or rejection.

Academic Advisors

Students will be assigned an Academic Advisor upon entering the program. They will meet within the first semester of instruction to review the requirements of the program and the student's expectations and career goals. Throughout the program the student and Academic Advisor will meet each semester, though either the student or Advisor may choose to meet more frequently. At the end of their first year, the student will be evaluated and screened with regard to their academic performance and readiness for practicum in year 2.

Readiness for practicum is based on academic performance and feedback from the practicum preparation instructor. Upon receipt of the Practicum Readiness form from the instructor, the advisor can then choose to approve the student for advancement to practicum or recommend dismissal from the graduate program. See Academic Progression Policy.

The Advisor writes an evaluation of the student each year that becomes part of their academic record.

Attendance Policy

The curriculum for the doctorate degree in psychology provides a broad, generalist education by imparting knowledge that is sequential, cumulative, graded in complexity, and provides a basis for further professional growth. This requires that students attend all classes and complete all practicum and internship requirements. It is the policy of the College that students shall not have unexcused absences in excess of two missed classes during any given course. Individual instructors may impose their own attendance requirements.

Excused Absences

The College of Psychology recognizes that circumstances may cause a student to miss an occasional class. The student must make up the work missed if the absence is excused. A student may request an excused absence for the following circumstances:

- medical (self or immediate family)
- military duty
- immigration or naturalization
- emergency
- jury duty or legal/court mandated appearance
- bereavement (immediate family)
- professional conference (requires verification of academic standing)
- involvement in traffic accident documented by a law enforcement report.

Except where provided by state or federal law, absences in excess of ten consecutive academic days in a semester may require the student to request a leave of absence from the PsyD program. Students are encouraged to contact the Office of Academic Affairs for further information.

Procedure

A student seeking an excused absence should complete the Excused Absence Request Form and seek the course instructor's signature for each missed class within three business days upon return to campus. The course instructor will determine if the absence is excused or unexcused according to the above policy and the completed form should be submitted to the Office of Academic Affairs.

Planned Extended Absence

Extended absences are initiated by the student. If the student knows that they will need to miss class due to extenuating life circumstances, they have the option to file an Extended Absence Request form with the Office of Student Affairs.

Except where provided by state or federal law, a student may request no more than five academic days of leave per semester.

In the event that an extended absence is due to a medical condition, the student may not return to the program without appropriate medical clearance.

Leave of Absence

A leave of absence is approved for a specific period of time, no less than one semester, but not to exceed one academic year or to the time that it would be impossible for the student to graduate within 7 years from the student's program start date. While on a leave, the student cannot participate in any classes or related curriculum including, but not limited to practicums or internships. The student is eligible to return without reapplication if the absence is within the approved time frame.

During the leave of absence, the student is not considered enrolled in the University. For this reason, a student requesting a leave of absence is required to meet with the Financial Aid Manager and Business Office to determine the impact of their decision and any requirements needing fulfillment prior to the leave.

Students considering a formal leave of absence must meet with the Dean of Student Affairs the semester before the leave is to be taken or as soon as it is known that a leave of absence is needed. The request must include the basis for the request and expected time of return. The form should have the student's Academic Advisor and, if assigned, their dissertation Chair. If approved by all parties, the request will require a final signature from the Dean. To formally file the approved leave of the absence, the CNU Leave of Absence Form must be filed with the CNU Office of the Registrar. The student must submit the completed request form with the signatures of the Dean of Student Affairs, Financial Aid Manager, the Business Office, and the Registrar. The Leave of Absence form is available from the Office of the Registrar and online at: <http://www.cnsu.edu/office-of-the-registrar/registrar->

services. Approved leave of absences will be noted on the student's transcript. The date of leave status is the date the Registrar receives the signed form.

Non-attendance does not constitute notification of intent to apply for leave of absence status.

Return from Leave of Absence

Approximately 60 days from the planned return or other agreed deadline indicated on the initial approved Leave of Absence request form, the student is responsible for submitting the Intent to Return form to the Dean of Student Affairs. To initiate registration, the completed Intent to Return form must be submitted to the Office of the Registrar.

The student is required to return to the University/College at the beginning of the semester for which the return was planned

The student will have 30 days of the date of the notice to reply to the Office of Registrar with their intent to return to the University/College or officially withdraw.

A student who does not return to enrolled status at the end of an approved period of leave is no longer considered to be pursuing their doctorate degree. Students who fail to apply for a leave of absence or for whom leave is denied, but do not remain enrolled will be considered no longer pursuing their degree.

Withdrawal from the College/University

Students may voluntarily withdraw from the University/College at any time during the academic semester. The student will earn a "W" grade for a course(s) that is (are) not complete at the time the withdrawal is initiated. Informing the College of Psychology, your academic advisor, or instructor does NOT constitute official withdrawal from the program.

All withdrawals must be processed by the Office of the Registrar. Students must submit a completed Official University/College Withdrawal form to the Office of the Registrar. The form is available online at <http://www.cnsu.edu/office-of-the-registrar/registrar-services> and in the Office of the Registrar.

A student must meet with and receive signatures from the following departments before the form can be filed with the Office of the Registrar: Office of Academic Affairs/Student Affairs, Business Office, Financial Aid, and Office of the Registrar.

A student who officially withdraws from the University/College is entitled to apply for readmission.

Because of the sequential nature of the program, students wishing to reenter the graduate program will be considered on a case by case basis with determining factors including renewed commitment to the completion of the program, previous academic and clinical performance, and current openings in class enrollment.

Alcohol and Drug Abuse Policy

CNU policy prohibits the unlawful possession, use, manufacture, or distribution of alcohol or controlled substances by students and employees in buildings, facilities, grounds or property operated by CNU or as part of College activities.

Any student or employee found on CNU property or at a CNU sponsored event, including practicums and internships, abusing, using, possessing, manufacturing, or distributing controlled substances or alcohol in violation of the law shall be subject to disciplinary action in accordance to state law and the policies of CNU. Such University disciplinary action includes, but is not necessarily limited to, expulsion, termination of employment, referral for prosecution, and/or completion of an appropriate substance abuse assistance or rehabilitation program. Matters involving drug and alcohol use are taken very seriously by law enforcement officials and vigorously prosecuted by the District Attorney's office. A conviction can jeopardize the ability to receive a professional license.

Student Grievance Policy

If a student wishes to file a grievance, they can submit a written complaint using the Complaint/Grievance form. This can be in regards to an event at the University or at a practicum/internship site. It may be submitted to the Dean of Student Affairs and Admissions in a sealed envelope. The Dean of Student Affairs will handle the complaint in accordance to University policies and after a review of the facts will attempt to resolve the issue. Any resolution will be provided to the student in writing within 4 weeks of the form submission, excluding holidays and University breaks. If the complaint relates to the Assistant Dean, the matter will be handled by an alternate Assistant Dean. If the issue still cannot be resolved, a committee will be formed to address the issue on a case by case basis. It will include 3-5 faculty or staff. If the committee cannot resolve the matter it will be transferred to the Dean of the college for appropriate action.

Students may further appeal decisions during this process by filing a request with the Dean of the College within 5 days of receipt of the complaint/grievance resolution. The Dean's decision is final.

A record of student complaints is kept on file in the Dean of Student Affairs and Admissions' office and all aspects of the grievance process are kept confidential.

Curriculum Description

Didactic Courses

Course descriptions are located on page 106

Comprehensive Exam

The Comprehensive Exam is taken by 3rd year students and has both written and oral components. This exam is designed to test students' retention and integration of the information they have gained in the graduate program. The written portion of the test contains multiple choice and short answer questions provided to the Testing Committee by professors who have been teaching the students. The Committee will sort through the admissions and select enough material to create two exams covering the same areas of knowledge.

Once students have passed the written segment, they will have the opportunity to schedule the oral portion of their exam. They will be given once of a number of clinical cases carefully prepared by the faculty. During the oral exam students will be expected to give a case presentation to three faculty members providing a thorough formulation, assessment, diagnosis, and course of treatment.

If a student does not pass the written or oral portion of the exam they will have the opportunity to take either section a second time. If they again do not pass they will be placed on academic probation and remedies will be decided on a case by case basis.

Dissertation and Defense

Dissertations are the culminating experience for a student pursuing a doctorate in psychology. It represents their opportunity to create an original scholarly work that contributes new information to the field's body of knowledge.

Students are expected to formulate their dissertation question throughout the course of the program and to begin work on the project once they have adequate knowledge of research design and implementation. Once students have a firm idea of the hypothesis they wish to test, they should begin seeking faculty members that will agree to be their Chair and Vice Chair. If the student wishes to select a Chair who is not a member of the College of Psychology faculty they must get permission from their Advisor to ensure the potential committee member understands and meets the high expectations required for acceptance of a dissertation by the College of Psychology.

The process of completing a dissertation can take a considerable amount of time and there are workshops to assist students provided during the entirety of the 4th year. Because of the complexity of requirements regarding the completion of the research, development, implementation, and writing of the dissertation a separate Dissertation Handbook has been created. Students are encouraged to obtain a copy from their Advisor early in their graduate studies so that they can complete all requirements before attending their internship.

Clinical Training

Practicums

During the first year of graduate study students will take a year-long Practicum Preparation course designed to integrate the information they are receiving in their classes with the practical knowledge they need to be successful in their practicum training. This is also a forum where they can express their expectations and concerns with other students regarding their first year in graduate school.

In years 2-4 students will be engaged in off-site practicums. The Field Placement Office will have a list of potential practicum sites in the Greater Sacramento area and students will apply and interview in the spring prior to the beginning of a practicum placement. During these years in practicum, students will be enrolled in a Practicum Case Conference. This seminar series provides a space where participants can share their clinical experiences and receive feedback from their peers and the professor.

Students are expected to complete a minimum of 1500 hours of supervised clinical experience prior to internship. Time spent at sites and the complexity and degree of clinical interventions will increase each year. Students are encouraged to manage their time carefully to ensure that all practical and academic requirements are met. In return for their services, practicum sites will provide students supervised experience working with diverse individuals presenting various diagnoses and interpersonal issues. Practicums provide weekly individual supervision, didactic training, and evaluations of student performance based on direct observation of clinical interventions.

Internship

During the first semester of their 4th year, students will be attending a workshop to help them prepare internship applications. Other class requirements are reduced to allow students the time necessary to complete the application process and travel to attend interviews. Students will participate in the AAPI match system. This process will be thoroughly explained in the 1st semester of year 4. Internships are full time commitments and take up the entirety of the 5th year in graduate school.

All students must apply to APA internships as part of the College of Psychology curriculum, however, some may not obtain a position through the match system. If this occurs, the student may apply the following year, keeping in mind that they must complete all graduation requirements in 7 years. They may also apply for a CAPIC internship or work with a private psychologist to earn their internship hours as a psychological assistant. Students may elect to participate in these other internship opportunities to complete their doctorate requirements.

Professional Series

Also known as the "Brown Bag Seminars," present an opportunity for all CNU students to gain insight from professionals about the issues presented to psychologists working in the field and allow them to form relationships with professionals from different sub-fields of psychology.

PSY Course Descriptions

Didactic Courses

PSY 601 Foundations of Behavior: Biological (3 cr)

This course focuses on the biological underpinnings of behavior including neural, physiological, anatomical, and genetic influences.

PSY 602 Foundations of Behavior: Cognitive and Affective (3 cr)

This course examines the ways in which humans learn, elements that affect memory, how thought processes are categorized, and a general overview of decision making. It will also cover response, mood, feeling states, and the interplay between behavior and emotion. Topics will include arousal, intensity, and interaction.

PSY 603 Psychopathology: Adult (3 cr)

This series goes through the DSM-V reviewing mental conditions found in adult patients. Attention will also be given to the construction of the DSM and a comparison to the ICD 10.

PSY 604 Psychopathology: Child/Adolescent (3 cr)

This course will review DSM-V diagnoses that are most commonly found among children or adolescents. Special attention will be given to the autistic spectrum and learning disabilities.

PSY 605 History and Systems (3 cr)

This course includes the origins and development of major areas in the discipline of psychology. The class will move through historical changes in the profession while examining the social and cultural factors that contributed to the advent of particular theories. The course will also examine the changes that have occurred in the discipline, its expanding role in healthcare, and its current state as a profession.

PSY 606 Foundations of Behavior: Developmental (3 cr)

This class focuses on the human lifespan, transitions through various stages of growth, and the intellectual and behavioral changes that occur across an individual's lifespan.

PSY 607 Foundations of Behavior: Social and Cultural (3 cr)

The study of social and cultural behavior includes group process, attributions, discrimination, societal attitudes, and the interface between the subjects of sociology and psychology.

PSY 608 Standards and Ethics (3 cr)

This course reviews the current American Psychological Association's Ethics and Professional Code through the

lens of real world cases. Students will be challenged in their thinking as they move from recipients of healthcare to practitioners.

PSY 613 Research Methods and Statistics 1 (3 cr)

This class prepares students to critically read research, understand the mathematical underpinnings of assessment measures, and to begin work on their own research and dissertation. They will learn the strengths and limitations, means of interpretation, and the technical aspects of rigorous case study. They will learn the difference between correlational, descriptive, and experimental research designs while studying measurement techniques such as sampling, replication, and theory testing. Along with quantitative measures, students will be introduced to qualitative methods including meta-analysis and quasi-experimentation. Using statistics, they will learn to engage in mathematical modeling, analysis of psychological data, description, inference, univariate and multivariate analysis, null-hypothesis testing, power, and estimation.

PSY 614 Research Methods and Statistics 2 (3 cr)

This class prepares students to critically read research, understand the mathematical underpinnings of assessment measures, and to begin work on their own research and dissertation. They will learn the strengths and limitations, means of interpretation, and the technical aspects of rigorous case study. They will learn the difference between correlational, descriptive, and experimental research designs while studying measurement techniques such as sampling, replication, and theory testing. Along with quantitative measures, students will be introduced to qualitative methods including meta-analysis and quasi-experimentation. Using statistics, they will learn to engage in mathematical modeling, analysis of psychological data, description, inference, univariate and multivariate analysis, null-hypothesis testing, power, and estimation.

PSY 650 Practicum Preparation 1 (3 cr)

This course is designed to prepare students for starting work in the community as new practitioners and is continued into PSY651. Students work toward understanding theoretical orientations, their role as a student volunteer, what their rights and responsibilities will entail as a practicum student, procedural elements such as charting and organizing their appointments, and how they can best use practicums as a means of applying the knowledge they have learned in class. This course is also an open forum where students can express concerns, support, and questions regarding their first year in graduate school. As part of this course, students will engage in interaction with

standardized patients (actors) under the guidance and observation of faculty.

PSY 651 Practicum Preparation (3 cr)

This course is designed to prepare students for starting work in the community as new practitioners and is a continuation of PSY650. Students work toward understanding theoretical orientations, their role as a student volunteer, what their rights and responsibilities will entail as a practicum student, procedural elements such as charting and organizing their appointments, and how they can best use practicums as a means of applying the knowledge they have learned in class. This course is also an open forum where students can express concerns, support, and questions regarding their first year in graduate school. As part of this course, students will engage in interaction with standardized patients (actors) under the guidance and observation of faculty.

PSY 703 Psychometrics (3 cr)

This course builds on the basics learned in Research Methods and Statistics, preparing students for a deeper understanding of topics that will be necessary as they move through the assessment series and start work on their dissertation. This course reviews theory and techniques of psychological measurement, scale and inventory construction, reliability, validity, evaluation of measurement quality, classical and contemporary measurement theory, and standardization. This is also the first class that introduces students to the formal requirements of the dissertation process.

PSY 710 Best Practices Series: Child and Family (3 cr)

This course will examine common psychological conditions and their scientifically proven treatments for children and their families in a variety of settings.

PSY 711 Best Practices Series: Adults (3 cr)

This course will examine common psychological conditions and their scientifically proven treatments for adult patients in a variety of settings.

PSY 712 Best Practices Series: Groups and Organizations (3 cr)

This course focuses on interventions for groups, with special attention given to substance disorders and the ethical and professional issues that differentiate work with groups and individuals. The course will also examine the structure, process, and culture of organizations by examining the relationship between employees and the companies they serve. Motivation, change management, and the process of business consultation will be major topics of the course.

PSY 720 Assessment Series: Intelligence (3 cr)

This class focuses on intellectual assessment of both children and adults. It also introduces students to assessment report writing, the various components

necessary in client interviews, and how to review supplementary information.

PSY 721 Assessment Series: Personality and Emotion (3 cr)

This portion of the Assessment Series focuses on tests that gauge a patient's personality and emotional state. Measurements will include those that detect personality disorders and mood disturbances.

PSY 722 Assessment Series: Neuropsychological (3 cr)

This course is the culmination of the assessment series, using knowledge students have gained about both brain function and the capabilities of psychological assessment. Students will complete full neuropsychological batteries and review cases of severe impairment, injury, stroke, and dementia.

PSY 801 Human Diversity (3 cr)

This course will review the social and cultural context of both patient care groups and the clinicians themselves. Students are expected to promote a healthy and safe environment in the class while challenging their own preconceptions and attitudes. They will also be taught the latest research regarding cultural attitudes and norms and the way human diversity effects psychological treatment.

PSY 804 Consulting and Supervision (3 cr)

All psychologists will be consulting throughout their career, whether it is with other psychologists and healthcare providers or with members of the public and professional organizations. This course addresses effective means of supervision and spotlights ethical issues that present themselves in the supervisor/supervisee relationship.

PSY 811 Leadership in Health Professions 1 (3 cr)

This is the first semester of a year-long course that divided over two semesters and is attended by students from all three colleges at California Northstate University. It uses experiential learning, real world cases, class discussion, and the latest research to help students develop their own voices as future leaders in the healthcare industry. Students will also gain a deeper appreciation of the talents, skills, and abilities each profession brings to case formulation and the treatment of patients.

PSY 812 Leadership in Health Professions 2 (3 cr)

This is the second semester of a year-long course that divided over two semesters and is attended by students from all three colleges at California Northstate University. It uses experiential learning, real world cases, class discussion, and the latest research to help students develop their own voices as future leaders in the healthcare industry. Students will also gain a deeper appreciation of the talents, skills, and abilities each

profession brings to case formulation and the treatment of patients.

PSY 860 Preparation for Internship Workshop (2 cr)

This course takes place in Year 4 of the program and assists students in the construction and development of their internship application. Materials will be reviewed and constructive criticism given to improve students' chances of obtaining the internship of their choice. Students will also assist each other through mock interviews, needed motivation, and assistance in finding the best fit for each applicant.

PSY 861 Dissertation Research Seminar 1 (2 cr)

First semester. This series takes place in Year 4 and is designed to assist students with the completion of their dissertation. Students will find a supportive environment where they can work through challenges, seek feedback, and progress in a systematic fashion towards completion the capstone to their doctorate experiences.

PSY 862 Dissertation Research Seminar 2 (2 cr)

Second semester. This series takes place in Year 4 and is designed to assist students with the completion of their dissertation. Students will find a supportive environment where they can work through challenges, seek feedback, and progress in a systematic fashion towards completion the capstone to their doctorate experiences.

Elective Courses

PSY 802 Introduction to Health Psychology (3 cr)

Elective course. This class will focus on the interface between behavior, cognition, and illness. A review of conditions most commonly referred to by psychologists in a hospital setting will form the foundation of the subject along with the interface between psychologists, physicians, and nursing staff. Special attention will be given to healthcare delivery systems and the different populations they serve.

PSY 803 Crisis/Trauma Intervention (3 cr)

Elective course. Students in this course will learn effective means to evaluate and treat patients in crisis or whom have experienced recent traumatic events. Subjects covered will include an extensive review of the legal avenues for treatment and the ethical responsibilities of clinicians.

PSY 805 Substance Abuse Treatment (3 cr)

Elective course. This course will focus on both individual and group treatment, the interaction between substance abuse and mental disorders, and community resources. Students will go into depth regarding substances and their effects on the brain.

PSY 806 Introduction to Forensic Psychology (3 cr)

Elective course. This course will examine the interface between psychology and the law. Discussion topics will include competency, violence risk, commitments, malingering, and testimony. There will also be a review of common assessment tools and report writing for the courts.

PSY 808 Psychopharmacology (3 cr)

Patients are often prescribed medication in conjunction with behavioral interventions. It is imperative that students learn about the medications that can be used to treat disorders, the resultant physiology, and their overall effectiveness.

Practicum Experiences

PRC 713 Practicum Case Conference (1 cr)

First semester. This seminar series takes place while the student is in practicum and provides a space where participants can share their clinical experiences and receive feedback from their peers and the professor. These sessions occur once per week and are kept at a maximum enrollment of 8 students per session.

PRC 714 Practicum Case Conference (1 cr)

Second semester. This seminar series takes place while the student is in practicum and provides a space where participants can share their clinical experiences and receive feedback from their peers and the professor. These sessions occur once per week and are kept at a maximum enrollment of 8 students per session.

PRC 750 Practicum 1 (2 cr)

Completed during the first semester of Year 2. 1 hour of credit is assigned approximately 3 hours each week of student time spent in this activity. Each practicum lasts between 9-12 months. Practicums vary in setting, patient population, and difficulty as the student progresses through the program. Students may apply to potential practicum sites based on their developmental level and practicum sites will select potential practicum students. The Field Placement Office has final approval on practicum selection. (Grading P/NP only)

PRC 751 Practicum 1 (2 cr)

Completed during the second semester of Year 2. 1 hour of credit is assigned approximately 3 hours each week of student time spent in this activity. Each practicum lasts between 9-12 months. Practicums vary in setting, patient population, and difficulty as the student progresses through the program. Students may apply to potential practicum sites based on their developmental level and practicum sites will select potential practicum students. The Field Placement Office has final approval on practicum selection. (Grading P/NP only)

PRC 752 Practicum 1 (2 cr)

Completed during the summer semester of Year 2. 1 hour of credit is assigned approximately 3 hours each week of student time spent in this activity. Each practicum lasts between 9-12 months. Practicums vary in setting, patient population, and difficulty as the student progresses through the program. Students may apply to potential practicum sites based on their developmental level and practicum sites will select potential practicum students. The Field Placement Office has final approval on practicum selection. (Grading P/NP only)

PRC 813 Practicum Case Conference (1 cr)

Third semester. This seminar series takes place while the student is in practicum and provides a space where participants can share their clinical experiences and receive feedback from their peers and the professor. These sessions occur once per week and are kept at a maximum enrollment of 8 students per session.

PRC 814 Practicum Case Conference (1 cr)

Fourth semester. This seminar series takes place while the student is in practicum and provides a space where participants can share their clinical experiences and receive feedback from their peers and the professor. These sessions occur once per week and are kept at a maximum enrollment of 8 students per session.

PRC 850 Practicum 2 (3 cr)

Completed during the first semester of Year 3. 1 hour of credit is assigned approximately 3 hours each week of student time spent in this activity. Each practicum lasts between 9-12 months. Practicums vary in setting, patient population, and difficulty as the student progresses through the program. Students may apply to potential practicum sites based on their developmental level and practicum sites will select potential practicum students. The Field Placement Office has final approval on practicum selection. (Grading P/NP only)

PRC 851 Practicum 2 (3 cr)

Completed during the second semester of Year 3. 1 hour of credit is assigned approximately 3 hours each week of student time spent in this activity. Each practicum lasts between 9-12 months. Practicums vary in setting, patient population, and difficulty as the student progresses through the program. Students may apply to potential practicum sites based on their developmental level and practicum sites will select potential practicum students. The Field Placement Office has final approval on practicum selection. (Grading P/NP only)

PRC 852 Practicum 2 (3 cr)

Completed during the summer semester of Year 3. 1 hour of credit is assigned approximately 3 hours each week of student time spent in this activity. Each practicum lasts between 9-12 months. Practicums vary

in setting, patient population, and difficulty as the student progresses through the program. Students may apply to potential practicum sites based on their developmental level and practicum sites will select potential practicum students. The Field Placement Office has final approval on practicum selection. (Grading P/NP only)

PRC 913 Practicum Case Conference (1 cr)

Fifth semester. This seminar series takes place while the student is in practicum and provides a space where participants can share their clinical experiences and receive feedback from their peers and the professor. These sessions occur once per week and are kept at a maximum enrollment of 8 students per session.

PRC 914 Practicum Case Conference (1 cr)

Sixth semester. This seminar series takes place while the student is in practicum and provides a space where participants can share their clinical experiences and receive feedback from their peers and the professor. These sessions occur once per week and are kept at a maximum enrollment of 8 students per session.

PRC 950 Practicum 3 (3 cr)

Completed during the first semester of Year 4. 1 hour of credit is assigned approximately 3 hours each week of student time spent in this activity. Each practicum lasts between 9-12 months. Practicums vary in setting, patient population, and difficulty as the student progresses through the program. Students may apply to potential practicum sites based on their developmental level and practicum sites will select potential practicum students. The Field Placement Office has final approval on practicum selection. (Grading P/NP only)

PRC 951 Practicum 3 (3 cr)

Completed during the second semester of Year 4. 1 hour of credit is assigned approximately 3 hours each week of student time spent in this activity. Each practicum lasts between 9-12 months. Practicums vary in setting, patient population, and difficulty as the student progresses through the program. Students may apply to potential practicum sites based on their developmental level and practicum sites will select potential practicum students. The Field Placement Office has final approval on practicum selection. (Grading P/NP only)

PRC 952 Practicum 3 (3 cr)

Completed during the summer semester of Year 4. 1 hour of credit is assigned approximately 3 hours each week of student time spent in this activity. Each practicum lasts between 9-12 months. Practicums vary in setting, patient population, and difficulty as the student progresses through the program. Students may apply to potential practicum sites based on their developmental level and practicum sites will select potential practicum students. The Field Placement

Office has final approval on practicum selection.
(Grading P/NP only)

Internship Experience

960 Internship (40 hours per week for 12 months)

Students participate in an APA internship or a CAPIC internship. Alternatively, students can work with a private psychologist to earn their internship hours as a psychological assistant. Part-time is available and requires 24 months to complete. (Grading P/NP only)

PsyD Curriculum

1st Year	Course#	Course Title	Credits	Semester
	PSY 601	Foundations of Behavior: Biological	3	Fall
	PSY 603	Psychopathology: Adult	3	Fall
	PSY 605	History and Systems of Psychology	3	Fall
	PSY 613	Research Methods and Statistics 1	3	Fall
	PSY 650	Practicum Preparation 1	3	Fall
	PSY 602	Foundations of Behavior: Cognitive and Affective	3	Spring
	PSY 604	Psychopathology: Child/Adolescent	3	Spring
	PSY 608	Standards and Ethics	3	Spring
	PSY 614	Research Methods and Statistics 2	3	Spring
	PSY 651	Practicum Preparation 2	3	Spring
Total			30	
2nd Year				
	PSY 606	Foundations of Behavior: Developmental	3	Fall
	PSY 703	Psychometrics	3	Fall
	PSY 711	Best Practices: Adults	3	Fall
	PSY 720	Assessment Series: Intellectual	3	Fall
	PSY 607	Foundations of Behavior: Social and Cultural	3	Spring
	PSY 710	Best Practices: Child and Family	3	Spring
	PSY 712	Best Practices: Groups and Organizations	3	Spring
	PSY 721	Assessment Series: Personality and Emotion	3	Spring
Total			24	
3rd Year	1 elective course required per semester			
	PSY 722	Assessment Series: Neuropsychology	3	Fall
	PSY 801	Human Diversity	3	Fall
(Elective)	PSY 803	Crisis/Trauma Intervention	3	Fall
(Elective)	PSY 805	Substance Abuse	3	Fall
	PSY 811	Leadership in Health Professions 1	3	Fall
(Elective)	PSY 802	Health Psychology	3	Spring
	PSY 804	Consultation and Supervision	3	Spring
(Elective)	PSY 806	Forensic Psychology	3	Spring
(Elective)	PSY 808	Psychopharmacology	3	Spring
	PSY 812	Leadership in Health Professions 2	3	Spring
Total			24	
2nd- 4th Year	PRAGICUM CASE CONFERENCE			
2nd year	PSY 713	Practicum Case Conference	1	Fall
	PSY 714	Practicum Case Conference	1	Spring
3rd year	PSY 813	Practicum Case Conference	1	Fall
	PSY 814	Practicum Case Conference	1	Spring
4th year	PSY 913	Practicum Case Conference	1	Fall
	PSY 914	Practicum Case Conference	1	Spring
Total			6	

PsyD Curriculum – (cont.)

2nd - 4th Year PRACTICUM REQUIREMENT <i>(duration of practicums range up to 12 months)</i>				
2nd year	PRC 750	Practicum 1	2	Fall
	PRC 751	Practicum 1	2	Spring
	PRC 752	Practicum 1	2	Summer
3rd year	PRC 850	Practicum 2	3	Fall
	PRC 851	Practicum 2	3	Spring
	PRC 852	Practicum 2	3	Summer
4th Year	PRC 950	Practicum 3	3	Fall
	PRC 951	Practicum 3	3	Spring
	PRC 952	Practicum 3	3	Summer
Total			16	
4th Year DISSERTATION RESEARCH				
	PSY 860	Preparation for Internship	2	Fall
	PSY 861	Dissertation Research Seminar 1	2	Fall
	PSY 862	Dissertation Research Seminar 2	2	Spring
Total			6	
5th Year INTERNSHIP <i>Total of 2000 Hours</i>				
	PSY 960	Internship <i>(fall, spring, summer)</i>	<i>Full-time</i>	<i>Half-time</i>
		40 hours a week for full-time for 50 weeks (1 year)	14	7
		20 hours per week for half-time for 50 weeks (2 yrs.)	14	7
			12	6
Total			40	20
TOTAL CREDITS for DOCTOR OF PSYCHOLOGY (PSYD) = 146 CREDIT HOURS				

Years 2 – 4

- Includes 3 years of practicums in clinical training for a min. of 1500 hours.

Year 5

- Full-time Internships are defined as 40 hours a week for 12 months.
- Part-time Internships are defined as 20 hours a week for 24 months.

PSY Academic Calendar

California Northstate University College of Psychology		
2018-2019 Academic Calendar		
Description	Start Date	End Date
	FALL 2018	
Orientation	Thursday, August 30	Friday, August 31
Welcoming Ceremony	Saturday, September 1	
Holiday – Labor Day	Monday, September 3	
Fall Academic Semester	Tuesday, September 4	Thursday, December 20
Holiday – Thanksgiving	Thursday, November 22	Friday, November 23
Final Exams	Monday, December 17	Thursday , December 20
Holiday – Winter Break	Friday, December 21, 2018	Friday, January 25, 2019
Grades Due	Friday, January 18 th	
	SPRING 2019	
Spring Academic Semester	Monday, January 28	Friday, May 24
Holiday – Martin Luther King, Jr.	Monday, January 21	
Holiday – President’s Day	Monday, February 18	
Holiday – Spring Break	Monday, March 18	
Final Exams	Monday, May 20	Friday, May 24
Grades Due	Friday, May 31	

Dates may be subject to change: version 06/21/2018

COLLEGE OF HEALTH SCIENCES

Mission, Vision, and Values

Mission: To advance the art and science of healthcare.

Vision: Evolution to excellence in education requires continual pursuit of higher levels of performance and achievement. We seek to challenge undergraduate students with a comprehensive academic program that prepares them for success and leadership in a professional healthcare career. Quality education for students pursuing a career in healthcare professions begins with rigorous study of core sciences such as biology and chemistry. The program of education must further empower students to apply quantitative methods and critical thinking to the practice of healthcare. Strength of character and interpersonal skills essential for work in healthcare-related fields are developed and enhanced through the study of relevant humanities and social science disciplines. Along with traditional lecture and lab courses, the opportunity to perform community service learning projects and independent scholarly research provides important capstone experience in applying concepts and theory learned in the classroom to real-world situations.

Values: Integrity, Ethical Conduct, Empathy, Inter-Personal Collaboration, Social Accountability, Civic-Minded Commitment to Service, Respect for Human Diversity

Educational Philosophy

The philosophy of our academic programs encompasses three goals of competency and personal development which students who pursue careers in biomedical science and healthcare must attain in order to be compassionate practitioners. These competencies broadly include Cognitive Ability and Intellectual Depth, Social and Communication Skills, and Community Engagement/Civic Responsibility.

Cognitive Ability and Intellectual Depth corresponding to command of any subject is best achieved by thoughtful study of the relevant body of knowledge under the guidance of a teacher who is an expert in the field and is well prepared to mentor students. Learning is often a demanding and inscrutable process, but it is known to emerge reliably from the interplay of thoughtful reading, attendance of inspiring lectures, case studies and practice problems, classroom discussion, and assessment. Ultimately, every student must commit to personal engagement in the learning process using methods that work best for the individual. There is no magic substitute for the hard work of studying. However, our faculty members are tasked to use innovative teaching methods and

technologies proven to be effective by pedagogical research. Each concentration and every course delivered at CNU has specific learning outcomes that are measured by various forms of assessment. The assessment results are used to make changes that continually improve upon teaching and the curriculum. The goal of every teacher is not merely to convey a list of facts but to transform novice students into active scholars and ultimately prepare them for life-long learning. Every field of knowledge, especially science, is being constantly revised by discovery through research. Learning a subject does not end with the final exam of the course; it only begins a life's journey.

The goal of acquiring Social and Communication Skills acknowledges the need to communicate effectively. As professionals, we must be proficient in the art of written and verbal communication in order to exchange technical information. Moreover, the best health science in the world loses its purpose unless it can benefit the people who need it. This process involves personal interaction between the healthcare professional and the patient or consumer. The patient must feel free to communicate concerns and the care provider must be able respond effectively. Values beyond mastery of medical science such as empathy and compassion fall within this area. Emotional and cultural understanding must be conveyed along with the delivery of care. These values are difficult to objectify but they fall within the realm of liberal arts, humanities, and social sciences. Courses such as Cultural Anthropology, Sociology, Psychology, Art Appreciation, and Music Appreciation provide context and insights into the complexity and diversity of human behavior. Our students are encouraged to become socially and intellectually well-rounded through the study of human culture and participation in extra-curricular activities.

Community Engagement and Civic Responsibility also lies within the territory of being a health science professional. People need to live in healthy communities in order to sustain their own good health. Health care professionals play a major role in fostering a healthy society by advocating for policies that promote the conditions, resources, and behavior conducive to social well-being. Our educational program guides students to the rich content of voluntary service and contributing to the greater good through supervised projects that partner with advocacy groups and organizations for the benefit of the community at large.

Learning Outcomes

The goals of the Bachelor of Health Sciences program are defined and assessed by a set of carefully designed

Program Learning Outcomes and General Education Learning Outcomes. These outcomes specify the intellectual substance and interpersonal communication skills that our students are expected to demonstrate by the time they graduate.

As overarching educational standards, Program Learning Outcomes (PLOs) define the primary learning agenda and the associated platform of assessment that measures teaching effectiveness and student competency.

Program Learning Outcomes (PLOs)

Upon successful completion of the CNUCHS Bachelor of Science in Health Sciences, students will be able to demonstrate the following learning program learning outcomes:

1. **Core Sciences and Mathematics.** Demonstrate knowledge of the core sciences and mathematics.
2. **Arts and Humanities.** Demonstrate understanding of how the arts and humanities enhance health, well-being, and healthcare practice and delivery.
3. **Healthcare Delivery Systems.** Demonstrate understanding of the collaborative nature of healthcare delivery.
4. **Professional Interaction.** Communicate with respect, empathy, and cultural competence.
5. **Social Accountability and Community Service.** Acts with social accountability and demonstrates commitment to community service.

Co-Curricular Learning Outcomes:

Upon successful completion of the CNUCHS Bachelor of Science in Health Sciences, students will be able to demonstrate the following co-curricular learning outcomes:

1. **Social Awareness and Cultural Sensitivity.** Demonstrate awareness of and responsiveness to social and cultural differences by adapting behaviors appropriately and using effective interpersonal skills.
2. **Self-Awareness and Learning.** Demonstrate self-awareness through reflection and the development of appropriate plans for self-directed learning and development.
3. **Service and Leadership.** Demonstrate the ability to lead and work collaboratively with others to accomplish a shared goal.
4. **Professionalism.** Demonstrate professional behavior and effective interactions with others.
5. **Oral Communication.** Demonstrate appropriate delivery techniques when communicating materials to an audience.

General Education Learning Outcomes (GELOs)

Upon successful completion of the CNUCHS Bachelor of Science in Health Sciences, students will be able to demonstrate the following general education learning outcomes:

1. **Written Communication.** Demonstrate the ability to write coherent, supported and logically structured prose.
2. **Oral Communication.** Listen and speak effectively in formal communication.
3. **Information Literacy.** Identify and search relevant libraries of information and databases; synthesize information obtained from primary literature using properly referenced citations.
4. **Critical Thinking.** Exercise reasoned judgement to assess technical information and make well-informed decisions using evidence-based approaches.
5. **Scientific Inquiry and Quantitative Reasoning.** Demonstrate knowledge of the complexity of biological systems and chemistry of matter through research with the use of mathematics and statistics in problem solving.
6. **Liberal Arts.** Demonstrate knowledge of diverse human cultures and influences of social forces, economic principles, and human interactions within the framework of social sciences.

The GE Requirements encompass a suite of courses that provide a broad educational framework for students. The GE curriculum at CNU CHS is designed to provide students with a solid foundation for advanced studies and essential skills needed to work effectively in diverse health-related careers. As required by the California Code of Regulations– Title 5– Article 2 on Admissions and Academic Achievement Standards “At least 25 percent of the credit requirements for a Bachelor’s Degree shall be in general education.” Accordingly, the GE courses comprise approximately 42 credit units of the minimum 120 required credits for graduation (35% of total degree credits).

The GE Learning Outcomes are fulfilled by completion of the following courses:

1. Written Communication (6 cr)

-ENGL 110 (3 cr); ENG 120 (3 cr)

2. Oral Communication (3 cr)

-COMM 110 (3 cr)

3. Information Literacy (3 cr)

-ENGL 120 or COLL 310 (3 cr)

4. Critical Thinking (3 cr)

-PHIL 310 or COLL 320

5. Scientific Inquiry and Quantitative Reasoning (14 cr)

- BIOL 110/L (3 cr/1 cr) and CHEM 110/L (3 cr/1 cr);
- MATH 120 (3 cr); & MATH 125 (3 cr) or MATH 130 (3 cr)

6. Liberal Arts (13 cr)

- Fine Arts (3 cr): ARMU 110 (3 cr), ARMU 120 (3 cr), or approved Arts elective
- Humanities (3 cr): ANTH 210 (3 cr) or approved Humanities elective
- Social Sciences (3 cr): ECON 210 (3 cr), GOVT 110 (3 cr), SOCL 110 (3 cr), or approved Social Sciences elective
- Social Accountability and Community Service (6 cr): COLL 210 (2 cr) and COLL 220 (2 cr)

Note: Approved course electives may be transfer credits including credit awarded by AP/IP exam, transfer courses, course substitution, or a CHS offered course designated as meeting the GE requirement area.

Academic Programs

Overview

The College of Health Sciences offers an undergraduate program leading to the Bachelor of Health Sciences (B.S.) degree. CHS has combined degree programs with California Northstate University's College of Medicine and the College of Pharmacy.

Bachelor of Science (BS)

In the undergraduate Bachelor of Science (BS) in Health Sciences program, students may choose from three concentrations within the program: Human Biology, Biopsychology, and Health Science Administration. Each concentration has a defined curriculum progressing from introductory to advanced courses. All concentrations include the same General Education (GE) requirements that fulfill a common set of learning outcomes spanning communication and critical thinking skills, natural sciences, liberal arts, and the social sciences. Additionally, the three concentrations are aligned with specific options for career paths in healthcare. This comprehensive program delivers a robust university education that prepares graduates to think independently and creatively as well as training them for practical occupations in health science.

Concentrations of Study Descriptions

Human Biology: This concentration is appropriate for students who are seeking focused coursework in biomedical sciences. It is a challenging curriculum that focuses upper division coursework on advanced topics of human biology such as functional anatomy, human genetics, microbiology, immunology, and pharmacology. Students who complete this concentration are expected to be exceptionally well prepared for a variety of professional health programs and employment in a variety of healthcare-related professions.

Biopsychology: This concentration is also appropriate for students headed for professional health programs since it includes many of the same rigorous basic science courses as the Human Biology concentration. However, students following this plan of study choose from a suite of psychology courses in the science of human behavior, mental health and mental illness. Such courses include developmental psychology, cognitive psychology, health psychology, and abnormal psychology. In addition to medical school options, students choosing this concentration will have a strong academic background for graduate schools that provide specialized training and certification for occupations such as clinical psychologists, psychiatrists, and counselors.

Health Science Administration: This concentration is offered for students who wish to work in the administrative side of health care delivery. The curriculum includes introductory science in the first year that is essential for understanding the basics of human biology. The second to fourth years of the curriculum consist of many courses relevant to business and management. Such courses include human resources management, healthcare financing, healthcare regulations and accreditation, and entrepreneurship. Students who complete this concentration will have a strong background in business and science to work

as administrators, managers, and sales representatives in hospitals, medical insurance companies, public health agencies, the pharmaceutical sector, health advocacy foundations, and other professions.

Bachelor of Sciences and Doctor of Medicine (BS-MD)

BS-MD combined programs offer high school applicants multiple options to enter the professional Doctor of Medicine (MD) program. Some program options are designed to allow entering freshmen to complete their pre-medicine coursework and MD in an accelerated time frame if they meet specific criteria. Students accepted into a BS-MD combined programs option will begin their program of study in the College of Health Sciences (CHS) undergraduate program to complete the MD prerequisite criteria and academic coursework. These students will work closely with the CHS pre-health advisors to ensure completion of all the required criteria and academic course prerequisites.

These students will also be required to participate in at least one activity per year in the CNU College of Medicine (COM) campus activity program. The COM campus activity program is designed to educate pre-medicine students about their future profession through community health service opportunities, specialty career exploration workshops, lab experiences, and special professional education sessions. This special program offers priority acceptance to the very competitive MD program provided they meet all the MD admission criteria.

Students have the opportunity to complete their BS degree and MD degree in an accelerated time frame--six to seven years in addition to the traditional eight years.

For the accelerated programs, at the end of the first year of COM coursework, the qualified BS-MD combined programs students who meet the graduation criteria of CHS will be eligible to earn the Bachelor of Science degree in Health Sciences.

2+4 BS-MD

Two Years Undergraduate + Four Years Doctor of Medicine. Students are required to take some classes in summer to fulfill the COM MD admissions requirements and CHS degree requirements for the Bachelor of Science.

3+4 BS-MD

Three Years Undergraduate + Four Years Doctor of Medicine. Students have the option to take some classes in summer to fulfill the COM MD admissions requirements and CHS degree requirements for the Bachelor of Science.

4+4 BS-MD

Four Years Undergraduate + Four Years Doctor of Medicine. Students have the option to take some classes in summer to fulfill the COM MD admissions requirements and CHS degree requirements for the Bachelor of Science.

Bachelor of Sciences and Doctor of Pharmacy (BS-PharmD)

BS-PharmD combined programs offer high school applicants two options to enter the professional Doctor of Pharmacy (PharmD) program. Both program options are designed to allow entering freshmen to complete their pre-pharmacy coursework and PharmD in an accelerated time frame if they meet specific criteria. Students accepted into a BS-PharmD combined programs option will begin their program of study in the College of Health Sciences (CHS) undergraduate program to complete the prerequisite criteria and academic coursework. These students will work closely with the CHS pre-health advisors to ensure completion of all the required criteria and academic course prerequisites outlined below.

These students will also be required to participate in at least one activity per year sponsored by CNU College of Pharmacy (COP). The COP campus activity is designed to educate pre-pharmacy students about their future profession through community health service opportunities, specialty career exploration workshops, lab experiences, and special professional education sessions. This special program offers priority acceptance to the very competitive PharmD program provided they meet all the PharmD admission criteria. In addition, students have the opportunity to complete the Doctor of Pharmacy degree in an accelerated time frame--six to seven years instead of the traditional eight years.

In addition, at the end of the first year of COP coursework, the qualified BS-PharmD combined programs students who meet the graduation criteria of CHS will be eligible for the Bachelor of Science degree in Health Sciences.

2+4 BS-PharmD

Two Years Undergraduate + Four Years Doctor of Pharmacy. Students are required to take some classes in summer to fulfill the COP PharmD admissions requirements and CHS degree requirements for the Bachelor of Science.

3+4 BS-PharmD

Three Years Undergraduate + Four Years Doctor of PharmD. Students have the option to take some classes in summer to fulfill the COP PharmD admissions requirements and CHS degree requirements for the Bachelor of Science.

Pre-Medicine Post-Baccalaureate

The Pre-Med Post-Baccalaureate coursework is designed to enhance the academic credentials and application portfolio of students aiming for a professional degree in the health professions. The post-baccalaureate provides a comprehensive 1-year educational experience that includes coursework in biomedical science and test preparation for medical school admission (i.e., MCAT exam).

Students will complete a minimum of 27 credit hours of advanced undergraduate coursework in the physical and social sciences over the course of two semesters. Students can also enroll in elective courses to engage in a community service learning project or serve as a standardized patient in role-play mode with medical and pharmacy students as supervised by medical school faculty.

Topics covered in career-building workshops for medical school admission include health professions seminars, MCAT exam skill-building and practice testing, application procedures (AMCAS, PHARMCAS), interview coaching, and portfolio fine-tuning. A comprehensive letter of recommendation will be provided for all students who complete the program. Fall admission is open through August 31.

Admission to the College of Health Sciences

Applicant Status Definitions

First-Time College Student: The College of Health Sciences (CHS) defines a first-time college student applicant as one who is either currently enrolled in, or has graduated from, a high school and has not registered in a regular session at any collegiate level institution since high school graduation. An applicant who has completed college courses while in high school or in a summer session immediately following high school graduation is still considered a first-time college student applicant.

Transfer Student: A transfer student applicant is a student who has been a registered student in a regular term at a college, university or in college-level extension classes since graduating from high school. A summer session attended immediately following high school graduation is excluded in this definition. Transfer applicants may not disregard any of their college records or apply for admission as a first-time college student. Students with 24 or more college credits are considered transfer students.

International Student: International student applicants are applicants with citizenship from any country other than the United States of America.

College Admission Criteria

The College offers rigorous programs seeking high school graduates who demonstrated notable academic and co-curricular accomplishments, and an interest in serving society in the health professions. The goal of the admission process is to identify and select applicants that have an excellent chance of success, are most likely to thrive at our campus, and will enhance the university's academic and cultural community.

The CHS Admissions Committee employs a holistic review, relying on both quantitative and qualitative indicators, to admit the most qualified applicants. A holistic review tool, scoring guide and a rubric were jointly developed by the Admissions Committee and the Assessment Committee of the College. The Admissions Committee reviews applications and makes admission recommendations based upon the qualifications of the applicant pool.

Admission Criteria for First-Time College Student

The Admissions Committee has established the following criteria for selecting and enrolling qualified students. The admissions criteria are posted on the CHS website and included in printed CHS brochures and other marketing materials.

2018-2019 Admission Requirements for Traditional Students

Min HS GPA	2.70
Min SAT (after 03/2016)*	1130
Min ACT	22

Admission Criteria for Transfer Students

Transfer students are those with 24 or more transferrable college credits. Admission of transfer students requires a 2.70 or higher in college coursework.

2018-2019 Admission Requirements for Transfer Students

Min HS GPA	2.70
Min SAT (after 03/2016)*	NA
Min ACT	NA
Interview	NA

*Math and Evidence-Based Reading and Writing (M+ERW) **Math and Reading

Guidelines for Evaluation of Transfer Student Coursework

- For applicants seeking to matriculate to CNUCHS as a transfer student from another college or university, the following general standards apply to the acceptance and award of transfer credits:
- CNUCHS will consider transfer of credit for college-level (not remedial) courses in which the student has earned a minimum grade of "C" (2.0 = "C" Grade Point Equivalent) (4.00 = "A") or higher from accredited colleges and universities.
- A maximum of 60 credit hours will be considered for transfer from regionally accredited community colleges, junior colleges, two-year and/or four-year colleges, and other accredited colleges, with the exception of certain unrecognized programs.
- Acceptance of any course for transfer credit granted toward the BS is subject to evaluation of the course topic, content, and teaching methodologies/pedagogy by expert faculty in that discipline.
- Course credits earned at other institutions based on different credit hours from those used by CHS are subject to conversion and possible decrease in credit hour value.
- Quarter-hours are converted to semester hours by multiplying those hours by 0.67. For example, 4 quarter-hours are equal to 2.68 semester hours.
- Transfer students are subject to the same graduation requirements as CNUCHS for the B.S. degree.
- The CHS cumulative grade point average (GPA) is based solely upon coursework taken at CNU.

Types of Transfer Credits NOT Accepted by CNU:

- Courses in which the student earned below "C" (2.0 = Grade Point Equivalent) (4.0 = "A") as the final grade
- Credit awarded by post-secondary schools in the United States that lack candidate status or are not accredited by a regional accrediting association
- Credit awarded by post-secondary schools for life experience
- Credit awarded by post-secondary schools for courses taken at non-collegiate institutions and society workshops (e.g., governmental agencies, corporations, industrial firms, etc.)

- Credit awarded by postsecondary schools for noncredit courses, workshops, and seminars offered by other postsecondary schools as part of continuing education programs

Admission Criteria for International Students

California Northstate University accepts applications from graduates of foreign institutions. California.

Transcripts and coursework from foreign institutions must be evaluated by WES, ECE or IERF. Evaluations must be sent directly to the College of Health Sciences Admissions Office, PharmCAS (for COP), AMCAS (for COM) and must include semester units and letter grades for each course, as well as a cumulative GPA and, if possible, a science GPA. If accepted, the applicant must provide an official copy of their transcript directly to the Office of Admission. If a copy of their official transcript is not received prior to the start of school, the offer of admission will be revoked and the seat will be offered to another candidate.

Applicants who receive their degree from a non-English speaking country will be requested to submit scores from the TOEFL Examination or the TSE. This will not apply, if an additional degree is obtained at a U.S. institution.

- A completed California Northstate University College of Health Science (CNUCHS) Application Form CHS Application.
- A high school diploma (or international equivalent) with a minimum Cumulative GPA of 2.70 on a 4.00 scale.
- Transcripts of all schools attended showing completion of the courses shown below. If the original document is not in English, please include a certified English translation.
 - 4 years of English
 - 3 years of mathematics at the level of Algebra I and higher (4 years recommended)
 - 2 years of laboratory science (3 years recommended)
 - 2 years of social science
- Standardized College Entrance Exam Scores:
 - Official SAT (College Code 7669) or ACT (College Code 7032) dates taken and scores
 - The College of Health Sciences may also take into account the following when considering

Applicants whose native language is not English must provide evidence of English language proficiency by submitting test scores from one of the following:

- Test of English as a Foreign Language (TOEFL): minimum 510 paper/93iBT
- International English Language Testing System (IELTS) (Academic): minimum 6.5

Applicants must have the test score sent directly to the College of Health Sciences at:

International Undergraduate Admissions
College of Health Sciences
California Northstate University
2910 Prospect Park Drive
Rancho Cordova, CA 95670

TOEFL: The official TOEFL score report can be sent directly to CNUCHS from the Educational Testing Service. For information about this test and registration procedures, contact ETS at PO Box 6151, Princeton, NJ 08541-6151, USA or visit www.toefl.org.

IELTS: For information about this test and registration procedures, contact the IELTS Office, University of Cambridge Local Examination Syndicate, 1 Hills Road, Cambridge/CB1 2EU, UK or visit www.ielts.org.

Bachelor of Science in Health Sciences (BSHS) Traditional Program

- High school diploma or equivalent (a General Education Development certificate, a California High School Proficiency Examination certificate, other official completion documentation recognized by the state of California) before entering the program.
- Overall GPA of 2.7 (on a 4.0 scale) and completion of the following classes with a grade of C or better
 - 4 years of English
 - 3 years of mathematics (4 recommended)
 - 2 years of natural science (3 recommended)
 - 2 years of social sciences
 - 2 years of a language other than English
- Standardized Test Scores:
 - March 2017 and later SAT: 1130 or higher. Pre-March 2017 SAT: 1050 or higher.
 - Math and Chemistry subject area tests are highly recommended.
 - ACT Composite 22 or higher
- Extra-Curricular Accomplishments: Demonstration of service activities in the community and/or school, employment, athletic accomplishments, or other extra-curricular accomplishments.
- Personal Statement: CHS highly recommends that students take the time to consult different resources, like their high school counselor, before writing the personal statement. The personal statement is an important component of the selection process. The college website contains links to sample personal statements as well as advice for writing personal statements.

Bachelor of Science and Doctor of Medicine (BS-MD)

These programs offer students a pathway to the College of Medicine at California Northstate University. In the 2+ and 3+ programs, students can complete the Bachelor of Science and MD degrees in six and seven years, respectively, rather than the traditional eight years. Students in these programs must meet the Technical Standards described on page125.

2+4 BS-MD

Admission Requirements for 2+4 BS-MD

Min HS GPA	3.75
Min SAT (after 3/2016)	1400
Min ACT	31
Interview	Required

- High school diploma or equivalent (a General Education Development certificate, a California High School Proficiency Examination certificate, other official completion documentation recognized by the state of California) before entering the program in the fall semester.
- Overall high school GPA of 3.75 or higher (on a 4.0 scale) as well as completion of the following courses with a grade of C or better:
 - 4 years of English
 - 3 years of mathematics (4 recommended)
 - 2 years of natural science (3 recommended)
 - 2 years of social sciences
 - 2 years of a language other than English
- Standardized Test Scores:
 - March 2017 and later SAT: 1400 or higher; Pre-March 2017 SAT: 1360 or higher.
 - Math and Chemistry subject area tests are highly recommended.
 - ACT Composite 31 or higher
- Extra-Curricular Accomplishments: Demonstration of service activities in the community and/or school, employment, athletic accomplishments, or other extra-curricular accomplishments.
- Personal Statement: CHS highly recommends that students take the time to consult different resources, like their high school counselor, before writing the personal statement. The personal statement is an important component of the selection process. The college website contains links to sample personal statements as well as advice for writing personal statements.
- An interview is required and may occur in-person, on the phone, or through video.

3+4 BS-MD

Admission Requirements for 3+4 BS-MD

Min HS GPA	3.60
Min SAT (after 3/2016)	1350
Min ACT	29
Interview	NA

- High school diploma or equivalent (a General Education Development certificate, a California High School Proficiency Examination certificate, other official completion documentation recognized by the state of California) before entering the program in the fall semester.
- Overall high school GPA of 3.60 or higher (on a 4.0 scale) as well as completion of the following courses with a grade of C or better:
 - 4 years of English
 - 3 years of mathematics (4 recommended)
 - 2 years of natural science (3 recommended)
 - 2 years of social sciences
 - 2 years of a language other than English
- Standardized Test Scores:
 - March 2017 and later SAT: 1350 or higher; Pre-March 2017 SAT: 1290 or higher.
 - Math and Chemistry subject area tests are highly recommended.
 - ACT Composite 29 or higher

- Extra-Curricular Accomplishments: Demonstration of service activities in the community and/or school, employment, athletic accomplishments, or other extra-curricular accomplishments.
- Personal Statement: CHS highly recommends that students take the time to consult different resources, like their high school counselor, before writing the personal statement. The personal statement is an important component of the selection process. The college website contains links to sample personal statements as well as advice for writing personal statements.
- An interview is required and may occur in-person, on the phone, or through video.

4+4 BS-MD

Admission Requirements for 4+4 BS-MD

Min HS GPA	3.50
Min SAT (after 3/2017)	1250
Min ACT	27
Interview	NA

- High school diploma or equivalent (a General Education Development certificate, a California High School Proficiency Examination certificate, other official completion documentation recognized by the state of California) before entering the program in the fall semester.
- Overall high school GPA of 3.50 or higher (on a 4.0 scale) as well as completion of the following courses with a grade of C or better:
 - 4 years of English
 - 3 years of mathematics (4 recommended)
 - 2 years of natural science (3 recommended)
 - 2 years of social sciences
 - 2 years of a language other than English
- Standardized Test Scores:
 - March 2017 and later SAT: 1250 or higher. Pre-March 2017 SAT: 1290 or higher.
 - Math and Chemistry subject area tests are highly recommended.
 - ACT Composite 27 or higher
- Extra-Curricular Accomplishments: Demonstration of service activities in the community and/or school, employment, athletic accomplishments, or other extra-curricular accomplishments.
- Personal Statement: CHS highly recommends that students take the time to consult different resources, like their high school counselor, before writing the personal statement. The personal statement is an important component of the selection process. The college website contains links to sample personal statements as well as advice for writing personal statements.
- An interview is required and may occur in-person, on the phone, or through video.

BS-MD Progression Requirements

Progression Requirements for BS-MD Programs

	2+4 & 3+4 BS-MD	4+4 BS-MD
Min Prog GPA	3.50	3.40
Min Prog MCAT	510	508

Prof Activity	1 per year	1 per year
Interview	Required	Required
Supp App	Required	Required
Target Enrollment	10	40
Bachelor's degree is NOT required for admission to COM or COP		

Bachelor of Science and Doctor of Pharmacy (BS-PharmD)

These programs offer students a pathway to the College of Pharmacy at California Northstate University. In the 2+ and 3+ programs, students can complete the Bachelor of Science and MD degrees in six and seven years, respectively, rather than the traditional eight years.

2018-2019 Admission Requirements for BS-PharmD Programs

	2+4 BS-PharmD	3+4 BS-PharmD
Min HS GPA	3.20	3.00
Min SAT (after 03/2017)*	1290	1190
Min ACT	27	25
*Math and Evidence-Based Reading and Writing (M+ERW) **Math and Reading		

2+4 BS-PharmD

- High school diploma or equivalent (a General Education Development certificate, a California High School Proficiency Examination certificate, other official completion documentation recognized by the state of California) before entering the program in the fall semester.
- Overall high school GPA of 3.20 or higher (on a 4.0 scale) as well as the following courses passed with a grade of C or better:
 - 4 years of English
 - 3 years of mathematics (4 recommended)
 - 2 years of natural science (3 recommended)
 - 2 years of social sciences
 - 2 years of a language other than English
- Standardized Test Scores:
 - March 2017 and later SAT: 1290 or higher; Pre-March 2017 SAT: 1200 or higher.
 - ACT Composite 27 or higher
- Extra-Curricular Accomplishments: Demonstration of service activities in the community and/or school, employment, athletic accomplishments, or other extra-curricular accomplishments.
- Personal Statement: CHS highly recommends that students take the time to consult different resources, like their high school counselor, before writing the personal statement. The personal statement is an important component of the selection process. The college website contains links to sample personal statements as well as advice for writing personal statements.

3+4 BS-PharmD

- High school diploma or equivalent (a General Education Development certificate, a California High School Proficiency Examination certificate, other official

completion documentation recognized by the state of California) before entering the program in the fall semester.

- Overall high school GPA of 3.00 or higher (on a 4.0 scale) as well as the following courses passed with a grade of C or better:
 - 4 years of English
 - 3 years of mathematics (4 years recommended)
 - 2 years of natural science (3 recommended)
 - 2 years of social sciences
 - 2 years of a language other than English
- Standardized Test Scores:
 - March 2017 and later SAT: 1190 or higher. Pre-March 2017 SAT: 1100 or higher.
 - ACT Composite 25 or higher
- Extra-Curricular Accomplishments: Demonstration of service activities in the community and/or school, employment, athletic accomplishments, or other extra-curricular accomplishments.
- Personal Statement: CHS highly recommends that students take the time to consult different resources, like their high school counselor, before writing the personal statement. The personal statement is an important component of the selection process. The college website contains links to sample personal statements as well as advice for writing personal statements.

BS-PharmD Progression Requirements

Progression Requirements for BS-PharmD Programs

	2+4 BS-PharmD	3+4 BS-PharmD
Min Prog GPA	2.60	2.60
Prof Activity	1 per year	1 per year
Interview	Required	Required
Supp App	Required	Required
Bachelor's degree NOT required for admission to COM or COP		

Advanced Placement (AP) & International Baccalaureate (IB) Credit Evaluation Policy

For students pursuing the Bachelor of Science in Health Sciences, the College of Health Sciences awards credit according to the following guidelines:

- CNUCHS will accept Advanced Placement (AP) test scores of 3, 4 or 5 for most exams and a 4 or 5 for science and math exams.
- International Baccalaureate (IB) test scores of 5, 6 or 7 for most exams and a 6 or 7 for science and math (see the attached table for detailed information); and
- A maximum of 60 course credit hours from AP, IB and/or other institutions can be transferred to CNUCHS.

Credit hours for AP and IB courses will appear on the student's transcript. Credits for AP and IB courses will not be used in the calculation of the Grade Point Average (GPA) noted on the CNUCHS transcript.

While some medical and other health professional schools accept Advancement Placement and International

Baccalaureate courses to satisfy admissions requirements pertaining to course subject preparation, many do not. Undergraduate students planning to apply to health professional schools are advised to carefully research admission requirements before deciding to use AP/IB credits to opt out of required CHS courses. It is strongly recommended that these students complete required science and math courses at CHS to retain maximal flexibility in meeting the admission standards of professional schools.

AP/IB Transfer Credit Tables

Note: the below AP/IB table is subject to change without notice. Questions regarding applicability of credit should be directed to CHS Admissions. Please visit the CHS website for the current AP/IB transfer equivalencies: <http://healthsciences.cnsu.edu/for-students/academic-advising>.

*No credit is awarded if the language is the student's native language.

① Entering freshmen and other undergraduate students who do not have credit for ENGL110 are required to take the CNUCHS English Placement Test. A total of 6 credits can be granted for English AP exams. Three of these credits will be for ENGL110 and the other 3 will be for English elective credit.

② BS-MD students are advised to take Mathematics and Physics courses in the College of Health Sciences in order to meet the admission requirements of medical schools. The CNU College of Medicine no longer accepts AP or IB course credits for Statistics and Calculus to fulfill the admission requirement of two semesters of college level mathematics courses.

③ BS-PharmD students are able to transfer AP Calculus and Physics to CNU's College of Pharmacy. However, BS-PharmD students are advised to carefully research admission requirements of other pharmacy schools.

④ Transfers and other undergraduate students who have achieved advanced level of proficiency in general biology, chemistry, mathematics and physics may opt to waive certain courses. They are advised to meet with course instructor and discuss a test-out option (with a minimum passing grade of B).

AP Subject Area	Score	Semester Units	CHS Equivalent Course
ART: Art History	3, 4 or 5	3	ARMU110
ART: Music (Theory)	3, 4 or 5	3	ARMU120
BIOLOGY	4 or 5	3	Elective (3 units) ④
CHEMISTRY	4 or 5	3	Elective (3 units) ④
ECONOMICS: Macroeconomics	3, 4 or 5	3	ECON210
ECONOMICS: Mircoeconomics	3, 4 or 5	3	ECON220
ENGLISH: Language/Composition	3, 4 or 5	3	ENGL110①
ENGLISH: Literature/Composition	3, 4 or 5	3	ENGL110①
U.S. Government/Politics (CA govt)	3, 4 or 5	3	GOVT110
MATH: Calculus AB/AB subscore	4 or 5	3	MATH130②③④
MATH: Calculus BC	4 or 5	3	MATH130②③④
Physics AP 1 Mechanics	4 or 5	4	PHYS210/210L②③④
Physics AP 2 Electricity and Magnetism	4 or 5	4	PHYS220/220L②③④
Physics AP Mechanics C	4 or 5	4	PHYS210/210L②③④
Physics AP Electricity/Magnetism C	4 or 5	4	PHYS220/220L②③④
PSYCHOLOGY	3, 4 or 5	3	PSYC110
STATISTICS	4 or 5	3	MATH 120②③④

IB Subject Area	Score	Semester Hours	CHS Equivalent Course
Art/Design	5, 6 or 7	6	ARMU110 and 120
Biology	6 or 7	8	Elective (3 units) ④
Business and Management	5, 6 or 7	3	Elective (3 units)
Chemistry	6 or 7	8	Elective (3 units) ④
Classical Languages (Latin)	5, 6 or 7	8	Elective
Economics	5, 6 or 7	6	ECON210 and 220
English A	5, 6, or 7	6	ENGL110①
Geography	5, 6 or 7	3	Elective
History—American	5, 6 or 7	6	Elective
History—East and Southeast and Oceania	5, 6 or 7	6	Elective
History—European	5, 6 or 7	6	Elective
Mathematics – Calculus	6 or 7	4	MATH130②③④
Music	5, 6 or 7	3	Elective
Modern Languages: Chinese	7	15	Elective
	6	10	Elective
	5	5	Elective
Modern Languages: French	5, 6 or 7	8	Elective
Modern Languages: German	5, 6 or 7	8	Elective
Modern Languages: Japanese	7	16	Elective
	6	15	Elective
	5	10	Elective
Modern Languages: Spanish	5, 6 or 7	8	Elective
Physics	6 or 7		PHYS110 & 120②③④
Psychology	5, 6 or 7	3	PSYC110
Social and Cultural Anthropology	5, 6 or 7	3	ANTH210
Theatre	5, 6 or 7	3	Elective
Visual Arts	5, 6 or 7	6	Elective

Pre-Medical Post-Baccalaureate (PMPB)

California Northstate University (CNU) offers a Pre-Medical Post-Baccalaureate (PMPB) program for students aiming for an advanced degree in the health professions. This comprehensive learning experience prepares students for admission to professional health schools.

The PMPB is a one year program and is suited for students interested in enhancing their knowledge and GPA in the natural and social sciences and/or in increasing their MCAT score. Students must have already completed all pre-requisites for admissions to a professional health school (Medicine, Pharmacy, etc.).

MCAT Review: Intensive MCAT Review is offered in the summer via a partnership with Kaplan, Inc. Students may opt out of the summer review class after consultation with an advisor at CHS.

The PMPB program is offered in a collaborative and supportive environment of the CHS. It also provides students with significant career development counselling, intercultural awareness and communication, and opportunities to interact with faculty from CNU's Colleges of Medicine (COM) Pharmacy (COP).

Admission Requirements

	Medicine (S18 and later)	Pharmacy
Min Overall GPA	3.20	2.60
Min BCPM* GPA	3.00	NA
Interview	Required	NA
*Biology, Chemistry, Physics, Math (Calculus and Statistics)		

- **Minimum Requirements:** The PMPB requires a baccalaureate degree from a U.S.-regionally accredited four-year institution or a non-U.S. equivalent institution. Required minimum coursework is:
 - 2 semesters, 3 quarters or 1 year of English
 - 2 semesters, 3 quarters or 1 year of Biology with laboratory
 - 2 semesters, 3 quarters or 1 year of Inorganic (General) Chemistry with laboratory
 - 2 semesters, 3 quarters or 1 year of Organic Chemistry with laboratory
 - 2 semesters, 3 quarters or 1 year of Physics with laboratory
 - 1 Semester or 2 quarters of Mathematics, including calculus and statistics
- **Other Recommended Courses:**
 - Social sciences
 - Behavioral sciences
 - Languages

- Anatomy
- Physiology
- Biochemistry
- Microbiology
- Immunology

PMPB Progression Requirements

Progression Requirements for PMPB

	Medicine SP18 and later	Pharmacy SP18 and later
Min Prog GPA	3.50	2.60
Min Prog MCAT	508	NA
Prof Activity	Rec.	Rec.
Interview	Required	Required
Supp App	Required	Required

When completing the PMPB coursework, students are equipped with sharpened critical thinking, writing, interview skills, and a more robust, competitive application portfolio.

The PMPB offers the following bonuses:

Pre-Med Post-Baccalaureate Bonus: After successfully completing the PMPB coursework, each student's faculty advisor will write a comprehensive letter of recommendation for qualified students who wish to apply to professional school.

Medical School Bonus: Students who successfully complete the PMPB coursework and MCAT score, as shown below, will be guaranteed a Medical College Application Services (AMCAS) interview with the CNU College of Medicine (COM).

Pharmacy School Bonus: Students who successfully complete the PMPB coursework with a minimum GPA of 2.60 will be guaranteed a Pharmacy College Application Services (PHARMCAS) interview with CNU College of Pharmacy.

Technical Standards

The Technical Standards describe the essential abilities required of BS-MD and PMPB candidates pursuing a professional medical degree.

- Reasonable accommodation in achievement of the standards is defined under U.S. federal statutes applied to individuals with disabilities. Such accommodations are intended to support the successful completion of all components of the MD degree.
- Standards in five areas must be met by all candidates: Observation, Communication, Motor Function, Cognitive, and Professional.

1. Observation:

- Observe demonstrations and participate in experiments in the basic sciences
- Observe patients at a distance and close at hand.

- Demonstrate sufficient use of the senses of vision, hearing, and smell and the somatic sensation necessary to perform a physical examination.
- Integrate findings based on these observations and to develop an appropriate diagnostic and treatment plan.

2. Communication

- Communicate in verbal and written form with health care professionals and patients, including eliciting a complete medical history and recording information regarding patients' conditions.
- Perceive relevant non-verbal communications such as changes in mood, activity, and posture as part of a physical examination of a patient.
- Establish therapeutic relationships with patients.
- Demonstrate reading skills at a level sufficient to individually accomplish curricular requirements and provide clinical care for patients using written information.

3. Motor Function

- Perform physical examinations and diagnostic procedures, using such techniques as inspection, percussion, palpation, and auscultation.
- Complete routine invasive procedures as part of training, under supervision, using universal precautions without substantial risk of infection to patients.
- Perform basic laboratory tests and evaluate routine diagnostic tools such as EKGs and X-rays.
- Respond in emergency situations to provide the level of care reasonably required of physicians.
- Participate effectively in physically taxing duties over long hours and complete timed demonstrations of skills.

4. Cognitive

- Measure, calculate, analyze, synthesize, extrapolate, and reach diagnostic and therapeutic judgments.
- Recognize and draw conclusions about three-dimensional spatial relationships and logical sequential relationships among events.
- Formulate and test hypotheses that enable effective and timely problem-solving in diagnosis and treatment of patients in a variety of clinical modalities.
- Understand the legal and ethical aspects of the practice of medicine.
- Remain fully alert and attentive at all times in clinical settings.

5. Professionalism

- Demonstrate the judgment and emotional stability required for full use of their intellectual abilities.

- Possess the perseverance, diligence, and consistency to complete the Pre-Med Post-Baccalaureate curriculum and prepare to enter the independent practice of medicine.
- Exercise good judgment in the diagnosis and treatment of patients.
- Complete all responsibilities attendant to the diagnosis and care of patients within established timelines.
- Function within both the law and ethical standards of the medical profession.
- Work effectively and professionally as part of the health care team.
- Relate to patients, their families, and health care personnel in a sensitive and professional manner.
- Participate effectively in physically taxing duties over long work hours, function effectively under stress, and display flexibility and adaptability to changing and uncertain environments.
- Maintain regular, reliable, and punctual attendance for classes and clinical responsibilities.
- Contribute to collaborative, constructive learning environments, accept constructive feedback from others, and respond with appropriate modification.

Student Enrollment Agreement

The Student Enrollment Agreement must be completed and submitted to the college in order to show intent to enroll in the program. The Student Enrollment Agreement is a legally binding contract when it is signed by the incoming student and accepted by the institution.

By signing the Enrollment Agreement, the student is acknowledging that the catalog, disclosures, and information located on the website have been made available to the student to read and review.

Any questions or concerns regarding the Student Enrollment Agreement should be directed to the college or university department.

Catalog, Performance Fact Sheet, and Website

Before signing the Student Enrollment Agreement, the prospective student is strongly urged to visit the University and College website at www.cnsu.edu, and to read and review the CNU General Catalog and School Performance Fact Sheet (SPFS). The SPFS contains important performance data for the institution. The Catalog contains important information and policies regarding this institution.

Student's Right to Cancel, Withdraw, and Refund

You have the right to cancel the Student Enrollment Agreement until 12:01 AM on the first calendar day after the first classroom instruction session attended, or until 12:01 AM on the eighth calendar day after a student has signed the Enrollment Agreement, whichever is later.

Cancellation shall occur when you give written notice of cancellation to the Admission Office at the University's address shown at the top of the first page of the Enrollment Agreement. You can do this by hand delivery, email, facsimile, or mail. Written notice of cancellation sent by hand delivery, email, or facsimile is effective upon receipt by the University. Written notice of cancellation sent by mail is effective when deposited in the mail properly addressed with postage prepaid.

After the cancellation period described above, you have the right to withdraw from the University at any time. Withdrawal shall occur when you give written notice of withdrawal to the Registrar at the University's address shown at the top of the first page of the Enrollment Agreement. When withdrawing from the college/university, please complete the Official College Withdrawal form available from the Registrar's request form website: <http://www.cnsu.edu/office-of-the-registrar/registrar-services>. Do not use this form to indicate your intent to cancel your enrollment agreement.

For information on refund calculations due to cancellation or college withdrawal, please see the FINANCIAL SERVICES & DISCLOSURES on page 149 of this catalog.

Tuition & Fees

All tuition, fees, expenses, and policies listed in this publication are effective as of August 2018 and are subject to change without notice by California Northstate University.

In the tables below, Y1, Y2, Y3, and Y4 indicate the student's year in the program (e.g. Y1 is a first-year student; Y2 is a second-year student, etc.).

Tuition is charged on a full-time, semester basis. Generally, tuition and fees are charged to a student's account thirty (30) days prior to the start of each semester term. The above is based on the assumption that a student will attend each semester term on a full-time basis, which allows for a student to graduate after successfully completing four (4) years of coursework consisting of 120-125 semester credit hours, depending on concentration.

International Students are not charged additional fees or charges associated with vouching for student status.

Payment deadlines, loan obligations, refund calculations due to cancellation and withdraw, and the Student Tuition Recovery Fund (STRF) disclosures are located in FINANCIAL SERVICES & DISCLOSURES (page 148).

2018-2019 Tuition & Fees for BSHS, BS-MD, & BS-PharmD

Tuition & Fees	Amount	Class
Enrollment Fee (nonrefundable)	\$100.00	Y1
Tuition	\$32,700.00	Y1, Y2, Y3, Y4
Student Association & Activity Fee	\$100.00	Y1, Y2, Y3, Y4
Technology Fee	\$50.00	Y1, Y2, Y3, Y4
Lab Fee	\$500.00	Y1, Y2, Y3, Y4
STRF ¹	\$0.00	Y1, Y2, Y3, Y4
Orientation Fee	\$50.00	Y1
Graduation Fees ²	\$300.00	Y4
Y1 Total Estimated Tuition & Fees per Year ³	\$33,500.00	
Y2 Total Estimated Tuition & Fees per Year ³	\$33,350.00	
Y3 Total Estimated Tuition & Fees per Year ³	\$33,350.00	
Y4 Total Estimated Tuition & Fees per Year ³	\$33,650.00	

Total Tuition & Fees for the entire 4-year College of Health Sciences undergraduate program estimated at \$140,000 to \$145,000; see headnote 1 below regarding 3+4 and 2+4 Combined Programs.

Estimated Other Educational Related Costs ⁴	Amount	Class
Health Insurance premium ⁵	\$3,200.00	Y1, Y2, Y3, Y4
Books and Supplies ⁶	\$1,600.00	Y1, Y2, Y3, Y4
Room and Board ⁶	\$23,272.00	Y1, Y2, Y3, Y4
Transportation ⁶	\$4,648.00	Y1, Y2, Y3, Y4

Y1 Total Estimated Cost per Year ⁷	\$66,220.00	
Y2 Total Estimated Cost per Year ⁷	\$66,070.00	
Y3 Total Estimated Cost per Year ⁷	\$66,070.00	
Y4 Total Estimated Cost per Year ⁷	\$66,370.00	

¹ The STRF fee is \$0.00 per \$1,000 of institutional charges.

² Covers regalia, graduation dinner, diploma cover, transcript, etc.

³ Total Tuition and Fees estimated at range of \$140,000 to \$145,000 through completion of entire four year traditional undergraduate program; assumes completion within four years prescribed time and 3% to 5% estimated annual tuition increases are not binding on the University. This estimate for students in the 3+4 and 2+4 Combined Programs needs to be adjusted to reflect the Period of Attendance on CNU College of Health Sciences campus, with the Period of Attendance at CNU Colleges of Medicine or Pharmacy based on the tuition and fees while at the latter two Colleges.

⁴ Costs and expenses a student may incur during the applicable year of the program, whether or not paid directly to CNU or CNUCHS. These expenses include estimated out-of-pocket cost of living expenses for the year.

⁵ Provided and charged by outside healthcare insurance plan; optional, estimated, and may increase or decrease based on the number of insured participants and other factors.

⁶ Estimated amount of student's individual housing, food, and transportation costs, not operated by, charged by, or paid to CNU.

⁷ Total Tuition and Fees from first table, plus estimated items from second table that student may incur, including estimated cost of living items not paid to CNU.

2018-2019 Tuition & Fees for Pre-Medicine Post-Baccalaureate Program

Tuition & Fees	Amount
Enrollment Fee (nonrefundable)	\$100.00
Tuition	\$32,700.00
Scholar Activity Fee (nonrefundable upon start of instruction)	\$100.00
Technology Fee (nonrefundable upon start of instruction)	\$50.00
Orientation Fee (nonrefundable upon start of instruction)	\$50.00
STRF Fee per \$1,000 ¹	\$0.00
Total Tuition & Fees	\$32,900.00

Estimated Other and Optional Educational Related Costs per year ²	Amount
Health Insurance premium ³	\$3,200.00
Books and Supplies (estimate)	\$1,000.00
Room and Board ⁴	\$23,272.00

Transportation ⁴	\$4,648.00
Total Estimated Cost per year⁵	\$65,20.00

¹ STRF fee is \$0.00 per \$1000 of institutional charges.

² Cost of living and other educationally related costs a student may incur while participating in the Pre-Medicine Post-Baccalaureate, whether or not paid directly to CNU.

³ Provided and charged by outside healthcare plan insurance company; optional, estimated, and may increase or decrease based on number of participants and other factors.

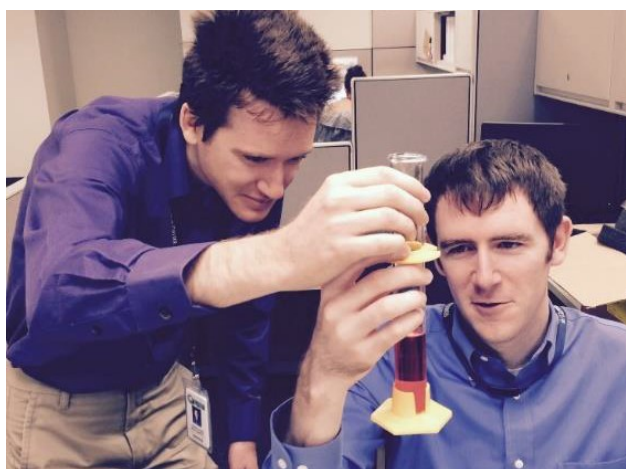
⁴ Estimated amounts of individual housing, food, and transportation costs, not operated by, charged by, or paid to CNU.

⁵ Total Tuition & Fees from first table, plus estimated items from second table that student may incur, including cost of living items not paid to CNU.

Scholarships

In the past, several companies have helped California Northstate University students finance their education through scholarships. Some of these companies include: Albertson's, CVS, Pharmacist Mutual Insurance Company, Safeway, SuperValu Drug Stores, and Walgreen's. These scholarships range from \$500 to \$2,000. Criteria for scholarships vary by the specific donor and are usually awarded in the late fall and early spring.

Information regarding various scholarships can be found the College of Health Science's website, healthsciences.cnsu.edu, Financial Aid, Types of Assistance, Grants and Scholarships as well as within the Grants and Scholarships section of this catalog, page 148.



General Policies

Orientation and Registration

Mandatory orientation for new students is held during the days preceding the start of classes. The Office of Student Affairs must be notified if a new student is unable to attend scheduled orientation due to illness or emergency.

Registration for classes requires:

1. All admission contingencies be fulfilled.
2. Financial aid clearance from the Financial Aid Officer.
3. Completion of all new student paperwork.

Admission contingencies include a final, official high school transcript evidencing high school graduation, or equivalent, required immunizations, evidence of health insurance coverage, and any other institutional requirements.

New students must submit the Emergency Contact and Medical Information Form to the Office of the Registrar by the end of Orientation. To make updates, a new form must be submitted to the Registrar. The Office of the Registrar requires submission of the Authorization to Release Student Records if a student desires to grant a personal third-party (such as a parent, spouse, etc.) access to his/her student record. Please refer to the Directory Information and Access to Student Records section of this catalog for more information.

New students should review their local, home, and billing contact information via the Student Portal and update as needed. It is the student's responsibility to maintain valid contact information throughout their enrollment at CNU. Instructions for accessing the Student Portal is sent by the CNU IT department to the student's CNU email address.

The Registrar acting in cooperation with the Assistant Dean for Student Affairs and Admissions and CHS faculty advisors is responsible for managing course registration for incoming freshmen, transfer students, PMPB students, and continuing students. The process of course registration for current students continuing into the next semester should be completed by the end of the 10th week of classes. The Registrar will enroll students in assigned and previously elected classes prior to the start of each semester.

Students with business, financial, or other registration holds on their account will not be registered until the Registrar is notified that the hold has been cleared. Students who are in compliance with institutional requirements or who have a hold on their student account at the time of registration are required to satisfy the requirement and may also be required to submit the Course Add/Drop form by the end of the Add/Drop period to register or make schedule changes.

Address Where Instruction Will Be Provided

Class sessions are conducted at the campus located at 2910 Prospect Park Drive and 2920 Prospect Park Drive, Rancho Cordova, CA 95670 and 9700 West Taron Drive, Elk Grove, CA 95757. Experiential education and clinical rotations and

service learning activities is conducted at assigned professional clinical locations and community sites as established by agreement among the student, professional preceptor, and College.

Catalog, School Performance Fact Sheet, and Website

Before signing the Student Enrollment Agreement, students are strongly urged to visit the College website at healthsciences.cnsu.edu/ and to read and review the CNU General Catalog and School Performance Fact Sheet (SPFS). The SPFS contains important performance data for the institution. The Catalog contains important information and policies regarding this institution.

By signing the Enrollment Agreement, the student is acknowledging that the catalog, disclosures, and information located on the website have been made available to the student to read and review.

Instruction/Course Delivery

The College of Health Sciences utilizes a variety of active learning pedagogical approaches within a classroom setting and through integrated research and teaching.

Research Instruction

The Freshman Research Experience is part of the core curriculum. Student enrolled in freshman biology and chemistry participate in original research projects during the entire first year or course work. The project is called the Interdisciplinary Science Learning and Novel Discovery (ISLAND) project, is a cross disciplinary innovation where student teams research the relationship between organismal health and environmental variables within a local ecosystem.

Scholarly Projects focuses on the language, ethics, approaches, and challenges of the research processes. Students can participate in a structured independent research experience where the student has the option of:

- Apprenticeship with a faculty research mentor, or
- CURE (Course-Based Undergraduate Research Experience) with themes, topics, and techniques.

Community Service Learning

Service Learning is a critical learning component that CHS requires of all undergraduate students. CHS offers a unique one-year approach: the first semester combines academic studies, experiential learning, and professional development prior to placement in a community agency. The subsequent semester includes meaningful work in the community with a concurrent course to support students as they move from theory to practice.

Language of Instruction

All courses are delivered in English and English language services are not provided.

Academic Policies and Procedures

Academic Calendar

The academic calendar consists of two semesters lasting approximately 15 weeks and an 8 week summer term.

Credit Hour Policy

1 credit is assigned per hour each week of classroom or direct faculty didactic instruction (that is, per hour of lecture or student in class time) and a minimum of 2 hours of out-of-class student work (homework) (LEC/SEM). For courses that include workshop and/or laboratory time, 1 credit is assigned per 3 hours each week of student time spent in this activity (LAB/EL).

Code	Course Type	Code	Course Type
EL	Experiential Learning	LEC	Lecture course
LAB	Laboratory course	SEM	Seminar

Grading

All courses are assigned student performance grades by the teaching faculty according to the following grade point and letter grade convention:

Definition	Grade Points	Definition	Grade Points
A+ 97-100%	4.00	P ≥70%, Pass*	Not in GPA
A 90 - 96%	4.00	NP <70%, No Pass*	Not in GPA
B+ 87 - 89%	3.30	AU Audit	Not in GPA
B 80 - 86%	3.00	I Incomplete	Not in GPA
C+ 77-79%	2.30	W Withdrawal	Not in GPA
C 70-76%	2.00		
D 60-69%	1.00		
F <60.00%	0.00		

Pass/No Pass

A course grade of "P" (Passing Course) will be recorded on student transcripts when students take a course on a Pass/No Pass basis. A "P" grade indicates that the student achieved 70% or higher in the course. A course grade of "NP" (Not Passing Course) indicates that the student earned less than 70% in the course. Courses taken on a P/NP basis will count toward the total hours earned but will not be used to satisfy degree/program completion. "P/NP" grades are not calculated into the GPA, thus, have no effect on the term or cumulative GPA. Undergraduate and PMPB students may take only 10% of their courses with a P/NP grading option—approximately 12 credit hours for undergraduate students and 2-3 credit hours for PMPB students. The P/NP grading option is usually allowed only for courses where a letter grade is not practicable, i.e. Teaching/Research/Student Service Assistant courses or introductory science courses. Students wishing to explore academic disciplines on an elective basis may request a P/NP grading option from the course instructor pending approval by Academic Affairs.

Incomplete

A course grade of "I" (Incomplete) may be recorded on the student transcript in cases where extenuating circumstances prevent a student from completing assignments or exams by the end of an academic term. Granting a grade of "I" is at the

discretion of the instructor of the course. Students must request an incomplete grade within two weeks of the extenuating circumstance by submitting an Incomplete Grade Agreement to the course instructor. If the course instructor approves of the granting of an "I" grade for the course they will complete the Incomplete Grade Agreement and enter an "I" grade for the course. The "I" is then transmitted to the Registrar by the grade submission deadline and the "I" is noted on the transcript for the corresponding course. An "I" grade may be changed to a letter grade upon the completion of the stipulations contained in the Incomplete Grade Agreement within 21 days following the last day of the term. Failure to complete the course within the 21-day extension period will result in a conversion of the "I" to the calculated grade for the course. In cases of valid excuses, students may request an exception to this deadline by completing and submitting a Petition Form.

Course Withdrawal

A course grade of "W" (Withdraw) will be recorded on the student transcript in lieu of an "A-F" letter grade in cases where withdrawal from a course is formally initiated and executed as described according to guidelines of the CHS3313 Course Add/Drop and Withdraw Policy.

A course grade of "P" (Pass) is to be placed on the transcript in lieu of an "A-F" letter grade in cases where the course is not required for degree completion and the student earns 70% or higher in the course.

A course grade of "NP" (No Pass) is to be placed on the transcript in lieu of an "A-F" letter grade in cases where the course is not required for degree completion and the student earns less than 70% in the course.

Course Auditing

A course grade of "AU" (Audit) will be recorded on a student transcript when a student has been granted permission to audit a course and enrolls in the course. "AU" notations have no grade point value. Students are charged tuition for courses taken as audit. Students may only audit one course per semester and a total of only two courses in their time in the College.

CNU students may audit lecture courses (i.e., attend lectures without receiving credit or calculated grade) only with advance permission of the faculty instructor. The instructor will inform the student of the amount of participation that is expected in the course. Lab courses cannot be audited. The responsibility of course instructors is to first meet the needs of officially registered students. Faculty are not obligated to review work submitted by course auditors.

GPA Calculation

The running and final grade point average (GPA) is calculated according to the following formula where C₁ = credit hours of Course1 and GP₁ = grade points of Course1, etc.:

$$\text{GPA} = \{(C_1 \times GP_1) + (C_2 \times GP_2) + \dots + (C_n \times GP_n)\} \div (\text{Total Credit Hours})$$

Note that GPAs recorded on semester grade reports and transcripts are calculated on the basis of grade point credits from courses taken exclusively at CNU. Scores from Advanced Placement, International Baccalaureate, and college level courses reported and/or transferred as credits toward the CNU degree are listed on the transcript but are not included in the CNU GPA calculation.

Academic Honors

Undergraduate students who earn 12 or more graded semester hours during a semester, or in 6 or more graded hours in the summer, in residence at CHS can qualify for semester honors. The honor is noted on the transcript for the semester it is earned and will receive a recognition letter.

President's List: GPA of 3.75 or higher

Dean's List: GPA of 3.50 or higher

Grade Change Policy

This policy will pertain to faculty who need to change the final grade of a course under certain recognized circumstances.

Course grade changes are permissible under the following circumstances:

1. When a faculty member has issued a grade of Incomplete (I) and the course has subsequently been completed. The "I" grade can be changed to the grade earned.
2. When a grade appeal process results in the legitimate change of grade.
3. When there has been a calculation or procedural error in the posting of a course grade.

To change a student's final grade, the faculty member must complete and sign a CNU Grade Change Request form available from the Office of the Registrar with an explanation of the circumstances for the change and submit it to the Department Head for consideration. The Department Head will review the request in accordance with the policy statement outlined above and either approve or deny. If approved, the Department Head will submit the completed form to the Office of the Registrar for processing.

Course Grade Appeal Policy

Students are permitted to appeal a final course grade if they believe the assigned course grade is inaccurate based on calculation error by faculty course instructor(s) or actions inconsistent with official published grading policies of the course, College, or University.

Early Resolution

1. Students using this appeal must communicate questions or disputes regarding the final course grade within 5 business days after the grade posting by discussing the basis of their concerns with the faculty instructor who issued the course grade. Students should obtain a Course Grade Appeal form from the Office of the Registrar, the faculty instructor, or other College personnel to document the discussion.
4. If the faculty member and the student do not resolve the issue, the student may schedule a follow-

up meeting with the appropriate Department Head for the course in question.

Formal Appeal

1. If the Department Head and the student do not resolve the issue, the student may initiate a formal grade appeal by completing the Course Grade Appeal form and submitting it to the Senior Associate Dean for Academic Affairs within 5 business days after the meeting with the Department Head.
2. The grade appeal must address at least one of the following:
 - a. Errors in grade calculation, or
 - b. Unpublished criteria used to calculate the grade, or
 - c. The assigned grade was based on procedures inconsistent with specific course, College or University policies.
3. Students who file a Grade Appeal form must provide the following materials and requests for information:
 - a. A description of their attempt at resolution of the grade dispute with the faculty instructor and Department Head;
 - b. Evidence of graded assignments, and/or
 - c. Any other relevant materials;
 - d. The Senior Associate Dean for Academic Affairs may request additional materials from the student or faculty instructor.
4. The Senior Associate Dean for Academic Affairs will convene an ad hoc committee of 3 faculty members to review the materials submitted the by student and the faculty instructor. This committee will report their recommendation to the Senior Associate Dean for Academic Affairs.
5. If the Senior Associate Dean for Academic Affairs decides that a grade change is appropriate and necessary, the faculty instructor will be notified within 5 business days after appeal form submission to submit a Grade Change form to the Registrar within 5 business days.
6. If the Senior Associate Dean for Academic Affairs decides that a grade change is inappropriate, the student may appeal the decision to the Dean of the College of Health Sciences. The appeal to the Dean must be submitted within 5 business days after the student is notified of the result of the formal grade appeal. The Dean's decision is final.

Academic Standing and Formal Warning Policy

The following levels of official standing with the university are applied in cases of academic underperformance:

1. 1st Warning Status: A semester GPA of less than 2.0 (C average) will result in a record of "1st Warning" placed on the semester grade report. The record of 1st Warning will be removed if the student achieves a semester GPA of greater than 2.0 for a full course schedule taken the following semester.
2. 2nd Warning - Probation status: If a second semester GPA of 2.0 or less follows a semester after 1st Warning, a record of "2nd Warning - Probation" is placed on the semester grade report. This record will

also be removed if the student achieves a GPA of greater than 2.0 for a full course schedule taken the following semester.

3. A third semester of poor performance with a GPA less than 2.0 will result in official separation from the university and termination of the student's enrollment pending the outcome of any appeals for consideration and readmission on a probationary basis. Students in this category will receive an email and official letter of separation at the home address on record.

Course Remediation Policy

A grade of D (letter grade of 1.0) in a course indicates a significant lack of understanding of the content of the course necessary for completion of the academic program. Remediation of D grades will be offered to students at the discretion of the Department Head and Course Instructor. Student eligibility for course remediation is also subject to verification by the Registrar. The Course Instructor will decide the format of the remediation exam. Students may prepare for the exam using a combination of self-study, tutoring, and meeting with the instructor. A course score of 70% or better after the remediation exam will be reported to the Registrar. If the course is not satisfactorily remediated, the original course grade will remain on the transcript and used in the calculation of the official GPA. The remediation process must be completed within 14 calendar days after the end of the term. Each CHS student is allowed a maximum of 3 course remediation opportunities.

Course Instructors are required to contact students who have earned a final course grade of "D" or lower at the close of each semester for possible grade remediation. Such students are given the option of taking a remediation exam that can be used to convert a grade of "D" or lower to the revised course grade as described above. The remediation exam should be weighted toward course content that was not mastered by the student. The student will be given the opportunity to seek tutoring and to study for a course remediation exam given after the regular close of the semester. However, the study and exam process must be completed within the 14 day remediation period. Course instructors are not necessarily required to be present on campus throughout the full remediation period but are responsible for making necessary arrangements and provisions for the exam process.

Academic Progression Policy

BS in Health Sciences (BSHS)

The BSHS program is designed to be completed in four years. In order for students to progress through this degree program they must meet certain criteria each semester and each academic year. These criteria are both qualitative and quantitative and include:

1. Students must pass all courses that are counted toward degree conferral with a minimum letter grade of C;
2. Students must maintain a cumulative GPA of 2.0; and
3. Students must complete the BSHS degree requirements within six consecutive academic years

(150%) from the date of the first day the student begins the program. Students may take up to 20 credits per semester but may not exceed 188 total credit hours earned.

Students who do not meet the above-listed criteria are considered to not meet academic progression requirements, and will be issued a formal warning and placed on probation until able to meet such requirements. Students not meeting academic progression requirements are expected to repeat courses and/or complete other activities to regain good academic standing status. See the Course Repeat Policy, the Course Failure Remediation Policy, and the Academic Standing and Formal Warning Policy

Students who do not successfully complete a course that is a prerequisite to a course in the next term must take the prerequisite course in the next term it is offered, and will not be able to enroll in the successive course. See the [Course Add/Drop and Withdraw Policy](#).

Students who earn a grade of Incomplete (I) may not enroll in the next course if the course in which the Incomplete was earned is prerequisite to a course in the next term. See the [Grading Convention Policy](#).

Students who take a Leave of Absence for one or more terms will need to enroll in the term following the leave in order to remain in good academic standing. All periods of leave of absence are included in the maximum time frame allowed (150%) to complete the program. See the [Leave of Absence Policy](#).

Students who do not earn at least a C- in a course may be offered the opportunity to remediate that course (or courses). A grade of D (letter grade of 1.0) in a course indicates a significant lack of understanding of the content of the course necessary for completion of the academic program. Remediation of D grades will be offered to students at the discretion of the Department Head and Course Instructor. If a course is remediated, the remediated grade earned will be noted on the official transcript and calculated in the cumulative GPA. If the course is not satisfactorily remediated, the student will need to repeat that course in a subsequent semester. See the [Course Repeat Policy](#) and [Course Remediation Policy](#).

Credit hours from another educational institution accepted as transfer credits into the BSHS program will be included as completed credit hours.

Students who are not academically progressing may not be eligible for financial aid.

BS-MD Combined Programs Progression

The BS-MD accelerated pathway is designed to be completed in either two, three or four years of prerequisite coursework and four years of medical school coursework. In order for students to progress through this accelerated pathway, they must meet certain criteria each semester and each academic year. These criteria are both qualitative and quantitative and include:

1. Students must pass all courses that are counted toward degree conferral with a minimum letter grade of C;
2. Students must maintain a cumulative GPA of 3.50 in the undergraduate program and be in good academic and professional standing;
3. Students must participate in at least one College of Medicine campus activity per year while attending the College of Health Sciences;
4. Students must submit a Supplemental Application to the College of Medicine Office of Admission upon request;
5. Students must successfully complete the College of Medicine Prerequisites;
6. Students must score a 510 or higher on the MCAT; and
7. Students must successfully complete the MD admission interview.

Students who do not meet the criteria described above will be notified of that status at the end of each term. They are still able to pursue the BSHS degree and compete for medical school admission. They will be subject to the Progression Criteria for the BSHS.

BS-PharmD Combined Programs Progression

The BS-PharmD accelerated pathway is designed to be completed in either two, three or four years of prerequisite coursework and four years of pharmacy school coursework. In order for students to progress through this accelerated pathway, they must meet certain criteria each semester and each academic year. These criteria are both qualitative and quantitative and include:

1. Students must pass all courses that are counted toward degree conferral with a minimum letter grade of C;
2. Students must maintain a cumulative GPA of 3.00 in the undergraduate program and be in good academic and professional standing;
3. Students must participate in at least one College of Pharmacy campus activity per year while attending the College of Health Sciences;
4. Students must submit a Supplemental Application to the College of Pharmacy Office of Admission upon request;
5. Students must successfully complete the PharmD admission interview;
6. Students must successfully complete the College of Pharmacy Prerequisites.

Students who do not meet the criteria described above will be notified of that status at the end of each term. They are still able to pursue the BSHS degree and compete for pharmacy school admission. They will be subject to the Progression Criteria for the BSHS.

Pre-Med Post-Baccalaureate (PMPB)

Students who successfully complete the PMPB program with an overall undergraduate GPA of 3.0 or higher, CNU program GPA of 3.2 or higher, and an MCAT score of 510 or higher will be invited for an interview for admission to the CNU College of Medicine through AMCAS.

Additionally, students who successfully complete the PMPB program curriculum with an overall undergraduate GPA of 2.6 or higher, and CNU program GPA of 2.6 or higher will be offered an invited interview for admission to the CNU College of Pharmacy via PharmCAS.

Degree Requirements for the Bachelor of Science in Health Sciences

The diploma of Bachelor of Science degree in Health Sciences from California Northstate University shall be awarded to a student who has met all of the following criteria:

1. A minimum of 120 credit hours. A maximum of 60 credit hour units from officially transmitted AP/IB courses (CHS Policy 3202) and/or officially transferred from another institution (CHS Policy 3203) with a grade point of 2.0 (letter grade of C or better) may be counted toward this total. At least 60 credit hours must be from courses taken at CNUCHS. Credit hours from courses with a grade of D, F, AU or W are not counted toward the credit hour minimum for graduation.
2. Pertaining to students in good standing and officially enrolled in accelerated pathways to Pre-Med to MD and Pre-Pharm to PharmD degrees, the CNU College of Health Sciences will accept credit hours from certain specified basic biomedical science courses in the CNU Colleges of Medicine (CNUCOM) and Pharmacy (CNUCOP) as substitute credit hours for advanced undergraduate courses in the CHS curriculum for the BS Degree in Health Sciences. Such substitute course credits accepted from CNUCOM and CNUCOP are not to exceed 60 credit hours. At least 60 credit hours must be from courses taken at CNUCHS.
3. An overall grade point average of 2.0 (letter grade of C) or higher as calculated by the weighted average of all course credit units and grade points for courses taken at CNU.
4. Satisfaction of the course requirements and associated learning outcomes.
5. Students who complete all the recommended courses specific to the example curriculum of a health sciences area concentration such as Human Biology, Biopsychology and Health Science Administration may have the area concentration listed on the BS degree diploma as follows: "Bachelor of Science Degree in Health Sciences with a Concentration in Human Biology (Biopsychology, or Health Science Administration)." Students who do not complete all the undergraduate courses specific to the health science concentration area will be awarded the "Bachelor of Science Degree in Health Sciences" without a concentration area listed on the diploma.
6. Students are expected to complete the Bachelor of Science in Health Sciences degree within six years or less after date of admission to the program.

Any deviation from these standards must be approved by a majority of the voting faculty and signed by the Dean after consideration of supporting material. Reasons for the exception must be fully documented.

Degree Honors

Students who complete the BS degree requirements with specified CHS grade point averages (GPAs) will have an Honors designation placed on their transcripts. The cumulative GPA requirements for graduating with honors are as follows:

Summa Cum Laude:	3.80 – 4.00 GPA
Magna Cum Laude:	3.65 – 3.79 GPA
Cum Laude:	3.50 – 3.64 GPA

Commencement

Students and faculty are strongly encouraged to attend commencement and wear the traditional regalia of cap, gown, and academic hood. Honor sashes will be awarded to honor graduates.

Attendance Policy

Students are encouraged to attend all lecture and discussion courses on a regular basis and are required to attend and complete all laboratory sessions and work. The college recognizes that illness and circumstances beyond one's control may cause a student to miss an occasional class. Course instructors are free to set their own attendance policy that may include signing in for each class and a having a portion of the grade dependent on attendance. If a student misses a required laboratory session, the work must be made up in accordance with the schedule and arrangements of the lab instructor.

Formal Excused Absence Policy

A student may request a formal excused absence for personal, legal, emergency, compassionate, professional conferences and functions, or health-related reasons. To protect confidentiality of students, all formally excused absence requests must be initiated in writing and submitted through the Office of Academic Affairs. Such reasonable requests are normally granted for a period of 1-5 academic days. Absences longer than 5 days may require a student to request a leave of absence or personal withdrawal. Approved formal absence will be communicated to the relevant course instructors who will make necessary accommodations for missed work. Official forms and directions for submitting a Request for Excused Absence are available on the college website or from the Office of Academic Affairs.

Leave of Absence Policy

This policy specifies procedures and rules for students who wish to take a Leave of Absence from the CHS.

A Leave of Absence is defined as a hiatus from college enrollment for one or two semesters. An official Leave of Absence may be approved for reasons in the student's best interest but may not exceed one academic year. The CHS will permit a student on an approved Leave of Absence to return to the College and re-enroll in classes without formal re-application for admission. Non-attendance does not constitute notification of intent to apply for Leave of Absence status. The starting date of Leave of Absence status is the date the Registrar receives the completed and signed Leave of Absence form. Because the curriculum progression is linear and most courses are offered in sequence in either the Fall or Spring semester, it is expected that most Leaves of Absence

will be for one year. However, a one-semester Leave of Absence is permissible with the understanding that students may have to take certain courses out of sequence. Students who take a one or two semester Leave of Absence must consult with the Office of Financial Aid to determine how the leave will affect their eligibility for financial aid. In some cases, students returning from a Leave of Absence may need to reapply for financial aid.

Students in the Pre-Medical Post-Baccalaureate are not permitted to take a leave of absence.

Procedure

Students requesting a Leave of Absence from the College of Health Sciences should fill out a Leave of Absence Form after discussing their decision with their faculty advisor and the Senior Associate Dean for Academic Affairs. The Leave of Absence form must be signed by the student, the faculty advisor, the Senior Associate Dean of Academic Affairs, and the Dean before it is forwarded to the Office of the Registrar for official approval and notation on the transcript.

Students requesting a Leave of Absence from the College of Health Sciences should fill out a Leave of Absence Form after discussing their decision with their faculty advisor and the Senior Associate Dean for Academic Affairs. The Leave of Absence form must be signed by the student, the faculty advisor, the Senior Associate Dean of Academic Affairs, and the Dean before it is forwarded to the Office of the Registrar for official approval and notation on the transcript.

Course Enrollment Policy

This policy specifies rules and procedures for enrolling in courses at the CHS.

Course Advisement and Enrollment

Incoming students entering college for the first time after completion of high school are automatically enrolled in an appropriate schedule of courses by the Office of the Registrar in consultation with the Director of Admissions. Transfer students are offered assistance in course selection and registration at the time of admission by the Admissions Office and an assigned faculty advisor. Currently enrolled students in the College of Health Sciences are required to meet with their faculty or professional advisor by the end of the 10th week of classes in each semester. At this meeting the faculty advisor is responsible for reviewing current academic progress and advising the student in appropriate selection of courses to be taken in the following semester. Students have the right to choose among optional course electives offered in any given semester within the constraints of course prerequisites stated in the college catalog and course syllabus.

Minimum and Maximum Number of Credit Hours per Semester

A standard load of courses is considered to average 15 credit hours per semester. A minimum of 12 credit hours for fall or spring semester is required to be considered a full time student. A maximum of 20 credit hours per fall or spring semester is allowed. During the summer session a maximum of 10 credit hours is allowed. A student may not enroll in more

than 30 total credit hours for the summer and fall terms combined.

Course Auditing

CNU students may audit lecture courses (i.e., attend lectures without receiving credit or transcript documentation) only with advance permission of the faculty instructor. The responsibility of course instructors is to first meet the needs of officially registered students. Faculty are not obligated to review work submitted by course auditors. Audited courses appear on the student's transcript.

Course Placement Policy

Math Placement

Entering students must take the CHS Mathematics Placement Exam. Students scoring below 60% on the CHS Mathematics Placement Exam will be enrolled in MATH125 Pre-Calculus. Students scoring above 60% will be enrolled in MATH120 Applied Statistics.

English Placement

Incoming students are eligible for the ENGL 110 credits if they satisfy any of the following criteria:

1. A score of 3 or above on the AP (Advanced Placement) English Language and Composition or AP English Literature and Composition Exam. An additional 3 credits can be awarded for English elective credit;
2. A score of 5 or above on IB (International Baccalaureate) English A; or
3. Official transcript record of a 3-unit college-level English composition course equivalent to ENGL 110 with a grade of C or higher.

Students who are awarded credit for ENGL 110 may be excused from taking the English Placement Diagnostic test if they so choose.

Students with 6 or more credit hours of English composition or writing courses with grades of C or better from a community college or four-year university are eligible to be credited with ENGL 110 and 120. The syllabus/syllabi of the qualifying course(s) must be reviewed for approval and one of the courses in question should have included a documented research paper. Students who transfer approved credits equivalent to both ENGL110 and ENGL120 may also be excused from taking the English Placement Diagnostic test if they so choose.

New first-year CHS students who do not meet one of the criteria above are required to take the English Placement Diagnostic Test given before the beginning of the semester to assess reading and writing skills and facilitate appropriate English composition course placement.

Course Repeat Policy

Students may only repeat courses in which they have received a grade of D or F; and, ordinarily, a course may only be repeated once. If a second repeat is desired, the student may petition the Office of Academic Affairs by describing extenuating circumstances that merit a second repeat attempt. If warranted, the Senior Associate Dean of Academic Affairs may authorize a second course repeat via a signed

Exceptions Form. Only six courses (up to 24 credits in the four-year program) may be repeated by any given student. Once a student successfully repeats a previously failed course, revised grade point units for the repeated course are calculated and the original grade points and credit hours for the initial course are removed and the course is marked as "Repeated" on the student transcript.

Course Add/Drop and Withdrawal Policy

Routine changes in course registration to add, drop, or withdraw from a course may be made under the terms of the CHS enrollment agreement simply by submission of a Course Add/Drop Form up to the end of the 3rd week of classes for Fall and Spring terms or the fourth day of classes for a summer term. If a class is dropped by the end of the 3rd week of classes, or the fourth day of summer term, the record of class enrollment is removed from the transcript. As stated in the CHS enrollment agreement, tuition is non-refundable for individual dropped classes. The CHS enrollment agreement specifies conditions for pro-rated tuition refund in cases where a student completely withdraws from the college during the academic term as described under the **Error! Reference source not found.** policy.

Students may petition for a "drop" instead of a "withdrawal" if there are extenuating circumstances.

Students are also permitted to withdraw from courses beginning from the 4th week of class to the end of the instructional period by submitting a Course Withdrawal Form signed by the student, course instructor, and the department head. Course withdrawal is documented by course grade of "W" with no credit noted on the permanent transcript in lieu of a grade. Students are limited to a maximum of four course withdrawals (up to 12 units in the four-year program). Note that course withdrawal may increase the time of completion to graduation of the standard four-year BS degree program.

The addition or removal of courses from the current course registration list and transcript is handled by submission of a Course Add/Drop Form or Course Withdrawal Form that must be signed by the student, course instructor, and department head before it is sent to the Registrar's Office for documentation on the student transcript.

Exam Policy

Course grades in which written examinations and assignments are the principal determinant of a student's semester grade may not be based on fewer than three exam/assignments plus a final exam. The purpose of this policy is to ensure that students have sufficient opportunities to achieve a passing grade in the course. Scheduled dates for final exams are announced via classroom instructors by the 12th week of classes and are staggered during Finals Week to minimize the occurrence of multiple exams on the same day. Make-up examinations are administered at the discretion and convenience of the course instructor.

Academic Integrity and Good Conduct Code of Honor

This policy governs standards of academic integrity and good conduct expected of students, faculty, and staff at the College of Health Sciences. It also establishes the operational plan for reporting and investigation of incidents, procedures of adjudication, and determination of sanctions pertaining to violations of academic integrity and personal misconduct.

The Academic Integrity and Good Conduct Policy of CNUCHS is defined by a Good Conduct Code of Honor that emphasizes the following four core principles which all students, faculty, and staff are expected to exemplify: Respect, Honesty and Integrity, Legal and Ethical Behavior, and Professionalism.

1. RESPECT

CNUCHS is dedicated to pursuit of education, scholarly activity, research, and service in an honorable and respectful manner. We respect one another, our supporters, our colleagues, and our community. We extend this respect to all persons, regardless of race, color, national origin, ancestry, citizenship, gender, gender identity, sexual orientation, age, religion, physical or mental disability, or veteran status. We promote good will within our diverse population and uphold the autonomy, dignity, and moral integrity of all persons. We respect the abilities, customs, beliefs, values, and opinions of others. As students of health sciences and members of the larger community, we exemplify respectful behavior both within and outside the college. The CNUCHS curriculum includes a variety of lectures and seminars on student success and leadership that discuss professional standards of personal ethics and teach students how to model respectful behavior and exemplify good conduct.

The following examples include acts that violate the respect principle of the Good Conduct Code of Honor: physical violence against any person, theft, vandalism, defacement, or destruction of property owned by or in the possession or control of CNUCHS or a member of the CNUCHS community, slander, libel, or defamation, and hate crimes against a member of the CNUCHS community. Acts described in the preceding sentence and similar types of personal misconduct that violate the respect principle of the Good Conduct Code of Honor are subject to disciplinary action whether they occur on campus or off campus or involve sponsored events and members of the CNUCHS community.

2. HONESTY AND INTEGRITY

CNUCHS is dedicated to conducting education, scholarly activity, research, and service with honesty and integrity, both on and off campus. Students have a duty to be truthful in academic and professional relationships. We are committed to teaching, scholarly activity, and professional growth in a community-based learning environment, in which all individuals are personally accountable and adhere to the high standards of honesty and integrity in the classroom and in the community. Cheating, plagiarism, commercial purchase of term paper assignments, and other forms of academic dishonesty are not tolerated. Academic work assigned to the individual student is to be based solely on the effort of the individual. Academic work assigned to a team of students is to be based on the individual contributions and collaboration

of all team members. All examinations, projects, and in or out of classroom assignments, whether individual or team-based, are expected to be performed and completed with the utmost degree of honesty and integrity.

The following examples include, but are not limited to, acts that violate the honesty and integrity principle of the Good Conduct Code of Honor and will be subject to academic disciplinary action: cheating; plagiarism; lack of attribution of cited material; claiming authorship of written material not so authored; commercial purchase of term papers submitted for assignments; claiming personal credit for research performed by others; claiming participation on a team project while not participating in the project; other forms of academic dishonesty; or, theft or destruction of academic materials owned by CNUCHS or a member of the CNUCHS community. The acts described in the preceding sentence and other acts in violation of the honesty and integrity principle are subject to disciplinary action whether they occur on or off campus.

3. LEGAL STANDARDS AND ETHICAL BEHAVIOR

CNUCHS is dedicated to promotion of behavior that follows legal and ethical standards in teaching, scholarly activity, research, and service. We are committed to following the law and professional practice standards. We comply with and adhere to all federal, state, and local laws and regulations. We encourage all to act ethically in developing and advocating a culture of consideration for codes of ethics, values, and moral convictions of those who could be affected by our decisions. Whenever appropriate, we seek advice and counsel to determine the right course of action and make the best decision on behalf of those who depend on us to do so.

The following examples include, but are not limited to, acts that violate the legal standards and ethical behavior principle of the Good Conduct Code of Honor and will be subject to academic disciplinary action or non-academic disciplinary action as appropriate: any behavior which violates federal, state, or local laws, or any University/College or formal affiliate policy, regulation, or rule; violation of the health-care related laws and regulations of the State of California; or, violation of the written standards of practice of schools and community organizations participating in the CNUCHS experiential education program. The acts described in the preceding sentence and other acts in violation of the legal standards and ethical behavior principle are subject to disciplinary action whether they occur on or off campus.

4. PROFESSIONALISM

CNUCHS is committed to providing teaching, scholarly activity, research, and service in a professional manner. We display professional attitudes, values, and behaviors in the classroom, at community partner organization sites, and within the broader community. We encourage teamwork and team-based learning that respects differing points of views of team members. At the same time we expect individual competence, performance, and accountability in a professional manner. We serve as positive role models by striving for excellence in the performance of our duties, while protecting the health and autonomy of colleagues and clients, and in serving individual, community, and societal needs.

The following examples include, but are not limited to, acts that violate the professionalism principle of the Good Conduct Code of Honor and will be subject to academic disciplinary action or non-academic disciplinary action as appropriate: any behavior which violates federal, state, or local laws, or any University/College or formal affiliate policy or rule; lewd, obscene, or indecent conduct on any University/College owned or controlled building or property; sexual harassment/misconduct; sexual harassment; unauthorized manufacture, sale, possession, or use of any illegal substance or substance that causes chemical dependence or impairment; hazing; bullying; physical or verbal abuse; or, possession of a deadly weapon. The acts described in the preceding sentence and other acts in violation of the professionalism principle are subject to disciplinary action whether they occur on or off campus.

Personal Accountability and Expectations

All students, faculty, and staff of the CNUCHS community are required to follow this Academic Integrity and Good Conduct Code of Honor. We are all personally responsible and accountable for maintaining an environment and culture of respect, honesty, integrity, legal and ethical behavior, and professionalism. This environment and culture is to be extended off campus when it involves a CNUCHS-related matter or a member of the CNUCHS community, including, but not limited to clients, preceptors, and volunteer sites participating in the CNUCHS experiential education program. It is understood that teamwork is necessary for ensuring and sustaining an environment and culture that support these core principles and related values.

As such, it is expected that all students, faculty, and staff of CNUCHS shall:

- Embrace the Academic Integrity and Good Conduct Code of Honor and its standards of expected behavior
- Uphold the Code of Honor in daily life both on and off-campus
- Promote the Code of Honor in an environment and culture of respect, honesty, integrity, legal and ethical behavior, and professionalism
- Report Academic Integrity and/or Good Conduct violations to the appropriate faculty and administrators
- Seek appropriate advice if unsure or in doubt
- Cooperate with investigations of violations of this Code of Honor

Consequences of Violations of the Academic Integrity and Good Conduct Code of Honor

Violations of the Code of Honor shall be reported and accorded due process according to the following procedures:

1. Students should report instances of academic dishonesty to the faculty member whose assignment or exam was compromised. The faculty member should evaluate the evidence and seriousness of the academic misconduct and hold a preliminary meeting with the accused student. For a first-time or minor infraction where the accused student admits misconduct, the faculty member has the option of setting a reasonable punishment (i.e., loss of points on an assignment) and/or mentoring the student on proper behavior with advisement of the consequences of repeated violation of the Code of Honor. If the accused student denies

misconduct in the face of sufficient evidence, the faculty member should refer the matter to the CNUCHS Committee on Academic Integrity and Good Conduct for documentation, investigation, and adjudication and disposition of the incident. Faculty members receiving such reports shall document all instances of academic dishonesty and Code of Honor violations in a confidential letter describing the incident and its resolution. The letter is to be forwarded to the Director of Student Success and Career Services who maintains confidential student records and communicates with appropriate university officials on a need-to-know basis.

2. Students and faculty should report instances of non-academic or personal misconduct to the Associate Dean of Student Affairs. The Associate Dean of Student Affairs is charged with handling the matter according to separate CNUCHS policies governing personal misconduct and crimes.

Non-Retaliation

CNUCHS does not tolerate retaliation against individuals who report dishonest, illegal, unethical, unprofessional, hateful, or otherwise inappropriate acts. Anyone who retaliates against reporting or whistle-blower individuals is in violation of the Code of Honor and is subject to appropriate disciplinary action for that violation including suspension and termination of employment or enrollment.

Complaint/ Grievance Policy

California Northstate University College of Health Sciences (CNUCHS) is committed to serving students by providing a rigorous academic program and the appropriate student services to promote success upon graduation. If students are dissatisfied with a decision, act, or condition at CNUCHS that is evidence-based, regarding negative, unjust, arbitrary, or discriminatory treatment they are encouraged to seek a remedy. Also see the Discrimination and Sexual Harassment and Sexual Violence Policies.

Early Resolution

Students who have a complaint relating to a College or University issue may wish to first discuss the matter with the relevant person or office. If this is not possible or the student is uncomfortable with a direct approach, the student may discuss the issue with a university official such as a faculty member, Director, or other neutral party. If the issue is not resolved through such an informal approach, the student may file an official written grievance using the Student Complaint or Grievance Form as soon as possible after the occurrence.

Formal Grievance

For grievances of an academic nature, students should direct their appeal to the Senior Associate Dean of Academic Affairs. See the Student Complaint or Grievance Form.

For grievances non-academic in nature, students should direct their appeal to the Associate Dean of Student Affairs. See the Student Complaint or Grievance Form.

Students filing an official written grievance must identify the specific College or University Policy that has been allegedly violated, cite specific evidence supporting the allegation, and suggest a possible approach to resolution.

As appropriate, the Senior Associate Dean for Academic Affairs or the Associate Dean for Student Affairs will convene an ad hoc committee of 3 faculty members or Directors. This committee will examine the grievance and recommend a remedy to the Senior Associate Dean or Associate Dean. The appropriate Associate Dean will provide a written response to the student with proposed resolution within 21 calendar days after receiving the written complaint. If the student is dissatisfied with the resolution, a further appeal can be made to the Dean of the College of Health Sciences within 7 calendar days after the formal written resolution. The Dean is charged with investigating the matter by examining all the relevant evidence. Upon due consideration, the Dean shall issue a final decision documented in a letter to the student and the relevant individuals involved in the matter. The Dean's decision is final.

A record of formal student complaints and their resolutions will be maintained by the Dean's Office.

For complaints related to accreditation standards, please see Accreditation Information on page 9 of this catalog.

CHS Course Descriptions

In alphabetical order by department

ANTH 210 Cultural Anthropology (3 cr)

This course introduces key concepts, methods and theoretical debates in cultural anthropology - a discipline that examines social patterns and practices across cultures. All stages of human life from birth to death are culturally influenced. Our lives emerge from programmed biological processes, yet we experience life within in a culturally rich world envisioned through identity, expectation and experience. We will explore various aspects of human life including perceptions of time and space, race, gender, marriage, sexuality, and family to examine how life stages are made meaningful and are given value through culture. We will also look at the historical development of social and economic systems, the role of language in culture and various systems of political power. We will conclude by looking through the anthropologist's lens at diverse concepts of body, health and illness. Summative work will emerge in Life Envisioned Projects and Life Envisioned Reflections that utilize the anthropologist's observation and ethnography toolkit. (Prerequisites: sophomore year standing or instructor approval)

ARMU 110 Art Appreciation (3 cr)

Artists document and interpret the human experience through creative expression recorded in drawings, painting, sculpture and other media. The history of art is also a catalog of human development from primitive origins to modern civilization. This course will enhance students' appreciation of art by exploring its many forms, interpretations, and creators. (Prerequisites: none)

ARMU 120 Music Appreciation (3 cr)

Students survey the evolution of western music from the middle ages to the present by identifying and analyzing musical compositions. The course explores basic elements of music, including structure of musical compositions as well as orchestral instrumentation and elements of world music culture as it relates to each stylistic period. For each musical period, students explore styles, characteristics, and major composers. Emphasis is placed on becoming a knowledgeable and discerning listener. (Prerequisites: none)

BIOL 110 Biology I – Inheritance, Evolution, & Diversity of Life (3 cr)

BIOL110 is an introductory course focusing on exploring the evolution and diversity of living organisms, including how organisms interact with each other and the environment. Emphasis is placed on relationships between living organisms and on organismal form and function. Companion laboratory course (BIOL110L) to be taken concomitantly with BIOL110 lecture course. (Prerequisites: none; co-requisite: BIOL110L)

BIOL 110L Biology I – Inheritance, Evolution, & Diversity of Life Laboratory (1 cr)

Companion laboratory course to be taken concomitantly with BIOL110 lecture course. (Prerequisites: BIOL110 if not taken concurrently)

BIOL 120 Biology II – Cells & Biomolecules (3 cr)

A continuation of BIOL110 that focuses on cell and molecular biology. Topics include cell organelles, cell physiology, membrane biology, bioenergetics, DNA, RNA, replication, gene transcription and regulation, protein synthesis, and protein structure and function. (Prerequisites: BIOL110 & CHEM110, or instructor approval)

BIOL 120L Biology II – Cells & Biomolecules Laboratory (1 cr)

A co-requisite of Bio 120 that focuses on current themes and techniques commonly used in cell and molecular biology laboratories. (Prerequisites: (Prerequisites: BIOL110 & CHEM110, or instructor approval); BIOL120 if not taken concurrently)

BIOL 210 Human Anatomy (3 cr)

This course provides a comprehensive overview of the gross anatomy of the human body. The architecture of the body and its structural relationships are presented with the use of three-dimensional models and software. NB: Organ dissections (kidney, heart, brain eye) will be performed by students who take the BIOL201L (laboratory component). However, should a student wish not to engage in dissection (e.g., ethical or religious concerns), the student may observe dissections performed by other students or study digital video demonstration of dissections. See BIOL210L Course Proposal for more information. (Prerequisites: BIOL110 & BIOL120, or instructor approval)

BIOL 210L Human Anatomy Laboratory (1 cr)

Companion laboratory course to be taken concurrently with BIOL210 lecture course. NB: Organ dissections (kidney, heart, brain eye) will be performed by students. However, should a student wish not to engage in dissection (e.g., ethical or religious concerns), he/she may observe dissections performed by other students or study digital video demonstration of dissections. (Prerequisites: BIOL210 if not taken concurrently)

BIOL 220 Human Physiology (3 cr)

The science of human physiology is presented in broad survey. Questions addressed by the course include: How does the body function at a mechanistic level? What are the quantitative principles of homeostasis compatible with life? A systems-based approach is used to examine the detailed function of the major organs and compartments of the body. (Prerequisites: BIOL210 & BIOL210L, or instructor approval)

BIOL 220L Human Physiology Laboratory (1 cr)

Companion physiology laboratory course to be taken concurrently with BIOL220 lecture course. This course provides a hands-on experience in applying physiological concepts and practices in addressing human health. (Prerequisites: BIOL210 & BIOL210L; BIOL220, if not taken concurrently)

BIOL 230 Genetics – From Genes to Genomes (3 cr)

Genetics deals with the structure and role of genes as determinants of inheritance (genotype) and biological function (phenotype) of all living organisms. The course explores the intricacies of gene function as elucidated from the structure of DNA to the organization and evolution of the genome – the entire complement of genes for a given organism. (Prerequisites: BIOL120 or instructor approval)

BIOL 240 Essentials of Biochemistry (3 cr)

Essentials of Biochemistry will focus on discovering the biological aspects of chemistry. Throughout the semester students will focus on fundamental topics in relation to the molecular design of life and transducing and storing energy. Specifically, students will build their foundations with macromolecule structure and function, energy storage and metabolism, synthesis of the molecules of life and the experimental methods used to study these components. (Prerequisites: BIOL110, BIOL120, CHEM110, & CHEM120)

BIOL 310 General Microbiology (3 cr)

This course is a general introduction to the study of microscopic forms of life including viruses, bacteria, protozoa, fungi, and algae. (Prerequisites: BIOL120, or instructor approval; co-requisite: BIOL310L)

BIOL 310L General Microbiology Laboratory (1 cr)

Companion laboratory course to be taken concurrently with BIOL310 lecture course. (Prerequisites: BIOL310 if not take together)

BIOL 320 Medical Microbiology & Epidemiology (3 cr)

A continuation of microbiology discussed in BIOL320 with a specific focus on microorganisms associated with infectious diseases of biomedical concern such as influenza, measles, methicillin-resistant staphylococcus, and HIV-AIDS. Epidemiology is the study of how microbial infections originate and spread within a population, and how they are contained. (Prerequisites: BIOL310 or instructor approval)

BIOL 330 Human Nutrition (3 cr)

(Formerly titled "Essentials of Nutrition") This course describes the nutrient requirements of the human body and the principles that define the relationship between diet and good health. (Prerequisites: CHEM310 or instructor approval)

BIOL 340 Immunology (3 cr)

Immunology is the study of the innate and adaptive capacities of the immune system as a complex cellular network that functions in the body's response to exposure to foreign substances (antigens) and organisms. The immune system exhibits a wide variety of cell-mediated defensive functions and antibody-mediated protective functions. It is also involved in pathological conditions such as septic shock and autoimmune disorders that are also covered in this course. (Prerequisites: BIOL220 or instructor approval)

BIOL 350 Current Topics in Biology and Medicine (3 cr)

This course surveys important developments in biology and medicine with regard to their present and future implications. Discussions may include such topics as discovery of DNA and founding of molecular biology, eugenics, biotechnology, human genome sequencing, genetic fingerprinting, and gene therapy. Special attention will be given to ethical issues

concerning the practice of medicine and the creation and application of biotechnology. (Prerequisites: sophomore year standing or instructor approval)

BIOL 410 Neuroscience (3 cr)

Neuroscience is the study of the cellular and molecular basis of nervous system function. Neurons and associated glial cells form an electrical and chemical signaling network that underlies sensory perception, muscle contraction, and central information processing in the brain. This course provides an in-depth overview of neurobiology relevant to the physiological function of peripheral nerves and central nervous system (brain and spinal cord). (Prerequisites: BIOL120 & CHEM120 both with a C or better)

BIOL 420 Advanced Cell and Molecular Biology (3 cr)

This course covers a variety of advanced topics in cell biology such as mechanisms of membrane transport, signal transduction, bioenergetics, cell cycle regulation, cell migration, gene expression, cancer, and cell death mechanisms. (Prerequisites: BIOL120; recommended courses: BIOL210 & CHEM310)

BIOL 430 Pharmacology (3 cr)

This course surveys major classes of drugs in clinical use and also introduces the science of modern drug discovery. A drug is broadly defined as any chemical that affects physiological function. Drugs that have been clinically tested and approved for human use are also powerful chemical tools used to manage symptoms and treat disease. The science of pharmacology is concerned with mechanisms of drug action at various levels from the whole organism to the cellular level to molecular interactions. (Prerequisites: BIOL220 & CHEM310, or instructor approval)

BIOL 440 Pathophysiology (3 cr)

Pathology refers to the general study of disease. The science of pathophysiology seeks to understand the physiological bases of the origin and progression of disease. This course also covers advanced methods used to detect and diagnose diseases such as histological examination of tissue samples and biochemical analysis of biomarkers. (Prerequisites: BIOL220 & BIOL420 or instructor approval)

BIOL 450 Human Genetics and Genomics (3 cr)

This course is an advanced course in human genetics which will build upon the fundamentals of Mendelian genetics by examining the chromosomal basis of inheritance and variation, complex inheritance patterns and advances in DNA technology and genomics. In particular, we will explore important ethical questions in addition to the benefits and limitations surrounding the field of human genetics. (Prerequisites: BIOL230 or instructor approval)

BIOL 460 Human Functional Anatomy (3 cr)

This course provides a comprehensive and integrative examination of the structure, function and evolution of the human body through integration of several fields of study. Structures and their organization are interpreted in terms of embryological, developmental, biomechanical and phylogenetic properties. Although the course requires rigorous, focused effort, its pay-off comes from a solid understanding of the whole organism's biology. The course reduces the number of unexplained facts otherwise

encountered in descriptive anatomy, in favor of an in-depth study of human form and function. (Prerequisites: successful completion of C grade or better of an introductory course in whole organism biology.)

CHEM 100 Principles of General Chemistry (1 cr)

A course introducing the basic principles of chemistry in preparation for general chemistry. Topics include basic anatomic structure, concepts of bonding, electronegativity, molecular geometry, chemical equations, stoichiometry, concentration, and acids/bases. (Prerequisites: none)

CHEM110 General Chemistry I (3 cr)

This course covers the electronic structure of atoms, periodic table, quantum theory, atomic bonding, molecular orbitals, principles of molecular structure, and chemical reactions. Students are introduced to the diversity of inorganic and organic chemical interactions that underlie the physical substance of matter. (Prerequisites: MATH110; co-requisite: CHEM110L)

CHEM 110L General Chemistry I Laboratory (1 cr)

Companion laboratory course to be taken concurrently with CHEM110 lecture course. (Prerequisites: CHEM110 if not taken concurrently)

CHEM 120 General Chemistry II (3 cr)

The second semester of general chemistry investigates the guiding principles of the behavior of chemical systems including thermodynamics, kinetics, equilibrium, electrochemistry, and radioactivity. (Prerequisites: CHEM110 & CHEM110L)

CHEM 120L General Chemistry II Laboratory (1 cr)

Companion laboratory course to be taken concurrently with CHEM120 lecture course. (Prerequisites: CHEM120 if not taken concurrently)

CHEM 200 Principles of Organic Chemistry (1 cr)

A course highlighting and extending the basic principles from general chemistry imperative to organic chemistry. Topics include extended geometry, basic nomenclature, molecular orbitals, resonance, electronegativity, polarity, acids, bases, pKa, kinetics, and thermodynamics. (Prerequisites: CHEM120)

CHEM 210 Organic Chemistry I (3 cr)

This course covers the chemistry of major classes of organic molecules and functional groups such as halogens, amines, ethers, esters, and amides. Organic compounds are broadly defined as molecules that contain carbon, an extremely versatile element in terms of its chemistry. (Prerequisites: CHEM120 & CHEM120L)

CHEM 220 Organic Chemistry II (3 cr)

A continuation of CHEM210 that expands upon organic reactions, organic synthesis, and biomolecules relevant to biology and medicine. (Prerequisites: CHEM210)

CHEM 220L Organic Chemistry II Laboratory (2 cr)

Companion laboratory course to be taken concurrently with CHEM220 lecture course. (Prerequisites: CHEM220 if not taken concurrently)

CHEM 220R Organic Chemistry II Recitation (1 cr)

A companion course to the second semester of a two semester course in organic chemistry. The recitation course will focus on reinforcing the conceptual frameworks and developing a greater understanding of the topics covered in CHEM 220. In addition, emphasis will be placed on improving approaches to studying and exam taking strategies. (Prerequisite: CHEM 210; co-requisite of CHEM 220)

CHEM 310 Biochemistry (3 cr)

The science of biochemistry is focused on chemistry specific to living organisms. Beginning with a detailed description of the structure of biomolecules and macromolecules such as DNA, amino acids, proteins, carbohydrates, and lipids, major topics of the course include enzyme mechanism and kinetics, metabolic pathways of biosynthesis and catabolism, and physical methods of analysis used in biochemical research. (Prerequisites: CHEM220 or instructor approval)

COLL 100 Student Success Seminar (2 cr)

The purpose of this course is to guide first-year students in a successful transition from high school to college. Topics include review of academic policies, university services, copyright laws and plagiarism, university etiquette, strategies for studying and test-taking, career advising, help resources, and balancing social life with academics. (Prerequisite: none)

COLL 105 Healthcare Student Success Seminar (1 cr)

The purpose of this course is to guide first-year combined program students in a successful transition from high school to college. Students will: participate in several self-reflection activities; acquire college learning skills; examine careers in the healthcare industry; learn about resources available to them and policies that affect them. (Prerequisite: none)

COLL 110 Medical Terminology (2 cr)

COLL110 is an online course which is a basic review of medical terms and technical jargon commonly encountered in medical school and in the health science workplace. *Students will spend approximately 30 hours using computer-based instruction via learning software *Instruction delivery will be either hybrid (in-class and online) or fully online. (Prerequisite: none)

COLL 210 Foundations of Service Learning (2 cr)

The course provides frameworks, theories, experiential learning, and models for to prepare students for service learning experiences with community organizations. Students achieve learning outcomes through critical reflection and interactive activities meant to prepare students for social accountability and cultural competence development. (Prerequisites: none)

COLL 220 Service Learning Practicum (2 cr)

The course provides support for students in conjunction with their service-learning placement with a previously identified community partner. Some discussions will review frameworks, theories, experiential learning, and models in order for them to integrate these into their service-learning experience. Student work addresses the needs of the community, as identified through collaboration with community partners, while meeting learning outcomes through critical reflection meant to prepare students for social accountability and cultural competence development. Students who do not fulfill

the volunteer requirement for any reason, including but not limited to tardiness, work ethic, or absenteeism, will not receive credit for the course. (Prerequisite: COLL210)

COLL 310 Scholarly Project I / Research Methods (3 cr)

This class introduces students to methodology used in scholarly research. Topics include the scientific method of hypothesis formulation and experimental design, information literacy, database sources and library skills, experimental design, data collection and analysis, reading and writing professional journal articles, and scholarly presentations in poster and seminar format. (Prerequisite: junior year standing or year two of 3+4 pathway)

COLL 320 Scholarly Project II (3 cr)

Research methods introduced in COLL310 are used to design and execute an independent research project. (Prerequisites: COLL310)

COLL 420 Leadership (3 cr)

Students will learn about tools needed to be a leader and to exercise leadership effectively in a variety of circumstances. Teaching methodology will be in the form of inquiry-style discussions and thought-provoking conversation. (Prerequisites: junior year standing or completion of 57 credits; and good academic standing.)

COLL 490a Peer-Assistant Learning (1-3 cr)

Formerly titled "Teaching Assistant") Students may elect to receive official credit on their transcripts for work as teaching assistants in laboratory courses or for tutoring other students who need additional support. Students electing this course must be approved by a faculty member who will supervise the teaching activity. Three hours of work must be completed per week for the semester to earn the equivalent of 1 credit unit. Course may be taken more than once, but no more than 2 units may be applied to the degree or program requirement. (Grading: P/NP only. Prerequisites: instructor approval)

COLL 490b Research Experience (1-3 cr)

COLL 490b provides students with training and engagement in academic research. Students receive official credit on their transcripts for work as research assistants in faculty research groups. Students electing this course must be approved by a faculty member who will supervise the research activity. The course may be taken more than once, but no more than 2 units may be applied to degree or program requirements. Over the course of the semester, 45 hours of work must be completed during the semester to earn the equivalent of 1 credit unit. (Grading: P/NP only. Prerequisites: instructor approval)

COLL 490c Student Services Assistant (1-3 cr)

Students will receive official credit on their transcripts for work performed as a Student Services Assistant. Students must be approved by a faculty member who will supervise them. Hours are variable. Course may be taken more than once, but no more than 2 units may be applied to the degree or program requirement. (Grading: P/NP only. Prerequisites: Approval of the supervising faculty member)

COLL 430 Service Learning for Health Care Professionals (2 cr)

(Formerly COLL530 and titled Community Outreach Project) This course provides frameworks, theories, experiential learning, and models for students to understand their service learning experience and support them during their placement with a community partner. Student work addresses the needs of the community, as identified through collaboration with community partners, while meeting learning outcomes through critical reflection meant to prepare students for social accountability and cultural competence development. A background check (fee varies) may be required by community partners. (Prerequisites: Passage of background check if required by community partner)

COLL 440 Service Learning Practicum for Health Care Professionals (2 cr)

(Formerly COLL540) This service learning course is a continuation of COLL430. (Prerequisites: None)

COMM 110 Oral Communication (3 cr)

This course allows student to learn and practice the art of oral communication in a variety of formats commonly encountered in professional settings: small group discussion and conferences, teaching, presentations accompanied by visual information, and formal speeches. Practice exercises with feedback from the instructor and student peers will help each student to improve delivery and confidence in speaking before groups. (Prerequisites: none)

ECON 210 Macroeconomics (3 cr)

Macroeconomics is concerned with the behavior of the whole economy at a national or global level. The significance of broad measures of economic activity and the influence of governmental policies such as monetary policy, fiscal policy, spending, and taxation are a few of the topics covered in this course. (Prerequisites: none)

ECON 220 Microeconomics (3 cr)

Microeconomics deals with the economic relationships of supply and demand for goods and services within a limited market. Sound understanding of the impact of microeconomic factors such as pricing and competition is important to the normal operation of any business as well as the healthcare marketplace. (Prerequisites: none)

ENGL 110 English Composition I (3 cr)

This purpose of this course is to ensure that all students develop the ability to write lucid and logically structured prose that meets accepted standards of business correspondence and professional publications and are able to effectively use word processing software and online writing tools. Diagnostic writing exercises will be used to assess students' basic skills of English grammar and vocabulary in order to customize instruction to level of skill. Increasingly complex assignments on topics relevant to health science will be used to establish and refine writing competency. (Prerequisites: Passing score on English placement exam, or satisfying SAT or ACT score)

ENGL 115 Research and Writing (1 cr)

A one unit writing course, English 115 invites students to explore contemporary issues through critical thought, reasoning, and research. Students will learn to use the CNU

library, develop research skills, critical analysis skills, and engage in the research writing process. Students will craft a college-level research paper and develop a professional oral presentation based on a topic of their choice.

ENGL 120 English Composition II (3 cr)

A continuation of ENGL110 that emphasizes originality, definition of and avoidance of plagiarism, proper methods of source citation, and further development of clarity, presentation, and writing style. (Prerequisites: ENGL110 or High Passing score on English placement exam)

ENGL 120L English 120 Composition II Writing Lab (1 cr)

English 120 Composition Writing Lab gives students the opportunity to strengthen their academic writing skills in a supportive and interactive environment. Students will focus on creating coherent and organized prose through review and application of grammar, sentence and paragraph construction, thesis formulation, and vocabulary development. Enrollment in ENGL120L is required of all students who did not meet the Developed Category of the English 120 Writing Assessment Rubric. (Co-requisite: ENGL120)

ENGL 310 Professional Communication Seminar (2 cr)

This course is an elective option for students who wish to improve written and oral communication skills useful for advancement in the health professions. The course focuses on building reading, writing, and oral skills in a variety of contexts, including written composition of personal statements for medical school applications, interview techniques, and critical reasoning skills applicable to reading comprehension of literature on standardized tests such as the MCAT exam. (Prerequisites: ENGL110 or ENGL120, or instructor approval)

GOVT 110 US Government (3 cr)

This course reviews the organization and principles of U.S. government at the federal, state, and local levels. It also takes an in-depth look at governmental agencies responsible for oversight and administration of matters related to health science and healthcare. (Prerequisites: none)

HIST 310 History of Medicine (3 cr)

Beginning with crude concepts of how the body works as developed by Hippocrates, this course will follow the story of how medicine evolved from myth and superstition into a modern science. (Prerequisites: sophomore year standing or instructor approval)

HUMN 210 Still Human: Science, Technology, and Culture (3 cr)

In this course, students critically engage two sprawling, dominant drivers of individual, cultural, and societal changes: science and technology. Students will explore the manifold ways that individuals and institutions, as well as sciences and technologies, shape one another. Humanities 210 students will not merely be passive observers of such changes; they will parse the normative fine print of scientific developments and emerging technologies to understand where and how to add their voices and perspectives. The aims will be arguments; the products will be essays, debates, and multi-media presentations. (Prerequisites: ENGL110 or instructor approval)

HUMN 220 Critically Engaging Contemporary Concerns (1 cr)

This course provides students with the opportunity to discuss and debate dissimilar, spirited, and considered perspectives, HUMN 220 invites critical engagement on significant contemporary topics. The themes will relate to current events, matters of regional, cultural, and international significance, subjects of moral import, scientific controversies, and issues that draw from the health sciences but have import far beyond the classroom. Course may be taken more than once, but no more than 3 units may be applied to the degree or program requirement. 3-5 hours of work must be completed per week for the semester to earn the equivalent of 1 credit unit. (Prerequisites: ENGL110 or instructor approval)

HUMN 410 Critical Analysis and Reasoning Contemporary Issues in Science and Technology (3 cr)

This course invites critical engagement on significant contemporary topics through textual analysis of academic literature from the humanities and social sciences. Readings draw from current, and sometimes controversial, topics related to health sciences, bioethics, medical ethics, medicine, pharmacology, and culture. Students will refine their reading comprehension skills and further develop their abilities to reason within and beyond the texts themselves. Through journal responses, short essays, discussions and debates, and multi-media presentations, students will demonstrate their abilities to engage critically with contemporary issues in science, technology, and culture. (Prerequisites: ENGL110 & ENGL120, or instructor approval; recommended courses: introductory philosophy, history, or sociology courses.)

MATH 120 Applied Statistics (3 cr)

This course provides a comprehensive overview of basic statistics concepts and their application to biomedical sciences. It explains general principles of data analysis and statistical terminology. At the end of the course students will be able to carry out basic statistical analysis and to interpret the results. (Prerequisites: none)

MATH 125 Pre-Calculus (3 cr)

This course reviews and elaborates upon mathematics essential for the study of calculus. Specific topics include polynomials, trigonometric functions, exponential and logarithmic functions, infinite series, and complex numbers. This course is required to be taken by students who need a thorough review of this material as determined by performance on a mandatory math placement exam given to all first-year students before the start of the Fall semester. Students who do well on the placement exam may skip this course and enroll directly in MATH130 Differential and Integral Calculus offered in the Spring. (Prerequisites: none. recommended courses: To be successful in this course, students must have satisfactorily passed the equivalent of Algebra, Geometry, Algebra II, and Trigonometry)

MATH 130 Differential and Integral Calculus (3 cr)

Calculus is a powerful mathematical approach used to solve many complex problems that concern rate of change and multi-dimensional objects. It has numerous applications in diverse fields such as physics, chemistry, biology, economics, and business. Many professional schools in health sciences and business require at least one semester of calculus. (Prerequisites: MATH125 or passing math placement exam)

MEDS 410 Standardized Patients Clinical Experience (2 cr)

(Formerly MEDS500) This course is designed to introduce pre-medical post-baccalaureate students to the clinical experience from the patient's perspective. Students will have the valuable opportunity to interact with medical students, clinical faculty members and community physicians. The course consists of both didactic lectures and experiential learning. The didactic training focuses on communication, ethics, culture competency, related medical terminology and case studies. Experiential learning is in the form of role-play as standardized patients. This unique clinical experience will prepare students to better understand the needs of patients in patient centered health care, and enrich the clinical experience for the premed post baccalaureate students. As an optional elective, participation in this course is offered on a voluntary basis. (Prerequisites: PMPB student; review and agree to participate in lab activities listed on Standardized Patient Consent Form. Consent forms are available through Academic Advising)

MEDS 420 Standardized Patients Clinical Experience (2 cr)

(Formerly MEDS510) This course is designed to introduce pre-medical students to the clinical experience from the patient's perspective, and provide an introduction to the healthcare profession environment. Students will have the valuable opportunity to interact with medical students, clinical faculty members and community healthcare professionals. The course consists of both didactic lectures and experiential learning. The didactic training focuses on communication, ethics, cultural competency, related medical terminology, case studies, the current and future healthcare profession environment, and an introduction to health profession leadership and advocacy. Experiential learning is in the form of role-play as standardized patients, pre-lab medical overviews, and an off campus advocacy in action experience. This unique clinical experience will prepare students to better understand the needs of patient centered health care, provide a foundation of the healthcare environment in the U.S., introduce students to health profession administration, and overall enrich the pre-professional student clinical experience. (Prerequisites: PMPB student; review and agree to participate in lab activities listed on Standardized Patient Consent Form. Consent forms are available through Academic Advising)

PHIL 310 Philosophy and Contemporary Life (3 cr)

Philosophy attempts to elucidate abstract topics at a fundamental level. It uses logic and reason to address big questions such as issues of existence, morality, and ethics that are essentially unanswerable in exact form. The classical work of major historical figures in philosophy is presented and discussed to help students sharpen their intellectual skills and form their own philosophy. (Prerequisites: ENGL120)

PHLT 310 Global Health (3 cr)

This course examines the status of human health and systems of healthcare delivery across the world. Reasons for disparity in availability health services and outcomes are critically analyzed. The role of international organizations dedicated to improvement of global health is also covered. (Prerequisites: junior year standing or instructor approval)

PHLT 320 Healthcare Policy (3 cr)

Current healthcare policy is examined in light of recent research and debate and the following question is asked: What policies and procedures work best to keep the human population healthy? (Prerequisites: junior year standing or instructor approval)

PHLT 410 Mental Health Services (3 cr)

The tragedy and realities of mental illness require special health services. This course covers issues specific to this field of health care including psychiatric treatment, depression, suicide, drug addiction, alcoholism, and neurodegenerative diseases such as Alzheimer's disease. (Prerequisites: senior year standing or instructor approval)

PHYS 210 Physics I (3 cr)

Physics describes universal laws of nature that underlie the workings of the universe. The first part of the two-semester course describes the theory and quantitative relationships of motion, force, energy, gravity, light, optics, and sound. (Prerequisites: MATH130 or instructor approval)

PHYS 210L Physics I Laboratory (1 cr)

Companion laboratory course to be taken concurrently with PHYS210 lecture course. (Prerequisites: PHYS210 if not taken concurrently)

PHYS 220 Physics II (3 cr)

A continuation of PHYS210 that covers electromagnetism, electronics, solid-state physics, quantum theory, nuclear physics, particle physics, and relativity. (Prerequisites: PHYS210 or instructor approval)

PHYS 220L Physics II Laboratory (1 cr)

Companion laboratory course to be taken concurrently with PHYS220 lecture course. (Prerequisites: PHYS220 if not taken concurrently)

PSYC 110 General Psychology (3 cr)

The science of human psychology is presented in broad survey. The focus is on perception, cognition, personality and social psychology, and biological aspects of behavior. This introductory course provides a comprehensive introduction and overview of the field which facilitates study of more specialized topics. (Prerequisites: none)

PSYC 220 Social Psychology (3 cr)

Social psychology is concerned with the influence of society or other people on the thoughts, feelings, and behavior of any given person. Topics of social behavior include interpersonal attraction and relationship development, social perception, social cognition, personal attitudes, persuasion, social identity, gender identity, as well as prejudice and discrimination. (Prerequisites: PSYC110)

PSYC 310 Developmental Psychology (3 cr)

Developmental psychology is concerned with the description and understanding of distinct human behavior at various stages of life such as infancy, adolescence, and adulthood. Specific topics include emotional development, moral development, stereotype development, and personality development. (Prerequisites: PSYC 110)

PSYC 320 Health Psychology (3 cr)

Health psychology is the study of how health influences mental function and behavior and vice versa. The effect of illness, stress, and exercise are examples of external influences and controllable behaviors that can influence a person's psychological profile. The course will also explore factors affecting health maintenance and illness recovery. (Prerequisites: PSYC110)

PSYC 410 Abnormal Psychology (3 cr)

Abnormal psychology is concerned with the basis of altered behavior associated with mental illness. Relevant topics include psychiatric conditions such as mania, depression, psychosis, obsessive-compulsive behavior, and autism. Theories of causation and strategies of various therapies will also be presented. (Prerequisites: PSYC110)

PSYC 420 Cognitive Psychology (3 cr)

Cognitive psychology is concerned with information processing by the brain. This field of research studies how humans make decisions and behave according to the influence of sensory input, experience, memory, and belief. It also addresses complex cognitive phenomena such as imagery, attention, memory, learning, language, problem solving and creativity. (Prerequisites: PSYC110)

PSYC 430 Psychology for Healthcare Practitioners (3 cr)

This course examines the discipline of health psychology as it relates to the practice of healthcare. Students will reinforce foundational concepts in general psychology and further investigate the psychological impact of disease. Emphasis will be placed on a biopsychosocial and cross-cultural perspective in the examination, prevention, etiology, diagnosis, and treatment of illness. As appropriate for the condition being discussed, students will focus on stress and health, and coping strategies. Finally, students will determine the roles of health care systems as well as health policy formation and implementation in affecting healthcare practice.

SEMR 410 Health Professions Seminar I (1 cr)

(Formerly titled "COLL510 Health Professions Seminar Course") This undergraduate seminar is designed as a career-

building workshop in the form of a professional lecture series. The 1-hour sessions cover a variety of topics of interest to pre-medical students such as research seminars, career talks by CNU faculty and administrators, group discussions on pertinent research articles and recent editorials published in medical journals. (Prerequisites: None)

SEMR 420 Health Professions Seminar II (1 cr)

(Formerly titled "COLL520 Health Professions Seminar and Workshop") Health Professions Seminar II is a continuation of SEMR410. It is designed as a career-building workshop in the form of a professional lecture series. The 1-hour Friday sessions cover a variety of topics of interest to pre-medical students such as research seminars, career talks by CNU faculty and administrators, group discussions on pertinent research articles and recent editorials published in medical journals. (Prerequisites: None)

SOCL 110 Sociology (3 cr)

Sociology uses scientific methods to investigate the logical basis of human social behavior. The effect of gender, family upbringing, and education on a person's social behavior are typical examples of sociological inquiry. The conceptual framework of sociology is very useful in addressing issues of health disparity and effectiveness of health care delivery.

SOCL 410 Sociology for Health Practitioners (3 cr)

Sociology for Healthcare Professionals undertakes a detailed examination of the biopsychosocial contributions to the health sciences. Through lectures, readings, and class discussions, students will engage and reflect on health and illness as it is portrayed in the U.S. This course critically examines how health and illness are defined and socially constructed, experiences of illness, training and hierarchies of health care workers, medicalization and social control, and the ethical issues surrounding such topics. Application of theories and concepts to real life situations and practical applications are emphasized. (Prerequisites: instructor approval.)

CHS 2018-2019 Academic Calendar

California Northstate University College of Health Sciences		
2018-2019 Academic Calendar		
Description	Start Date	End Date
SUMMER 2018		
Student Orientation	Monday, June 11, 2018	Friday, June 15, 2018
Summer Academic Term	Wednesday, June 13, 2018	Friday, August 3, 2018
Instructional Period	Wednesday, June 13, 2018	Wednesday, August 1, 2018
Admission Drop Deadline	Monday, June 18, 2018	
Midterm Exam	Wednesday, July 4, 2018	
Final Exams	Thursday, August 2, 2018	Friday, August 3, 2018
Final Grades Due	Monday, August 6, 2018	
Remediation Period	Tuesday, August 7, 2018	Thursday, August 23, 2018
Spring Remediation Grades Due	Friday, August 24, 2018	
FALL 2018		
Student Orientation	Thursday, August 23, 2018	Friday, August 24, 2018
Fall Academic Semester	Monday, August 27, 2018	Friday, December 14, 2018
Instructional Period	Monday, August 27, 2018	Friday, December 7, 2018
Holiday — Labor Day	Monday, September 3, 2018	
Admission Drop Deadline	Monday, September 10, 2018	
Holiday — Thanksgiving Break	Thursday, November 22, 2018	Friday, November 23, 2018
Final Exams	Monday, December 10, 2018	Friday, December 14, 2018
Final Grades Due	Wednesday, December 19, 2018	
Winter Break	Monday, December 17, 2018	Friday, January 11, 2019
Remediation Period	Monday, December 17, 2018	Wednesday, January 2, 2019
Fall Remediation Grades Due	Friday, January 4, 2019	
SPRING 2019		
New Student Orientation	Thursday, January 17, 2019	Friday, January 18, 2019
Holiday — Martin Luther King Jr.	Monday, January 21, 2019	
Spring Academic Semester	Tuesday, January 22, 2019	Friday, May 17, 2019
Instructional Period	Tuesday, January 22, 2019	Friday, May 10, 2019
Admission Drop Deadline	Monday, February 4, 2019	
Holiday — President's Day	Friday, February 16, 2019	
Spring Break	Monday, March 18, 2019	Friday, March 22, 2019
Graduation Ceremony	Saturday, May 11, 2019	
Final Exams	Monday, May 13, 2019	Friday, May 17, 2019
Final Grades Due	Wednesday, May 22, 2019	
Remediation Period	Monday, May 20, 2019	Friday, May 31, 2019
Spring Remediation Grades Due	Tuesday, June 4, 2019	

FINANCIAL SERVICES & DISCLOSURES

Financial Aid

Financial Aid Contact Information

Student Financial Aid Office
 9700 West Taron Drive, Elk Grove, CA 95757
 Phone: (916) 686-8784
 Fax: (916) 686-8145
 E-mail: jhansana@cnsu.edu
 URL: <http://www.cnsu.edu/student-financial-aid-offices>

What is Financial Aid?

Financial Aid is defined as assistance provided for the purpose of paying educational expenses. Assistance may come from various sources, and be of varying types:

- **Grants:** generally, monies from a government program that do NOT require repayment.
- **Scholarships:** generally, monies from an institution, private organization, or government programs that do NOT require repayment.
- **Loans:** generally, monies from private lenders or government programs that MUST BE repaid.

Financial Aid Eligibility?

Eligibility for financial aid is determined by three important factors:

1. **Enrollment Status:** an eligible financial aid recipient is one that is enrolled and attending at a minimum of 6 credits per semester, or otherwise considered to be enrolled at least half-time. This is subject to verification with the Office of the Registrar.
2. **Satisfactory Academic Progress:** an eligible financial aid recipient is one that continues to meet the academic progression requirements of the program. This is subject to verification with the Office of the Registrar.
 - a. Verification of adherence to progression requirements is completed as the end of each academic year, or more frequently on a case-by-case basis.
3. **Cost of Attendance:** an eligible financial aid recipient is one who's total financial aid award package does not exceed his/her applicable cost of attendance for the period of enrollment.

How to Apply for Financial Aid?

Ensure all required forms and applications are received by the appropriate departments.

1. **Financial Options Statement:** the Financial Aid department requires this form from all enrolled students each semester to identify his/her preferred financing method for payment of tuition and fees.
2. **Student Financial Aid Application:** the Financial Aid department requires this form from all enrolled students each academic year who are financing tuition and fees with a private educational loan.
3. **Private Educational Loan Promissory Note:** the Financial Aid department requires completion of this application for all enrolled students who desire to use

a private educational loan to assist with financing of educational expenses, **OR**

4. **Installment Payment Plan Contract:** the Business Office requires completion of a contract for all enrolled students who desire to use an installment payment plan to pay tuition and fees.

The [CNU Student Financial Aid Tools](#) webpage provides a wealth of information to manage finances, understand loan repayment options, learn about types of loans available, and much more.

Types of Financial Assistance

California Northstate University offers the following competitive educational financing options for students:

- Private Educational Loans
- Payment Plan Options
- Grants and Scholarships

Private Educational Loans

There are many private loan lenders available for students. The Student Financial Aid Office provides available programs listed on the ELM Select website at:
<https://www.elmselect.com/link/query?schoolId=473>

Payment Plan Options

CNU offers assistance to any student who is interested in paying semester tuition and fees over a series of months.

- [TuitionEase Payment Plan](#)

Grants and Scholarships

Grants and scholarships are monies that do not require payment – they are free money. Grants are often need-based, while scholarships are usually merit-based.

List of some scholarship databases:

- [CareerOneStop](#)
- [FinAid!](#)
- [Peterson's](#)
- [fastweb!](#)
- [Scholarship Search by Sallie Mae](#)
- [Scholarship Search by Best Colleges](#)

In the past, several companies have helped California Northstate University students finance their education through scholarships. Some of these companies include: Albertson's, CVS, Pharmacist Mutual Insurance Company, Safeway, SuperValu Drug Stores, and Walgreen's. These scholarships range from \$500 to \$2,000. Criteria for scholarships vary by the specific donor and are usually awarded in the late fall and early spring.

Financial Disclosures

Payment and Prerequisite Due Dates and Options

All tuition and fees described in the Tuition and Fees sections of this catalog, are due in full in accordance with the respective notification as identified below:

- New incoming students: Payment schedule is identified on the last page of the Student Enrollment Agreement;
- Continuing students: Payment is due 10 days prior to the first official day of class or the date listed on the Tuition and Fee Notification from the Business Office.

As an alternative to payment in cash, the student may (1) provide satisfactory written creditor approved loan documentation to the University, or (2) apply for one of the installment payment plans offered by the University, either of which the University may within its complete discretion accept as an alternative to cash payment for the above tuition and fees, excluding the nonrefundable enrollment fee deposit and the student health insurance premium. If either of these two alternative payment options is chosen by the student and approved by the University instead of payment in cash, the student must make the appropriate arrangements with the University for payment in accord with these options no later than thirty (30) days before the applicable due date described on the last page of the Enrollment Agreement. Failure to make full payment, or alternative loan or installment payment arrangements, by the due dates described in the Enrollment Agreement will subject the defaulting incoming student to forfeiture of the student's seat and the defaulting continuing student to dismissal or interest on the balance due at 10% per year until paid.

Student's Right to Cancel and Refund

You have the right to cancel the Student Enrollment Agreement until 12:01 AM on the first calendar day after the first classroom instruction session attended, or until 12:01 AM on the eighth calendar day after a student has signed the Enrollment Agreement, whichever is later.

If a student cancels the Enrollment Agreement, the University will refund the amount of tuition that was paid; not including nonrefundable enrollment fees identified in the Tuition and Fees table for each college, within forty five (45) days after a notice of cancellation is received by the University. The student health insurance premium in the estimated amount of \$3,200.00 is set by the health plan, which is an outside provider, and will not be refunded unless the health plan provides a refund and, if so, then only according to the plan's terms.

Cancellation shall occur when you give written notice of cancellation to the University at the University's address shown at the top of the first page of the Enrollment Agreement. You can do this by hand delivery, email, facsimile, or mail. Written notice of cancellation sent by hand delivery, email, or facsimile is effective upon receipt by the University. Written notice of cancellation sent by mail is effective when

deposited in the mail properly addressed with postage prepaid.

Student's Right to Withdraw and Refund

After the cancellation period described above in "Student's Right to Cancel and Refund," you have the right to withdraw from the University at any time. Withdrawal shall occur when you give written notice of withdrawal to the Registrar at the University's address shown at the top of the first page of the Enrollment Agreement. You can do this by hand delivery, email, facsimile, or mail. Written notice of withdrawal sent by hand delivery, email, or facsimile is effective upon receipt by the Registrar. Written notice of withdrawal sent by mail is effective when deposited in the mail properly addressed with postage prepaid.

The written notice of withdrawal should be on the Official College Withdrawal Form provided by the Office of the Registrar, but may also be in any writing that shows you wish to withdraw from the University. Please include your student ID number on your notice. A withdrawal may also be effectuated by the student's conduct showing intent to withdraw, including but not necessarily limited to the student's continuing and unexcused failure to attend all classes.

If you withdraw before or at completion of 60% (and no more) of the current term, you will be eligible for a pro-rata refund for such term. The University will perform a pro-rata calculation of current term tuition as follows:

Step A) Total calendar days* in current term** – Calendar days in current term completed = Total Calendar days Not Completed

Step B) Total calendar days not completed/Total calendar days in current term = % of pro-rata refund

Step C) Institutional charges*** x % of pro-rata refund = Total refund owed

* Total calendar days include weekends and holidays, except:

- Scheduled break of five or more consecutive days when no classes are offered.
- Days of leave of absence are not included in total days.

**Current term generally means the current semester, but when tuition is charged for the entire period of enrollment rather than by semester, then the current term shall mean that period of enrollment.

***Institutional charges excluded from the pro-rata refund are: (1) non-refundable registration fee (applicable to first year, first semester students only), (2) all other non-refundable fees as described in the current General Catalog, (3) Student Tuition Recovery Fund fee, and (4) Student Health Insurance premium estimated at \$3,200.00, if applicable; institutional charges included in the pro-rata refund include: (1) current term tuition.

There is no refund for students who withdraw after completing more than 60% of the current term.

If the amount of the current term payments is more than the amount that is owed for the time attended, then a refund of

the difference will be made within 45 days after the notice of withdrawal is received by the Office of the Registrar. Refunds owed to the student as a result of a pro-rata calculation will be done in the following order:

- Private Educational Loan(s);
- To the student.

If the amount of the current term payments is less than the amount that is owed for the time attended, it is the sole responsibility of the student to contact the University to make appropriate payment arrangements.

Financial Aid and Loan Obligations

California Northstate University offers financing options to meet the needs of its students. For a detailed description of the financing options, please visit the Financial Aid Office webpage, <http://cnsu.edu/student-financial-aid-offices>.

If the student has received federal student financial aid funds, upon cancellation or withdrawal and subject to the conditions for refund described above, the student is entitled to a refund of moneys not paid from federal student financial aid program funds.

If the student obtains a loan to pay for an educational program, then the refund upon cancellation or withdrawal, subject to the conditions for refund described above, will be sent to the lender or to the loan guarantee agency, up to the amount of the loan; the student will have the responsibility to repay the full amount of the loan plus interest, less the amount of any refund paid to the lender. If the student owes money to the lender after the refund, then the student will need to make arrangements with the lender for payment of the amount remaining owed. If there is a refund amount remaining after payment to the lender, it will be paid to the student as described above.

If the student is eligible for a loan guaranteed by the federal or state government and the student defaults on the loan, both of the following may occur: (1) the federal or state government or a loan guarantee agency may take action against the student, including applying any income tax refund to which the person is entitled to reduce the balance owed on the loan; (2) the student may not be eligible for any other federal student financial aid at another institution or other government assistance until the loan is repaid.

Student Tuition Recovery Fund (STRF) Disclosures

The State of California created the Student Tuition Recovery Fund (STRF) to relieve or mitigate economic loss suffered by a student in an educational program at a qualifying institution, who is or was a California resident while enrolled, or was enrolled in a residency program, if the student enrolled in the institution, prepaid tuition, and suffered an economic loss. Unless relieved of the obligation to do so, you must pay the state-imposed assessment for the STRF, or it must be paid on your behalf, if you are a student in an educational program, who is a California resident, or are enrolled in a residency program, and prepay all or part of your tuition.

You are not eligible for protection from the STRF and you are not required to pay the STRF, if you are not a California resident, or are not enrolled in a residency program.

It is important that you keep copies of your enrollment agreement, financial aid documents, receipts, or any other information that documents the amount paid to the school. Questions regarding the STRF may be directed to the Bureau for Private Postsecondary Education, 2535 Capitol Oaks Drive, Suite 400, Sacramento, CA 95833, (916) 431-6959 or (888) 370-7589

To be eligible for STRF, you must be a California resident or are enrolled in a residency program, prepaid tuition, paid or deemed to have paid the STRF assessment, and suffered an economic loss as a result of any of the following:

1. The institution, a location of the institution, or an educational program offered by the institution was closed or discontinued, an you did not choose to participate in a teach-out plan approved by the Bureau or did not complete a chosen teach-out plan approved by the Bureau.
2. You were enrolled at an institution or a location of the institution within the 120 day period before the closure of the institution or location of the institution, or were enrolled in an educational program within the 120 day period before the program was discontinued.
3. You were enrolled at an institution or a location of the institution more than 120 days before the closure of the institution or location of the institution, in an educational program offered by the institution as to which the Bureau determined there was a significant decline in the quality or value of the program more than 120 days before closure.
4. The institution has been ordered to pay a refund by the Bureau but has failed to do so.
5. The institution has failed to pay or reimburse loan proceeds under a federal student loan program as required by law, or has failed to pay or reimburse proceeds received by the institution in excess of tuition and other costs.
6. You have been awarded restitution, a refund, or other monetary award by an arbitrator or court, based on a violation of this chapter by an institution or representative of an institution, but have been unable to collect the award from the institution.
7. You sought legal counsel that resulted in the cancellation of one or more of your student loans and have an invoice for services rendered and evidence of the cancellation of the student loan or loans.

To qualify for the STRF reimbursement, the application must be received within four (4) years from the date of the action or event that made the student eligible for recovery from STRF.

A student whose loan is revived by a loan holder or debt collector after a period of noncollection may, at any time, file a written application for recovery from STRF for the debt that would have otherwise been eligible for recovery. If it has been more than four (4) years since the action or event that made the student eligible, the student must have filed a written application for recovery within the original four (4)

year period, unless the period has been extended by another act of law.

However, no claim can be paid to any student without a social security number or a taxpayer identification number

Statement of Nonparticipation in Government Financial Aid Programs

California Northstate University does not accept or otherwise participate in any federal direct student loan program (Title IV) funding, any federal veterans benefits program (Title 38) funding, or any other federal or state government student loan/ financial aid funding.

STUDENT RECORDS

Office of the Registrar

The Registrar retains official enrollment, registration, and academic information for students and alumni. Downloadable request forms related to academic transcripts, enrollment/degree verifications, contact and personal information changes, grade changes, duplicate diploma requests, FERPA release authorization, emergency contact updates, leave of absences, and college withdrawals are available from the Office of the Registrar website.

Students are strongly encouraged to become familiar with the Office of the Registrar website.

Contact Information

Office of the Registrar
9700 West Taron Drive
Elk Gove, CA 95757
(P) 916-686-7400
Email: CNRegistrar@cnsu.edu
Website: <http://www.cnsu.edu/office-of-the-registrar/>

The main office is located on the second floor of the Elk Grove campus. A Registrar Office staff member is available on the Rancho Cordova campus on various days during the week during normal business hours. Please contact the Office for specific availability dates or to make an appointment.

Student Records

The academic transcript is a permanent student record maintained by the Office of the Registrar. Other student records as prescribed by California Code of Regulations 71920, are maintained by the institution for a minimum of five years from completion of or withdrawal from the CNU academic program. For assistance in accessing a record, please contact the Office of the Registrar or the department responsible for maintaining the record. Access to student records are governed by the Family Education Rights and Privacy Act of 1974 (FERPA). Please see the [Directory Information and Access to Student Records](#) section of this catalog or contact the Registrar for more information

CAMS Student Portal

Some records can be reviewed and updated online through the CAMS Student Portal.

The Portal allows the student to:

- Update contact information;
- View official grades, print unofficial transcripts, and review course narratives;
- Register for classes;
- View course schedules;
- Track submitted documents.

Students access the Student Portal with unique credentials provided by the CNU IT department prior to matriculation to the college.

To access the Student Portal, go to:

<http://www.cnsu.edu/office-of-the-registrar/student-portal>.

A PDF users guide is available on the website. Technical issues related to CAMS Student Portal should be directed to CAMSSUPPORT@cnsu.edu.

Please note that the Student Portal is different than and is not related to Canvas. Canvas is the learning management system (LMS) used by CNU. Grades displayed in Canvas are not official. Students use Canvas to participate in courses. Questions regarding Canvas should be directed to CNU IT department.

Changes or Corrections to Personal Information

Students are responsible for immediately report any change in their personal information (e.g. name, address, telephone number, etc.) to the Office of the Registrar. CNU will not be held responsible for any mail sent to the wrong address due to an incorrect address on file. The postage cost for remailing may be at the expense of the student.

Corrections to date of birth, social security number, and sex/gender require submission of the Change of Personal Information form and supporting legal documentation to the Office of the Registrar.

The request form is available at <http://www.cnsu.edu/office-of-the-registrar/registrar-services>.

Legal Name Change Request

Official CNU records and academic transcripts must reflect the student's name as it appears on government issued photo identification, such as a driver's license or U.S. Passport.

A student may request an official name change for school documents and records by submitting the following information to the Office of the Registrar:

1. A completed Change of Personal Information request form the Office of the Registrar's Service and Forms web page.
2. Government-issued photo ID showing new legal name
3. Acceptable proof of name change (marriage certificate or court order)
4. Current student identification card

Once the information has been verified and approved all official school documentation will be updated. The Registrar will then forward the name change to the following departments:

1. Business Office
2. Experiential Education
3. Financial Aid Office
4. Library - All library resources
5. OSAA
6. IT Department – The LMS (Canvas), new student identification badge, new email address

7. Student Records - Official Academic file, Student roster, academic advisor

The request form is available at <http://www.cnsu.edu/office-of-the-registrar/registrar-services>.

Change of Address

Current students should update their address, phone number and email through the **Student Portal** or by submission of the Change of Address Request form.

Former students must submit the request form to update their contact information. The request form is available on the Office of the Registrar website and in the forms display near the Office.

Submitted forms typically take 5 to 7 business days to process. Updates submitted through the Student Portal are reflected immediately, but may take 5-7 business days to be reflected in all University systems. This change will not update your W-9. To update the address on your W-9 you must submit a new W-9 to the Business Office.

Enrollment and Degree Verifications

The Office of the Registrar provides confirmation of student enrollment status to financial institutions, organizations, or agencies in writing at the student's request. Students may request proof of enrollment or degree by completing an Enrollment, Degree, & Good Standing Verification Request form located on the Office of the Registrar's web page.

The student must complete the form and submit it to the Registrar. Complete requests are typically processed within 5 business days. Verification letters are printed on official letterhead and include the Registrar's signature as well as the University seal. Requests are typically processed within 5 business days.

Information about verifications and the request form are available at: <https://www.cnsu.edu/office-of-the-registrar/enrollment-degree-verification-request>.

Transcript Request

A student's academic transcript is a permanent record. Students and former students may request an official transcript through the Office of the Registrar by:

- A) Submission of the Transcript Request Form
 - The Transcript Request form is available on the Office of the Registrar website and in the display case outside of the Office. The ordering fee is posted on the order form and payment is due at time of order submission.
 - Complete requests are typically processed within 5 business days.
- B) Order Online: www.parchment.com.
 - Official transcripts may be ordered through Parchment's online record ordering service. Credit card is required and additional service fees are applicable.

Unofficial transcripts can be viewed online through the Student Portal or ordered free-of-charge using the Transcript Request form.

All delinquent financial and business obligations with the University must be cleared before transcripts are released. The University will withhold official transcripts if the University has knowledge that the student has any default on loans or service obligations.

Ordering instructions and request form are available at: <https://www.cnsu.edu/office-of-the-registrar/registrar-request-a-transcript>.

Application for Graduation

Students applying for graduation must meet all academic and financial requirements prior to submitting the Petition to Graduate. Students who have completed all the requirements to graduate are required to submit the Petition to Graduate to the Office of the Registrar for processing prior to the graduation application deadline. The Petition to Graduate form is available on the Office of the Registrar Services and Forms web page.

Application Deadline for conferment of degree is as follows:

Graduation Application Deadline	Filing Period
Spring	February 1 through April 1

In addition, students must complete and submit the Graduation Clearance Form before their diploma will be mailed. The Clearance Form verifies that the student has no outstanding balances or University requirements.

Diplomas

The Office of the Registrar oversees the release of CNU diplomas. The student's degree must be awarded and posted to the Official Transcript before a diploma can be sent. Diplomas will include any applicable CNU honors (cum laude, magna cum laude, and summa cum laude).

Students must complete and submit the Graduation Clearance Form before their diploma will be mailed. The Clearance Form verifies that the student has no outstanding balances or University requirements. A diploma will not be provided until all student account requirements are met.

Diplomas are typically mailed first class to the permanent address listed on the Petition to Graduate approximately 6-8 weeks following graduation/degree conferral for students who have met all clearance requirements. CNU uses a third-party vendor to print and mail all diplomas. CNU is not responsible for lost, stolen, or returned diplomas.

Diplomas returned to the school as undeliverable will be held for five (5) years. Repeat shipping is at the cost of the student.

Duplicate Diplomas

A student may request a duplicate diploma that has been lost or damaged by completing a Duplicate Diploma Request Form and submitting the form to the Office of the Registrar.

The fee for a duplicate diploma is posted on the form and must be paid at the time it is submitted. When possible, the original diploma must be returned to the Office of Registrar. The request for a duplicate diploma is kept in the student's file.

Diplomas will be mailed first class to the address indicated on the Duplicate Diploma Request Form. Diplomas and official transcripts will not be released if there is a financial hold. CNU is not responsible for lost, stolen, or returned diplomas.

In the event that your diploma is lost or stolen and degree verification is needed, please submit the Enrollment and Degree Verification Request form.

Directory Information and Access to Student Records

Student Rights Under FERPA

The Family Educational Rights and Privacy Act (FERPA) afford eligible students certain rights with respect to their education records. An "eligible student" is a student who is 18 years of age or older or who attends a postsecondary institution. These rights include:

1. The right to inspect and review the student's education records within 45 days after the day California Northstate University receives a request for access. A student should submit to the Registrar a written request that identifies the record(s) the student wishes to inspect. The Registrar will make arrangements for access and notify the student of the time and place where the records may be inspected.
2. The right to request the amendment of the student's education records that the student believes is inaccurate, misleading, or otherwise in violation of the student's privacy rights under FERPA.
3. A student who wishes to ask the school to amend a record should write the Registrar, clearly identify the part of the record the student wants changed, and specify why it should be changed.
4. If the school decides not to amend the record as requested, the school will notify the student in writing of the decision and the student's right to a hearing regarding the request for amendment. Additional information regarding the hearing procedures will be provided to the student when notified of the right to a hearing.
5. The right to provide written consent before the university discloses personally identifiable information (PII) from the student's education records, except to the extent that FERPA authorizes disclosure without consent.
6. The school discloses education records without a student's prior written consent under the FERPA exception for disclosure to school officials with legitimate educational interests. A school official is a person employed by California Northstate University in an administrative, supervisory, academic, research, or support staff position (including law enforcement unit personnel and health staff); a person serving on the board of trustees; or a student serving on an official committee, such as a disciplinary or grievance

committee. A school official also may include a volunteer or contractor outside of California Northstate University who performs an institutional service of function for which the school would otherwise use its own employees and who is under the direct control of the school with respect to the use and maintenance of PII from education records, such as an attorney, auditor, or collection agent or a student volunteering to assist another school official in performing his or her tasks. A school official has a legitimate educational interest if the official needs to review an education record in order to fulfill his or her professional responsibilities for California Northstate University.

7. The right to file a complaint with the U.S. Department of Education concerning alleged failures by California Northstate University to comply with the requirements of FERPA. The name and address of the Office that administers FERPA is:
Family Policy Compliance Office
U.S. Department of Education
400 Maryland Avenue, SW
Washington, DC 20202-5901

Institutional Student Procedures for FERPA

FERPA does not cover employment, medical or police records, confidential letters of recommendation if the student has waived the right to review them, professors or administrator's personal records for their own use about students, parent's financial records, and other FERPA excluded records.

Additional information regarding FERPA can be viewed online at
<http://www.ed.gov/policy/gen/guid/fpco/ferpa/index.html>.

Student Directory Information Disclosure and Access

California Northstate University reserves the right to disclose certain directory information. Personally identifiable information such as student directory information (student name, address, telephone number, email address, field of study, cohort classification, enrollment status, dates of University attendance, club and/or organization memberships, degrees, honors and awards received, photograph, and the most recent educational agency or institution attended) is considered public information and may be disclosed by the University without prior written consent. The student may request that directory information be withheld from sources outside the University, excluding law enforcement, or within the University to anyone who does not have a need to know status.

Parents have no inherent rights to inspect their child's educational records after age 18. Students requesting that directory information not be disclosed should submit the Directory Opt-Out Request Form to the Registrar before the last day to add a class in a semester.

The University is not responsible for inadvertent release of directory information.

Upon placement at a clinical rotation site, the student's University email address and name will be given to the company in which they are placed.

Annual Disclosure and Record Access

Students receive an annual FERPA notification from the Office of the Registrar prior to or following the start of each Fall semester. The FERPA notice will be sent to all CNU student email addresses in addition to being posted in the following locations: student information boards, inside and outside the Office of the Registrar, and online at: [http://www.cnsu.edu/shareddocs/Registrar/CNU FERPA Notice.pdf](http://www.cnsu.edu/shareddocs/Registrar/CNU_FERPA_Notice.pdf).

STUDENT SERVICES

Alcohol & Drug Prevention; Dependency Referral

The Office of Student Affairs & Admissions (the "OSAA") offers many resources and programs to promote alcohol and drug prevention awareness and dependency referral services, as well as individualized assistance and support for all CNU students.

If you feel you may be experiencing an alcohol or drug problem, we encourage you to contact the OSAA staff. The OSAA staff are available for confidential referral assistance on a walk-in basis or by appointment. The OSAA office is open Monday through Friday from 8:00am – 5:00pm. Confidentiality will be maintained unless authorized by the student or a threat to life occurs. The OSAA will be able to provide you with information with regards to local agency, treatment facility, or clinical professional, or to assist in making an appointment to a local agency, treatment facility, or licensed clinical professional.

The Assoc./Asst. Dean for the OSAA is listed in the Directory of this catalog and on the CNU website. Students may contact any of the staff in the OSAA for assistance. For any emergency, please call 911.

Toll-Free Numbers

Alcohol Abuse 24-Hour Assistance and Treatment	1-800-234-1253
Alcohol Abuse and Crisis Intervention	1-800-234-0246
Cocaine Abuse 24-Hour Assistance & Treatment	1-800-234-1253
Cocaine Abuse & Crisis Intervention	1-800-234-0246
Drug and Alcohol 24-Hour Information, Assistance, & Referrals	1-800-662-4357
Talk One 2 One – 24/7 Confidential Support for Students	1-800-756-3124

Websites

Alcoholics Anonymous	http://www.aa.org
National Drug Helpline	https://www.samhsa.gov/find-help/national-helpline
The National Council on Alcoholism and Drug Dependence	http://www.ncadd.org

Local/Community Resource

Alcoholics Anonymous (24 Hours)	916-454-1100
Alcoholics Anonymous (Office)	916-454-1771
Al-Anon	916-344-2971
Cocaine Anonymous Hotline	916-386-3545
Narcotics Anonymous	1-800-600-4673
Adolescent Chemical Dependency Program	916-482-1132
National Council on Alcoholism and Drug Dependence-NCADD	

Options for Recovery	916-922-5110
Prevention	916-922-5118
Hope Line	916-922-5122
Emergency Contact	911

Primary Local Assessment and Treatment Center

Bi-Valley Medical Clinics	
Capitol Clinic	916-442-4985
Carmichael Clinic	916-974-8090
Norwood Clinic	916-649-6793
Sutter Health-Center for Psychiatry	916-386-3620
Midtown Mental Health Center	916-577-0200
Addiction Treatment Program	916-525-6100
Mental Health Center – Kaiser Patients	916-631-3034
Mental Health Center – Kaiser, after hours emergencies	916-973-5300
Alcohol and Drug System of Care	916-874-9754

For additional assistance, you are encouraged to enlist the help and support of family and friends who would be supportive of your sobriety. Also, look in the yellow pages of your telephone directory under mental health, community services, social and human services, alcoholism, or drug abuse. You may be surprised to learn how many organizations there are that can help.

Career Services, Planning, and Counseling

The Career Services Coordinator directs professional career planning and career counseling services. Information about career opportunities at various companies can be found in the Career Resource section of the library or on the CNU website.

In-class and extracurricular workshops are conducted throughout the program to assist students in analyzing their strengths and weaknesses, and documenting their educational and practical experiences in the E*Value portfolio.

An internship and job expo is hosted on campus during the Fall semester to provide students with direct contacts for obtaining part-time employment and internships at local pharmacies.

Students have the opportunity to attend seminars and workshops in writing resumes, developing interview skills, and preparing for career placement.

During the final year of the program, students have the opportunity to talk with employers and share their portfolios during the graduating student Career Fair.

The Career Services Coordinator in collaboration with the Alumni Coordinator follow-up with graduates for the first five (5) years after graduation through phone interviews and surveys to monitor how graduates' careers are progressing and to solicit suggestions for improvement in the respective program or the University and College service offerings.

Disability Accommodation Services

Any student requiring disability assistance may apply for services through the Assistant Dean of Student Affairs. The University is committed to promoting equal access to programs and facilities, thereby insuring that students with disabilities experience the opportunity to participate fully in all academic experiences. Specialized services and academic accommodations are provided to meet the individual needs of students with disabilities to help them achieve successful completion of their professional degree.

Students with disabilities, whether hidden or visible, who wish to seek special accommodations must make a request for accommodations in writing and submit appropriate documentation listed in this section. If the disability develops during the school year and accommodations are requested, the student must notify the Assistant Dean of Student Affairs or designee in writing as soon as he/she becomes aware of the disability. The Assistant Dean of Student Affairs serves as the advisor to students with disabilities and as a liaison between students with disabilities and the faculty.

Eligibility for Services

The federal definition of "disability" encompasses a physical or mental impairment which substantially limits one or more major life activities such as walking, breathing, seeing, hearing, learning, working, and performing manual tasks.

Types of Disabilities

Some common types of disabilities include, but are not limited to, physical disabilities, learning disabilities, psychiatric disabilities, and attention deficit hyperactivity disorders (ADHD).

Students Responsibility

Students enrolled at CNU are required to self-identify if they are seeking services on the basis of a disability. Students are required to meet with the Assistant Dean of Student Affairs or designee for an initial intake and are required to provide appropriate documentation of the disability. Students must provide documentation, at the student's expense, of the disability before the provision of services is reviewed. Since medical conditions change reapplication for accommodation services must be submitted annually and may require submission of updated documentation.

Documentation Guidelines

Both medical and functional elements of the disability must be explicitly documented. Documentation must be printed on appropriate letterhead and prepared by a qualified health care provider who has professional training and practice to diagnose and treat the impairment that led to the disability.

Documentation of the disability should include, but is not limited to:

- A diagnostic statement identifying the disability
- Date of the current diagnostic evaluation (must be within the past three (3) years)
- Date of the original diagnosis
- A description of the diagnostic criteria used

- A description of the current functional impact of the disability
- Treatments and medications, assistive devices currently prescribed or in use
- A description of the expected progression or stability of the disability over time
- Specific recommendations for accommodations and an explanation of why each recommendation is needed
- Impact the disability has on specific major life activities
- Credentials of the diagnosing professional

In addition to the above documentation, students are required to submit additional documentation based on the specific disability.

Documentation Guidelines for Learning Disabilities

Students applying for services and accommodations on the basis of a learning disability should submit a comprehensive report of a psycho-educational assessment performed by a licensed psychologist. The assessment, usually performed in the junior or senior level of high school, should contain the following:

- A complete intellectual assessment with all subtests and standard scores reported
- A comprehensive academic achievement battery with subtests, standard scores, current levels of academic functioning in reading, mathematics, and oral and written language
- Short and long-term memory, sequential memory, auditory and visual processing, processing speed, executive functioning, and motor ability
- A clinical summary of the supported judgment of the health care provider conducting the assessment justifying the diagnosis and suggested accommodations that would be appropriate to strengthen the students relative learning deficits.

Students applying for services and accommodations on the basis of a psychiatric disability should submit a comprehensive report completed by a psychiatrist or licensed psychologist who has experience diagnosing and treating the student's condition.

The assessment should include the following:

- DSM-IV diagnosis
- Psychological test(s) and all scores used to support the diagnosis
- Medications needed, side effects affecting academic performance, and compliance with the therapeutic plan
- Any accommodation(s) that may jeopardize therapeutic interventions

Students applying for services and accommodations on the basis of ADD/ADHD should submit a comprehensive report of a psycho-educational assessment performed by a psychiatrist, licensed psychologist, and/or licensed medical doctor who has expertise in diagnosing and treating ADD/ADHD.

The assessment should include the following:

- DSM-IV diagnosis
- Description of supporting past and present symptoms
- Summary of assessment procedures
- Fluctuating symptoms and prognosis
- Medications needed, side effects affecting academic performance

- Recommendations for reasonable accommodations

Recommendations for Accommodations

The student's request for accommodations will be assessed by the Assistant Dean for Student Affairs who will determine eligibility for available services and accommodations. Approval of the recommendations requested are based on the diagnostic report submitted by an appropriate health care provider rather than the student's request alone. Prior history of accommodations does not guarantee provisions of a similar accommodation.

Accommodations are not retroactive and begin only after appropriate documentation is received and a reasonable time for accommodation development exists.

Once registered, the Dean of Student Affairs will work collaboratively with the student, and faculty to provide the best reasonable accommodations for the student to achieve academic success.

Disability Services and Accommodations

1. Academic Accommodations
 - Large print materials
 - Extended exam times
 - Exams in distraction-free environment
 - Modified exams (in certain circumstances)
2. Disability Services
 - Note takers
 - Readers
 - Help with ordering taped texts
 - Help with ordering text to speech texts for Kindle

Health Insurance

All Students are required to maintain health insurance while enrolled at CNU (Policy of Mandatory student Health Insurance). Students not participating in the Student Health Plan must obtain private insurance and submit evidence of coverage to their online health records tracker. Evidence not submitted to the online health records tracker will not be accepted. Failure to provide evidence of insurance coverage may result in cancellation of registration. Questions relating to this requirement should be directed to your college's Student Affairs Office (if you are a current student) or Admissions Office (if you are an incoming student).

To help students meet this requirement, CNU offers a student health plan (SHP) through Western Health Advantage (WHA). The policy allows full-time students to have continuous health coverage throughout the year, including break periods. To be eligible for this option, you must be a CNU student who is enrolled full-time.

If you plan to enroll in the WHA SHP option, please be sure to include the SHP cost in your estimated cost of attendance when filing for financial aid and budget planning. The fee for this policy is paid directly to the school and is billed on a bi-annual basis.

For more information regarding the Student Health Insurance Plan through WHA including enrollment instructions and benefit information, please visit: website:

<http://www.cnsu.edu/office-of-the-registrar/student-health-plan>.

Information on other individual health plans in California can be found at:

- Blue Cross of California: www.bluecrossca.com
- Blue Shield of California: www.blueshieldcaplans.com
- Covered California: www.coveredca.com
- Health Net: www.healthnet.com
- Kaiser Permanente: <https://healthy.kaiserpermanente.org/>
- Western Health Insurance (non-CNU affiliated options): <https://www.westernhealth.com/>

This list is neither complete nor in any way an endorsement or recommendation by California Northstate University.

Healthy Lifestyle Services and Programming

The OSAA provides programming, guest presentations from health practitioners, and referral information to assist students with healthy lifestyle practices throughout the year. Information regarding programming will be sent by campus email to all students at least two weeks in advance or posted to campus information boards. Examples of programming include time management skills, nutrition guidance, stress reduction strategies, and work/life balance practices. Brochures offering guidance and tips for managing and understanding student focused problems are available from the OSAA.

Housing

Information on off-campus housing can be obtained from CNU's website and the OSAA. There is currently no on-campus housing available.

A wide variety of apartment housing is available within Elk Grove and Sacramento. Elk Grove offers housing accommodations ranging from apartments, condominiums, or single family homes within a 10 minute commute. Sacramento itself borders Elk Grove and several housing options in south western Sacramento are within 15 minutes of campus. Rental prices can range from \$600 - \$1,600 for apartments depending on the number of bedrooms and amenities offered. Single family homes for rent and for sale vary considerably within these areas; the most current listings available through real estate websites such as <http://www.sacbee.com/classified-ads/category/Real+Estate+For+Rent>.

Maternity/Childbirth/Adoption Accommodations

This policy is intended to provide an accommodation for the temporary academic disruption that pregnancy, childbirth, adoption, and the care of a newborn may place on the student. It is designed to make it possible for the student to maintain the "enrolled student status", and to facilitate return

to full participation in classwork, and, where applicable, research, and clinical/experiential training in a seamless manner.

All matriculated/registered students anticipating or experiencing a birth or adoption, are eligible to receive the following:

- An excused absence per College policy;
- A leave of absence* for an academic accommodation around the time of the birth, during which the student may postpone course assignments, examinations, and other academic requirements. Students requesting this accommodation may be placed into an extended program. Students considering this alternative must discuss the maximum allowable completion time with their academic advisor, the Office of Academic Affairs, and the Office of Student Affairs and Admissions;
- Access to CNU facilities, student services, and CNU student health insurance plan; and
- Parking accommodations.

*Students may opt to use a leave of absence in lieu of the benefits provided by the accommodation policy. Depending on the stage in their academic career, the timing of the birth or adoption and the level of assistance the student will receive from others in caring for the child, the student may find it more advantageous or feasible to take one or more semesters of a leave of absence. This may especially be the case for healthcare professional students because of the highly structured and sequential curriculum.

Mental Health Counseling Referral Services

Mental health counseling is available to students through the school's student health insurance program, the county of Sacramento, and private counselors in the area (by referral only). A list of referrals is available in the OSAA. Students may schedule an appointment with the Associate Dean for Student Affairs & Admissions for more detailed information and assistance for mental health counseling. Students who have elected to use the student health plan offered by the school and administered Western Health Advantage (WHA), have access to mental health counseling as part of the WHA insurance policy.

Tutor Services

Students experiencing difficulty in any course are urged to seek the help and assistance of the course coordinator or their academic advisor before the problem becomes unmanageable. If academic problems arise, school funded tutoring services are available through the OSAA. Students requiring this assistance must be referred by the faculty of the course or by their academic advisor. Additional tutoring is offered for a nominal fee by students who have successfully completed courses. These tutors typically post their contact information on campus bulletin boards. The OSAA keeps a list of recommended tutors and can provide insight into selecting a suitable student to hire. Additional tutoring is offered free of charge and is provided by faculty volunteers in the form of review sessions.

Alumni Services

The primary goal of Alumni Services is to maintain our graduates' on-going relationship with the faculty, staff, and student body at California Northstate University by building lifelong connections to their alma mater community. We are very proud to share the history of our alumni's major accomplishments as students and as alumni. Our office recognizes that our alumni will be distributed throughout the United States and the challenge of keeping all alumni in touch with classmates, resources, and institution news. CNU Alumni Services is committed to updating graduates with alumni social events, continuing education course information, career resources and services, fundraisers, speaking engagements, e-newsletters, news about what fellow classmates are doing, and the buzz on faculty, and support services to help alumni continue to grow as professionals.

- | | |
|----------------------------------|---|
| • E-newsletters | • Fundraisers |
| • Career Services | • Alumni Store |
| • Social/Networking Events | • Connections through Facebook and LinkedIn |
| • Continuing Education Resources | • Alumni Directory & Discount Benefits |

Information Technology Services

The Information Technology department provides computer, Canvas, email, and system assistance to all faculty, staff and students.

Canvas

Canvas is the University's learning management system which contains course information, assignment grades, and class documents/assignments. A brief introductory session to Canvas is provided to new students during orientation.

Email accounts & service

All students are assigned a unique campus email address for use during enrollment in the program. The IT department offers assistance to students who experience problems with their account during normal business hours. Students are responsible for reading and responding, as appropriate, email messages sent to their CNU email. Please refer to the Student Handbook for additional information specific to each college.

ID Badge and Turning Point Clicker

If you lose your ID Badge, please notify IT as soon as possible so that it can be disabled. To replace a lost or damaged badge or clicker, complete the Loss form and include the payment amount indicated on the form.

Library/Learning Resources

Library Facilities

The Learning Resource Center is available for students, faculty, staff, preceptors, as well as local pharmacists and is located on the second floor of the CNU Elk Grove campus. This program includes 8000 square feet of space devoted to the following resources:

- Library Facility and Collection

- Library Computer System
- CNU Electronic Library
- Computer Lab
- Classroom Resources
- Interlibrary Loan Program

Facility Hours

The library facility is a significant part of the Learning Resources Center. It houses the library collection and provides space for individual and group study. Students may use the facility during University operational hours. The hours of operation when the school is not in session, including holidays and spring break, will vary. Students can receive assistance from library staff members 9:00 a.m. to 5:00 p.m. Monday through Friday. Operational hours can be directed by phone to 916-686-7400.

Library Staff

The Learning Resource Center is managed and operated by a full-time health sciences librarian and a part-time librarian assistant. The librarian will provide training and consultation to students and faculty on how to access good information and efficiently use electronic resources. The librarian holds an academic appointment on the faculty and participates in all faculty functions and meetings.

An IT specialist works with the librarian to update, maintain, and operate electronic systems in the resource center.

Learning Resource Center Programs

The Learning Resource Center provides both students and faculty with support as well as sufficient research references. The following programs are offered to educate students and faculty on the availability of resources and the process of their uses.

Students Resource Center Orientation Session

At the beginning of each semester, a Resource Center Orientation session is scheduled to accommodate all interested students. The attendance is mandatory for all first year students and optional for other students. During this orientation, students are introduced to the learning resources available as well as to policies and procedures relevant to their usage.

Interlibrary Loan Program

With the large number of universities in the Sacramento valley, CNU is developing affiliation agreements with the libraries at other institutions in order to facilitate interlibrary loans. Please see the librarian for details.

Library Computer System & Lab

A designated area of the learning resource center is dedicated as a computer lab. The computers in the lab are available to students, where they can access the electronic resources as well as electronic library materials. Additionally, the lab provides students with general PC software, access to the Internet, and the ability to print desired materials.

Student Access

Students may access Library materials in several ways. Physical books (including reserve books) for the College of

Pharmacy and College of Medicine are located in room 202, the Library Book Room and Quiet Study Area. The books are in locked cabinets with clear doors and arranged in call number order so that the student may determine if the material is available. The Library's web page provides a link to an online card catalog for those materials. The Librarian or Library Assistant retrieves and checks out the materials to the students. Other physical materials such as calculators, stethoscopes, models, etc. are located in the Library Director's Office. They are listed in the online catalog and can be retrieved for check out by the Library Director or the Library Assistant.

Electronic Learning Resources

The Learning Resource Center maintains an Electronic Learning Resources System. Its purpose is to provide library and learning resources to students, faculty, and staff, and serve as an entry point for all users to meet their academic and research needs. The library subscribes to approximately 1,000 scholarly electronic journals.

Electronic journals and databases are available through links from the Library's webpages. Students authenticate themselves using their school e-mail logon and password in order to access the electronic materials but may access these materials anywhere they have a computer and internet access.

All CNU students can access electronic resources by entering their college log-in credentials at <https://ezproxy.cnsu.edu/login>.

The username and password, are the same credential that you use for cnsu.edu email.

For step-by-step instructions on how to access the Library Databases for each college, see below:

College of Pharmacy

1. From the home page www.cnsu.edu, click on **Pharmacy** drop down and then click Home
2. Now you are at the Pharmacy's home page, click on Current Students drop down and then click Library & Learning Resources
3. On Library & Learning Resources' page, click on "Click here to access the databases" which will bring you to the login page
4. For username and password, this will be the same credential that you use for cnsu.edu email

College of Medicine

1. From the home page www.cnsu.edu, click on **Medicine** drop down and then click Home
2. Now you are at the Medicine's home page, click on Current Students drop down and then click Library/Learning Center
3. On Library & Learning Resources' page, click on "Click here to access the databases" which will bring you to the login page
4. For username and password, this will be the same credential that you use for cnsu.edu email

Past lectures for the College of Medicine may be retrieved for viewing through the Mediasite link on the College of Medicine website under "Current Students". Students can access this site using their CNU credentials.

College of Health Sciences

1. From the home page www.cnsu.edu, click on **Health Sciences** drop down and then click Home
2. Now you are at the Health Sciences' home page, click on Research drop down and then click Library/Learning Resources Center
3. On Library & Learning Resources' page, click on "Click here to access the databases" which will bring you to the login page
4. For username and password, this will be the same credential that you use for cnsu.edu email

EDUCATIONAL AND RESEARCH EQUIPMENT

California Northstate University utilizes the following research laboratories and facilities in conjunction with the delivery of instruction for all CNU Colleges.

Research Laboratories: The dedicated research labs at the Elk Grove campus are fully equipped for molecular, cellular and microbiological investigations. Equipment includes multiple high-capacity freezers (-80°C, -20°C and LN₂) and refrigerators, autoclaves, fume hoods, water purifiers, centrifuges and ultra-centrifuges, light and fluorescent microscopes, fluorescent plate readers, vacuum pumps, balances, scales, pH meters, ice machine, transilluminators. Small equipment include vortexers, hot plates, stirrers, rockers, shakers, variable temperature water baths, refrigerated and non-refrigerated microcentrifuges. All equipment necessary for protein, DNA and RNA electrophoresis, and RT-PCR, including a Li-COR, photoDoc and other imaging systems for quantification. Separate cell culturing suites are equipped with annually certified biosafety cabinets, CO₂ incubators and dedicated storage and refrigerators. Additional equipment for pharmacologic research include multiple chromatography systems (automated, liquid, HPLC), disintegration tester, dissolution tester, autosamplers, spectrophotometers, fractionators. The compounding lab is fully equipped and supplied for its purpose. All small equipment and tools, from automated and manual pipettors, glassware, cylinders to magnetic stir bars and label makers are abundantly available. All plastics and disposables (tubes, tips etc) as well as required reagents are available. Safety equipment, including spill kits, goggles, face shields, fire blankets, extinguishers, PPE, and sharps disposal are stored in easily accessible locations. Safety cabinets are in place for flammables, acids and oxidizers. Eye-washers and chemical showers are routinely inspected. All signage, safety information, protocols and training records, along with engineering controls are established for biosafety level 2 research. Additional equipment of interest include a 500MHz NMR and a 3D printer.

Medical Education Facilities: are fully equipped with furniture, exam tables, computers and storage for simulated and actual patient exams, with vital sign monitors (sphygmomanometers with multiple BP cuffs, otoscope, ophthalmoscope, automated thermometers), PPE, sanitation equipment, gowns drapes and all required disposables. Located in the vicinity are crash carts, resuscitators, EKG workstation, spirometer and other supplies. The hospital Simulation Center is equipped with all necessary supplies and equipment, including state-of-the-art SimMan patient simulators with monitors, repair kits, tools and simulation fluids/supplies/equipment, rolling vital signs monitors, motorized hospital beds, privacy curtains and dividers, crash cart, aortic scan machine, a weight scale, wheelchairs and walkers, IV pole with dispensers, computers workstations, phlebotomy trays, tracheotomy equipment and a myriad of other supplies and equipment as required. The IDL lab is fully equipped with all essential equipment and disposables, including student microscopes and a projecting Olympus CX31 microscope, cell staining paraphernalia, cell counters,

alcohol burners, all safety supplies and ergonomic furniture. Additional equipment onsite include training equipment and simulators for suturing, injections, lumbar punctures, cardiac, breast, airway, IV, catheterization models, and all other essentials. The anatomy lab is fully equipped with 20 dissection tables with hoods, equivalent numbers of body trays for storage, a cadaver hydraulic lift, all required powered and non-powered saws, blades, shears, chisels, etc; complete arrays of surgical instrument with trays, multiple skeletal models, ultrasound equipment, endoscopy machine, mobile microscope, PPE including disposable respirators, liquid waste disposal systems.

Pharmacology Training Facilities: Additional equipment for pharmacologic research and training include multiple chromatography systems (automated, liquid, HPLC), including a Hitachi HPLC with auto-sampler and sample collection as well as photo diode array detector for quantification of organic molecules and identification of bioactive molecules. Additional equipment includes a disintegration tester, dissolution tester, autosamplers, spectrophotometers, fractionators and a microfluidics microfluidizer 110L. The sterile compounding lab is fully equipped and supplied for its purpose, with 13 clean room hoods.

College of Health Sciences Educational Facilities: Fully equipped with A/V systems, computers, lab benches (plumbed and gas lined) and all furniture, safety supplies and other accoutrements required for state-of-the-art physics, chemistry, biology, biochemistry, anatomy, biotechnology and liberal arts education, the CHS campus also houses an array of scientific instrumentation for instruction and research. These include dissection trays, neurodiagnostic equipment, LED zoom lamp, tactile sensory evaluators, stethoscopes, electrode digital caliber, breathing tubes with tubing adapter, disposable respiratory kit, spirometer pod, , performance monitor, ECG monitor, ECG electrodes, eye occluder, blood pressure kits, hemacytometer, 9L student wet spirometer, black frame clear xTR lense high impact protector, human biological fluid simulators. Chemistry equipment includes heating water bath, 12 hot/stir plates, 3 UV-Vis spectrophotometers w/ PCs, pH meters, multimeters, Bunsen burners, portable gas burners, precision and analytical balances, standard and digital thermometers, a variety of centrifuges, rockers and shakers, a biotech cytation 5 image reader, all equipment necessary for PCR and immunoblotting, microscopes, a water filtration system, refrigerators, freezers, CO₂ incubators, cell culture hoods, and fume hoods. All supplies, reagents and disposables are on-hand.

UNIVERSITY POLICIES AND PROCEDURES

Admissions

Admissions - Legacy

The University recognizes the enormous amount of good will, commitment, dedication and resources in its formation and the need of intergenerational sustaining effort in maintaining and fulfilling its education mission. The University recognizes rightfully that legacy be included in the collective definition of diversity and inclusion, much like but not limited to socioeconomic status, life experiences, contributions to the community, cultural identity, gender and other gender related elements.

The University reveres the integration of legacy into the collective definition of diversity and inclusion as part of the multi-factorial approach towards admission decisions. Legacy by itself does not guarantee admission.

This policy is applicable to all colleges within the University and applies to all constituents who have advanced the education mission of the University. The constituents include but are not limited to alumni, faculty, staff, administrators, volunteers, trustees, donors, financial sponsors, and founding members of the University.

Procedure

1. An applicant who meets all four of the following categories of criteria shall be deemed eligible for diversity and inclusion consideration in the second-look admission process:
 - Criterion 1: Applicant meets the published minimum test score requirement for admission, e.g. SAT, ACT, MCAT etc;
 - Criterion 2: Applicant has completed all required courses for admission prior to matriculation;
 - Criterion 3: Applicant has achieved the GPA required for admission;
 - Criterion 4: Applicant must meet one of the following criteria:
 - a. An immediate family member of an alumni, employee, or founding member of the institution;
 - b. An immediate family member of a significant contributor to the support and/or advancement of the mission of the University, as described in Section V of this policy.
2. The Vice President of Admissions upon notification by an eligible constituent will request the Chair of the Admission Committee of the College to conduct a second-look evaluation of applicant.
3. The Chair of the Admission Committee for the College will call for a Subcommittee meeting per Bylaws (e.g., Article V of the College of Medicine Admission Committee Bylaws.)
4. The Subcommittee is responsible for performing all of the following:
 - Ensure that the applicant has met the published minimum GPA, standardized test(s) [MCAT, SAT, ACT or etc.] and would have completed all required courses;
 - Schedule the applicant for interview or review the interviewer's note of the applicant;
 - Make a recommendation regarding admission with diversity and inclusion consideration.
 - Notify the Office of the Dean of the College regarding the Subcommittee's findings.
5. The Dean will act on the Subcommittee's recommendation.
6. Upon enrollment, the student is subject to the conditions, codes, standards, and requirements as described in the Student Handbook.

(2200-Legacy Admission Review Policy)

International Students (Visa Services)

CNU is authorized by the United States U.S. Department of Homeland Security (DHS) to accept and enroll non-immigrants students. The University is approved to issue documents that support the issuance of F-1 Visas and F-1 Visa transfer to qualified international students. The college admission office to which the international student is admitted will work the students to complete the I-20 and will report the student's status to SEVIS. There is no fee for CNU to vouch for student status.

CNU complies with the Department of Immigration Services regulations that govern the financial eligibility of international students. International students must provide evidence of sufficient financial support for their studies while in the U.S.

International students must submit a current bank statement or a letter on bank letterhead indicating the applicant's and/or sponsors have sufficient funds available balance in U.S. dollars with original signature of an authorized bank official. Students are issued an I-20 after they have confirmed their enrollment and demonstrated in their Financial Certification Statement that they have the funds necessary to cover their living and education expenses. Financial Support and Documentation Forms will be sent to international students by the Financial Aid Office.

Steps to obtain a US Visa:

1. Once the Enrollment Agreement and Financial Certification Statement is received by the college, the college admissions office will issue the Form I-20 to the student;
2. The student must pay the I-901 SEVIS fee;
3. The student must apply for a Visa;
 - a. Fees for the Visa application vary depending on the student's home country.
 - b. Student should check with their U.S. consulate or U.S. embassy for other possible requirements.
4. Prepare for the trip
 - a. Carry your original passport, visa, and Form I-20 with you at all times.

- b. It is recommend that the student leave a copy of each document with his/her family before departure.
5. The student will be issued a Form I-94 at arrival in the U.S. airport from a U.S. Customs and Border Protection officer.
6. Students may enter the U.S. 30 days prior to the official program start date. The student must report to CNU by the program start date listed on the Form I-20.
7. The student must maintain status by attending and passing classes at CNU as a full-time student.

International students are not charged additional fees or charges associated with vouching for student status.

Please see the International Student Handbook available on the CNUCOP website for detailed instructions and timeline.

Language Rights

An enrollment agreement shall be written in language that is easily understood. If English is not the student's primary language, and the student is unable to understand the terms and conditions of the enrollment agreement, the student shall have the right to obtain a clear explanation of the terms and conditions and all cancellation and refund policies in his or her primary language. If the recruitment leading to enrollment was conducted in a language other than English, the enrollment agreement, disclosures, and statements shall be in that language. If any of the circumstances described in this paragraph apply to you, please contact the Assistant Dean of Student Affairs and Admissions so that your rights described in this paragraph may be applied.

Academic Freedom

Academic Freedom is integral to an institution of higher education. It is the right of students to express their opinions without concern for their grades and the right of faculty to teach and to express their opinions without fear of retribution. With academic freedom comes a responsibility to respect other's opinions. Academic honesty is demanded of faculty and students alike.

Awards: Non-Academic

CNU bestows certain honors to faculty, staff and students for non-academic achievement, community service, student organization activity, and other noted involvement in promoting CNU and the community. Notification of criteria, nomination information, and deadlines will be made throughout the year. The Scholarship and Awards Committee coordinates selection of recipients for all honors and awards, as well as a limited number of diversity and financial need-based scholarships. Student recipients of scholarships and awards are invited by formal invitation to attend an annual ceremony that recognizes student achievements. The annual Scholarship and Award Ceremony is a joint collaboration of the CNU's Scholarship & Award Committee and the Northern California Pharmacy Education Foundation (NCPEF). The majority of the scholarships received by students are awarded by the Foundation. Criteria for each scholarship are determined by the Foundation's Board. For more

information about the Foundation and a list of previous awards, please visit their website, <http://northerncaliforniaeducationfoundation.com/>. Faculty and staff awards are delivered during the annual faculty retreat that is held in the summer.

Non-Discrimination

California Northstate University is committed to cultivating a diverse community that recognizes and values inherent worth in individuals, fosters mutual respect, and encourages individual growth. The University believes that diversity enhances and enriches the quality of our academic program. CNU provides equal opportunity in education and employment and does not discriminate on the basis of race, color, creed, religion, national origin, ethnicity, gender identity, gender expression, age, sexual orientation, political affiliation, veteran status, or disability.

Alcohol/Chemical Dependence/Impairment Policy

CNU is a drug-free academic environment consistent with federal and state laws. Any person within CNU community may be disciplined for violation of these policies and tested for suspected use of an illegal drug. The possession, use, consumption, manufacturing or distribution of any form of alcohol or any illegal substance, is prohibited on CNU campus as well as any off-site location while the student is involved in academic learning experiences.

Any student who is under the influence of alcohol or drugs during class or experiential or clinical rotations is subject to immediate removal from the setting and dismissal. Any student convicted of a drug or alcohol related crime during the time they are enrolled at CNU is subject to dismissal.

Students are also reminded to adhere to the Honor Code and E-Professionalism policy outlined in the Student Handbook of the College indicating students must not present themselves on social media as a person who does not adhere to these policies.

Students dependent on alcohol or other chemical substances should voluntarily seek assistance from a treatment and recovery program identified in the previous section or a similar drug treatment program.

Students with alcohol or substance abuse, or addiction problems may have impaired judgment compromising educational experiences and may be unable to competently function in patient care settings, and may be dangerous to self or others. Therefore, the OSAA may refer the student to his or her physician or to a treatment and recovery program. If the student does not consent to participate or does not comply with a recommended treatment plan/contract, then the student may be suspended, be subject to other disciplinary actions up to dismissal from CNU.

Any violation of this policy may result in disciplinary action. In addition appropriate legal action against the offending individual(s) or organization(s) may also be pursued.

Students experiencing difficulties with alcohol or drug use should take action to improve the situation by seeking

substance abuse referral assistance from the OSAA as soon as possible.

CNU complies with the Drug-Free Schools and Communities Act and the Higher Education Act Section 120A: Drug and Alcohol Abuse Prevention by implementing the following provisions:

1. The annual distribution in writing to each student, regardless of the length of the student's program of study, and to each employee of:
 - a. Standards of conduct that clearly prohibit, at a minimum, the unlawful possession, use, or distribution of illicit drugs and alcohol by students and employees on its property or as part of any of its activities;
 - b. A description of the applicable legal sanctions under local, State, or Federal law for the unlawful possession or distribution of illicit drugs and alcohol;
 - c. A description of the health risks associated with the use of illicit drugs and abuse of alcohol; and,
 - d. Clear statement that the institution will impose disciplinary sanctions on students and employees (consistent with local, State and Federal law), and a description of those sanctions, up to and including expulsion or termination of employment and referral for prosecution, for violators of the standards of conduct. A disciplinary sanction may include the completion of an appropriate rehabilitation program.
2. Conducting a biennial review of the campus drug and alcohol abuse prevention program to:
 - a. Determine its effectiveness and implement changes to the program if they are needed; and
 - b. Ensure that its disciplinary sanctions are consistently enforced.
 - c. A biennial review will be conducted to evaluate the effectiveness of the drug and alcohol prevention program by a review panel. The review panel consists of Administrative representatives from the President's Executive Council (PEC).
 - d. Any recommendation for change will be considered, evaluated, and implemented as deemed necessary to health and welfare of all CNU students.

Violation of Alcohol and Drug Policy – School Sanctions

In the event a student is cited for any combination or violation of campus related alcohol or drug laws, rules or regulations the student will be:

1. Required to attend alcohol, tobacco, or other drug education at a location recommended by Student Affairs.
2. Required to provide additional proof of continued education and alcohol, or other drug assessment after the second violation.
3. Immediately referred to the Honor Board after a third violation of policies.

Federal Laws on Controlled Substances

Under federal law, manufacture, sale, or distribution of Schedule I and II illicit drugs or mixtures containing them (e.g. cocaine, methamphetamines, heroin, Ecstasy, GHB, Ketamine, LSD, PCP, and so-called "designer drugs", as well as "counterfeits" purported to be such drugs) and trafficking in marijuana and hashish are felonies. Depending upon the quantity of drugs involved, penalties for first offenses range from five years to life (20 years to life if death or serious injury involved) and fines up to \$10 million or more, and for second offenses from ten years to life (life if death or serious injury involved) and fines up to \$20 million. Illegal trafficking in over-the-counter or prescription drugs (including anabolic steroids) have maximum terms of 5 years for first offenses and ten years for second offenses, and heavy fines. Illegal possession of controlled substances can trigger federal prison sentences and fines up to \$100,000 for first offenses, more for second offenses; possession of crack cocaine is punishable by 5 to 20 years and fines up to \$250,000.

California Laws on Alcohol and Controlled Substances

Important parts of State law are summarized below:

No person may sell, furnish, give or cause to be sold, furnished, or given away, any alcoholic beverage to a person under the age of 21, and no person under the age of 21 may purchase alcoholic beverages. (California Business and Professions Code, Sec. 25658 (a))

It is unlawful for a person under the age of 21 to possess alcoholic beverages on any street or highway or in any public place or in any place open to public view. (California Business and Professions Code, Sec. 25662).

It is a misdemeanor to sell alcoholic beverages any place in the state of California without a proper license issued by the California State Department of Alcoholic Beverage Control. (California Business and Professions Code, Sec. 23300).

It is a misdemeanor to sell, furnish, or give away an alcoholic beverage to any obviously intoxicated person. (California Business and Professions Code, Sec. 25602).

It is unlawful to issue a license to fraternities, sororities, or other undergraduate organizations to sell alcoholic beverages. (California Penal Code, Sec. 172e).

Any person found in a public place to be under the influence of an intoxicating liquor, drug, or controlled substance and unable to care for his/her own safety or who interferes with the use of a public way is guilty of Campus Policies and Procedures disorderly conduct. Public intoxication is a misdemeanor crime in California. (California Penal Code, Sec. 647f).

California law also prohibits driving a motor vehicle under the influence (a blood alcohol level of .08 percent or higher creates a presumption of intoxication, but can be charged with lower blood alcohol levels); drinking or possessing an open container of alcohol while driving; and operating a bicycle while intoxicated. Drunken driving penalties include

jail or prison, fines of \$1,000 or more, driver's license suspension or revocation, and required drug/alcohol treatment programs. Refusing to submit to a test for blood alcohol can result in suspension of driver's license for up to 3 years.

Laws and Ordinances Governing Marijuana

Cultivation, possession for sale, or sale of marijuana is a felony and may result in a prison sentence and fine (Health and Safety Code sections 11358, 11359, 11360). Possession of less than one ounce of marijuana is an infraction punishable by a fine; determined by the court. (Health and Safety Code section 11357(b)).

Laws and Ordinances Governing Controlled Substances

Manufacture, possession, possession for sale, sale, or distribution: (Health and Safety Code sections 11350, 11351, 11352, 11377, 11378, 11379, 11379.6) and possession of drug paraphernalia is illegal (Health and Safety Code section 11364). All are felony-classified crimes with a possible \$10,000 fine per violation and/or a state prison sentence.

Sale or possession for sale of controlled substances such as cocaine, methamphetamines, heroin, Ecstasy, GHB, Ketamine, LSD, PCP, marijuana, and so-called "designer drugs" is a felony with terms of 7 years or more; manufacture results in terms of 20 years or more; possession alone is punishable by up to 7 years in prison. Sentences are enhanced for previously convicted felons and for distribution within 1,000 feet of a school or University, distribution within 100 feet of a recreational facility, and distribution to a pregnant woman or to someone under 18 by someone over 18. Property may be seized if used in drug transactions.

The convicted party can be excluded from all federal and/or state monetary benefits. If not a U.S. citizen can be deported and prevented from re-entry into the United States. The convicted party may have to give up, as part of a penalty, all personal property traceable to (or gained as a result of) the crime.

Animals on Campus

In order to protect the safety, health, and well-being of students, faculty, staff, and visitors, no animals or pets are to be brought into CNU campus unless certain conditions are met. Any animal that is not a trained service animal is not allowed on University property inside campus buildings. Any animal outside the building must be on a leash. As defined by the U.S. Department of Justice, a service animal is any animal including dogs that has been individually trained to do work or perform tasks to accommodate an individual with a disability. Police dogs accompanied by a police officer or law enforcement officer is permitted for entry.

Service animals are permitted to be anywhere on campus that the animal's handler is permitted to be, including indoor spaces, however, there may be some locations and activities where animals (including service animals) are not permitted for health and safety reasons, including:

- i. Research and teaching laboratories or clinics
- ii. Mechanical rooms/maintenance closets

iii. Food service preparation areas

iv. Areas where there is a danger to the service animal

Access to these and other restricted areas may be granted on a case by cases basis by the VP of Operations.

Students who anticipate bringing a service animal to campus regularly are encouraged to notify Student Affairs and the VP of Operations.

The privilege of the animal to enter the campus is revoked if such animals are considered dangerous or such animals are deemed endangering the health of people or the environment. (1715-Animals on Campus)

Bicycles

Bicycles may not be brought into the classroom or buildings. It is recommended that bicycles be locked securely to prevent theft. Bicycles should be secured in designated areas or in bike lockers provided in designated areas. Bicycles should not be secured in areas that would interfere with pedestrian or vehicular traffic. It is also recommended that students keep information about the bicycle with their records in the event of theft which would include: make, model, color, and serial number. Information on the availability of bike lockers can be obtained from the Facilities Manager or Safety and Security Director. (1705-Bicycles)

Building Access

Student identification cards are programmed with an electronic key access code. The card provides access to the building as well as some of the interior classroom and other spaces designated for student use. The campus building hours will be posted prior to each semester and the hours may be extended prior to exam dates. Student card entry is logged and entry information is monitored by CNU administrators. Professional behavior dictates respect of equipment, furnishings, and building access by all CNU students. Any student not exhibiting professional behavior in regards to building access, including destroying property, allowing unauthorized guest in the building, or compromising building security, will be addressed through the judicial procedures.

The Elk Grove building is open to students from:

- Monday-Thursday: 8:00 a.m. to 11:30 p.m.
- Friday: 8:00 a.m. to 6:00 p.m.
- Saturday-Sunday: 10:00 a.m. to 5:00 p.m.

All doors are automatically locked after 11:30 p.m. Monday through Thursday, 6:00 p.m. on Friday and 5:00 p.m. Saturday and Sunday.

The Rancho Cordova building is open to students from:

- Monday – Friday 7:30 am to 9:00 pm

(1701 After Hours Access)

Cell Phones

Out of courtesy for others, all cell phones must be turned off before entering any classroom, laboratory, and discussion session or on-campus academic/professional event unless

instructed by the course coordinator or CNU Official. Violation procedures for unauthorized use of cell phone by a student include, but are not limited to, the following: a verbal warning for the first offense; removal from the setting for any subsequent occurrences; and dismissal from the course and the possible loss of a full academic year if substantial academic disruption occurs

Children in the Academic Environment Policy

It is recognized that it is important not only to preserve the educational environment for all students but also to make sure that the education of the parent who is responsible for the care of a child is not compromised. In this regard, students are expected to have day care arrangements with back-up plans. Children are not permitted to be in the classrooms or in laboratory settings or patient care settings. The student is responsible for obtaining handouts or lecture notes when class time is missed. Referrals/information for sick child care can be obtained in the Office of Student Affairs and Admissions.

Complaint/Grievance Policy

Non-Academic

While at CNU, students may encounter situations that adversely affect relationships with others within CNU community. General complaints or concerns should be directed to the Associate/Assistant Dean of the Office of Student Affairs and Admissions (OSAA) who will advise students about the appropriate procedures to follow in resolving a general complaint or concern. An informal process of resolution will be sought unless the incidence is severe enough to warrant a formal hearing.

This policy shall also apply to all discrimination, harassment, and sexual harassment reports and complaints that may arise in matters involving rights protected under legislation relating to equal opportunity in Employment and Education or any policy of CNU relating to sexual harassment.

General grievances may also be made anonymously by sending a letter to the Associate/Assistant Dean of the OSAA, or by dropping a letter or note in the Suggestion/Complaint Box located in the classrooms and in the library resource center.

Informal Procedure

Students are encouraged to discuss and resolve non-academic conflicts, including complaints of harassment, and/or discrimination, with the individual involved before filing a formal complaint. The suggested time frame to discuss and resolve informal complaints is 10 days from the date of the incident. If the student is not satisfied with the outcome a formal complaint may be filed with the Associate/Assistant Dean of the OSAA.

Formal Procedure

The complaint must be in writing and should describe: the specific action(s) necessitating the complaint, a statement of facts supporting the complaint, actions sought in an informal

resolution, and information about why the action did not lead to a satisfactory resolution prior to filing a formal complaint, if an informal process was utilized. The complainant must be willing to be identified as the accuser.

The complaint must be signed and dated by the complainant and filed with the Associate/Assistant Dean for the OSAA within fourteen (14) days of the occurrence. A completed Complaint/Grievance form should be included with the letter. The form can be found on the school's website. All complaints will be investigated by a committee appointed by the Associate/Assistant Dean and handled in a confidential manner. Investigations will usually be completed within fifteen (15) business days from the receipt of the complaint. At the conclusion of the investigation, a report shall be provided to the individuals in the situation stating the findings and recommendations. The report will typically be provided within seven (7) business days from the conclusion of the investigation. In unforeseen circumstances, or due to the complexity of the investigation, time limits may need to be modified. If the outcome was not satisfactory, the complainant may appeal the decision of the committee to the Dean of the College.

The written appeal request must be received in the Office of the Dean within five (5) business days from the written recommendation provided by the Associate/Assistant Dean for OSAA. The Dean shall provide a written final decision to the complainant within fifteen (15) business days from the receipt of the request. The decision of the Dean will be final.

A confidential record or log of all complaints filed is kept by the Associate/Assistant Dean for the Office of Student Affairs and Admissions (OSAA).

Anyone wishing to file a report may do so anonymously through the CNU website, <https://californianorthstateuniversity.formstack.com/forms/anonymouseportcnu>. If you are witnessing an emergency or crime, you should make the report to the proper authorities. This form should not be used to report an emergency or crime.

Complaints related to accreditation or licensing standards, please see the Accreditation Information section of this catalog on page 9.

Computer/Technical Support

Every student must have a personal laptop and external access to computer resources to complete academic requirements. CNU provides computing and communications access to faculty, students and staff to support the mission of CNU in teaching, research, learning and service. Students having difficulty accessing the student Learning Management System, Canvas, have access to Technical Support on campus during regular school hours.

Copyright Compliance Policy

It is the policy of California Northstate University to comply with copyright law.

Copyright exists in any original work which exists or is fixed in any tangible medium of expression. Images displayable on

computer screens, computer software, music, books, magazines, scientific and other journals, photographs and articles are some of the things subject to copyright. A copyright notice is not required.

Subject to exceptions contained in 17 U.S.C. §§ 107 and 108 (<http://www.copyright.gov/title17/92chap1.html>), it is a violation of copyright law to copy, distribute, display, exhibit or perform copyrighted works without the authority of the owner of the copyright. Copyright infringement is the act of exercising, without permission or legal authority, one or more of the exclusive rights granted to the copyright owner under section 106 of the Copyright Act (Title 17 of the United States Code). In the file sharing context, downloading or uploading substantial parts of a copyrighted work without authority constitutes an infringement.

Content owners are able to track the sharing and downloading of their copyrighted files via the IP address of the file sharer or downloader. Upon proper notice of infringement from the copyright owner to as the Internet service provider in accordance with the Digital Millennium Copyright Act, CNU investigates, takes down any infringing site or material on the University's network, and blocks access to any infringing sites or material. CNU also investigates to identify the infringing user and takes appropriate action to address misuse in accordance with CNU policies.

Summary of Civil and Criminal Penalties for Violations of Federal Copyright Laws

The unauthorized distribution of copyrighted material, including unauthorized peer-to-peer file sharing, may subject you to civil and criminal liabilities. Penalties for infringement include civil and criminal penalties. In general, anyone found liable for civil copyright infringement may be ordered to pay either actual damages or "statutory" damages affixed at not less than \$750 and not more than \$30,000 per work infringed. For "willful" infringement, a court may award up to \$150,000 per work infringed. A court can, in its discretion, also assess costs and attorneys' fees.

Willful copyright infringement also can result in criminal penalties, including imprisonment of up to five years and fines of up to \$250,000 per offense. For more information, please see www.copyright.gov and www.copyright.gov/help/faq.

Disciplinary Action for Violations

As set forth in the student honor code a violation of copyright law also constitutes a violation of University policy and the honor code. Students found guilty of such a violation can be subject to disciplinary action including suspension and dismissal from the University in addition to any civil and criminal penalties.

Disability Policy

CNU does not discriminate on the basis of a disability and is committed to self-directed learning by offering qualified students an equal opportunity to attain a degree. CNU will make every effort toward meeting reasonable requests for

accommodations to students with disabilities according to Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act (ADA). Information regarding disability services and is located in the [Student Services](#) section of this Catalog.

Disorderly Assembly/Conduct Policy

No person shall participate in or organize any activity for the purpose of creating a disturbance that interferes with the operations of CNU. No person shall use any CNU owned or controlled building or property without authorization. Any conduct on CNU campus or affiliated sites that are disruptive or offensive is prohibited and may be grounds for dismissal from CNU.

Disorderly conduct includes but is not limited to:

- Disrupting a class in progress
- Physically or verbally assaulting another being
- Discriminating, threatening, demeaning another being
- Dishonest behavior

Any violation of this policy will result in disciplinary action. In addition appropriate legal action against the offending individual(s) or organization(s) may also be pursued.

E-Professionalism and Social Media Policy

California Northstate University requires all students to uphold the core principles of the Honor Code which includes E-Professionalism in the use of social media in addition to respect, honesty and integrity, legal and ethical behavior, and professionalism in all aspects of their lives. This policy establishes internet usage guidelines for CNU students to ensure that they are representing themselves and the University professionally on and off campus. Social Media includes social networking sites (e.g., Facebook, Twitter, LinkedIn, etc.); blogs; video sharing sites (e.g., YouTube, Vine, etc.); and photo sharing sites (e.g., Flickr, Instagram, etc.).

Social Media

Students are to maintain a professional demeanor at all times over social media. Students must avoid posting or being tagged in text, photos, or videos that may be professionally compromising. Students should monitor their sites to seek removal of unprofessional public posts by others. Using social media to insult, threaten, defame, harass, disparage or bully another person or entity or to engage in copyright or trademark infringement, misappropriation of trade secrets, discrimination, or related actions, or for any other purpose that is illegal, against University policy, or not in the best interest of the University is prohibited. The use of social media during class time is unacceptable.

Violation of the Social Media and E-Professionalism Policy

Any violation of this policy may result in disciplinary action suspension and other actions up to or dismissal from the

University. In addition appropriate legal action against the offending individual(s) or organization(s) may also be pursued.

Confidential Information (HIPAA)

Students are required to abide by HIPAA (Health Insurance and Portability and Accountability law) and related jurisprudence in treating patient information as confidential. Students are prohibited from:

- Discussing specific patients' online, unless on secure healthcare-related networks, even if all identifying information is excluded.
- Posting pictures of patients online without the specific prior written permission of the patient (or legal guardian, in the case of a minor).
- Disclosing confidential University information including, but not limited to, student records, personal information of students or employees, and non-public strategies.

Representation of University Entities

Representing one's personal opinions as institutionally endorsed by the University or any of its entities is prohibited. Students should maintain the privacy of fellow student colleagues and CNU employees unless they have been given prior written permission to use the person's likeness or name. Students are not allowed to use CNU logos unless they have received prior written permission from authorized University personnel. While students are encouraged to share information about their experiences at the University online, they should be transparent in regard to their relationship with CNU and be truthful, accurate and complete in describing the University programs and services.

Food in Class/Laboratory

Eating food during class or laboratory is not allowed unless permitted by the course coordinator, staff, or other CNU personnel. The only exception to this are during the lunch hour of 12:00 p.m. to 1:00 p.m. or if approved for an authorized University event.

Free Speech

CNU supports the right of students to free speech, to engage in discourse and to listen to others to express views whether expressing approval or disapproval of ideas or issues.

Fundraising

Detailed information regarding fundraising for student organizations can be found in the Student Organization Handbook. CNU recognizes that fundraising is a vital component of a successful professional organization. Therefore, CNU encourages students to seek entrepreneurial ideas for fundraising.

Students/organizations must first obtain permission from the Associate/Assistant Dean of OSAA to sell any items on campus.

Use of CNU insignia or logo is prohibited unless prior authorization for use is granted. Students/organizations soliciting funds from an outside company (such as pharmaceutical companies, medical employers, alumni) is prohibited. A request may be made through the Associate/Assistant Dean for the OSAA. A formal proposal, with the organization's advisors signature, must be submitted with the request to a Student Affairs Coordinator. Once the proposal is deemed complete it is sent to the Associate/Assistant Dean for the OSAA for review and approval. The approved request will be forwarded to the potential sponsor(s) by the Student Affairs Coordinator. Forms and paperwork for organization use can be located on CNU's website under Student Affairs.

Gambling

CNU prohibits any form of gambling for money or stakes representing money on CNU property unless exempted by California state law.

Harassment

Anti-Sexual Harassment/Harassment/Assault & Disruptive Conduct Policy

The University is committed to maintaining a positive learning, working and living environment. In pursuit of these goals, the University will not tolerate acts of sexual harassment or related retaliation against or by any student or employee.

Anti-Harassment Training and Prevention Programs

Students will become familiarized with the Anti-Sexual Harassment/Harassment/Assault and Disruptive Conduct Policy at orientation. Training programs focused on awareness, prevention, and bystander intervention are offered to students and employees at least once a year. Notices and arrangements of these events will be sent to the campus community accordingly.

Definitions of Unaccepted Harassment

Sexual harassment: consists of interaction between individuals of the same or opposite sex that is characterized by unwelcome sexual advances, requests for sexual favors and other verbal or physical conduct of a sexual nature when: (1) submission to such conduct is made either explicitly or implicitly a term or condition of an individual's employment, living conditions and/or educational evaluation; (2) submission to or rejection of such conduct by an individual is used as the basis for tangible employment or educational decisions affecting such individual; or (3) such conduct has the purpose or effect of unreasonably interfering with an individual's work or academic performance or creating an

intimidating, hostile or offensive working or educational environment.

Hostile environment sexual harassment: (described in subpart (3) above) is unwelcome sexual conduct that is sufficiently severe or pervasive that it alters the conditions of education or employment and creates an environment that a reasonable person would find intimidating, hostile or offensive. The determination of whether an environment is “hostile” must be based on all of the circumstances. These circumstances could include the frequency of the conduct, its severity and whether it is threatening or humiliating.

Retaliatory acts: It is a violation of this policy to engage in retaliatory acts against any employee or student who reports an incident of alleged sexual harassment or any employee or student who testifies, assists or participates in a proceeding, investigation or hearing relating to such allegation of sexual harassment.

Lesbian, Gay, Bisexual, Transgender, & Questioning (LGBTQ) Non-Discrimination Policy

The University has a no tolerance policy for any type of sexual harassment including harassment or discrimination of LGBTQ students. The policies and protection acts that focus on this non-discrimination stance include:

Equal Protection Clause of the 14th Amendment All students has a federal constitutional right to equal protection under the law. This means that schools have a duty to protect lesbian, gay, bisexual, transgender, and questioning (LGBTQ) students from harassment on an equal basis with all other students.

Title IX of the Education Amendment Acts of 1972 prohibits discrimination based on sex in education programs and activities receiving federal financial assistance. Although Title IX does not prohibit discrimination on the basis of sexual orientation, sexual harassment directed at an LGBTQ student is prohibited by Title IX if it is sufficiently severe and pervasive. Title IX also prohibits gender-based harassment, including harassment on the basis of a student’s failure to conform to stereotyped notions of masculinity and femininity. CNU does not currently receive federal financial assistance but takes a proactive stance in the protection of all students. The Associate/Assistant Dean of Student Affairs and Admissions is the Title IX Coordinator for the University. Any violations of the Title IX Education Amendment Act should be reported to the Associate/Assistant Dean of Student Affairs in a timely manner.

1st Amendment, Equal Protection & Due Process Clauses

A transgender student’s right to dress in accordance with his or her gender identity may be protected under the First Amendment and the Equal Protection and Due Process Clauses of the U.S. Constitution. The First Amendment limits the right of school officials to censor a student’s speech or expression. Students also have a protected liberty interest (under the Due Process Clause) in their personal appearance.

In addition, a transgender student also has a right under the Equal Protection Clause to be treated similarly to other students of the same gender identity.

Conduct Disruptive to the University Community Policy (SaVE Act)

Students should immediately report any acts of violence, threatening behaviors or violations of any of the Anti-Harassment policies or disruptive conduct to the Associate Dean of the Office of Student Affairs, Office of Academic Affairs, campus security or any other school official. This policy defines disruptive conduct as:

Violent Behavior

Violent behavior encompasses a broad range of behaviors that may affect the campus or the workplace, may generate reasonable concerns for personal safety, or may result in physical injury. Violent behavior includes, but is not limited to, aggressive or frightening acts, intimidation, threats, harassing behavior, stalking/unwanted pursuit, physical attacks, domestic violence or property damage.

Intimidation

Intimidation is engaging in actions intended to frighten, coerce, or induce duress. These actions include, but are not limited to, stalking/unwanted pursuit.

Threats

A threat is an expression of intent to cause physical or mental harm. A threat may be direct, indirect, conditional or veiled. Any threat is presumed to constitute a statement of intent to complete the behavior consistent with the threat.

Physical Attack

Physical attack is unwanted physical contact such as hitting, kicking, pushing, shoving, biting, fighting or throwing objects or use of unauthorized weapon against another person.

Domestic Violence

Domestic violence is the use of abusive or violent behavior, including threats and intimidation, between people who have on ongoing or prior intimate or familial relationship, including individuals who are or have been married, living together, or dating.

Stalking

Stalking is the act of harassing somebody with persistent, inappropriate, and unwanted attention.

Harassment, Assault, and Disruptive Conduct Investigations

The Title IX Officer will initiate an investigation after an alleged offense is reported to campus authorities. The focus of the investigation is to collect as much information as possible to substantiate the initial complaint. The accuser and the accused are entitled to the same opportunities to present information, including having others present during any meeting or disciplinary hearing. The accuser and the accused will be informed of the outcome of the investigation and/or disciplinary proceeding. Disciplinary action by the institution may include suspension and/or dismissal from the College/University.

The College/University will make reasonable changes to an alleged victim/victim's academic situation after an alleged offense and provide options for those changes if those changes are requested by the victim.

Reporting Sexual Harassment, Harassment, Assault, or Disruptive Conduct

Students should report sexual harassment or conduct that is disruptive to the OSAA, the Office of Academic Affairs, or other campus administrator. If the situation is an emergency please call the Elk Grove police by dialing 911. If at all possible report the incident immediately. The University campus security and/or administration will assist students in contacting authorities.

In order to assist campus security, administrator's, or other authorities victims are strongly encouraged to preserve as much evidence as possible to support the complaint.

Students may also report non-emergency incidents using the University official Student Complaint/Grievance Form located in the lobby area on the first floor or on the University website. Once the Student Complaint /Grievance Form is completed contact the OSAA to review the complaint. Additional resources and assistance will be provided.

To report off-campus criminal conduct, including sexual assault or other serious allegations in which the complainant believes that his or her safety is threatened contact the Elk Grove Police Department or call emergency personnel by dialing 911. Allegations of serious sexual harassment should also be reported to the local police department if they occur after hours or on weekends. Students are strongly encouraged to notify the Associate/Assistant Dean of Student Affairs of the incident immediately so action can be taken to adjust the education environment. Documentation of the police report should be made available.

Stalking

This is behavior in which a student engages in conduct directed at another individual and makes a creditable threat to place that person in reasonable fear for his or her personal safety, or the safety of his or her family. The University forbids any form of stalking. Please refer to the Conduct Disruptive to the University Community Policy in this handbook for additional information.

Hazing Policy

Hazing in any form for any reason will not be tolerated at California Northstate University and is grounds for dismissal from CNU. Hazing is defined as any act that is likely to cause physical, emotional or social harm, fright or embarrassment to another person. Hazing includes any means of initiation or pre-initiation into a student organization, which causes mental or physical hardship to the person seeking membership. Hazing includes but is not limited to: encouraging or requiring participation in drinking games, creation of excessive fatigue, wearing inappropriate public attire, morally degrading or humiliating activities.

Any student who believes they have been hazed or believe that they may be accused of the same should contact the Associate/Assistant Dean for Student Affairs.

Health Insurance

CNU requires all students to have health insurance coverage meeting certain standards. An active health insurance is required due to the nature of the health care educational programs at CNU, in addition to the wellbeing of the students.

The health insurance coverage must include:

- 1) Inpatient Care and Outpatient Care
- 2) Urgent Care and Emergency Care
- 3) Mental Health Care

International students are required to subscribe to and maintain their enrollment with the school designated health insurance plan.

New enrolled students are required to provide proof of health insurance coverages to the Student Affairs Office no later than **5 calendar days** before the start of orientation. Failure to provide proof of health insurance coverages by the deadline, students will not be allowed to attend orientation, the White Coat Ceremony, and may lose their seats if requirement is not met.

Continuing enrolled students are required to provide proof of health insurance coverages to the Student Affairs Offices no later than **14 calendar days** before the first day of classroom instruction each semester. Failure to provide proof of health insurance coverages by the deadline, students will be subject to the following consequences:

1. Students will be emailed with information of insurance carriers.
2. Failure to enroll and pay the cost of the insurance premium in full will result in transcript hold, progression hold, registration hold, and library hold (student will not be able to check any materials out from the library).

Students are expected to maintain health insurance coverages at all times as a student of CNU. If a student's health insurance coverage is lapsed, the student is required to contact the Student Affairs Office within 72 hours and must provide proof of insurance.

Students will be randomly selected throughout the academic year to provide proof of health insurance coverage verification. When student is selected for health insurance coverage verification, student(s) will have 5 days to provide proof of insurance. (2100-Student Health Insurance Policy)

Medical Emergencies

For life threatening emergencies, call 911. For all other emergencies contact the University Office of Student Affairs or Business Operations at (916) 686-7300. Students should routinely update their Emergency Contact and Medical Information forms on record with the Office of the Registrar.

The ECMI form is available on the Office of the Registrar Services and Forms web page.

Missing Student Policy

This policy provides guidelines and action steps to assist faculty and staff in the event a student fails to report to an academic or clinical site as scheduled or an issue concerning a possible missing student safety situation is brought to their attention.

If a student is reported missing and cannot be located, or a safety concern has been registered with a university official, the following procedures will be followed by the Office of Student Affairs and Admissions (OSAA):

- The student's designated Emergency Contacts will be notified.
- If the student fails to return to the institution, and the student's personal family searches are unsuccessful, and/or at the discretion of the Associate Dean for Student Affairs and Admissions, the police may be contacted and a request made for a "wellness check" at the student's address on record, or last known whereabouts. If the student reports back to the institution, the OSAA will, if necessary, contact the student to inform him or her of support services available. This support will also be offered to any other students affected by the incident as needed.
- If a student has been absent from the institution, without notice, for a period of two academic weeks (10 business days), the institution will assume that the student is not planning to return and will take steps to withdraw the student from the academic program.
- The Associate Dean for Student Affairs will notify the appropriate University and College Administration of the missing student situation.

Definition of a Missing Student

Circumstances that may indicate a student is missing include:

1. Health related problems have been reported and the student has not returned to school on an agreed upon date.
2. The person has not regularly attended classes and has not been seen elsewhere on campus or a clinical site.
3. The student's team members, roommate, parent, spouse, or significant other report such a disappearance due to irregular contact.
4. The Student's Academic Advisor or other University employee reports concern that the student may be missing for circumstances related to situations discussed with the academic advisor or employee.

Outside Work

Students are encouraged to obtain outside employment preferably in a practice environment to enhance their overall academic experience. However, outside employment should not interfere with didactic success and students must arrange their work schedules to accommodate academic schedules. International students must follow the work guidelines established by their visas.

Parking

The University currently charges no fee for parking on campus. Off campus parking for students at experiential education sites must be paid by the student. No refunds or reimbursements will be made by the University. To obtain a parking placard, the student must submit the Vehicle Registration Form to the CNU front desk.

Students receive a college and student-specific parking placard that is good for any student lot, regardless of their CNU college affiliation. Placards must be hung clearly off of the rear-view mirror or be placed on the dashboard area where campus security can easily verify the information. Failure to clearly display their CNU placards will have their vehicle information recorded by security. By default, any vehicle falling under this category may be treated as suspect or unknown until a correct identification reveals otherwise.

Graduating and withdrawing students are expected to surrender their parking placards at the front desk.

Illegal Parking, Warnings, and Fines

Students are allowed to park in spaces marked "Car or Van Pool". Students must not park in spaces marked Visitor, Employee, Exec, VP, Dean, or President. Vehicles that are illegally parked will be towed at the driver or owner's expense. A parking zone map is available from the CNU front desk.

A warning slip will be issued to students who violate the parking policies such as parking in the wrong area, taking up multiple spaces, not displaying a decal or other error of inconsideration.

A second violation of any type related to the parking policy will be issued a \$50.00 fine and a financial hold placed on their student account. Students who display unprofessional behavior with University staff after receiving a penalty ticket will be forwarded to Student Affairs and will be addressed as prescribed by the college's Student Handbook.

Appeals for parking fines may be brought to the attention of the Business Office, and will be handled on a case-by-case basis to determine actual fault/responsibility. Appeals must be filed with the finance group within two (2) business days of receiving the fine. Notice of approval or denial will be issued within two (2) business days of receiving the request for appeal. Please note that Business Office's decision is final; no additional appeals will be granted.
(1706-Parking Policy)

Smoking/Smokeless Tobacco

Healthcare professionals advocate for health and wellness and therefore smoking, vaping, or using smokeless tobacco is not permitted on university property.(1704-Smoking, Smokeless Tobacco Policy)

Student Travel

Student representation at local/state/and national meetings, activities, and events is encouraged by the University. Students must be financially responsible for part of the cost

of travel. Current funding availability does not provide for the full travel funding of any student.

A limited amount of funding is available through the school to help assist students who plan to represent their organization or club at approved meetings. Approved meetings are generally considered to be professional conferences. Other types of meetings, or travel request, must be approved by the organization's advisor, faculty mentor, or other administrative official.

Student Organization Travel

Student organizations, representing a poster, or participating in other activities will be required to submit a proposed travel budget on a Funding request form prior to making any travel arrangements. The request must be approved for reimbursement of expenses. The proposal will be considered and either approved, returned to the organization/student with available travel funding allowance, or returned for revision. All approved travel will be reimbursed to students by the Student Organization treasurer affiliated with the conference within 7-14 days after the receipt of an approved Student Travel Reimbursement form and all receipts showing payment for the expense. Information regarding this process can be discussed with the student organization Treasurer, organization President, or the staff in the OSAA. See the Student Handbook for more information.

Student Competitor and Research Presenter Travel

Student competitors who have won a CNU competition to represent the college and the student organization will receive travel assistance from the Office of Student Affairs and Admissions (OSAA). In order to receive this assistance the following must be completed prior to booking any travel:

1. A Letter or announcement from the student organization or research advisor to the Associate Dean for Student Affairs acknowledging the event representation;
2. A completed Student Travel Application - Competitor or Research Presentation
3. Student Travel Application Documentation
4. A Release Waiver and Participation Agreement
5. Submit items 1-4 to the staff in the OSAA
6. Approval signature from the Associate Dean for Student Affairs & Admission
7. A notification of the approval from the staff in OSAA

Student Travel Reimbursement

Upon return from the conference all pre-approved travel will be reimbursed to students by either the student organization treasurer or the OSAA. The OSAA, as noted above, provides student travel reimbursement for competitors or research presenters only. All other travel reimbursement is provided by the student organization. The reimbursement is usually available within 7-14 days after the receipt of an approved Student Travel Reimbursement form and all receipts showing payment for the expense. Information regarding this process can be discussed with your organization Treasurer or the staff in the OSAA.

Falsification of Travel Documents or Receipts

Students who receive any travel funding from the school in advance and do not attend the meeting, for any reason, must notify their advisor or the OSAA. Any funding received must be returned to the school immediately. Students who knowingly submit falsified documentation for receipts or request reimbursement for travel that has been reimbursed or provided for by the professional organization or the student organization will be in violation of the Honor Code and will be subject to a review of the circumstances by the Professional and Academic Standards Committee (PASC).

Student Record Privacy (FERPA)

CNU adheres to the Family Educational Rights and Privacy Act of 1974 (FERPA). For information regarding FERPA, please see STUDENT RECORDS on page 152.

Theft

Any attempted or actual theft of property of the University, of a member of the campus community or campus visitor, violates the campus honor code and state law.

Vandalism

Any physical abuse, destruction or defacing of The University property or to another's property or the diminishing of its material or aesthetic value is prohibited.

Visitors

Visitors are not permitted on campus without prior authorization. Students wishing to bring visitors on campus must receive prior authorization from the OSAA, a faculty member, or other campus administrator.

Visitors will not be allowed in the classroom or laboratory without prior authorization from the faculty member conducting the lecture/laboratory exercise.

Visitors are generally prohibited from visiting experiential sites. Students are responsible for any misconduct of their guest.

Voter Registration

To register to vote in California, you must be a U.S. citizen, a resident of California, and 18 years of age or older on the day of the election. It is the responsibility of the OSAA to make registration forms available to you. It is important to exercise your right to vote. For additional information and voter registration forms please visit our website at <http://pharmacy.cnsu.edu/student-services/student-affairs>. Register to vote today to make a difference.

Weapons Policy

The University prohibits the possession, display or use of any weapons of any description including air- powered weapons on campus. California Penal Code 626.9 and 626.10

specifically prohibit the possession of firearms, including pellet and BB guns, on The University property, without specific written permission. Violators of this policy are considered a threat to the academic community and are subject to immediate dismissal from the University.

Safety and Security

Who to Call When You Need Help

Campus Security or any Administrative Office on Campus

Direct Contact: Campus Security Officer – Kyree Lomack
Telephone: (916) 432-7615

Elk Grove Police Department

Office: 8400 Laguna Palms Way, Elk Grove, CA 95758
Telephone: (916) 478-8000
Emergency: Emergency: 911

Clery Act

The Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act (20USC §1092(f)) is a federal law, originally known as the Campus Security Act, that requires The University and universities across the United States to disclose information about crime on and around their campuses since 1990. The most up to date information regarding crime statistics for the CNU campus, the immediate campus vicinity, and the City of Elk Grove can be found on the college website.

Megan's Law

For a listing of registered sex offenders in the adjacent community and other pertinent information, please review the law enforcement database at <http://meganslaw.ca.gov/>.

Campus Access Cards

All students who have authorized access to campus will be issued an electronic entry access card that permits entry to the campus main entrances. This type of access to campus facilities helps provide students with a more secure campus environment by restricting campus entry and the possibility of unauthorized visitors. Campus access is tracked and monitored through an electronic security camera system. Access is tracked and monitored

Annual Security Report – Tables and Additional Information

The CNU Annual Security Report contains data for crime information in the immediate area surrounding the campus. The report can be obtained on our website at the following web address: <http://www.cnsu.edu/annual-security-report>. A paper copy is available upon request.

An overview of campus security, emergency alert, and response procedures is provided at the new student orientation. Additional safety and security information, tips, and alerts will be delivered to students through campus email. The school offers safety awareness seminars throughout the year.

Disclosure of Campus & Local Area Crime Statistics

The categories on the chart below show crime statistics for the campus, certain non-campus properties, and certain public property areas which have been reported to local police and campus security authorities must be disclosed for the most recent three calendar years.

Composite Clery Act Statistics 2014-2016

Offense Category	Year	Elk Grove On-Campus Property	Elk Grove Public Property	Rancho Cordova On- Campus Property	Rancho Cordova Public Property	Total
Murder and Non-negligent Manslaughter	2014	0	0	N/A	0	0
	2015	0	0	0	0	0
	2016	0	0	0	0	0
Negligent Manslaughter	2014	0	0	N/A	0	0
	2015	0	0	0	0	0
	2016	0	0	0	0	0
Sex Offenses (Forcible)	2014	0	0	N/A	0	0
	2015	0	0	0	0	0
	2016	0	0	0	0	0
Sex Offenses (Non-forcible)	2014	0	0	N/A	0	0
	2015	0	0	0	0	0
	2016	0	0	0	0	0
Robbery	2014	0	0	N/A	0	0
	2015	0	0	0	0	0
	2016	0	0	0	0	0
Aggravated Assault	2014	0	0	N/A	0	0
	2015	0	0	0	0	0
	2016	0	0	0	0	0
Burglary	2014	1	0	N/A	2	3
	2015	0	0	0	2	2
	2016	0	1	1	1	3
Motor Vehicle Theft	2014	0	0	N/A	2	2
	2015	0	0	0	1	1
	2016	0	0	0	0	0
Arson	2014	0	0	N/A	0	0
	2015	0	0	0	0	0
	2016	0	0	0	0	0
Liquor Law Arrests	2014	0	0	N/A	2	2
	2015	0	0	0	0	0
	2016	0	0	0	1	1
Liquor Law Disciplinary Action	2014	0	0	N/A	2	2
	2015	0	0	0	0	0
	2016	0	0	0	1	1
Drug Law Arrests	2014	0	0	N/A	2	2
	2015	0	0	0	1	1
	2016	0	0	0	1	1
Drug Law Disciplinary Action	2014	0	0	N/A	2	2
	2015	0	0	0	1	1
	2016	0	0	0	0	0
Weapons Arrest	2014	0	0	N/A	0	0
	2015	0	0	0	1	1
	2016	0	0	0	0	0
Weapons Disciplinary Action	2014	0	0	N/A	0	0
	2015	0	0	0	1	1
	2016	0	0	0	0	0

Composite Clery Act VAWA (Special) Statistics 2014-2016

Offense Category	Year	Elk Grove On-Campus Property	Elk Grove Public Property	Rancho Cordova On- Campus Property	Rancho Cordova Public Property	Total
Domestic Violence	2014	0	0	N/A	0	0
	2015	0	0	0	0	0
	2016	0	0	0	0	0
Dating Violence	2014	0	0	N/A	0	0
	2015	0	0	0	0	0
	2016	0	0	0	0	0
Stalking	2014	0	0	N/A	0	0
	2015	0	0	0	0	0
	2016	0	0	0	0	0

DIRECTORY

UNIVERSITY ADMINISTRATION

For a current listing of people, titles, specialties, and contact information, please visit:
<http://www.cnsu.edu/administration/university-administration>.

Alvin Cheung PharmD, University of the Pacific MHSA, University of the Pacific	President
Paul Wagstaffe JD, University of California, Davis School of Law	General Counsel
Shoua Xiong MBA, National University	Vice President, Finance; CFO/Controller
Xiaodong Feng PharmD, Albany College of Pharmacy and Health Sciences PhD, Chinese Academy of Medical Sciences	Vice President, Admissions, Student Affairs, and Outreach
Grant D. Lackey PharmD, University of California, San Francisco	Vice President, University Operations, Faculty and Program Development;
Karen McClendon PhD, University of Louisiana	Vice President, Institutional Research & Assessment
Catherine Yang PhD, Tufts University	Vice President Academic Affairs; Associate Dean of Medical Education
Joseph Silva MD, MACP	Dean of College of Medicine, Professor, Vice President of Medical Affairs
Philip Mack PhD, University of California, Davis	Vice President, Research; Professor (COM BS)
Cindy Zheng MD, Shanghai Medical School	Assistant Dean of Education Development

Administrative Staff

For a current listing of people, official titles and contact information, please visit:
<http://www.cnsu.edu/about/administration/administration-staff>.

Business Office

Akelia Forsyth, Bookkeeper/Payroll
Cathy Hawkins, Staff Accountant
Minyi Jiang, Staff Accountant
Lisa Sypraseuth, AP Clerk

Office of Continuing Education

Michelle Ngo, Administrative Assistant

Financial Aid

JoAnne Hansana, Financial Aid Manager
Judy Her, Financial Aid Administrator

Human Resources

Heidi Herman, PHR, Director, Human Resources

Information Technology (IT)

Simon Tam, IT Manager
Hoa Huynh, Applications Specialist
Christopher Marez, Desktop Support Technician

Library

Scott Minor, MLS, Director of Library Resources

Office of the Registrar

Janine Dagna, Registrar
Amanda Wilder, Assistant Registrar

COLLEGE OF MEDICINE

COM Administration

For a current listing of people, official titles and contact information, please visit: <http://medicine.cnsu.edu/faculty/faculty-contact-info/college-administration/>.

<http://medicine.cnsu.edu/faculty/faculty-contact-info/faculty-contact-info><http://medicine.cnsu.edu/faculty/staff/staff>

Joseph Silva MD, Northwestern University	Dean; Vice President of Medical Affairs; Professor
Catherine Yang PhD, Tufts University	Vice President of Academic Affairs; Associate Dean of Medical Education
Xiaodong Feng PharmD, Albany College of Pharmacy and Health Sciences PhD, Chinese Academy of Medical Sciences	Vice President of Student Affairs, Admissions & Outreach; Professor (COM BS)
Gordon Wong MD, UCLA School of Medicine	Senior Associate Dean of Clinical Medicine; Professor
Grant Lackey PharmD, University of California, San Francisco	Associate Dean of Faculty Affairs & Development; Associate Professor (COM BS)
Lester Pan MD, Sun Yat-Sen University of Medical Science MD, PhD, University of California, Davis	Associate Dean of Global Health Medical Education Development
Rajendra Ramsamooj MD, University of Minnesota	Assistant Dean of Curriculum; Professor
Hugo Arias MD, PhD, University of Natal Medical School	Assistant Dean of Research; Professor
Darilyn Falck MD, Eastern Virginia Medicinal School	Assistant Dean of Student Affairs; Associate Professor
Ghaith Aleyd MBChB, College of Medicine, Al-Nahrain University	Director of Assessment; Associate Professor

COM Faculty by Department (Chair then alphabetical by last name)

For a current listing of people, official titles and contact information, please visit:
<http://medicine.cnsu.edu/faculty/faculty-contact-info/faculty-contact-info>

Department of Basic Sciences (COM BS)

Michael Bradbury , Chair; Professor PhD, Yale University	Valerie Gerriets , Assistant Professor PhD, Duke University
Lakshmi Chaturvedi , Assistant Professor PhD, Sanjay Gandhi Postgraduate Institute of Medical Sciences, UP, India	Michael Ibrahim , Associate Professor MD, Medical University of the Americas, West Indies PhD, Medical College of Wisconsin
Nripendra Dhillon , Associate Professor MBBS, University of Delhi, India MS, University of California, Davis	Philip Mack , Associate Professor PhD, University of California Davis
Nehad El-Sawi , Professor PhD, University of Dublin, Trinity College, Ireland	Jose Puglisi , Assistant Professor PhD, Universidade Estadual de Campinas, San Pulo, Brazil
Susan Ely , Professor PhD, Tufts University School of Medicine	Sailabala Vanguri , Assistant Professor MD, Osmania Medical College
Alan Ernst , Assistant Professor PhD, University of Minnesota	Jennifer West , Assistant Professor PharmD, University of California, San Francisco School of Pharmacy

Katherine Whitcome, Assistant Professor
PhD, University of Texas at Austin

Catherine F. Yang, Professor
PhD, Tufts University

Department of Clinical Sciences (COM CS)

Peter Yip, Senior Chair; Associate Professor
MD, University of Southern California

ForShing Lui, Vice-Chair; Associate Professor
MD, University of Hong Kong

Scott Braley, Associate Professor
MD, Texas Tech University

Carol Lynne Conrad-Forrest, Assistant Professor
MD, University of Nevada College of Medicine

Floyd Culler, Professor
MD, University of Tennessee

Guy DiSibio, Associate Professor
MD, UCLA, School of Medicine
PhD, UCLA

Sambandam Elango, Professor
MBBS, Madras Medical College

Rochelle Frank, Associate Professor
MD, University of California, San Diego

Louise Glaser, Assistant Professor
MD, George Washington University

Tim Grennan, Professor
MD, University of Nebraska College of Medicine

Nazir Habib, Associate Professor
MD, University of Birmingham

Nazila Hejazi, Assistant Professor
MD, Iran University of Medical Sciences

Laura Hoffman, Associate Professor
MD, University of California, Davis School of Medicine
PhD, University of California, Davis

Rodolph Holguin, Associate Professor
MD, UC Irvine

Ishwarlal Jialal, Professor
MD, PhD University of Natal Medical School, Natal, South Africa

Tracy Yarbrough, Associate Professor
, University of Iowa
PhD, University of Iowa

Ravinder Khaira, Associate Professor
MD, St. George University
PhD, John Hopkins University

James Lee, Assistant Professor
MD, University of California, San Diego School of Medicine

Kenneth Lee, Professor
MD, Harvard

Arthur Lee, Professor
MD, University of California, Davis School of Medicine

James Martel, Associate Professor
MD, Harvard University

Joseph Martel, Associate Professor
MD, University of Wisconsin Medical School

Malcolm McHenry, Associate Professor
MD, University of Southern California

Peter Murphy, Associate Professor
MD, University College of Dublin

Mark Owens, Professor
MD, University of Michigan

Lally Pia, Assistant Professor
MD, University of California, Davis School of Medicine

Leonard Ranasinghe, Professor
MD, Loma Linda School of Medicine

Joseph Rogers, Assistant Professor
MD, Medical College of Wisconsin

Mark Sheffield, Associate Professor
MD, PhD, Creighton University

Azad Sheikh, Associate Professor
MBBS, Karnatak Medical College

Jean-Claude Veille, Professor
MD, University de Montpellier School of Medicine

COLLEGE OF PHARMACY

COP Administration

For a current listing of people, official titles and contact information, please visit:

<http://pharmacy.cnsu.edu/college-administration>.

Hieu Tran

PharmD, Philadelphia College of Pharmacy and Science

Dean

Linda Buckley

PhD, MA, University of California, Davis

Associate Dean for Academic Affairs

Tiffany-Jade Kreys

PharmD, University of Michigan College of Pharmacy

Assistant Dean for Student Affairs & Admissions; Assistant Professor (CAS)

Leo Fitzpatrick

PhD, George Washington University

Assistant Dean for Research; Associate Professor (PBS)

COP Faculty by Department (Chair then alphabetical by last name)

For a current listing of people, official titles and contact information, please visit:

<http://pharmacy.cnsu.edu/faculty-and-staff/faculty-staff>.

Clinical & Administrative Sciences (CAS) <http://pharmacy.cnsu.edu/faculty-and-staff/faculty-staff>

Diana Cao, Chair; Assistant Professor

PharmD, University of Southern California, School of Pharmacy

Ivan Petrzalka, Adjunct Faculty

PharmD, Charles University
JD, California Southern University
MBA, Newport University

Kenan Alkhour, Adjunct Faculty

PhD, University of Bradford
MS, University of Damascus
PharmBSc, University of Teshreen

Olivia Phung, Assistant Professor

PharmD, Northeastern University, Bouve College of Health Sciences, School of Pharmacy

Jennifer Courtney, Adjunct Faculty

PharmD, California Northstate University, College of Pharmacy

Sam Rasty, Adjunct Faculty

PharmD, Ferris State University, College of Pharmacy
MPH, University of Illinois at Chicago

Bin Deng, Assistant Professor

PharmD, California Northstate University, College of Pharmacy

Peter Tenerelli, Assistant Professor

PharmBSc, University of Washington, School of Pharmacy

Eugene Kreys, Assistant Professor

PharmD, University of Michigan College of Pharmacy
PhD, University of Texas at Austin College of Pharmacy

Erika Titus-Lay, Assistant Professor

PharmD, Purdue University College of Pharmacy

Justin Lenhard, Assistant Professor

PharmD, University at Buffalo, School of Pharmacy & Pharmaceutical Sciences

Tuan Tran, Assistant Professor

PhD, Oregon State University
MS, Polytechnic University of Turin

Jennifer Murphy, Adjunct Faculty

PharmD, University of California, San Francisco, School of Pharmacy

Huyen Vu, Assistant Professor

PharmD, Massachusetts College of Pharmacy and Health Sciences

Jennifer West, Assistant Professor

PharmD, University of California, San Francisco, School of Pharmacy

Pharmaceutical & Biomedical Sciences (PBS)

Uyen Le, Chair; Associate Professor

PhD, Oregon State University

Eman Atef, Associate Professor

PhD, Massachusetts College of Pharmacy and Health Sciences

Tibebe Woldemariam, Vice-Chair; Associate Professor

PhD, University of Bradford, U.K.

Lakshmi Chaturvedi, Associate Professor
PhD, Sanjay Gandhi Post-Graduate Institute of Medical Sciences, UP, India

Suzanne Clark, Associate Professor
PhD, Duke University

Rania Elkeeb, Assistant Professor
PhD, Massachusetts College of Pharmacy and Health Sciences

Hatem Elshabrawy, Assistant Professor
PhD, University of Illinois at Chicago

Ahmed El-Shamy, Assistant Professor
PhD, Kobe University, Japan

Linh Ho, Assistant Professor
PhD, University of California San Francisco

Simeon Kotchoni, Associate Professor
PhD, University of Bonn, Germany
MS, University of Abomey Calavi, Benin
MS, Obafemi Awolowo University, Ile-Ife, Nigeria

Experiential Education (EED)

Hyeryeon Noh, Chair; Associate Professor
PharmD, Massachusetts College of Pharmacy
BS, Yonsei University

Tony Eid, Assistant Professor
PharmD, BS Loma Linda University, School of Pharmacy

Joe Hubbard, Associate Professor
RPh, PharmD, BCPS, University of Arizona

Sukhvir Kaur, Assistant Professor
PharmD, BCACP, University of Massachusetts, College of Pharmacy

Ashim Malhotra, Associate Professor
PhD, St. John's University

Islam Mohamed, Assistant Professor
PhD, University of Georgia

Lakshmi Shankar Chaturvedi, Associate Professor
PhD, Sanjay Gandhi Post-Graduate Institute of Medical Sciences, India

Ruth Vinall, Associate Professor
PhD, Cardiff University, U.K.

Hongbin Wang, Assistant Professor COP PBS
PhD, University of Pennsylvania
MS, PharmBS, Second Military Medical University, Shanghai, China

Zhuqiu Zin, Associate Professor
PhD, Central South University

Kristine Kim Thomas, Assistant Professor
PharmD, St. John's University

Welly Mente, Assistant Professor
PharmD, University of Southern California

Josephine Quach, Assistant Professor
PharmD, California Northstate University, College of Pharmacy

COLLEGE OF PSYCHOLOGY

COP Administration

Bret McLaughlin

PsyD, The Wright Institute
MBA, California Northstate University, Sacramento
MA, New York University

Dean

Mark Eddensohn

PsyD, The Wright Institute

Assistant Dean of Student Affairs and Admissions

Sandra Nevis

PhD, Bowling Green State University

Assistant Dean of Clinical Training

COP Faculty by Last Name

Larry Bienati, Associate Professor

PhD, Golden Gate University
MBA, California State University Hayward

Andrea Schneider, Associate Professor

PhD, University of Potsdam

Kristee Haggins, Associate Professor

PhD, Ohio State University

Craig Wetterer, Associate Professor

PhD, Fielding Graduate University
JD, William Howard Taft University School of Law

Tiffany Mimms, Assistant Professor

PhD, Fuller Theological Seminary

COLLEGE OF HEALTH SCIENCES

CHS Administration

For a current listing of people, titles and contact information, please visit:

<http://healthsciences.cnsu.edu/about/people/administration>

Heather Brown

PhD, University of California, Santa Cruz

Rikki S. Corniola

MS, Florida State University

PhD, Florida State University

TBD

Dean

Interim Associate Dean of Academic Affairs; Director of Accreditation and Assessment; Assistant Professor

Assistant Dean of Student Affairs and Admissions; Assistant Professor; Director of Student Success and Career Services

Director of Student Life and Service Learning; Instructor for Service Learning

Moira Delgado

MA/MA, Middlebury College

CHS Faculty by Department (Chair then alphabetical by last name)

<http://healthsciences.cnsu.edu/about/people/faculty>

Science and Mathematics

Damon Meyer, Chair; Assistant Professor

PhD, Irell & Manella Graduate School of Biological Sciences at the City of Hope

Molly M. Foote Assistant Professor

PhD, Florida State University

Jose Luis Puglisi Assistant Professor

PhD, Universidade Estadual de Campinas UNICAMP – Brazil

Nicholas Valley Assistant Professor

PhD, Northwestern University

Katherine Whitcome, Assistant Professor

PhD, University of Texas at Austin

Christopher Wostenberg Assistant Professor

PhD, The Pennsylvania State University

Humanities and Social Sciences

William J. Davis Chair; Assistant Professor

PhD, Virginia Tech

Louise Glaser, Associate Clinical Professor MD,

George Washington University

Cassandra Perryman Assistant Professor

PhD, University of Queensland

Frances Wise, Lecturer

MA, Santa Clara University

CNU OFFICE DIRECTORY

Office	Email	Campus Phone	Additional Phone/Fax
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College of Medicine	comadmissions@cnsu.edu	916-686-7813	
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California Northstate University
College of Dental Medicine

Volume 5
Appendices for Standard 2 (Part 2)



CNU IA Application – Predoctoral Dental Education Program
Submitted to the Commission on Dental Accreditation
May 2019

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California Northstate University

College of Dental Medicine

Student Handbook

2020-2021

MISSION

The Mission of the College of Dental Medicine is to advance the art and science of health care through excellence in oral health education, practice, research, service, and social accountability.

Education: Create caring, skilled and knowledgeable clinicians who will constantly advance their capabilities throughout life

Practice: Produce clinical leaders in oral health who will serve in private practice, health systems practice, in interprofessional settings, academia and industry

Research: Promulgate scientific inquiry throughout the curriculum and support student and faculty research that creates an environment of scientific curiosity and an evidence-based foundation for clinical practice

Service: Provide individual patient care services at all clinical sites under the auspices of CNUCDM that produces the very best oral health outcomes and clinical value.

Social Accountability: Advocate for and help build stronger communities in California and globally through improved oral health care, disease prevention, health promotion and protection from oral diseases through community-based approaches.

VISION

The Vision of the College of Dental Medicine is to provide constructive innovation in its education programs, and leadership in integrating oral health care into human health care systems.

The College of Dental Medicine Embraces the California Northstate University WECARE Values of:

- **W**orking as a team
- **E**mbacing diversity and workplace excellence
- **C**aring about our students, our staff, our faculty, and our profession
- **A**dvancing our university, our goals, and our discipline
- **R**esponding to challenges that may impede our Mission
- **E**nhancing communication and partnership

College of Dental Medicine Values:

- Patient-centered didactic and clinical education that always puts improved health outcomes first
- Foster a humanistic and character-developing environment for dental students
- Making better communities and a better world through improved oral health
- Understanding the professional responsibility of the dentist as the head of the oral health care team
- Practicing health promotion and disease prevention and protection
- Advancing California Northstate University through excellence in all we do

2020-2021 Student Handbook

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(clinical) 2400 Maritime Drive, Elk Grove,
California 95757

916.686.7300

Please Note: The information in this handbook serves as a student resource for policies and procedures of California Northstate University College of Dental Medicine and is subject to change. Students should review the handbook at the beginning of each academic year and refer to the online version at <http://dentalmedicine.cnsu.edu> for the most current information.

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WELCOME

Message from the Dean: Leon Assael

Welcome to the California Northstate University College of Dental Medicine. We are America's youngest dental school with a unique mission to gain the benefits of good oral health to the people of Northern California and beyond. We intend to recruit the most committed and capable students, staff and faculty who are devoted to caring for the sick in an integrated health education and delivery environment. We will seek out and serve those who otherwise do not have the means to care for their ailments and by helping them through improved oral health, improve their lives and the sustenance of their families, employers, friends, and their communities. Making a better world through improved oral health truly begins with us.

We will care for those whose conditions are complex and require the care that only an expert faculty in an integrated health care system in an academic health center can provide. We will educate the next great generation of oral health professionals with a forward-thinking curriculum that emphasizes Human Systems, Odontology, Oral/Maxillofacial Studies, and Behavioral/Social Sciences. Our education and our clinical care will emphasize the inter-professional teams and community resources needed to achieve desirable health outcomes.

To achieve this, you will find the College of Dental Medicine to have a remarkable array of students like you who see learning and practicing dental medicine as a life's vocation worthy of the exceptional effort, talent, personal values, and desire to achieve excellence it requires. You will be able to model your growth as a clinician with faculty and staff who will serve as role models in your development. You will have the very best educational resources, clinical environments and faculty with which to care for patients and produce the highest levels of patient care.

Message from the Assistant Dean of Student Affairs and Admissions: Richard Simonsen

The basic curriculum of California Northstate University College of Dental Medicine will be delivered by providing unique scientific, scholarly, interpersonal communication, and precise management skills and experiences to you, as our student, through the use of modified team-based learning. By working on teams and learning the benefits of teamwork, you will be exposed to a diverse population of CNU students from a variety of backgrounds and life experiences. You, as a student in our program, will assume a more proactive role in the program as

you learn to effectively interact with your fellow team members to enhance learning and practical application of the didactic material presented in classes. Team-based learning prepares you, our students, to play a key role in a multidisciplinary team setting, something that will be key to success in the outside world of dental practice, as you work collaboratively with a variety of dental health care specialists, and other health care providers, to improve patient care and enhance patient outcomes.

Since the profession of dentistry is constantly evolving with the discovery of new treatment methods, new dental materials and the tremendous revolution of digital dentistry, it is imperative that dental clinicians stay at the forefront of such developments. Our faculty at California Northstate University College of Dental Medicine is dedicated to providing you, our students, with up-to-date, evidence-based instruction to cultivate competent, empathic and caring dental practitioners and life-long learners in this, your chosen, field. The educational foundation provided to you will prepare you to assume a leadership role in the community and healthcare field as a trusted resource for treatment and advice.

As a dental student, you will assume the great responsibility of providing caring, empathic, evidence-based clinical care to patients. Therefore, it is vital to receive a comprehensive educational experience that offers numerous opportunities for growth on both a personal and professional level. As you and your fellow students undergo the rigors of the dental curriculum, the Office of Student Affairs and Admissions (OSAA) provides a variety of services to support and enable you to be successful in our program. Among the many services provided, the OSAA offers career development programs, disability, health, and counseling services, LGBTQ assistance, academic advising, and tutoring programs. The OSAA also oversees the student clubs and organizations and helps to facilitate outreach events at the local, regional and national level.

I look forward to working with each and every one of you as you pursue your educational goal of becoming a superb dentist, be it in clinical dentistry or one of the many valuable arms of the profession, in industry, education, or administration. California Northstate University College of Dental Medicine welcomes you to our Doctor of Dental Medicine program!

ABOUT CNUCDM

History of the College

California Northstate University (CNU) was founded in 2007 by a group of visionary leaders to meet the needs of our communities. The successful launch of the College of Pharmacy in 2009 led to the consideration of the development of an academic health center to include colleges of medicine, dental medicine, nursing, psychology and other health professions. In addition the baccalaureate programs in the health sciences to educationally guide students towards the health professions went under development. This resulted in the formations of the College of Health Sciences and establishment of the CNU College of Medicine.

A group of local community healthcare providers and leaders realized the growing local and national shortage of primary care physicians and other community health resources and committed to design the College of Medicine in order to meet the need for more physicians and health care providers in the Central Valley, Delta, Mountains and rural north of California.

The local healthcare community provided visionary leadership, funding and resources to develop and run the college. Much of the preliminary design of the structure of the College of Medicine and its curriculum was in place by July 2011.

The College of Medicine successfully completed all necessary planning and accreditation procedures, and in June 2015, received its preliminary accreditation by the LCME. The inaugural class of 60 students matriculated in September 2015.

In 2017 the development of a working group to establish the College of Dental Medicine in a strong relationship with the other health sciences ensued. This resulted in a decision in June 2018 by the CNU Board of Trustees to form the College of Dental Medicine.

Mission, Vision, and Core Values

MISSION

The Mission of the College of Dental Medicine is to advance the art and science of health care through excellence in oral health education, practice, research, service, and social accountability.

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- Advancing our university, our goals, and our discipline
- Responding to challenges that may impede Mission
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College of Dental Medicine Values:

- Patient-centered didactic and clinical education that always puts improved health outcomes first
- Foster a humanistic and character-developing environment for dental students
- Making better communities and a better world through improved oral health
- Understanding the professional responsibility of the dentist as the head of the oral health care team
- Practicing health promotion and disease prevention and protection
- Advancing California Northstate University through excellence in all we do

Accreditation

WASC

Application was submitted to the Western Association of Schools and Colleges for a substantial change to add the College of Dental Medicine program in February 2019

CODA

Application for initial approval of the DMD program at California Northstate University was submitted to the Commission on Dental Accreditation in March 2019

Complaints Related to CODA Accreditation Status

The Commission on Dental Accreditation (CODA) is required by the U.S. Secretary of Education to require its dental medicine program to record and handle student complaints regarding a school's adherence to the CODA Standards. The college must demonstrate a link between its review of complaints and its evaluation of a program in the accreditation process self-study. Therefore, in order to demonstrate compliance with the U.S. Department of Education Criteria for Recognition, and with the prior review and advice of Department of Education personnel, CODA requires dental schools to provide an opportunity for dental students to provide comments and/or complaints about the school's adherence to CODA's Standards.

Additionally, students, faculty, staff, patients, or the public may file complaints regarding adherence to CODA standards directly to the Commission on Dental Accreditation. As stated in the CODA standards

“The Commission on Dental Accreditation will review complaints that relate to a program’s compliance with the accreditation standards. The Commission is interested in the sustained quality and continued improvement of dental and dental-related education programs but does not intervene on behalf of individuals or act as a court of appeal for treatment received by patients or individuals in matters of admission, appointment, promotion or dismissal of faculty, staff or students. A copy of the appropriate accreditation standards and/or the Commission’s policy and procedure for submission of complaints may be obtained by contacting the Commission at 211 East Chicago Avenue, Chicago, IL 60611-2678 or by calling 1-800-621-8099 extension 4653.

Western Association of Schools and Colleges (WASC)

California Northstate University is fully accredited by the Accrediting Commission for Senior Colleges and Universities of the Western Association of Schools and Colleges (ACS WASC). The College of Dental Medicine will be accredited by ACS WASC as a new educational program developed within California Northstate University.

For information on WASC: <http://www.wascsenior.org/>

Complaints Related to Accreditation Standards (WASC)

Accreditation by the Accrediting Commission for Senior Colleges and Universities represents the Commission’s judgment that an institution is satisfactorily achieving its mission and educational purposes and that it meets or exceeds the Commission’s standards of quality, integrity, and effectiveness.

The Commission values information provided by students, employees, and others in determining whether an institution’s performance is consistent with the Standards of Accreditation and Commission policies and procedures.

The Commission has two established means for receiving comments from students, employees and members of the public about its member institutions: complaints and third-party comments.

As a general rule, complaints are written by employees and students who have grievances that draw into question the member institution’s adherence to one or more Commission Accreditation Standards or Policies. Third-party comments are usually more general comments of a substantive nature about a member institution.

Individuals should review the [Complaints and Third-Party Comments Policy](#) on the WASC website to ascertain the appropriate means to communicate comments and complaints.

ADMINISTRATION AND FACULTY

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PROGRAM DESCRIPTION

Educational Philosophy

The College of Dental Medicine curriculum is designed to help students become dentists who are self-directed and lifelong learners. The four year curriculum is designed to facilitate and optimize student learning in a progressive and integrated manner both in didactic and experiential courses. CNUCDM recognizes the need to implement varied educational styles in order for students to become competent self-directed, life-long learners. Therefore, there will be a variety of formats for instruction ranging from lecture to completely self-directed.

integrated curriculum. Clinical presentations frame the introductory material in the Foundations of Clinical Dental Medicine. All subsequent courses in the Human Studies curriculum (Year 1 and Year 2) integrate biochemistry, cell biology, embryology, genetics, anatomy, histology, immunology, microbiology, pathology, pharmacology, nutrition, and physiology with the clinical presentations.

The Dental Medicine Skills courses and introductory dental medicine courses run concurrently with the systems-based courses and are designed to integrate dental medicine skills. These include Foundations of Odontology and Dental Anatomy courses in the first year as well as preclinical courses in the first and second year in Operative Dentistry, and Prosthodontics

Masters Colloquium and Junior and Senior seminars is a biweekly course designed to foster professionalism, ethics, and global health knowledge and behaviors throughout the curriculum.

The required clerkships and electives in year 2, 3 and 4 carry our clinical presentation curriculum through completion of the dental medicine education program. CNUCDM has clinical clerkships required in comprehensive care dentistry (including Odontology, Operative Dentistry, Radiology, Prosthodontics, Periodontics and Endodontics), Oral Surgery, Pediatric Dentistry, Orthodontics, Emergency Dental Care, Special Needs Dentistry, and community-based education. Fourth year clerkships incorporate all disciplines into a comprehensive care model. Electives to provide additional experience into the above areas, as well as discipline-specific in oral medicine, sleep dentistry, primary care medicine, public health, among others, are selected. Students will have the opportunity to master the basic sciences and foundational clinical skills associated in clinical care and apply basic sciences in all clinical experiences.

Detailed course descriptions are accessible for students online and in the all syllabi provided prior to the start of each course.

Learning Outcomes

Institutional Learning Outcomes

Students are expected to master the Institutional Learning Outcomes (ILOs), which are the learning outcomes expected of every student at California Northstate University. While the approach and specific outcomes vary in each program, all program and course learning outcomes are derived from these three fundamental institutional outcomes:

- Highly developed critical thinking skills
- Effective oral and written communication skills

- Exemplary professional behavior, attitude, and values

Program Learning Outcomes

Appendix A: CNUCDM PLOs

Upon completion of the CNUCDM the graduating dentist (DMD) will demonstrate:

1. Patient-Centered Care: Demonstrate understanding of healthcare disparities and cultural awareness in patient counseling and patient advocacy
2. Evidence-Based Care: Apply current, evidence-based oral healthcare within the scope of general dentistry
3. Culturally competent, empathic communication: Demonstrate patient centered, empathic, and culturally competent communication and interpersonal skills
4. Oral and Written Communication: Demonstrate sound oral and written communications in patient care
5. Critical Thinking: Utilize critical thinking, problem solving skills and systemic thinking in assessing and making reasoned, evidence-based decisions in patient care
6. Ethics and Professionalism: Demonstrate professionalism and ethical decision making
7. Biomedical Sciences Knowledge: Demonstrate an understanding of the fundamentals of biomedical sciences and apply them appropriately in oral healthcare
8. Practice Management: Apply legal, regulatory and business management concepts related to provision of oral healthcare services

Co-Curricular Learning Outcomes

Upon successful completion of CNUCDM Doctor of Dental Medicine (DMD) program, students will be able to demonstrate the following co-curricular learning outcomes:

- 1. Social Awareness and Cultural Sensitivity.** Demonstrate awareness of and responsiveness to social and cultural differences by adapting behaviors appropriately and using effective interpersonal skills.
- 2. Professionalism and Advocacy.** Demonstrate professional behavior and effective interactions with other healthcare professionals, community members, and/or patients and advocate for initiatives to improve patient care, health outcomes, and the profession of medicine.
- 3. Self-Awareness and Learning.** Demonstrate self-awareness through reflection and the development of appropriate plans for

self-directed learning and development.

4. Innovation and Entrepreneurship. Demonstrate innovation and creativity to develop novel strategies to accomplish professional goals, or students demonstrate an understanding for how innovation and creativity influence the development of novel strategies to accomplish professional goals.

5. Public Health and Education. Apply skills learned in the classroom to create and effectively deliver public health initiatives and health-related education to the community.

6. Service and Leadership. Demonstrate the ability to lead and work collaboratively with others to accomplish a shared goal that improves healthcare.

HONOR CODE

The Honor Code of CNUCDM is a formal code of conduct that emphasizes the core principles of respect, honesty and integrity, legal and ethical behavior, and professionalism, to which all students, faculty, and staff are held responsible for maintaining.

Respect

CNUCDM is dedicated to teaching, scholarly activity, research, and service in a respectful manner. We respect one another, our supporters, our colleagues, and our patients. We extend this respect to all persons, regardless of race, color, national origin, ancestry, citizenship, gender, gender identity, sexual orientation, age, religion, physical or mental disability, or veteran status. We promote good will among our diverse population and uphold the autonomy, dignity, and moral integrity of all persons. We respect the abilities, customs, beliefs, values, and opinions of others. As members of the dental, medical and surgical community, we promote the good health and lives of every patient in a caring, compassionate, and confidential manner, with respect to their right to privacy. We perform our procedures for the primary purpose of improving the health and lives of our patients, and we have respect for their autonomy.

Honesty and Integrity

CNUCDM is dedicated to teaching, scholarly activity, research, and service with honesty and integrity, both on and off campus. Dental students, faculty and staff have a duty to be truthful in professional and professional-patient relationships. We are committed to teaching, scholarly activity, and professional preparation in a team-based learning environment, in which all individuals are personally accountable and adhere to the tenets of honesty and integrity in the classroom and in the community. Cheating, plagiarism, and other forms of academic dishonesty are not tolerated. Individual work is to be based solely on the

effort of the individual. Team work and professional relationships are to be based on individual contributions and collaboration from all team members. All examinations, projects, and in or out of classroom assignments, whether individual or team-based, are expected to be performed and completed with the utmost degree of honesty and integrity.

Cheating in a health care studies environment is particularly egregious in that the knowledge and skills to be learned needs to be applied in the care of another person, the patient. On that basis it is a legal requirement of licensure in most states for dentists to report physical, health, or personal harm to patients under various limits. Similarly, as a student doctor, it is the obligation of dental students to report to the honor code council for investigation, suspected cases of cheating or other violations of the honor code.

Legal Standards and Ethical Behavior

CNUCDM is dedicated to behavior that follows legal and ethical standards in teaching, scholarly activity, research, and service. We are committed to following the law, professional practice standards, and the American Dental Association Code of Ethics. We comply with and adhere to all federal, state, and local laws and regulations.

We encourage all to act ethically in developing and advocating a culture of consideration for codes of ethics, values, and moral convictions of those who could be affected by our decisions. Whenever appropriate, we seek advice and counsel to determine the right course of action and make the best decision on behalf of those who depend on us to do so.

Professionalism

CNUCDM is committed to providing teaching, scholarly activity, research and service in a professional manner. We display professional attitudes, values, and behaviors in the classroom, at clinical clerkship sites, and in the community. We encourage team work and team-based learning, with respect for differing points of views of team members. At the same time, we expect individual competence, performance, and accountability in a professional manner. We serve as positive advocates for our profession by striving for excellence in the performance of our duties, while protecting the health and autonomy of our patients, and serving individual, community, and societal needs.

Personal Accountability and Expectations

All students, faculty, and staff of the CNUCDM community are required to follow all applicable provisions of this Honor Code. We are all personally responsible and accountable for maintaining an environment and culture of respect, honesty, integrity, legal and ethical behavior, and professionalism. This environment and

culture shall be extended off campus when dealing with a CNUCDM related matter or a member of the CNUCDM community, including, but not limited to patients, CNU clinics, and clinical clerkship sites participating in the CNUCDM clinical education program.

It is understood that teamwork is necessary for ensuring and sustaining an environment and culture that support these core principles and related values.

As such, it is expected that all students, faculty, and staff of CNUCDM shall know the Honor Code, uphold the Honor Code in daily life both on and off-campus, promote the Honor Code and an environment and culture of respect, honesty, integrity, legal and ethical behavior, and professionalism, report all known or suspected Honor Code violations to the appropriate personnel, and seek appropriate advice if unsure or in doubt, and cooperate with investigations of Honor Code violations.

Each year prior to and at the white coat ceremony, DMD students are given the opportunity to add their own commitment and accountability statements to the honor code. Each student signs the honor code as a requirement for matriculation at the white coat ceremony.

Consequences of Honor Code Violations

Any and all violations of the Honor Code are processed as appropriate through the Office of Student Affairs and Admissions, or the responsible governing body. Any person accused of academic or non-academic violations will be afforded fair jurisprudence and due process of law. Violations of an academic, professional, or other nature are subject to appropriate disciplinary action, which may include, but is not limited to, warning, probation, remediation, restitution, suspension, dismissal, expulsion, or legal prosecution. For specific information, refer to the CNUCDM policy most relevant to the violation.

Non-Retaliation

CNUCDM does not tolerate retaliation against individuals who report honor code violations particularly hateful, dishonest, illegal, unethical, unprofessional, or otherwise inappropriate acts. Anyone who retaliates against these individuals is in violation of the Honor Code and is subject to disciplinary action for that Honor Code violation.

Rewards

By knowing, understanding, embracing, and following the core principles of this Honor Code, we can ensure that CNUCDM will sustain an environment and culture that supports: an effective learning environment, an effective teaching environment, an effective working environment, and an institution with high quality

members.

Honor Council

The Honor Council hears alleged violations of the Honor Code and Professional Conduct Code, and determines the validity of any allegation of academic dishonesty. The Honor Council establishes bylaws and procedures for conducting hearings.

All alleged Honor Code and Professional Conduct Code violations go before the Honor Council and may result in dismissal from the College.

A representative from the Council introduces the Honor Code and Professional Conduct Code to the student body during new student orientation. Additionally, the Honors Council reviews the Honor Code and Professional Conduct Code in collaboration with a faculty advisor every odd year, and makes recommendations for changes to the Assistant Dean of Student Affairs. The Honor Council is made up of two representatives elected by each class at the time class officers are elected. A student may serve as both a class officer and member of the Honor Council. One third year student is elected by the council as co- chair and a fourth year student is Past co-chair. The faculty representatives include one member from four of the twelve divisions to be rotated through the divisions annually. The Assistant Dean of Student Affairs and Admissions serves ex officio as co-chair. Students interested in serving on this council must be in good academic standing and display qualities of honesty, integrity, and maturity.

Reports and recommendations of the Honor Council are presented to the Dean of the College of Dental Medicine for further action in concert with university administration.

CONDUCT

CNUCDM is committed to guiding students as they seek to attain the highest standards of professional responsibility and adherence to ethical principles. The domains of professionalism are honesty, integrity, responsibility, and accountability, commitment to excellence, altruism, empathy, respect for others and respect for patients. Students are expected to display these professional qualities and uphold the highest level of professional and personal ethical behavior at all times and in all

places while engaged in educational or university activities.

It is the policy of the University to respond in a measured fashion commensurate with the student's breach of professional conduct. The University reserves the right to require the student seek medical/psychological evaluation and receive appropriate treatment, be suspended, and/or be dismissed from the program for any acts that violate the guidelines and spirit of the conduct rules of California Northstate University.

Students arrested for illegal acts may be suspended immediately from the College of Dental Medicine until the resolution of the allegations against the student. It is the responsibility of the student to notify the Assistant Dean of Student Affairs and Admissions as soon as possible if s/he has been arrested for any reason. Regardless of the actions of any third party, CNUCDM reserves the right to dismiss any student for violations of the conduct codes of the University.

Professionalism

Professionalism is very important because it communicates trust. Professionalism can further be defined with respect to responsibilities, relationships, and ethics.

Professional Responsibilities:

- Seek and accept feedback and constructive instruction from teachers, peers, residents and faculty in order to continually improve the student's educational experience, knowledge and clinical skills.
- Commit to the highest standards of competence both for the student and for those with whom they work.
- Recognize the importance of life-long learning and commit to maintaining competence throughout the student's dental career.
- Be mindful of demeanor, language, and appearance in the classroom, in the presence of patients, and in all healthcare settings.
- Be accountable to all members of the CNUCDM community and its affiliates, including students, residents, faculty, and support staff.
- Admit to and assume responsibility for mistakes in a mature and honest manner and develop productive strategies for correcting them.
- Refrain from using federally illegal substances. Refrain from using alcohol, non-prescription or prescription drugs in a manner that may compromise judgment or ability to contribute to safe and effective patient care.
- Be considerate and respectful of others' (teachers, peers, residents, patients and faculty) time, rights, values, religious, ethnic and socioeconomic backgrounds, lifestyles, opinions, and choices, even when they differ from my own.

- Meet the expectations for participation and timeliness that are communicated to me by those who teach me.
- Take an active role in caring for the diverse patient population served by the CNUCDM and its affiliate hospitals and clinics
- Recognize my limitations and seek help when my expertise, knowledge, or level of experience is inadequate to handle a situation in the classroom, hospital, or research setting.

Professional Relationships

- Maintain appropriate relationships with patients, teachers, peers, residents and faculty.
- Treat all members of the CNUCDM community, patients, and their families with respect, compassion, and dignity.
- Be mindful to avoid intentionally embarrassing or deriding others.
- Provide feedback to others (both colleagues and superiors) in a constructive manner, with the goal of helping them to improve.
- Treat those who participate in student education (e.g. standardized patients) with dignity and respect.
- Actively work to create an atmosphere in classrooms, clinical settings and in laboratories that is conducive to optimal, interactive learning.
- Help and support peers during difficult times in their academic, professional, and personal lives.
- Attend to personal physical and emotional well-being.

Professional Ethics

- Maintain the highest standards of academic and scholarly honesty by behaving in a trustworthy manner.
- Recognize and function in a manner consistent with the role of a student on a team.
- Maintain a commitment to patient confidentiality, recognizing the importance of patients' entrustment of sensitive information.
- Place patients' interests and well-being at the center of educational and professional goals.
- Treat cadaveric and other scientific/clinical specimens with respect.
- Adhere to the standards of the dental profession and apply fundamental principles of social justice, patient autonomy, and the primacy of patient welfare.
- Learn how to avoid conflicts of interest while carrying out responsibilities.
- Contribute to dental/medical knowledge through active scholarship and discovery.

Disciplinary Process for Non-Academic Reasons

Students are expected to comply with all regulations and policies of California Northstate University and of the College of Dental Medicine. Students are also expected to conduct themselves in accordance with accepted professional standards as student doctors and as future dentists.

Professionalism Concern Process

In the event that a student is alleged to be in violation of norms of conduct as described in the Student Handbook, or in violation of professional conduct code at an affiliate institution, the allegation is reported to the Assistant Dean of Student Affairs and Admissions via the Professionalism Concern Process using the Professional Concern Report (PCR). The student will need to meet with the Assistant Dean of Student Affairs to review and respond in writing to the unprofessional behavior reported in the PCR. The student has the option to appeal to the Dean of the College of Dental Medicine and/or seek the assistance of the Honor Council. The Assistant Dean of Student Affairs may refer to the Honor Council and/or the Academic Review/Promotion and Graduation Committee for further recommendations or disciplinary action. If a student accumulates two or more PCRs, these will become part of the student's permanent record. If a student accumulates one PCR and not more, it will be destroyed at the time of graduation and will not become part of the permanent record.

If a student has been arrested and has pending legal action against him/her, the Assistant Dean of Student Affairs and Admissions, or the Dean of the College of Dental Medicine may initiate the Professionalism Concern Process. Final action by the Associate Dean of Student Affairs and Admissions or Dean of the College of Dental Medicine may be withheld pending the final outcome of the legal action against the student.

Professionalism Concern Report (PCR)

The Professionalism Concern Report (PCR) can be found on CNUCDM's website or by [clicking here](#).

Absences

Students are required to attend class unless otherwise stated by the course director or in the syllabus. Students are required to attend all mandatory laboratory and clinical sessions and seminars as well as other classes or sessions declared as mandatory by the Course Director, Clerkship Director, or Assistant Dean of the Office of Student Affairs and Admissions.

All summative examinations and competency evaluations are considered mandatory and may only be rescheduled due to an approved excused absence. Students are to remain local and not travel out of the area prior to the end of the semester in the event of needed summative exam retesting.

An absence for any of the following reasons is considered approved and will normally be excused: medical/illness, religious holiday, emergency leave, bereavement, military duty, jury duty, involvement in a traffic accident, or immigration and naturalization. The Office of Student Affairs and Admissions may request documentation to substantiate the nature of the absence.

Special circumstances may be eligible for an excused absence but must be approved by the Assistant Dean of Student Affairs and Admissions at their discretion. Please refer to the Absence Form and Policy for instructions.

Any unexcused absences will be adversely reflected in the Professionalism Performance section of the Dental Student Performance Evaluation (MSPE). Excessive unexcused absences will result in a PCR report and can impact academic progress.

Absence Request Form

The Absence Request Form can be found on CNUCDM's website or by [clicking here](#).

Disorderly Assembly and Conduct

No person shall participate in or organize any activity for the purpose of creating a disturbance that interferes with the operations of University or of the College of Dental Medicine. No person shall use any University- and/or College-owned or controlled building or property without authorization. Any conduct on the college campus or on affiliated sites that is disruptive or offensive is prohibited and may be grounds for dismissal from the College.

Disorderly conduct includes but is not limited to:

- Disrupting a class in progress
- Physically or verbally assaulting another person
- Discriminating, threatening, demeaning another person
- Dishonest behavior

Any violation of this policy will result in disciplinary action. In addition appropriate legal action against the offending individual(s) or organization(s) may also be pursued.

Dress Code Guidelines

Classroom

As representatives of the dental profession, all dental students are expected to maintain an image that conveys credibility, trust, respect, and confidence in one's colleagues and patients. Attire and behavior should promote a positive impression for the individual student, the specific course, and the institution.

For men, a shirt with a collar is preferred. For women, shirts and blouses must extend, at least, to the waistband of the skirt or pants.

Students are permitted to wear casual slacks, jeans, and T-shirts to classroom activities provided they are clean, in good repair, and do not contain any offensive language or pictures.

Clinic

Standards of dress and appearance in a clinical setting, including the OSCE Area and Simulation Lab. Standards are designed to ensure that students present a professional appearance consistent with what is expected in a clinical setting. How students look and act directly affects how provided care is perceived by patients, faculty, staff, and other students.

Clothing

Men should wear a collared shirt, long pants, socks, and closed-toe, non-athletic shoes. Ties, if worn, must be bow ties or tacked to the shirt to prevent the tie coming in contact with the patient.

Women may wear dresses of medium length or professional-style slacks. Dress and skirt hems must be clearly visible below the hem of the white coat. A white coat with the CNUCDM logo and a name badge are required. Clothing should be neat and clean and appropriate for the clinical setting.

While wearing a white coat in the clinical setting, dental students are expected to verbally identify themselves as "student doctors" at all times and must assume responsibility to clarify their role to patients.

Scrubs

Scrubs must be worn in compliance with the policies of the institution in which the dental student is assigned for patient care rotations and according to clerkship preceptor instruction.

Students assigned to CNUCDM clinics will, during clinic days, change into scrubs on site for the clinic day. It is not appropriate to wear CNU scrubs while commuting, at retail/restaurant or other external sites.

Footwear

Shoes and socks/stockings are required in clinical settings. They must be comfortable, clean, in good repair and appropriate to the job functions and duties. Flip-flops, slippers, or open-toed shoes/sandals are not allowed in the patient-care setting. Your shoes should provide sufficient traction for use in a dental clinic setting where there is a distinct possibility of fluid spills.

Personal Grooming

Hair must be neatly groomed and clean. Long hair may neither obstruct vision nor interfere in any way with the student's clinical performance. A hair restraint, i.e., hair net/surgical cap, is required in clinical and simulations settings, to protect against entanglement with clinical equipment and to be part of barrier protection. Also, hair color and style must be appropriate for the clinical work environment.

Facial hair must be neatly groomed, clean, and must not interfere in any way with patient care. For safety and infection control reasons, students working in some areas of the clinics and operatories may be required to wear beard guards.

Fingernails should be short, neat and clean. Nail polish, if used, should be clear and without chips. Long fingernails are a safety hazard to self and others. Artificial nails are not permitted.

Jewelry

Any jewelry worn by students must be of reasonable shape and size, appropriate to the work setting, as defined by the clinical supervisor, and may not interfere with patient care, job performance, or safety. Earrings and small nose studs are the only acceptable forms of visible pierced jewelry. Rings must be small enough to allow for the use of gloves, with no risk of tearing.

Tattoos

Tattoos are to be covered, if practical, at all times when in the clinical setting.

Other

Hair covers, masks, shoe covers, and gowns should be removed before leaving the designated clinical areas and should not be worn while in the outpatient clinics or when making rounds on the inpatient services, unless permitted by the institution or instructed by the clerkship preceptor.

Research Lab

The CNUCDM dress code for the research laboratory is about safety and following OSHA regulations. The basic safety rule is to dress in a manner that will minimize safety risks.

Clothing

Clothing should be comfortable, appropriate for the work, and must be clean, neat, and in good repair. Lab regulations strictly prohibit shorts, skirts, and short dresses. Exposed skin is at risk for contact with hazardous material and burns.

Jeans may be appropriate attire based on the section in which the student works. Jeans, when worn, must be clean, neat, and in good repair.

Jewelry and any hanging article of clothing should be constrained.

Footwear

Shoes worn must meet OSHA safety standards and regulatory requirements relative to the specific work location. Footwear must be clean, in presentable condition, professional, closed-toed, and closed-heeled. Canvas sneakers and flip flops are not appropriate.

Personal Grooming

Hair must be clean and groomed. Long hair must be tied back. Fingernails should be short, neat and clean.

Lab Coats

Research lab coats must be worn inside the laboratory at all times. Lab coats may not be worn out of the working area in the central facility. All non-laboratory employees must wear a lab coat when visiting or conducting business in the laboratory work area. Extra coats are made available for these temporary uses.

Gloves and protective eyewear must be worn in appropriate locations.

Anatomy Lab

Clothing

Shorts or skirts are not permitted. Clothing or personal protective equipment must cover any part of the body that could be contaminated or come in contact with the cadaver or chemical fluids.

Lab Coats

A lab coat or scrubs must be worn when working in the laboratory to protect you from contaminating your clothes. Such clothing should be laundered frequently. Lab coat/scrubs worn in anatomy lab may not ever be worn outside of anatomy lab.

Footwear

No open-toed shoes are allowed. Your shoes should protect your feet from accidental chemical drips and injury from falling sharps. Your shoes should provide sufficient traction for use in a lab setting where there is a distinct possibility of the floor having fluid spills.

Protective equipment

Appropriate personal protective equipment will be provided for you, and it is your responsibility to use it. Gloves must be worn when working in lab, and properly disposed of in the designated receptacles prior to leaving the lab. Particulate masks will be available for use when needed. If you find that you have a chemical sensitivity (respiratory or mucosal irritation), or if you are pregnant, please let an instructor or the Lab Manager know.

Proper protective eyewear is recommended at all times (while eyeglasses provide some protection, they are not considered protective). Protective eyewear is mandatory when using rotary instrumentation and saws in all settings or any other procedure with risk of spatter or aerosol contamination.

Personal Grooming

Hair should be clean and groomed. Long hair must be tied back.

E-Professionalism and Social Media

The following serves as a summary of the e-Professionalism and Social Media Policy.

California Northstate University requires all students to uphold the core principles of the Honor Code which includes E-Professionalism in the use of social media in addition to respect, honesty and integrity, legal and ethical behavior, and professionalism in all aspects of their lives.

Social Media

Students are to maintain a professional demeanor at all times within social media. Students must avoid posting or being tagged in text, photos, or videos that may be professionally compromising. Students should monitor their sites to seek removal of unprofessional public posts by others.

Using social media to insult, threaten, defame, harass, disparage or bully another person or entity or to engage in copyright or trademark infringement, misappropriation of trade secrets, discrimination, or related actions, or for any other purpose that is illegal, against University policy, or not in the best interest of the University is prohibited. The use of social media for non-academic purposes during class time is unprofessional.

Confidential Information

Students are required to abide by HIPAA (Health Insurance and Portability and Accountability Act) and related jurisprudence in treating patient information as confidential. Formal instruction regarding HIPAA is provided prior to the first clinical experiences.

Representation of University Entities

Representing one's personal opinions as institutionally endorsed by the University or any of its entities is prohibited. Students should maintain the privacy of fellow student colleagues and University/College employees unless they have been given prior written permission to use the person's likeness or name.

Students are not allowed to use the University or College of Dental Medicine logos unless they have received prior written permission from authorized University personnel.

For more information regarding the usage of university and college logos, please see the [University Logo Use](#).

Violations

Any violation of these guidelines may result in disciplinary action, suspension, or dismissal from the University. In addition, appropriate legal action against the offending individual(s) or organization(s) may be pursued.

Food on Campus

Food and drinks are not allowed in the laboratory setting, OSCE, or Simulation Lab. Beverage containers with capped and closed bottles are allowed in the classrooms.

Students are responsible for cleaning up any remnants, messes, or spills in classrooms, College Rooms, or hallways. If unable to completely clean, please contact the receptionist to coordinate janitorial assistance.

Refrigerators in the Academic Café are available for student use. All food must be clearly labeled with student's name and date. Students are expected to regularly remove their food from the refrigerators; leftover food and storage containers are regularly discarded at the end of each week.

College Room refrigerators are to be kept clean. Perishables should not be stored in College Room lockers.

Free Speech

CNUCDM supports the right of students to free speech, to engage in discourse and to listen to others, and to respectfully express approval or disapproval of ideas or issues. However, it is inappropriate and unprofessional to be disruptive of the academic or clinical setting when seeking to express an opinion. Unprofessional conduct will be addressed by the Professionalism Concern Process and/or disciplinary action.

Fundraising

CNUCDM recognizes that fundraising is a vital component of a successful professional organization and encourages students to seek entrepreneurial ideas for fundraising.

Dental students and student organizations must first obtain permission from the Assistant Dean of Student Affairs and Admissions to sell any items on campus.

Dental students/organizations may not directly solicit funds from an outside company (such as pharmaceutical companies, medical/dental employers, alumni). However, a funding request may be made through the Assistant Dean of Student Affairs and Admissions. A formal proposal, with the organization's advisors signature, must be submitted with the request to the Assistant Dean of Student Affairs and Admissions for review. Once the proposal is approved by the Assistant Dean of Student Affairs and Admissions the student organization may forward the approved request to the potential sponsor(s).

Detailed information regarding fundraising for student organizations can be found in [CNUCDM's Student Organization Policy and Procedure Manual](#). The CNU Event and Fundraising Form can be found [here](#).

Use of the University or College insignia is prohibited unless prior authorization for use is granted by the Vice President of Operations. Use of the University or College insignia must comply with the Use Guide for the University or College insignia.

For more information regarding the usage of university and college logos, please see the [University Logo Use](#).

Gambling

CNUCDM prohibits any form of gambling for money or stakes representing money on College property unless exempted by California state law.

Hazing Policy

Hazing in any form for any reason is not tolerated at CNUCDM and is grounds for dismissal from the College. Hazing is defined as any act that is likely to cause physical, emotional or social harm, fright or embarrassment to another person. Hazing includes any means of initiation or pre-initiation into a student organization, which causes mental or physical hardship to the person seeking membership. Hazing includes but is not limited to: encouraging or requiring participation in drinking games, creation of excessive fatigue, wearing inappropriate public attire, and morally degrading or humiliating activities.

Any student who believes they have been hazed or believe that they may be accused of the same should contact the Assistant Dean of Student Affairs.

Liability and Malpractice Insurance

All incoming students are enrolled in the California Dental Association and American Dental Association – Student Division at the beginning of the academic year. Professional liability insurance is included for students as part of the care team at CNU clinics and at authorized clinical rotation in community-based education. It is not included for unauthorized activities that are not an official component of the curriculum such as international or regional volunteer work.

Name Badges

Name badges are provided to all students during Orientation and must be worn at all times while on campus, at clinical sites, and during patient-care activities.

CNUCDM identification badges must be worn in all academic and professional environments. Additional identification may be required by other affiliated facilities such as affiliated hospitals, clinics, and doctor's offices. The identification must be worn in plain view, above the waist on a lanyard, clip, or pin.

Replacing Name Badges

Students must report any missing, lost, or stolen identification badges immediately. Additional name tags are provided at a replacement cost of \$25.00 for the first loss and \$60.00 for any second or subsequent loss. The replacement cost is waived if the badge is stolen and a copy of the police report is submitted.

Professional Identification

It is extremely important for students not to identify or introduce themselves as "doctor." To misrepresent oneself as a dentist is a felony, and CNUCDM does not foster or tolerate criminal activity, even if it is unintentional in nature.

Students who have already obtained a doctorate degree are still asked to refrain from introducing themselves as "doctor" in the presence of patients in order to prevent confusion and maintain legal compliance.

Smartphones and Personal Communication Devices

All smartphones, pagers, and headphones (including earbuds) should be turned off before entering any classroom, laboratory, and discussion session or academic/professional event.

Smoking and Smokeless Tobacco

Smoking or using smokeless tobacco is not permitted on the campus. This includes vaporizers and vapor-based cartridges. Dental students are urged not to smoke tobacco or other substances at any time as this adversely impacts on the dental care delivery environment.

University Logo Use

The following serves as a summary of the University Logo use and Branding Policy. To read the complete policy, [click here](#).

Use of Logo

Every use of the CNU marks and logos must be approved by Student Affairs and Apparel Department. Products licensed to use CNU's identifying marks must be of high quality and good taste.

CNU does not authorize the use of marks or logos under any circumstances on the following:

- Alcoholic beverages
- Inherently dangerous products
- Obscene or disparaging products
- Sexually suggestive products

For any questions regarding whether it falls under any of these please see the Office of the General Counsel.

University Entities

CNU colleges, departments, centers, institutes, and organizations are exempt if the merchandise is for internal use and not for resale. CNU entities may use the logo to promote their activities on posters advertising events, programs, brochures, etc. but must adhere to the CNU brand and identity standards. Posters for presentations and scientific use are permitted.

Student Organizations

Registered student organizations are considered CNU entities, and are allowed to use the CNU logo for products that are not for resale. Any use of CNU's logo and brand must be approved by the Apparel Department.

Guidelines for Logo Use on Apparel

Do not stretch the logo. Proportions of the CNU logo must remain the same whether reduced or enlarged. When applied to a T-shirt, sweatshirt, jacket, hat or other apparel, the CNU logo should be placed so it is easily visible, with ample clear zone around it. Always use an approved CNU logo instead of creating your own, and do not use a scanned, recreated, reproportioned

or otherwise modified version of the logo. Do not alter the colors of the logo. Use the approved version of the logo that is most suitable to the background material on which it is placed. The CNU seal is to be used on official University documents and should not be used on apparel.

Request for Logo Use

To request to use the CNU or CNUCDM logos, please complete the [Request to Use University Logo/Branding Form](#) and submit to the Assistant Dean of Student Affairs.

Official Colors

College of Pharmacy PMS 683
College of Medicine PMS 293
College of Health Sciences PMS 356
College of Psychology Hex 5d2a89
College of Dental **Medicine PMS 646 C**

ACADEMIC AND CAREER SERVICES

Career Advising

Choosing a career path in dentistry or a specialty is one of the most significant decisions a student will make during their time in dental school. In order to assist the student in achieving that goal, the Office of Student Affairs coordinates the Careers in Dental Medicine program and career advising. Both are important and designed to help students with specialty and career exploration.

Careers in Dental Medicine Program

The American Dental Education Association (ADEA), graduate programs, and dental specialty organizations, provide excellent assessment tools and resources to help students better understand themselves in light of selecting a career path. Students are introduced to these resources at orientation and encouraged to utilize these tools which can be found on the ADEA website at www.adea.org.

Speaker forums, lunchtime informative sessions, panel discussions and other resources are utilized to expose students to the greatest number of specialty options and career paths and to assist with the student's discovery of their specialty of choice. US armed and uniformed services, the Veteran's Administration, the Indian Health Service, community clinics, and dental health systems employers are welcomed to CNUCDM to provide informational sessions to our students

The ultimate goals of the program are to help each student learn of their options by the spring quarter of their D3 year, prepare their application for employments, or residency, interview, and enjoy a successful Match to the residency of their

choosing.

Dental Colleges and Salons (all four years)

Upon matriculation, the dental student class is subdivided into four groups of twenty students, with each college headed by a College Master(s), a CNU faculty member. The student is assigned a College Master overseeing that college. An important goal of the College Master is to foster a collegial relationship with their advisees that results in the facilitation of a student's learning and successful progression through the first two years of the curriculum. A second goal is to assist the student with career advising.

Each College is named for a leader promoting the art and science of oral health in our history: Revere, Shira, Black and Satcher.

1. The Paul Revere College
2. The General Robert Shira College
3. The GV Black College
4. The Surgeon General David Satcher College

Colleges are encouraged to develop an informal curriculum that fosters professional development and collegiality while advancing the art and science of dental knowledge and capability. These are done through periodic "salons" which are group meetings designed to address a particular problem with informal open discussion.

The student will have an initial meeting with their College Master during the first week of dental school and will continue to meet regularly, at least once per semester, with the purposes of career and academic advising.

Students may request to be assigned a different College Master at any time through the Assistant Dean of Student Affairs and Admissions.

Specialty Specific Advisors

Faculty and community dentists and dental specialists have been identified and are available to provide specialty specific advising to students. These advisors help students better understand the nuances of residency application specific to that specialty and further assist students in the process of dental specialty selection and residency application.

The Office of Student Affairs will make contact information for these advisors available to students at the start of each academic year.

Academic Advising

It is CNUCDM's desire to see that each student has every opportunity to succeed. The goal of the academic advising system is to prevent a student from falling into academic difficulty through early assessment and intervention.

College Masters

In addition to career advising, the College Master has the responsibility for monitoring advisees' academic progress during the student's four years. The College Master can play a valuable role in helping students proactively identify and address evolving academic difficulties and refer the student to appropriate resources.

College Masters will have access to advisees' academic records for the purposes of academic counseling.

Students may request to be assigned a different College Master at any time through the Assistant Dean of Student Affairs.

Office of Student Affairs

The Assistant Dean of Student Affairs and Admissions monitors students' academic progress, meets with individuals who are concerned with their academic progress or who have been identified from performance data or by referral, as potentially needing assistance.

If a student needs to meet with the Academic Review/Promotion and Graduation Committee, he/she may seek counsel from the Assistant Dean of Student Affairs in preparation for the meeting.

Academic Review/Promotion and Graduation Committee

The CDM Academic Review/Promotion and Graduation Committee (PGC) is responsible for the application of effective procedures for the evaluation of student performance, which includes both academic achievement and professional competence.

The committee evaluates the progress of all students and certifies eligibility to advance from one phase of the curriculum to the next, and from one year to the next. It recommends appropriate actions when students do not maintain satisfactory academic progress.

The Academic Review/Promotion and Graduation Committee may formulate a remediation program for the student based on his/or her unique situation. In such cases, the student may be required to submit reports to the Academic Review/Promotion and Graduation Committee concerning the progress they have made in these remediation efforts.

Open Door Policy

Students may consult in-person with any CDM faculty member, Dean or administrator for academic or logistical advice; appointments are encouraged.

Peer Tutoring

The following serves as a summary of the Peer Tutoring Policy. Please refer to the CNUCDM website for the complete policy.

Students experiencing difficulty in any course are urged to seek the help and assistance of the Course Director or their College Master before the problem becomes unmanageable. School-funded peer tutoring services are available through the Office of Student Affairs.

Students may request tutoring for themselves by contacting the Office of Student Affairs directly. Students may also be referred for tutoring by the Course Director, by their College Master, the Assistant Dean of Student Affairs and Admissions or by the Academic Review/Promotion and Graduation Committee.

Tutee Responsibilities

The student requesting tutoring must contact the Office of Student Affairs to be connected with an available peer tutor.

The tutee is responsible for contacting and arranging sessions with the tutor.

The tutee is required to report any concerns or challenges regarding the tutor or the tutoring sessions to the Office of Student Affairs.

Tutor Responsibilities

The tutor must have a grade of 80% or above on the most recent summative exam and on any subsequent formative exams.

Tutoring is normally limited to three hours per week. The tutor must obtain approval from the Office of Student Affairs for additional tutoring hours.

The tutor must record all tutoring session on the Peer Tutoring Agreement & Tutor Report/Payment Form and submit it to the Office of Student Affairs for payment processing.

The tutor is required to report any concerns or challenges regarding the tutee or the tutoring sessions to the Office of Student Affairs.

CLERKSHIP POLICIES

Required Background Checks

Admission to California Northstate University College of Dental Medicine (CNUCDM) as well as retention in the Doctor of Dental Medicine (DMD) program requires that all candidates undergo criminal background checks. The criminal background check is in accordance with California state law, which requires that all individuals who have access to children less than 16 years of age, those with developmental disabilities, or vulnerable adults, must disclose background information concerning crimes and offenses against these populations. Candidates must disclose, in writing, any criminal history involving drug-related crimes, proceedings related to vulnerable populations, Medicare/Medicaid/healthcare-related crimes and any other general conviction information (excluding parking tickets and traffic citations). Commission of such crimes may prevent a student from completing the experiential education requirements for graduation. In addition, students must report any actions taken by a licensing authority (Dental Board or other agency) against a professional license (Dental intern or other health-related license). Such actions taken prior to admission to the College must be disclosed at the time of offer of admission. Any such actions taken while a current student is enrolled in the Doctor of Dental Medicine program must be immediately disclosed. Such actions could, depending on the circumstances, be grounds for revocation of an offer of admission or for dismissal from the College.

The College's policies as well as California state laws and regulations prohibit the synthesis, manufacture, distribution, sale, illegal possession, or diversion to one's own use of controlled substances or other illicit or illegal drugs. Dental students are held to California state law regarding the health professions as defined in the Uniform Disciplinary Act.

CNUCDM requires a background check on at least two separate occasions. The first background check is a requirement for admission and is conducted prior to entering the program. The College's second background check will occur prior to progression to the clinical clerkships (3rd year). Students not receiving a cleared background check at this stage will not progress to the clinical clerkships and may be disqualified from the program. The Associate Dean of Academic Affairs will notify students of any additional requirements needed prior to clinical clerkships. Additional requirements may include, but are not limited to, a blood panel for drug testing.

California Northstate University College of Dental Medicine complies with **The Dental Board of California** reporting requirements of criminal convictions. As stated The Dental Board

of California's [website](#), "You must disclose all convictions as well as all cases in which you pled guilty or nolo contendere, even if they have been expunged pursuant to Section 1203.4 of the Penal Code. This includes every citation, infraction, misdemeanor and/or felony, including traffic violations. Convictions that were adjudicated in the juvenile court or convictions under California Health and Safety Code sections 11357(b), (c), (d), (e), or section 11360(b) which are two years or older should NOT be reported. Convictions that were later expunged from the record of the court or set aside pursuant to section 1203.4 of the California Penal Code or equivalent non-California law MUST be disclosed."

Clinical Log Policy

Students are required to log clinical experiences. Please refer to specific clerkship handbooks for information on how to submit logs to Clerkship Directors. These experiential logs must be HIPAA compliant and not disclose any health protected information.

Clerkship Grade Assignment

For all clerkships performed in health systems and community clinics, the Clerkship Director or preceptor for clerkships not listed in the Course Selection Book is responsible for completing the student's final narrative evaluation and assignment of grade within five days (please check that this time is in line with other preclinical courses) after the clerkship ends. It is the responsibility of the preceptors to submit their evaluations of the student in a timely manner such that the Course Director can complete the evaluation and grading. The course director is also responsible for reporting the final grade to the Registrar within 21 days (please check time with other courses) after the clerkships ends. Students have the right to appeal their grade but must follow the Grade Appeal Policy.

Clerkship Assignment Policy

California Northstate University College of Dental Medicine assigns students to clinical clerkship sites. Students may request alternative clerkship site assignments due to extenuating circumstances based on the judgment of clerkship director and availability of alternative sites.

- Specific extenuating reasons include, but are not limited to:
- Family circumstances (location of spouse/partner/dependents)
- Health conditions, such as pregnancy
- Delayed entry to third year or fourth year
- Hardship

Any third year and fourth year dental students with specific extenuating circumstances can contact the Office of Student Affairs before or during the assigned clerkship. Student may request for an alternative rotation site, or sequence, or both.

Students must discuss the issues with the specific Clerkship Director. Students must submit a formal request to the Senior Chair of the Department of Clinical Sciences with narrative and supportive evidence to outline the details of the specific extenuating circumstance.

All requests are reviewed by the Assistant Dean of Student Affairs. The decision will be made based on validity of the extenuating circumstance and the availability of alternative site, sequence or both.

The student will be notified of a decision by the Clerkship Director within five business days. If the student is not satisfied by the decision reached by this process, the student may appeal to the Assistant Dean of Student Affairs within two business days. The Assistant Dean of Student Affairs will make final decision within two business days.

Process for Dental Student Clinical Clerkship Assignment

There are currently two required clerkship each of 8 weeks, differing in sequence of the specialty rotations. Majority of clerkships all take place in the Greater Sacramento Valley area. Students will individually rank the clerkship tracks in order of their own preferences. Each student's first choice is then placed into their respective tracks. Using a computerized randomization lottery process, students are chosen from the pool for each respective track, thus providing many students with their first choices. Those students who were not picked for their first choices are then entered into the second round using their second ranked choices. Again, using the computerized

randomization lottery process, students are chosen for each respective track using their second choice rankings. This process continues until all students are assigned to one clerkship track.

Once the lottery has been completed, the students will be given ten (10) days to negotiate an exchange of track assignments with their peers. Both parties must be in complete agreement with the exchange. Once this ten-day period expires, no further exchanges or changes can be made to the specific track assignments without specific extenuating reasons.

If a dental student is experiencing an extenuating circumstance, such as illness/medical condition, family emergency, delayed entry to third year, undue hardship stemming from their assigned clerkship site or mentor, that student must discuss the issue with the clerkship site leader and/or the specific Clerkship Director and/or the Assistant Dean of Student Affairs. The dental student will need to provide details and specific information justifying their request to transfer to a different site and/or a different mentor.

Clerkship Duty Hours Policy

Duty hours are defined as all clinical and academic activities related to the program; i.e., patient care (both inpatient and Ambulatory), administrative duties relative to patient care, the provision for transfer of patient care, time spent in-house during call activities, and scheduled activities, such as conferences. Duty hours do not include reading and preparation time spent away from the duty site.

Duty hours must be limited to 80 hours per week, averaged over a four-week period, inclusive of all in-house call activities.

In-house call must occur no more frequently than every third night.

Continuous on-site duty, including in-house call, must not exceed 24 consecutive hours.

Students may be on site for up to 6 additional hours in order to participate in didactic activities.

Students must be provided with one day (24 consecutive hours) in seven, free from all educational and clinical responsibilities, averaged over a four-week period.

Students will have a minimum of 10 hours' break between shifts.

The number of hours will be tracked by rotation student schedules, student's personal electronic portfolio, written feedback from student evaluation of rotation and preceptor, as well as observation of the student's clinical team.

California Northstate University College of Dental Medicine (CNUCDM) is committed to always act in its students' best interest. Each student's physical and psychological wellness will be a priority. This policy addresses an important face of student wellness: clerkship duty hours.

The following is intended to mandate acceptable duty hours for dental students participating in clinical clerkships.

Responsibility of the Supervising Faculty: Clinical Setting

If a student in a clinical setting has violated duty hours, the faculty supervising the student should immediately release the student from further clinical duties and responsibilities. If the student exhibits signs of excessive fatigue, the supervising faculty should follow the policies outlines in the Policy on Stress and Fatigue Management.

The faculty and/or supervising resident should privately discuss with the student the possible causes of the duty hour violation in order to identify ways to mitigate such violations in the future.

The faculty and/or supervising resident must immediately notify the Clerkship Director of the decision to release the student from further clinical duties.

A student who is released from further clinical duties due to violation of duty hours cannot resume clinical duties without permission by the Clerkship Director.

Student Responsibility

Students who perceive they are experiencing violations of duty hours have the professional responsibility to immediately notify their attending faculty and Clerkship Director without fear of reprisal. If deemed necessary, students may make a confidential report via the online confidential grievance form.

Students who recognize a peer student violating duty hours should report their observations and concerns to the attending/presenting faculty and the Clerkship Director.

Clerkship Director Responsibility

Upon removal of a student from duties, the Clerkship Director must determine the need for immediate change in duty assignments for peer students in the clerkship and/or the clinical site.

The Clerkship Director will notify the departmental chair, as necessary, to discuss methods to manage clerkship duty hours.

The Clerkship Director will meet with the student in person, as necessary, to discuss methods to manage clerkship duty hours.

The Clerkship Director will follow up with the faculty supervising the clinical setting as necessary.

Clerkship Directors should provide students assigned schedules for on-site clinical and educational activities.

Clerkship Directors will monitor the academic and clinical workload of students within individual clerkships by the virtue of clerkship design and student scheduling.

Clerkship directors will include relevant excerpts from the policy on duty hours in the clinical clerkship handbooks and will discuss this policy with students at clerkship orientation

FORMS, POLICIES, AND PROCEDURES

Leave of Absence Policy

CNUCDM grants approved leaves of absence (LOA) to dental students for remediation purposes, or for other personal or professional reasons. It is the responsibility of the student to review the LOA policy. Students should consult with their College Master in addition to the Assistant Dean of Student Affairs prior to any planned LOA to ensure that the procedural requirements for a LOA are correctly followed.

It is ultimately the responsibility of the student to fully comprehend the potential financial and professional implications of a LOA.

It is the responsibility of the student to ensure that a LOA request form is submitted in a timely manner. Non-attendance does not constitute notification of intent to apply for LOA status. It is the responsibility of the student to continue coursework (barring an emergency) until the LOA is approved.

In order to request a planned absence, students should first contact their individual College Master, and also immediately contact the appropriate course director(s) or clerkship director(s). After consultation with the College Master, an official LOA request must be submitted that specifically states the reason for the request. The LOA request must also be signed by both the Director of Student Financial Aid and the Registrar prior to being submitted to the Assistant Dean of Student Affairs and Admissions. The Assistant Dean of Student Affairs and Admissions will review the academic standing of the student in determining whether a LOA will be granted. Final approval of a LOA is required by the Assistant Dean of Clinical Education. LOA forms can be found on the CNUCDM website and in the CNUCDM Student Handbook. All requests for planned absences must be submitted to the Assistant Dean of Student Affairs at least two months prior to the planned absence.

A LOA is approved for a specific period of time, not to last more than one calendar year. Due to the integrated curriculum at CNUCDM, a LOA causing a student to miss more than one course during the first two years of instruction will result in the student needing to repeat the entire year.

Likewise, a single clinical rotation missed due to a LOA may result in the student repeating that year. In general, a student is eligible for one LOA request during their tenure at CNUCDM. Requests for a second LOA are highly discouraged and unlikely to be approved due to the disruption it would cause to the student's chances of progression through the curriculum.

Students considering leaves of absence should consider the fact that an LOA can have a significant financial impact, and that the timing of the leave is therefore critical. A student may not receive a full refund of tuition if a LOA is submitted after the first day of instruction. A leave may affect financial aid, health insurance and malpractice insurance coverage.

Leave of Absence Form

The Leave of Absence Form can be found on CNU's website or by [clicking here](#).

Returning from a Leave of Absence

A student may apply for readmission if they have been on Leave of Absence (LOA) or have withdrawn from CNUCDM. The Office of the Student Affairs will contact a student on LOA approximately 90 days before the LOA expires via certified U.S. mail. The student will receive a request of intent, readmission form and readmission procedures. The student has 30 days to reply to the Office of Student Affairs with their intent to return to the College or officially withdraw. If a student intends to return, they must complete and return the Intent to Return Form within 30 days. They must also meet with the Assistant Dean of Student Affairs at least 30 days prior to the first day of class to review and sign a Readmission Contract. This contract outlines the courses that are required for the remainder of the student's educational career at CNUCDM.

If a student has withdrawn from the University, the student may reapply to the College. If accepted, the student may be required to return as a first year student.

Complaint and Grievance Policy

The following serves as a summary of the Complaint and Grievance Policy. To read the complete policy, [click here](#).

A grievance is defined as a matter not falling under the progression policy for academic or non-academic due-process. CNUCDM is committed to a policy of fair treatment of its students in their relationships with the administration, faculty, staff and fellow students.

Should a student wish to submit a complaint or grievance, the student should file a written complaint using the Student Complaint/Grievance Form.

The completed Student Complaint/Grievance Form may be submitted to any member of the CNUCDM Office of Student Affairs and Admissions in a sealed envelope.

The Assistant Dean of Student Affairs and Admissions will handle the complaint in accordance with the policies of CNUCDM, review the facts surrounding the issue, and address the complaint in a timely fashion.

A record of the student complaints is kept on file in the Assistant Dean of Student Affairs' office. All aspects of student complaints shall be treated as confidential.

Complaint and Grievance Form

The Complaint and Grievance Form can be found on CNUCDM's website or by [clicking here](#).

Copyrighted Material

The following serves as a summary of the Policy for Use of Copyrighted Material. To read the complete policy, [click here](#).

Students, faculty and staff may not act as distributors of copyrighted material to others, including the dissemination of copyrighted material by any means without written permission from the copyright holder.

Students may not act as distributors of copyrighted material to others, including the dissemination of copyrighted material by any means without written permission from the copyright holder. Students shall not transfer copyrighted material onto a computer for any use other than personal study. Some of the material provided to the student by CNUCDM via electronic means may be "printable" from student's personal computer for student's use only. Any charges of violation of the copyright policy will be brought before the Honor Council.

Credit Hours Assignment

For each course, the following credit hour assignments are used:

- 1 credit hour for every 15 lecture hours and 30 preparation/homework hours.
- 1 credit hour for every 25 workshop hours and 25 preparation/homework hours.
- 1 credit hour for every 30 laboratory hours and 30 preparation/homework hours.
- 1 credit hour for every week with scheduled at least 40 hours in an integrated curriculum, including (a) mixed methods of teaching [e.g., lecture, small group, TBL, PBL, flipped classroom, clinical skills, patient encounter, etc.] and (b) assigned self-preparation time.
- 1 credit hour for every week with assigned at least 36 clinical hours during clerkship or other clinical rotations.

Course syllabi are reviewed every semester by the Assistant Dean of Curriculum, in collaboration with the Curriculum Committee to ensure that course credits remain consistent with course content and course schedules have the appropriate amount of class time, including the appropriate amount of out-of-class (self-study or homework) time.

Disability Policy

The following serves as a summary of the [Disability Policy](#). Please refer to the CNUCDM website for the complete policy.

CNUCDM does not discriminate on the basis of a disability and is committed to self-directed learning by offering qualified students an equal opportunity to attain a Doctor of Dental Medicine degree. The College will make every effort toward meeting reasonable requests for accommodations to students with disabilities according to the Rehabilitation Act of 1973 and the Americans with Disabilities Act (ADA).

Students with disabilities, whether a hidden or visible disability, who wish to seek special accommodations from the College must notify the Assistant Dean of Student Affairs or designee in writing before the beginning of the school year. If the disability develops during the school year and accommodations are requested, the student must notify the Assistant Dean of Student Affairs or designee in writing as soon as he/she becomes aware of the disability.

Student Responsibility

Students enrolled at CNUCDM are required to self-identify if they would like to request services on the basis of a disability. Students are required to meet with the Assistant Dean of Student Affairs or designee for an initial intake and are required to provide appropriate documentation of the disability. Students must provide documentation, at the student's expense, of the disability before the provision of services is reviewed.

Documentation

Both medical and functional elements of the disability must be explicitly documented. Documentation must be printed on appropriate letterhead and prepared by a qualified health care provider who has professional training and practice to diagnose and treat the impairment that led to the disability.

Recommendations for Accommodations

Once registered, the Assistant Dean of Student Affairs works collaboratively with the student and faculty to provide the best reasonable accommodations for the student to achieve academic success.

Infection and Environmental Hazards Exposure Control Policy

The following serves as a summary of the [Infection and Environmental Hazards Exposure Control Policy](#). Please refer to the CNUCDM website for the complete policy.

CNUCDM provides a safe and healthy workplace for all dental students, faculty, staff and volunteers by establishing, implementing, and maintaining an effective exposure control plan as required by the blood borne pathogens regulation in California Code of Regulations, Title 8 (8 CCR), Section 5193. Students will receive training appropriate to their current level of responsibility. Those with risk of exposure to pathogens receive training on the epidemiology, symptoms, and the prevention of transmission of pathogens.

Infection and Environmental Hazards Post-Exposure Policy

The following serves as a summary of the [Infection and Environmental Hazards Post-Exposure Policy](#). Please refer to the CNUCDM website for the complete policy.

At CNUCDM, safety training session on preventing needle stick injuries, handling sharps, proper scrubbing and research safety is mandatory prior to clinical clerkships and research assignments. Competency and compliance are reinforced at CNUCDM.

If a dental student experiences a biological or chemical occupational exposure at CNUCDM or while studying away, the student must follow CNUCDM Infection and Environmental Hazards Exposure Control Policy to properly contain, report, and seek medical evaluation and treatment for the exposure.

Any treatment needed post-exposure or for a clinical condition that develops as a result of the exposure or injury should be covered by the individual's health insurance policy.

If a student becomes disabled as the result of an occupational exposure or injury, CNUCDM Disability Policy provides coverage.

The students should be allowed to continue their educational activities without disruption if that is the professional recommendation from the clinicians who treat the students.

after exposure.

If the recommendation is to seek additional diagnosis and follow-up treatments, CNUCDM allows dental students to get excused absence to seek required additional medical care.

Non-Discrimination

CNUCDM is committed to cultivating a diverse community that recognizes and values inherent worth in individuals, fosters mutual respect, and encourages individual growth. The College believes that diversity enhances and enriches the quality of our academic program. CNUCDM provides equal opportunity in education and employment and does not discriminate on the basis of race, color, creed, religion, national origin, ethnicity, gender, age, sexual orientation, political affiliation, veteran status, or disability.

CNUCDM has a no tolerance policy for any type of sexual harassment including harassment or discrimination of LGBT students.

Equal Protection Clause and Due Process Clause

A transgender student's right to dress in accordance with his or her gender identity may be protected under the First Amendment and the Equal Protection and Due Process Clauses of the U.S. Constitution. The First Amendment limits the right of school officials to censor a student's speech or expression. Students also have a protected liberty interest (under the Due Process Clause) in their personal appearance. In addition, a transgender student also has a right under the Equal Protection Clause to be treated similarly to other students of the same gender identity.

Title IX

Title IX of the Education Amendment Acts of 1972 prohibits discrimination based on sex in education programs and activities receiving federal financial assistance. Although Title IX does not prohibit discrimination on the basis of sexual orientation, sexual harassment directed at an LGBT student is prohibited by Title IX if it is sufficiently severe and pervasive.

Title IX also prohibits gender-based harassment, including harassment on the basis of a student's failure to conform to stereotyped notions of masculinity and femininity. CNUCDM does not currently receive federal financial assistance but takes a proactive stance in the protection of all students. Any violations of the Title IX Education Amendment Act should be reported to the Assistant Dean of Student Affairs and Admissions.

Professionalism and Ethics Policy

The following serves as a summary of the [Ethics and Professionalism Policy](#). Please refer to the CNUCDM website.

CNUCDM is committed to guiding students as they seek to attain the highest standards of professional responsibility and adherence to ethical principles. Students are expected to display professional qualities including compassion, patient confidentiality, cultural sensitivity, academic integrity, adherence to relationship boundaries, honesty, and professional behavior at all times and in all places while engaged in educational or university activities.

Professional Meetings

A goal of CNUCDM is to graduate competent dentists who will improve health care to a diverse population through dental expertise. CNUCDM appreciates the value, and encourages the participation of all its students in professional organizations. The College recognizes that attendance at professional meetings is beneficial but may also interfere with the students' pursuit of academic excellence. Students desiring to attend professional meetings must obtain a written approval at least three weeks prior to the meeting from the Assistant Dean of Student Affairs and Admissions. Any student on academic probation will not be allowed to attend.

Scheduling Guidelines

D1 and D2 year students receive all University holidays as time off; D3 and D4 year student schedules will be determined in part by clerkship directors and preceptors in conjunction with scheduling policies at the individual clinical sites.

There should be a 10-minute break between classes. Class sessions two hours or longer should incorporate a 10-minute break for every hour of instruction.

No questions regarding content will be answered during exams.

Class and clinic hours are from 8 AM to 5 PM daily. Lunch will be 12:00 PM to 1:00 PM every day.

Sexual Harassment Policy

The following serves as a summary of the [Sexual Harassment Policy](#). Please refer to the CNUCDM website.

CNUCDM is committed to maintaining a positive learning, working and living environment. In pursuit of these goals, the college does not tolerate acts of sexual harassment or related retaliation against or by any employee or student.

Reporting Sexual Harassment

If you need to report sexual harassment, have any questions regarding sexual harassment, or the policy above please contact the Assistant Dean of Student Affairs. If the situation is an emergency please call the Elk Grove police by dialing 911. If at all possible, try to report the incident immediately.

Student Mistreatment

The following serves as a summary of the Student Mistreatment Policy. To read the complete policy, [click here](#).

CNUCDM is committed to assuring a safe and supportive learning environment that reflects the institution's values of professionalism, respect for individual rights, and appreciation of diversity, altruism, compassion, and integrity. Mistreatment of dental students is prohibited.

Examples of Mistreatment

CNUCDM defines mistreatment as behavior that is inconsistent with the values of the university and that unreasonably interferes with the learning process. When assessing behavior that might represent mistreatment, students are expected to consider the conditions, circumstances, and environment surrounding such behavior.

Examples of mistreatment include, but are not limited to:

- Verbally abusing, belittling, humiliating or bullying a student
- Intentionally singling out a student for arbitrary treatment that could be perceived as punitive rather than corrective
- Unwarranted exclusion from reasonable learning opportunities
- Assignment of duties as punishment rather than education

- Pressuring students to exceed established restrictions on work hours
- Exploitation of students in any manner, e.g. performing personal errands
- Directing students to perform an unreasonable number of non-educational "routine hospital procedures" on patients not assigned to them or where performing them interferes with a student's attendance at educational activities, e.g. rounds, teaching sessions, lectures, etc.
- Pressuring a student to perform dental procedures for which the student is insufficiently trained (i.e. putting a student in a role that compromises the care of patients)
- Threatening a lower or failing grade/evaluation to a student for inappropriate reasons
- Committing an act of physical abuse or violence of any kind, e.g. throwing objects, aggressive violation of personal space
- Making unwelcome sexual comments, jokes, or
- Taunting remarks about a person's protected status.

Reporting Concerns of Mistreatment

Dental students who themselves experience or observe other students experiencing possible mistreatment are encouraged first to discuss it with someone in a position to understand the context and address the necessary action(s). Such individuals include the student's College Master, the Assistant Dean of Student Affairs and Admissions, Clerkship Director, or Course Director.

The individual considering a formal report of mistreatment may attempt to resolve the matter directly with the alleged offender, although he/she is not required to do so.

The options for filing a formal mistreatment report include:

- File a formal report with the Vice President of Institutional Effectiveness and Assessment
- File an [Anonymous Report](#) on the CNUCDM website

Anonymous Reports filed on the CNUCDM website are sent to the Department of Student Affairs and Admissions.

Dental students desiring anonymity should be made aware that doing so may interfere with the university's ability to investigate the concern and their ability to receive information about the follow-up investigation.

No Retaliation

CNUCDM does not tolerate retaliation against individuals who report hateful, dishonest, illegal, unethical, unprofessional, or

otherwise inappropriate acts that constitute student mistreatment. Every effort is made to respond to concerns of mistreatment in a professional manner to minimize the risk of retaliation.

Individuals who believe they are experiencing retaliation are strongly encouraged to contact the Vice President for Institutional Effectiveness and Assessment. Alleged retaliation will be subject to investigation and may result in disciplinary action up to and including termination or expulsion.

Student Religious Observance Policy

The following serves as a summary of the Student Religious Observance Policy. To read the complete policy, [click here](#).

Students from various religious faiths are afforded the opportunity to participate in the major religious observances of that faith, when reasonable accommodations of such requests are possible. Such accommodations cannot be guaranteed in circumstances where granting the request would create an undue burden on faculty, negatively affect other students who are participating in the scheduled educational activity, or jeopardize patient care.

Requesting Accommodations

The student's request must be made in writing using the CNUCDM [Absence Request Form](#).

Students must notify the Course or Clerkship Director(s) by the end of the first week of the semester, or at least 2 weeks before the holiday to be observed, whichever comes first, of their request to be absent from class on their day(s) of religious observance.

Students who are excused from class, specific work assignments, clerkship duties, or other academic or educational activities for the purpose of observing a religious holiday will be responsible for the material covered in their absence and may be required to complete work in lieu of missed sessions, etc.

A plan for completing the missed academic or educational activity is to be decided upon by the student and the involved faculty member (typically Course Director or Clerkship Director) and determined in advance of the missed work. The student must obtain signatures for both plan approval and then upon completion of the make-up work. The form must be submitted the Office Student Affairs.

Requests for absences from clinical activities must comply

with the excused absences limitations for each clerkship or clinical rotation.

LIBRARY AND LEARNING RESOURCES

CNUCDM Learning Resource Center is available for students, faculty, and staff. This program includes an initial 5000 square feet of space devoted to the following resources:

- Library Facility and Collection
- Computer resources
- CNUCDM Electronic Library
- Classroom Resources
- Interlibrary Loan Program
- Career Resource Center

Facility

The library facility is a significant part of the CNUCDM Learning Resources Center. It houses the library collection and provides space for individual and group study.

The California Northstate University College of Dental Medicine's Library and Learning Resource Center is managed and operated by a combination of a full-time health sciences librarian and a library assistant.

The medical/dental librarian provides training and consultation to students and faculty on how to access effective information and efficiently use electronic resources. The medical/dental librarian holds an academic appointment on the faculty and participates in all faculty functions and meetings.

The medical/dental librarian works to update, maintain, and operate electronic systems in the resource center.

Library Resource Center Programs

The Library Resource Center provides both students and faculty with support as well as sufficient research references. At the beginning of each semester, a Resource Center Orientation session is scheduled to accommodate all interested students. The attendance is mandatory for all first semester students and optional for other students. During this orientation, the students are introduced to the learning resources available as well as to policies and procedures relevant to their usage.

Electronic Learning Resources

CNUCDM Resource Center maintains an Electronic Learning

Resources System. Its purpose is to provide library and learning resources to students, faculty, and staff, and serve as an entry point for all users to meet their academic and research needs.

Library Collection

The library subscribes to approximately 1,000 scholarly electronic journals.

Interlibrary Loan Program

With the large number of colleges and universities in the Northern California and across the United States, CNUCDM is developing affiliation agreements with the libraries at other institutions in order to facilitate interlibrary loans. Please see the medical/dental librarian for details.

SAFETY AND SECURITY

Security

The Director of Safety and Security in consultation with the Elk Grove Police Department and third party vendors, will provide an overview of campus security, emergency alert, and response procedures.

All students who have authorized access to CNUCDM campus are issued an electronic entry access card that permits certain entry. All access is tracked and monitored.

The Jeanne Cleary Disclosure of Campus Security Policy and Campus Crime Statistics Act (20 USC §1092(f)) is a federal law, originally known as the Campus Security Act, and it requires that University/Colleges and universities across the United States disclose information about crime on and around their campuses since 1990. All Title IV funding recipient University/Colleges and universities are subject to its requirements.

Although CNU is not a Title IV institution, CNU adheres to the Cleary Act principles for reporting regional crimes and addressing student protection issues.

Annual Security Report

Crime statistics for the campus, certain non-campus properties, and certain public property areas which have been reported to local police and campus security authorities must be disclosed for the most recent three calendar years. These reports are posted on our website at

The [CNU Annual Security Report](#) data regarding crime statistics for the immediate area surrounding the campus can be found on

CNUCDM's website.

An overview of campus security, emergency alert, and response procedures will be provided at orientation. Additional safety and security information, tips, and alerts will be delivered to students through campus email throughout the year.

Meagan's Law

For a listing of registered sex offenders in the adjacent community and other pertinent information, please review the law enforcement database at <http://meganslaw.ca.gov>

Weapons

California Northstate University prohibits the illegal manufacture, sale, transportation, possession, concealment, display, or use of any weapons of any description such as firearms, cutting instruments, explosives, incendiary devices, or other deadly weapons including air-powered devices on campus. California Penal Code 626.9 and 626.10 specifically prohibit the possession of firearms, including pellet and BB guns, on College property, without specific written permission. Violators of this policy are considered a threat to the academic community and are subject to immediate dismissal from the College and any pertinent state or federal criminal charges.

Vandalism

Any physical abuse, destruction or defacing of College property or to another's property or the diminishing of its material or aesthetic value is prohibited.

Theft

Any attempted or actual theft of property of the College, of a member of the campus community or campus visitor, violates the campus honor code and state law and will be dealt with accordingly. The institution has a responsibility to report crimes to local authorities. Perpetrators are therefore subject to state and federal criminal charges and sanctions which may include fines and imprisonment.

Building Access Hours

Student identification cards are programmed with an electronic key access code. The card provides access to the building as well as some of the interior classroom and other spaces designated for student use. Student card entry is logged and entry information is monitored by the University. Professional behavior dictates respect of equipment, furnishings, and building access by all dental students. Any student who does not exhibit professional behavior in regards to building access,

including destroying property, allowing unauthorized person's access to the building, or compromising building security, is subject to disciplinary procedures.

The campus building hours are posted prior to each semester and the hours may be extended to accommodate student study needs prior to summative final exam week. This request can be made to the Office of Student Affairs and Admissions at least 2 weeks in advance.

Campus Parking

The College currently charges no fee for parking on campus. Students must not park in spaces marked Visitor or Faculty. Parking designated as Carpool is reserved for vehicles that carpool with two or more persons. Students must comply with any signs regarding parking that have been posted. Vehicles that are illegally parked are towed at the owner's expense.

Bicycles

Bicycles may not be brought into the classroom or buildings. It is recommended that bicycles be locked securely to prevent theft. Bicycles should be secured in designated areas or in bike lockers provided in designated areas. Bicycles should not be secured in areas that would interfere with pedestrian or vehicular traffic. It is also recommended that students keep information about the bicycle with their records in the event of theft, which would include: make, model, color and serial number.

Animals on Campus

Pets should not be brought on campus and may not be brought into University buildings. Service animals (which include guide dogs, signal dogs or other animals) individually trained to do work or perform tasks for the benefit of another individual with a disability are permitted to be on campus but must be on a leash or guide rail at all times.

Housing

California Northstate University College of Dental Medicine (CNUCDM) does not provide housing to students. In the immediate vicinity, there are several fairly-priced apartment units which students may find adequate. The area surrounding the campus is very safe and nearby apartment complexes are highly rated within the Sacramento Region.

Visitors

Visitors are allowed to visit a student in the common area of the building entrance. For further access, prior permission must be obtained through the Office of Student Affairs and Admissions.

No visitors are allowed in the classroom or laboratory without prior authorization from the Office of Student Affairs and Admissions and the faculty member conducting the lecture/laboratory exercise. No visitors are allowed in the gross anatomy laboratory unless authorized by the Director of Gross Anatomy.

Visitors are prohibited from visiting clinical sites.

Students are responsible for any misconduct of their guests.

GRADING AND EXAMS

Utilizing a competency based grading system, all students must reach a threshold for clinical competency in knowledge and skill set at 75%. Structured remediation activities for each didactic course will ensure a higher level of knowledge for the cohort of students earning a Y, 60-75%. Students earning below 60% receive an F requiring repeat of the course or further academic action. Students earning 90%-95% will earn a grade of Honors and students earning 96-100% will earn Highest Honors.

Clinical courses will be graded Pass/Fail with the opportunity to earn EPR's (exceptional performance reviews) that can be offered to up to 1/3 of enrollees to each course director at the conclusion of each term. EPR's will be recorded numerically in each transcript according to the course in which they were earned. EPR's are based upon patient-centered care and patient outcomes as well as application of the program learning outcomes. Each clinical course will develop defined rubrics for the achievement of EPRs.

Class rank will be based upon the students' performance in LAL, SIM and LAB courses for 60% of the class rank value and by rank based upon clinics EPRs for 40% of class rank value.

LAL, SIM AND LAB GRADING

HH	PASS WITH HIGHEST HONORS (96-100%)
H	pass with honors (90-95%)
P	pass (75-89%)
y	no pass, requires remediation (60-74%) to earn P (Y is temporary grade)
F	fail (less than 60%)
I	Incomplete, course work at satisfactory quality but assignments completion delayed by circumstance (temporary grade)

IP In progress grade given for multiple semester courses where final grade given in subsequent semester

W Official withdrawal

CLIN grading

P Clinical care demonstrates knowledge and skills and values commensurate with achieving the defined competencies of the curriculum. Clinical course outcomes will be linked to both Program learning outcomes and CODA defined clinical competencies through Competency Evaluations (CEs). Passing of CEs integrated into a clinical course is required for a P in the course.

Y No pass, requires remediation to earn a P (Y is temporary grade)

EPRs Exceptional performance reviews based upon rubrics defined by the program learning outcomes as accommodated in the clinical course

End-of-Course Evaluations

Class grade for a course will not be released by the Course Director until at least 90% of students enrolled in the course have completed the end-of-course evaluation. End-of-course evaluations will be scheduled for the last Friday of instruction, and it is expected that a minimum of 90% of enrolled students will complete the evaluation.

Narrative

Where possible (e.g. small group activities), all grades should be accompanied by a narrative.

Grade Appeal Policy

The following serves as a summary of the [Grade Appeal Policy](#). Please refer to the general catalog on page 36.

The purpose of this policy is to provide an academic system for the students at CNUCDM to contest alleged academic injustice relating to a final course grade, clerkship grade or evaluation of a professional activity.

Change to the final grade will occur only when there is evidence of arbitrary or incorrect academic evaluation. In some cases, however, the grade process involves the faculty member's judgment of student academic performance.

The grade appeal process requires a student to present clear evidence that the assignment of a grade was based on factors other than the academic judgment of the faculty member. Grade appeals must be based on problems of process and not on difference in judgement or opinion concerning academic performance. The students take responsibility to demonstrate that one or more of the following occurred:

- The student believes that the grade was based on prejudice, discrimination, arbitrary or other reasons not related to academic performance.
- The grading decision was based upon standards unreasonably different from those which are applied to other students in the same course.
- Mathematical/ clerical error

A student can file an appeal if s/he is unsatisfied with a final course grade. The appeal must be submitted within ten (10) CNU work days of the official notification of the grade. The student must follow the formal grade appeal process by initially presenting the appeal to the course director in writing.

GRADUATION

Graduation Requirements:

- A. Maximum of six years to complete the DMD is allowed without extenuating circumstances based upon the competency assessment model of clinical education
- B. Students must complete a minimum of 240 credit hours in the dental program, including all didactic, laboratory and clinical experiential courses and successful completion of all competency assessments.
- C. Students must pass the NBDE integrated format examination or traditional step 1 and 2 examinations (in phase out from 2021-2024)
- D. Students are not required to pass the state sanctioned licensing examination as this is based upon residency and career plans.
- E. Failure to meet these requirements will result in review by the Academic Review/Promotion and Graduation Committee.
- F. Students must attain the knowledge and skills, and develop capacity and behaviors required of a dentist.
- G. Students must attain a level of clinical judgment which warrants entrustment by the Faculty as required for entry to residency or practice.
- H. Students must demonstrate a sense of responsibility and social accountability to patients and the community.
- I. Students must comply with the School's standards of conduct, professionalism, and academic integrity.
- J. Students must comply with the laws of the United States; the laws of the State of California; local city, county, and municipal ordinances; the policies, rules and regulations of the California Northstate University and the CDM.
- K. All academic requirements must be completed at least 10 days before the date of graduation. Failure to comply may lead to delayed graduation.
- L. Only students in good academic standing are eligible for graduation. Students must have satisfied all conditions for resolution of probation before graduation.

Exit Interviews

Exit interviews will be conducted during the last academic year. The College of Dental Medicine does not issue grades, grant degrees or furnish academic transcripts until all financial obligations have been met and all University property has been returned.

Licensure

Acceptance to CNUCDM does not guarantee dental licensure in any jurisdiction. Successful completion of the College of Dental Medicine program meets the academic requirements for dental licensure in the State of California and in all states and jurisdictions for which graduation from a CODA accepted program are required.

Commencement

Every student is strongly encouraged to attend commencement and required to wear traditional academic regalia consisting of cap, gown, and academic hood. Hoods are conferred upon the graduates at commencement by faculty. The hood is lined with the California Northstate University colors of blue and gold and the velvet is adorned with Violet, denoting Doctor of Dental Medicine.

11% of the class out of the top 20% of the class is eligible for admission to OKU (omicron kappa upsilon) the academic honorary organization for dental medicine. The CNU chapter will submit those names to the Academic Review/Promotion and Graduation Committee and a hood shawl denoting admission to OKU will be worn by recipients.

Any ornamentation must signify recognized College organizations and must be approved in advance of commencement by the Assistant Dean of Student Affairs.

STUDENT RECORDS (REGISTRAR)

Office of the Registrar

The Registrar retains official enrollment, registration, and academic information for students and alumni. Downloadable request forms related to academic transcripts, enrollment/degree verifications, contact and personal information changes, grade changes, duplicate diploma requests, FERPA release authorization, emergency contact updates, leave of absences, and college withdrawals are available from the Office of the Registrar website.

Students are strongly encouraged to become familiar with the Office of the Registrar website.

Contact Information

Office of the Registrar
9700 West Taron Drive
Elk Grove, CA 95757

(P) 916-686-7400

Email: CNRegistrar@cnsu.edu

Website: <http://www.cnsu.edu/office-of-the-registrar/>

The main office is located on the second floor of the Elk Grove campus. A Registrar Office staff member is available on the Rancho Cordova campus on various days during the week during normal business hours. Please contact the Office for specific availability dates or to make an appointment.

Student Records

The academic transcript is a permanent student record maintained by the Office of the Registrar. Other student records as prescribed by California Code of Regulations 71920, are maintained by the institution for a minimum of five years from completion of or withdrawal from the CNU academic program. For assistance in accessing a record, please contact the Office of the Registrar or the department responsible for maintaining the record. Access to student records are governed by the Family Education Rights and Privacy Act of 1974 (FERPA). Please see the Directory Information and Access to Student Records section of this handbook or contact the Registrar for more information

CAMS Student Portal

Some records can be reviewed and updated online through the CAMS Student Portal.

The Portal allows the student to:

- Update contact information
- View official grades, print unofficial transcripts, and review course narratives
- Register for classes
- View course schedules
- Track submitted documents

To access the Student Portal: <http://www.cnsu.edu/office-of-the-registrar/student-portal>. Be sure to use either Internet Explorer, Firefox, Mozilla, or Safari. You must allow pop-ups in your browser so using Chrome will cause issues in using the Portal.

Students access the Student Portal with unique credentials provided by the CNU IT department prior to matriculation to the college. If you do not know your password, you can reset your

password from the log-in screen. If you do not know your username, contact CAMSSupport@cnsu.edu and IT staff will assist you.

A PDF users guide is available on the website. Technical issues related to CAMS Student Portal should be directed to:

CAMSSUPPORT@cnsu.edu.

Please note that the Student Portal is different than and is not related to Canvas. Canvas is the learning management system (LMS) used by CNU. Grades displayed in Canvas are not official. Students use Canvas to participate in courses. Questions regarding Canvas should be directed to CNU IT department.

Viewing Letter and Narrative Grades in the Student Portal

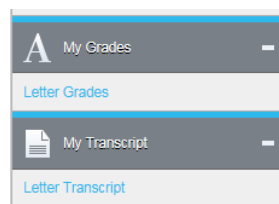
First, log into the Student Portal using either Internet Explorer or Firefox/Mozilla. Please do not use Chrome as you must allow pop-ups within your browser.

1. Log into the correct term/semester (e.g. COM M1 FA 18, COM M2 SP 18, etc.)

If you need to change semesters once logged in, click Change next to the current term in the upper left hand corner under your name.

Current term: COM M1 FA 18 (Change)

2. You will work in these two areas to access your grades:



a. Narrative Grades, Under My Grades> click Letter Grades> Grade Type = Narrative Grades. Your narrative grades for the term selected will be displayed. At this time you can only view your narrative grades by term.

b. Letter Grades: Under My Grades>click Letter Grades>Grade Type = Final Grades. Your final grades for the term selected will be displayed.

c. View your unofficial transcript without narratives: Go to My Transcript> click Letter Transcript.

For a printer-friendly version of your unofficial transcript click the printer icon in the top left corner of the transcript page.

Note: If you require a printed transcript that includes your letter and narrative grades, please submit the [CNU Transcript Request form](#) to the Office of the Registrar.

Changes or Corrections to Personal Information

Students are responsible for immediately report any change in their personal information (e.g. name, address, telephone number, etc.) to the Office of the Registrar. CNU will not be held responsible for any mail sent to the wrong address due to an incorrect address on file. The postage cost for remailing may be at the expense of the student.

Corrections to date of birth, social security number, and sex/gender require submission of the Change of Personal Information form and supporting legal documentation to the Office of the Registrar.

The request form is available [online](#).

Legal Name Change Request

Official CNU records and academic transcripts must reflect the student's name as it appears on government issued photo identification, such as a driver's license or U.S. Passport.

A student may request an official name change for school documents and records by submitting the following information to the Office of the Registrar:

1. A completed Change of Personal Information request form the Office of the Registrar's Service and Forms web page.
2. Government-issued photo ID showing new legal name
3. Acceptable proof of name change (marriage certificate or court order)
4. Current student identification card

Once the information has been verified and approved all official school documentation will be updated. The Registrar will then forward the name change to the following departments:

1. Business Office
2. Experiential Education
3. Financial Aid Office
4. Library - All library resources
5. OSAA
6. IT Department – The LMS (Canvas), new student identification badge, new email address
7. Student Records - Official Academic file, Student roster,

academic advisor

The request form is available [online](#).

Change of Address

Current students should update their address, phone number and email through the Student Portal or by submission of the Change of Address Request form. Former students must submit the request form to update their contact information. The request form is available on the Office of the Registrar website and in the forms display near the Office.

Submitted forms typically take 5 to 7 business days to process. Updates submitted through the Student Portal are reflected immediately, but may take 5-7 business days to be reflected in all University systems. This change will not update your W-9. To update the address on your W-9 you must submit a new W-9 to the Business Office.

Enrollment and Degree Verifications; Letter of Good Standing

The Office of the Registrar provides confirmation of student enrollment status to financial institutions, organizations, or agencies in writing at the student's request. Students may request proof of enrollment or degree by completing an **Enrollment, Degree, & Good Standing Verification Request** form located on the Office of the Registrar's web page.

The student must complete the form and submit it to the Registrar. Complete requests are typically processed within 5 business days. Verification letters are printed on official letterhead and include the Registrar's signature as well as the University seal. Requests are typically processed within 5 business days.

Information about verifications and the request form are available [online](#).

Transcript Requests

A student's academic transcript is a permanent record.

Unofficial transcripts can be viewed online through the Student Portal or ordered free-of-charge using the Transcript Request form.

All delinquent financial and business obligations with the University must be cleared before transcripts are released. The University will withhold official transcripts if the University has knowledge that the student has any default on loans or service obligations.

Students and former students may request an official transcript through the Office of the Registrar by:

1. Submission of Transcript Request Form

The Transcript Request form is available on the Office of the Registrar website and in the display case outside of the Office. The ordering fee is posted on the order form and payment is due at time of order submission.

Complete requests are typically processed within five business days.

2. Order Online

Order Online: www.parchment.com

Official transcripts may be ordered through Parchment's online record ordering service. Credit card is required and additional service fees are applicable.

Ordering instructions and request form are available at: <https://www.cnsu.edu/office-of-the-registrar/registrar-request-a-transcript>.

Application for Graduation

Students applying for graduation must meet all academic and financial requirements prior to submitting the Petition to Graduate. Students who have completed all the requirements to graduate are required to submit the Petition to Graduate to the Office of the Registrar for processing prior to the graduation application deadline. The Petition to Graduate form is available on the Office of the Registrar Services and Forms web page.

Application Deadline for Conferment of Degree:

Graduation Application	Filing Period
Spring 1	Feb 1 through April

Diplomas

The Office of the Registrar oversees the release of CNU diplomas. The student's degree must be awarded and posted to the Official Transcript before a diploma can be sent. Diplomas will include any applicable CNU honors (cum laude, magna cum laude, and summa cum laude).

Students must complete and submit the Graduation Clearance Form before their diploma will be mailed. The Clearance Form verifies that the student has no outstanding balances or University requirements. A diploma will not be provided until all student account requirements are met.

Diplomas are typically mailed first class to the permanent address

listed on the Petition to Graduate approximately 6-8 weeks following graduation/degree conferral for students who have met all clearance requirements. CNU uses a third-party vendor to print and mail all diplomas. CNU is not responsible for lost, stolen, or returned diplomas.

Diplomas returned to the school as undeliverable will be held for five (5) years. Repeat shipping is at the cost of the student.

Duplicate Diplomas

A student may request a duplicate diploma that has been lost or damaged by completing a Duplicate Diploma Request Form and submitting the form to the Office of the Registrar. The fee for a duplicate diploma is posted on the form and must be paid at the time it is submitted. When possible, the original diploma must be returned to the Office of Registrar. The request for a duplicate diploma is kept in the student's file.

Diplomas will be mailed first class to the address indicated on the Duplicate Diploma Request Form. Diplomas and official transcripts will not be released if there is a financial hold. CNU is not responsible for lost, stolen, or returned diplomas.

In the event that your diploma is lost or stolen and degree verification is needed, please submit the Enrollment and Degree Verification Request form.

Directory Information and Access to Student Records

Student Rights Under FERPA

The Family Educational Rights and Privacy Act (FERPA) afford eligible students certain rights with respect to their education records. An "eligible student" is a student who is 18 years of age or older or who attends a postsecondary institution. These rights include:

1. The right to inspect and review the student's education records within 45 days after the day California Northstate University receives a request for access. A student should submit to the Registrar a written request that identifies the record(s) the student wishes to inspect. The registrar will make arrangements for access and notify the student of the time and place where the records may be inspected.
2. The right to request the amendment of the student's education records that the student believes is

inaccurate, misleading, or otherwise in violation of the student's privacy rights under FERPA.

3. A student who wishes to ask the school to amend a record should write the Registrar, clearly identify the part of the record the student wants changed, and specify why it should be changed.
4. If the school decides not to amend the record as requested, the school will notify the student in writing of the decision and the student's right to a hearing regarding the request for amendment. Additional information regarding the hearing procedures will be provided to the student when notified of the right to a hearing.
5. The right to provide written consent before the university discloses personally identifiable information (PII) from the student's education records, except to the extent that FERPA authorizes disclosure without consent.
6. The school discloses education records without a student's prior written request under the FERPA exception for disclosure to school officials with legitimate educational interests. A school official is a person employed by the California Northstate University in an administrative, supervisory, academic, research, or support staff position (including law enforcement unit personnel and health staff); a person serving on the board of trustees; or a student serving on an official committee, such as a disciplinary or grievance committee. A school official also may include a volunteer or contractor outside of California Northstate University who performs an institutional service or function for which the school would otherwise use its own employees and who is under the direct control of the school with respect to the use and maintenance of PII from education records, such as an attorney, auditor, or collection agent or a student volunteering to assist another school official in performing his or her tasks. A school official has a legitimate educational interest if the official needs to review an education record in order to fulfill his or her professional responsibilities for California Northstate University.

7. The right to file a complaint with the U.S. Department of Education concerning alleged failures by California Northstate University to comply with the requirements of FERPA is:

Family Policy Compliance Office
U.S. Department of Education
400 Maryland Avenue, SW
Washington, DC 20202-5901

Institutional Student Procedures for FERPA

FERPA does not cover employment, medical or police records, confidential letters of recommendation if the student has waived the right to review them, professors or administrator's personal records for their own use about students, parent's financial records, and other FERPA excluded records.

Additional information regarding FERPA can be viewed [online](#).

Student Directory Information Disclosure and Access

California Northstate University reserves the right to disclose certain directory information. Personally identifiable information such as student directory information (student name, address, telephone number, email address, field of study, cohort classification, enrollment status, dates of University attendance, club and/or organization memberships, degrees, honors and awards received, photograph, and the most recent educational agency or institution attended) is considered public information and may be disclosed by the University without prior written consent. The student may request that directory information be withheld from sources outside the University, excluding law enforcement, or within the University to anyone who does not have a need to know status.

Parents have no inherent rights to inspect their child's educational records after age 18. Students requesting that directory information not be disclosed should must submit the Directory Opt-Out Request Form to the Registrar before the last day to add a class in a semester.

The University is not responsible for inadvertent release of directory information.

Upon placement at a clinical rotation site, the student's University email address and name will be given to the company in which they are placed.

Annual Disclosure and Record Access Students receive an annual FERPA notification from the Office of the Registrar prior to or following the start of each Fall semester. The FERPA notice will be sent to all CNU student email addresses in addition to being posted in the following locations: student information boards, inside and outside the Office of the Registrar, and [online](#).

Course Registration; Deadlines

Registration is conducted by the Registrar prior to the start of each semester for new and continuing students. Students with business, financial, or other registration holds on their account will not be registered until the Registrar is notified that the hold has been cleared. Students who are in compliance with institutional requirements, including but not limited to health insurance and/or immunization documentation, or who have a registration hold on their student account at the time of registration are required to satisfy the requirement and may also be required to submit the Course Add/Drop form by the end of the Add/Drop period to register or make schedule changes. A student should not be attending class for which he or she is not registered. Course registration can be viewed through the Student Portal.

The Registrar performs block registration for all Phase A students (D1 & D2). D3 and D4 rotation placement is provided to the Registrar by the CDM experiential department.

Students are encouraged to review their semester registrations through the Student Portal on a regular basis to ensure accuracy. At minimum, students should check their Portal at the beginning of the semester, after any requested course/rotation changes; and shortly before the end of the course and/or semester.

Elective Course Registration

Students who meet the course prerequisites may register for elective courses each semester. Instructions for elective course registration are emailed.

Course Add/Drop Deadline

The COM course add/drop deadline is the fifth business day of the course, or by 5:00 p.m. the day after the 2nd class meeting, whichever is later. To make schedule changes, the Course Add/Drop request form must be submitted to the Office of the Registrar for processing. The form is available from the [Registrar's Website](#), and paper copies are available from the form display outside of the Registrar's Office.

College Withdrawal

Cancellation shall occur when you give written notice of cancellation to the Admission Office at the College's address

shown at the top of the first page of the Enrollment Agreement prior to 12:01am on the second day of instruction of the semester. After the cancellation period, a college withdrawal shall occur when you give written notice of withdrawal. Please submit the Official College withdrawal form to the Registrar at the College's address shown at the top of the first page of the Enrollment Agreement. You can do this by hand delivery, email, facsimile, or mail. Written notice of cancellation or withdrawal sent by hand delivery, email, or facsimile is effective when received by the College, provided that such receipt can be verified. Written notice of cancellation or withdrawal sent by mail is effective when deposited in the mail properly addressed with postage prepaid. The written notice of cancellation or withdrawal need not take any particular form and, however expressed, is effective if it shows that you no longer wish to be bound by the Enrollment Agreement in the case of a cancellation, or that you wish to withdraw from the College in the case of a withdrawal.

STUDENT GOVERNMENT AND INTEREST GROUPS

Students have representation on a number of committees and councils at California Northstate University College of Dental Medicine (CNUCDM) and are encouraged to develop leadership skills by serving on a College committee or council. The Assistant Dean of Student Affairs requests nominations of students desiring to serve on CNUCDM committees or councils.

Student Government

The Student Government establishes bylaws for governing its operations. The Assistant Dean of Student Affairs serves as a faculty advisor to the Student Government. Within their capacity as representatives of the student body, student government may fulfill a range of responsibilities, such as:

- Class officers are dedicated to promoting class unity and school spirit through class-based programming
- Representing the interests and concerns of the student body and serving on college-wide committees
- Sponsoring college-wide programs (professional development, speakers, workshops, etc.)
- Chartering and regulating student organizations.
- Participating in hearings of the honor council

Student Interest Groups

Students have the freedom to organize and join professional organizations that promote and advance the profession of

dental medicine and further the goals of the College. The Assistant Dean of Student Affairs provides guidance to students seeking to develop new professional organizations as well as re-registering of existing organizations at CNUCDM.

All organizations must register with the Office of Student Affairs, Admissions and Outreach to be recognized by CNUCDM. [CNUCDM's Student Organization Policy and Procedure Manual](#) is available through the Office of Student Affairs that provides policy and suggestions for starting an organization. [Click here](#) to be directed to the registration application.

Registration Procedures

Professional Student Organizations must meet the following requirements to attain registered status:

- Membership must be open to all CNUCDM students regardless of race, color, ethnicity, national origin, age, gender, political affiliation, religion, creed, sexual orientation, veteran status, or disability.
- The professional organization must not associate with any local, state or national organizations which require its members to support positions contrary to CNUCDM policies.
- A copy of the current constitution and bylaws that govern the professional organization must be on file with the Assistant Dean of Student Affairs. If the professional organization is associated with any local, state or national organizations, a current copy of their constitution and bylaws must be on file with the Assistant Dean of Student Affairs.
- The professional organization must have a faculty advisor.
- Student professional organizations must have a minimum of five (5) members, including two (2) officers.
- Student officers must be in good academic standing.
- Meeting dates and events should be reported to the Assistant Dean of Student Affairs and placed on the professional affairs yearly calendar.
- Officers or designated representatives from all professional student organizations are required to attend an organization orientation at the beginning of the fall semester.

Responsibilities

All registered professional student organizations must act within the context of College policies, the organization's bylaws, and conduct operations in a fiscally sound manner. It is the

responsibility of each organization, its officers and members to abide by all policies and procedures in the Student Organization Policy & Procedure Manual.

Student Officers and the group's advisor are responsible for submitting any forms or other required paperwork required by the policies and procures outlined in the manual.

Rights and Privileges

Professional student organizations may use the College facilities for meeting or events. Request for reservations of facilities must be made to the Office of Student Affairs and Admissions within seven (7) days of the scheduled meeting or event. Forms are located online. Completed forms should be returned to the Office of Student Affairs, Admissions and Outreach.

Recognized student organizations may use the College name, address, and insignia in organization correspondence and outreach. Use of the University or College insignia must comply with the Use Guide for the University or College insignia.

Loss of Recognition

Any professional dental organization may be instructed to cease and desist for not abiding by California Northstate University College of Medicine (CNUCDM), local, state or national policies.

Any organization that has lost its recognition may not engage in any College event or activity nor use the college name, insignia or other College assets.

Professional organizations alleged to have violated any College or organization policy will go before the Honor Council.

Professional Student Organizations

[American Dental Association - California Dental Association Student Section](#)

The American Dental Association (ADA) is the principle organization representing dentistry and oral health in the United States. The California Dental Association is a component society for which there is vertical membership in the ADA.

Every dental student should inaugurate a lifelong commitment to organized dentistry and join the student section of the CDA and ADA.

[American Student Dental Association \(ASDA\)](#)

The American Student Dental Association is an organization that advocates for students needs in legislation, advocacy and

camaraderie. It is the voice of dental students in policies ranging from student debt, to licensure issues.

American Dental Education Association (ADEA)

Student chapters of ADEA promote future dental educators through engagement with dental faculty nationally and regionally and provide a voice for students to influence dental education.

Student National Dental Association (SNDA)

The Student National Dental Association is focused on supporting minority students who are preparing to enter the field of dentistry. SNDA provides opportunities for camaraderie, efforts to diversify the oral health workforce, and mentorship.

Hispanic Dental Association Student Chapters

The Hispanic Dental Association and its student chapters have the goal of addressing oral health disparities in Hispanic communities, while providing opportunities for mentorship and camaraderie among its members.

STUDENT HEALTH AND WELLNESS

Student Wellness Program

CNUCDM recognizes the intense nature of the dental school curriculum and the importance of ensuring that students adjust to the demands of the dental school environment. It is not uncommon for dental students to experience fatigue, low mood, sleeplessness, anxiety, etc. Therefore, it is important that the skills, knowledge and attitudes necessary for a long term successful work-life balance have their foundation in the student's dental school years. More importantly, it is imperative for a student to understand when he or she needs help and where to turn for that assistance.

The Student Wellness Program is designed to support the well-being of students as they progress through their dental education and into their professional careers. By integrating wellness programming into various aspects of the curriculum, sustaining a student-led wellness committee, and promoting on-campus activities, the wellness program aims to facilitate a positive sense of individual well-being physically, mentally, emotionally, and socially.

Office of Student Affairs

The Office of Student Affairs and Admissions functions to

provide individual counseling to students if they have issues and concerns of a personal nature. That office has professional staff that will be able to assist students in determining the type of support or resource that they should access. The Assistant Dean of Student Affairs and the staff involved who deal with these types of issues do not have a role in assessing academic performance.

Personal Counseling

To assist students at times of need, the College of Dental Medicine has on-site licensed mental health providers. Neither provider teaches in classes nor has any evaluative academic role in the student's curriculum.

All discussions shared with the counselors are confidential and will not be shared with anyone else at the school or outside of the school without the student's expressed, written permission. Nothing disclosed to the counselors will appear in any student records.

CNUCDM's counselors are prepared to discuss with students any topics including, but not limited to: school stress, anxiety, time management, relational stress, depression, suicidal thoughts, creating positive coping strategies, life transition issues, and substance use concerns.

Students should feel free to come in with any concerns and the providers are available for one-time meetings or ongoing therapy. No concern is too small or too big.

Students are encouraged to make appointments ahead of time to ensure that one of the counselors is available to talk. However, students are also welcome to drop in to see if either counselor is available.

Contacting the Counselors

Counseling Office – 2525 West
Taron Court, Suite 100
(916) 686-8549

Katelyn Shields: Katelyn.shields@cnsu.edu

Student Wellness Committee

The Student Affairs and Wellness Committee, more commonly known as the Wellness Committee, in the College of Dental Medicine is comprised of faculty, staff, and students who all have diverse passions for engaging in and supporting student wellness. It liaises with the wellness committees of the other professional schools of CNU. The committee meets on the second Tuesday of every month and encourages input from all students, staff, and faculty members to help enhance the well-being of

students throughout their dental school journey and beyond.

The Wellness Committee is open to student members, seven faculty members, and three staff members. Student members serve on student-created and student-led subcommittees. The following are planned as initial committees for CDM:

- Arts and Music
- New Student Outreach
- Nutrition
- Outdoor Activities
- Service and Community Outreach
- Resiliency

The Wellness Committee hosts weekly, monthly, and annual events for CNUCDM students, staff, and faculty to participate in to learn more about how to support their own wellness and practice self-care.

Peer Mentoring

First year students will be assigned a peer who is an upperclassman in academic good standing. The purpose of this program is to provide first-year students with the opportunity to work with an upperclassman that has a firm understanding of the curriculum and the requisite skills for its successful navigation.

Faculty

One of the key features of CNUCDM is that faculty have a close professional relationship with students and an open door policy. A student may seek out a faculty member or their College Master for counsel regarding personal or academic issues. The student's College Master will be well versed in resources to which the student can be referred.

Stress and Fatigue Management

The following serves as a summary of the Stress and Fatigue Management Policy. To read the complete policy, [click here](#).

Responsibility of the Supervising Faculty – Classroom

In the classroom setting, if a faculty recognizes a student is demonstrating evidence for excess fatigue and/or stress, the faculty should notify the student's College Master, who, in turn, should discuss the possible reasons and opportunities for support.

The College Master may recommend that the student meets with the Director of Student Affairs and Admissions for identifying available support.

Responsibility of the Supervising Faculty – Clinical Setting

If a student in a clinical setting demonstrates evidence of excessive fatigue and/or stress, faculty supervising the student should immediately release the student from further clinical duties and responsibilities.

If the student exhibits signs of excessive fatigue, the supervising faculty should advise the student to rest for at least a 30-minute period before operating a motorized vehicle. The student may also call someone to provide transportation back home.

A student who is released from further clinical duties due to stress or fatigue cannot resume clinical duties without permission by the Clerkship Director.

Student Responsibility

Students who perceive they are manifesting excess fatigue and/or stress have the professional responsibility to immediately notify their attending faculty and Clerkship Director without fear of appraisal.

Students who recognize a peer student exhibiting excess fatigue and/or stress must immediately report their observations and concerns to the attending/presenting faculty and the Clerkship Director.

Clerkship Director Responsibility

Upon removal of a student from duties, the Clerkship Director must determine the need for immediate change in duty assignments for peer students in the clerkship and/or the clinical site.

The Clerkship Director will notify the departmental chair to discuss methods to manage fatigue and stress.

Healthcare Insurance Requirement

It is mandatory for students to have medical insurance while enrolled in the program. Registration for classes is not authorized until a student provides proof of insurance and coverage. CNUCDM has obtained a Student Health Insurance Policy through Western Health Advantage. The fee for this policy is paid directly to the school and is billed on a bi-annual basis. This allows students to have continuous health coverage throughout the year including break periods. Students requiring medical care would need to access the appropriate providers available through their insurance option. Students may use their parent's or spouses insurance, by providing proof of coverage.

Drug Test Requirements

Drug testing is required prior to matriculation and again prior

the start of the D3 year. Clinical Clerkship site partners who are accredited or seeking accreditation from The Joint Commission are required to screen students according to the same standards as employees.

Students must pass all drug test requirements prior to D3 clerkship placement.

Drug Testing

The testing may include a urine toxicology screening, a blood panel screening, or other screenings and tests mandated by the hospital or clinic.

Students must pass all drug tests or screenings.

If a student tests positive, they have 10 days to meet with a Medical Review Officer (MRO) to see if the positive test is due to legal medication that the student is taking. If so, the MRO clears the student as negative.

A Medical Review Officer is a physician named by the Associate Dean of Academic Affairs to review medical issues and reports related to students.

The school uses a 10 panel drug test. If a student tests positive for any illegal substances, and is not cleared by the MRO, the student may be required to make adjustments to his/her academic program. If a student consistently tests positive for illegal substances and is unable to meet the requirements of the Program, they may be dismissed from the College.

On campus screening for all students is generally held prior to the semester of the scheduled hospital or clinic rotation.

Vaccination Requirements

Students are required to present proof of vaccinations before registration. Documentation of required immunizations must be completed by a licensed healthcare provider. A health care provider is a physician licensed to practice (MD or DO), a Licensed Nurse, or a Public Health Official. Forms for documenting immunization requirements are provided in the acceptance packet sent to the student. All immunization forms and copies of laboratory reports must be submitted in English.

Students that are allergic to some vaccines will need to provide medical evidence of that condition. They will then be required to adhere to a very strict protection regimen as required by the clerkships.

Equivocal antibody titers are not considered sufficient to protect from infection and a complete vaccine series will be administered as recommended by the CDC-ACIP.

Alcohol or Chemical Dependence or Impairment

The following serves as a summary of the [Alcohol or Chemical Dependence Policy](#). The full policy can be found on page 164.

CNUCDM is a drug-free academic environment consistent with federal and state laws. Any person within the College community may be disciplined for violation of these policies and may be tested for suspected use of an illegal drug.

The possession, use, consumption, manufacturing, or distribution of any form of illegal substance, or alcohol is prohibited on the College campus as well as any off-site location while the student is involved in academic learning experiences.

Any student who is under the influence of alcohol or drugs during class or clinical experiences is subject to immediate counsel and possible diversion into a therapeutic recovery system. Those who fail to participate or fail to follow through with treatment guidelines are subject to immediate removal from the setting and dismissal from the University.

TUITION AND FEE, FINANCIAL AID, AND SCHOLARSHIPS

Tuition and Fees

Information on tuition, fees, charges and expenses will be updated each year and posted on the website. Please see this resource for further information.

Tuition and fees may increase on an annual basis. This program is designed to allow a student to graduate after successfully completing four (4) years of coursework consisting of 226 semester credit hours while attending the College on a full-time basis. All fees are therefore charged on an annual basis, with no proration available for part-time study based on the number of units taken or based on any other method of calculation. Tuition and fees for remediating or repeating a course or courses as the result of a failing grade in the course, including when an additional year is required for this purpose, are described in the College Catalog.

The Student Tuition Recovery Fund (STRF) amount is based on the Regulations in effect on May 11, 2011.

Payment Due Dates and Options

All tuition and fees described on the first page of the Student Enrollment Agreement are due in full in accord with the schedule "Total Charges You Are Obligated to Pay upon Enrollment and Required Scheduled Payment Dates" set forth on the last page of the Enrollment Agreement. As an alternative to payment in cash, the student may (1) provide satisfactory written creditor approved loan documentation to the College, or (2) apply for one of the installment payment plans offered by the College, either of which the College may within its complete discretion accept as an alternative to cash payment for the above tuition and fees, excluding the enrollment confirmation fee and the student health insurance fee. If either of these options is chosen by the student, the student must make the appropriate arrangements with the College no later than thirty (30) days before the applicable due date described on the last page of the Enrollment Agreement.

Failure to make full payment, or alternative loan or installment payment arrangements, by the due dates described in this Enrollment Agreement subject the defaulting incoming student to forfeiture of the student's seat and the defaulting returning student to dismissal or interest at the then current rate under the College's direct pay installment program, which is presently 12% per year.

Student's Right to Cancel and Refund

You have the right to cancel this Student Enrollment Agreement. Please refer to the Enrollment Agreement for all details regarding student's right to cancel and refund. You may also contact the Admissions Department for more details at (916) 686-7300.

Student's Right to Withdraw and Refund

After the cancellation period described above in "Student's Right to Cancel and Refund," you have the right to withdraw from the University at any time.

Withdrawal shall occur when you give written notice of withdrawal to the Registrar at the University's address shown at the top of the first page of this Student Enrollment Agreement. You can do this by hand delivery, email, facsimile, or mail. Written notice of withdrawal sent by hand delivery, email, or facsimile is effective upon receipt by the Registrar. Written notice of withdrawal sent by mail is effective when deposited in the mail properly addressed with postage prepaid.

The written notice of withdrawal should be on the official College Withdrawal Form provided by the Office of the Registrar, but

may also be in any writing that shows you wish to withdraw from the University. A withdrawal may also be effectuated by the student's conduct showing an intent to withdraw, including but not necessarily limited to the student's continuing and unexcused failure to attend all classes.

If you withdraw before or at completion of 60% (and no more) of the current term, you will be eligible for a pro-rata refund for the current term. The University will perform a pro-rata calculation of current term tuition and refund as follows:

Step A) Total days in current term* – Days in current term completed = Total

Step B) Total days not completed/Total days in current term % of pro-rata refund

Step C) Institutional charges* x % of pro-rata refund = Total refund owed

*Current term generally means the current semester, but when tuition is charged for the entire period of enrollment rather than by semester, then the current term shall mean that period of enrollment.

*Institutional charges excluded from the pro-rata refund are: (1) all non-refundable fees as described in the current General Catalog, (2) Student Tuition Recovery Fund fee, and (3) student health insurance premium estimated at \$3,200.00, if applicable; institutional charges in the pro-rata refund include: (1) current term tuition.

If the amount of the current term payments is more than the amount that is owed for the time attended, then a refund of the difference will be made within 45 days after the notice of withdrawal is received by the Office of the Registrar. Refunds owed to the student as a result of a pro-rata calculation will be done in the following order:

- I. Private Educational Loan(s); and
- II. To the student

Required Notice of Cancellation or Notice of Withdrawal

Cancellation or withdrawal shall occur when you give written notice of cancellation or withdrawal to the Registrar at the College's address shown at the top of the first page of the Enrollment Agreement. You can do this by hand delivery, email, facsimile, or mail. Written notice of cancellation or withdrawal sent by hand delivery, email, or facsimile is effective when received by the College, provided that such receipt can be verified. Written notice of cancellation or withdrawal sent by mail is effective when deposited in the mail properly addressed

with postage prepaid. The written notice of cancellation or withdrawal need not take any particular form and, however expressed, is effective if it shows that you no longer wish to be bound by the Enrollment Agreement in the case of a cancellation, or that you wish to withdraw from the College in the case of a withdrawal.

Refund Policy in the Event of Dismissal

Refund of paid tuition and fees for students who are dismissed follows the same timelines as in the event of withdrawal from enrollment.

Financial Aid and Loan Obligations

If a student obtains a loan to pay for an educational program, then the refund upon cancellation or withdrawal, subject to the conditions for refund described in the Student's Right to Withdraw and Refund section will be sent to the lender or to the loan guarantee agency, up to the amount of the loan. The student will have the responsibility to repay the full amount of the loan plus interest, less the amount of any refund paid to the lender. If there is a refund amount remaining after payment to the lender, it shall be paid to the student as described above. If you owe money after the refund, then you will need to make arrangements for payment of the amount remaining owed.

NOTICE: YOU MAY ASSERT AGAINST THE HOLDER OF THE PROMISSORY NOTE YOU SIGNED IN ORDER TO FINANCE THE COST OF THE EDUCATIONAL PROGRAM ALL OF THE CLAIMS AND DEFENSES THAT YOU COULD ASSERT AGAINST THIS INSTITUTION, UP TO THE AMOUNT YOU HAVE ALREADY PAID UNDER THE PROMISSORY NOTE.

Scholarships

In the past, several companies have helped University students finance their education with Scholarships. Scholarship amount varies. Criteria for scholarships vary by the specific donor and are usually awarded in the late fall and early spring. The University awards various scholarships to students during the academic year. The scholarships are awarded on the basis of financial need, academic performance, leadership, and promoting diversity in the profession.

SCHEDULES

The academic calendar and holiday schedule is posted to the CNUCDM website.

Students are to remain local and not travel out of the area until the end of each semester term.

BASIC LIFE SUPPORT

All students are required to be certified in Basic Life Support for Health Care Providers (BLS). All matriculating students and students completing the second year will be offered the BLS course at CNUCDM, first in Foundations of Odontology (Odont 511) and at the end of the second year in Local Anesthesia (OMFS 632). It is the student's responsibility to provide the signed BLS certification card to myrecordtracker.

APPENDIX A: CNUCDM PLOs

1. Patient-Centered Care: Demonstrate understanding of healthcare disparities and cultural awareness in patient counseling and patient advocacy
2. Evidence-Based Care: Apply current, evidence-based oral healthcare within the scope of general dentistry
3. Culturally competent, empathic communication: Demonstrate patient centered, empathic, and culturally competent communication and interpersonal skills
4. Oral and Written Communication: Demonstrate sound oral and written communications in patient care
5. Critical Thinking: Utilize critical thinking, problem solving skills and systemic thinking in assessing and making reasoned, evidence-based decisions in patient care
6. Ethics and Professionalism: Demonstrate professionalism and ethical decision making
7. Biomedical Sciences Knowledge: Demonstrate an understanding of the fundamentals of biomedical sciences and apply them appropriately in oral healthcare
8. Practice Management: Apply legal, regulatory and business management concepts related to provision of oral healthcare services

PROGRAM CLINICAL CARE OUTCOMES

Patients experience:

1. Patient-centered highest quality diagnostic, preventive and treatment services at the most reasonable cost with the best patient experience and treatment outcomes
2. Comprehensive oral health care in a dental medicine model integrated with overall health
3. Minimally invasive care utilizing the latest technology

STRATEGIC GOALS

Tactics, development plan, critical success factors, and evidence of achievement

Goal 1. Educate effective practitioners of dental medicine

Recruit, retain, educate, and train the highest quality of DMD students

Goal 2. Develop a high quality faculty and staff

Develop and distribute resources to recruit, retain and promote the effective activities of faculty and staff. Promote research and scholarship in the college.

Goal 3. Achieve effective leadership in oral health care delivery

Provide patient care that becomes recognized as some of the best oral health care available anywhere. Gain the benefits of good oral health for the patients served and in our communities beyond.

Goal 4. Promote a diverse and inclusive environment in dental medicine and in the communities we serve

Create and sustain an environment that respects all its students, staff and faculty and the patients we serve. Promote multiculturalism and American values of equality and inclusiveness in the college and for community oral health.

Goal 5. Create exceptional facilities and infrastructure

Build an efficient infrastructure to support and sustain learning, teaching, communication, research and scholarship while keeping education affordable.

Goal 6. Ensure financial sustainability and growth

Build a financially sustainable budget that will provide effective support of existing programs while being poised for expansion through strategic growth of programs

APPENDIX B: CODA TABLE 2

The cycle of continuous improvement based upon the strategic plan

STRATEGIES AND TACTICS FOR OUR GOALS

Goal 1. Educate effective practitioners of dental medicine

Recruit, retain, and train the highest quality of DMD students

Strategy 1.1. Provide excellence in teaching.

Tactics:

- Develop and deliver an exceptional curriculum
- Work with the CNU Institute for Teaching and Learning Excellence to develop contemporary pedagogy
- Develop a student faculty mentorship program to promote professionalism and ethics

Tactic	February 2019 status	Development Plan	Critical Success Factors	Party responsible for report	Evidence of Achievement
Develop and deliver an exceptional curriculum	A curriculum with four themes (human studies, odontology, oral and maxillofacial studies, behavioral and social sciences) has been presented to the planning committees. 226 course hours and course names have been identified and course directors have	Spring 2019: Completion of syllabi, development of course materials in Canvas . selection of source materials 2019-2020: presentation of D1 courses with assigned auditors and 360 degree course assessment Repeat this cycle for D2, 2021, D3, 2022, and D4 2023	Positive assessment of courses at 360 degrees: students auditor, faculty, course director, academic Dean, Dean Pass or remediation to pass for all courses (for academic reasons) with competency-based grading policy Performance at or above national average on National Board Exam	Associate Dean of Academic Affairs	1. Student course evaluations 2. Student engagement dashboard 3. Faculty self-assessment 4. Course auditors report

	been selected				
Work with the Institute for Teaching and Learning Excellence (ITLE) to develop contemporary pedagogy	The center is an emerging organization for which was launched in October 2018 by the College of Medicine, Pharmacy, and Psychology	Participate fully in all activities of the ITLE with a broad engagement of full and part time faculty	Demonstrated participation resulting in incorporation of ITLE directed advance pedagogy in CODM courses	Associate Dean of Academic Affairs	Implementation of active learning in CODM courses Reports of course directors on implementation of ITLE training
Develop a student faculty mentorship program to promote professionalism and ethics	No mentorship program has been established as of February 2019	Train faculty in mentorship through faculty development program. Create assessment rubric for faculty to individually assess mentorship performance Assign each faculty member mentees Apply CDM resources to support mentorship activities Perform annual review of program and participants	Improved student life Improved faculty staff and student satisfaction. Development of values of professionalism in students	Dean Assistant Dean of Student Affairs	Survey of students on the mentorship program Survey of faculty on the mentorship program Evaluations of student reflective essay on the mentorship program and its impact on professionalism

Goal 1: Educate effective practitioners of dental medicine

Recruit, retain, and train the highest quality of DMD students

Strategy 1.2 Recruit and retain exceptional dental students

Tactics:

- Recruit a qualified class ensuring scientific clinical ability with a holistic approach to promote social consciousness and action
- Retain all these qualified students with timely completion of the DMD program

Tactic	February 2019 Status	Development Plan	Critical Success Factors	Party responsible for report	Evidence of Achievement
Recruit a qualified class ensuring scientific clinical ability with a holistic approach to promote social consciousness and action	The college has begun to integrate into university recruitment and admissions processes. Participation in the university wide admissions and student affairs retreat in January 2019	Implement the admissions marketing plan as in the CODA self study Appendix XX INSERT HERE MARKETING PLAN	Application pool from the region (central valley, delta, Shasta, Humboldt, Sierras) in excess of applicants to other California dental programs. Social science majors represented. Students from universities of the Delta, Central Valley, mountains and Northern California HPSA shortage areas represented Immigrants and underrepresented minorities exceed the region	Dean of admissions and student affairs	More than 50% of students from the underserved region and colleges associated to the region 20% social science majors Immigrants and underrepresented minorities in excess of other regional dental programs
Retain all students with timely	No students are enrolled in the college of dental	Assess the effect of the mentorship		Associate Dean of Academic	1.

completion of the DMD program	medicine but programs to assist in retention are in place for medicine and pharmacy	program in Strategy 1.1 on retention of students Monitor student performance consistently and continuously		Affairs.	
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Goal 2. Develop a high quality faculty and staff

Develop and distribute resources to recruit, retain and promote the effective activities of faculty and staff. Promote research and scholarship in the college.

Tactics:

- Recruit outstanding sufficient founding faculty of the college
- Complement faculty with appropriate staff
- Develop a program of scholarship and research that supports faculty development

Tactic	February 2019 status	Development plan	Critical Success factors	Party responsible for report	Evidence of achievement
Recruit outstanding sufficient founding faculty of the college	65 interested full and part time faculty engaged and interviews commenced Hiring plan for faculty accepted by university.	Implement hiring plan for 36 FTE faculty as well as Volunteer onsite faculty. Complete MOU's for community based faculty	Sufficient faculty to deliver curriculum and clinical care/clinical education at each stage of development	Dean Associate Dean of Academic affairs	Administrators in place in critical areas of academic affairs, curriculum, clinical affairs and research. Course directors and sufficient faculty in place for each of the courses at least 90 days prior to course delivery Faculty in place to care for patients in CNU clinics ready for students

					to join care teams
Complement faculty with appropriate staff	Staff hires have begun with Dean's administrator and hiring plan for academic and clinical operations under development	Complete hiring plan for all academic, administrative and clinical staff. Complete hiring of qualified personnel as needed during development.	High functioning qualified staff hired in timely fashion associated with need	VP for human resources Dean Dean of Clinical Affairs Dean of Academic affairs	Clinical staffing model achieved consistent with industry standards in all areas. Academic and administrative staffing consistent with CNU collaborative models and standards and task based needs
Develop a program of scholarship and research that supports faculty development	Interview and hiring plan completed for assistant Dean of research	Develop collaborative public health oriented research program	Active college research program with external funding including NIH, HRSA, state of California, industry and foundation grants	Dean of research VP for Research	Research program in top 50% of the 67 dental programs in the US by the first 5 years of operation

Goal 3. Achieve effective leadership in oral health care delivery

Tactics

- Provide patient care that becomes recognized as some of the best oral health care available anywhere.
- Gain the benefits of good oral health for the patients served and in our communities beyond.

Tactic	Initial status February 2019	Development plan	Critical Success Factors	Responsible for reporting	Evidence of achievement
Provide patient care that becomes recognized as some of the	Plans for clinics and clinical partners are under development	Complete construction of 2 clinics each of 30 clinical treatment units and appropriate	60 operational units. Core radiology, digital clinical facilities,	Dean of Clinical Affairs Dean	Operational program attracts patients who communicate the triple aim in

best oral health care available anywhere		<p>supporting clinical facilities. Equip clinics and hire expert renowned, clinical staff.</p> <p>Complete MOUs with health systems in the region for clinical education and care partnerships.</p>	<p>operational electronic health record system, sterilization and equipment management program</p> <p>Marketing program to attract sufficient patients with oral health needs fulfilled by CNU clinics</p>		<p>surveys of the highest quality of care at the lowest cost and with the best patient experience</p> <p>10,000 new patients in the first year of operation and additional 5000 per year to threshold of 20,000 active patients.</p> <p>Measure: Press Ganey, faculty and staff engagement survey</p>
Gain the benefits of good oral health for the patients served and in our communities beyond	<p>Clinics are not operational in February 2019.</p> <p>Analytics of outcomes based care and value based care for diseases including caries, periodontal disease and oral cancer have been undertaken</p>	<p>Develop thresholds for impact on extant pathologic entities in clinics and utilize standards/parameters of care to develop rubrics regarding thresholds for high quality outcomes: e.g. CAMBRA assessment tools, cancer screening outcomes and disease management and control profile for periodontal disease.</p>	<p>Reduced recurrent caries rate for enrolled patients as compared to cohort</p> <p>Greater tooth retention and periodontal index in patients with periodontal disease</p> <p>Prevention of oral cancer above</p>	Dean of Clinical affairs	<p>Chart review pre- and post-interventions to assess value based care model</p> <p>Community-based interviews with stakeholders to assess community engagement</p>

		Engage Sacramento community in population health initiatives to improve oral health	community standards in patients with premalignant disease and high risk factors. Increased utilization and decreased disease as outcome of community engagement		
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Goal 4: Promote a diverse and inclusive environment in dental medicine and in the communities we serve

Tactics

- Create and sustain an environment that respects all its students, staff and faculty and the patients we serve.
- Promote multiculturalism and American values of equality and inclusiveness in the college and for community oral health

Tactic	Status February 2019	Development Plan	Critical Success Factors	Party Responsible for report	Evidence of achievement
Create and sustain an environment that respects all its students, staff and faculty and the patients we serve.	Consistent CNU values and applied environment in student affairs admissions and academic affairs are present to create a community of respect.	The humanistic environment for dental education will be addressed by the appointed Dean of academic affairs to interface with extant CNU activities. Both curricular and faculty development	Faculty and students demonstrate a respectful and inclusive culture in plenary activities, interest group development, and individual assessment.	Dean	<ul style="list-style-type: none"> • Engagement survey • Interviews with community of students staff and faculty
					51 Page

		program will be initiated to promulgate a dental college culture of respect for diversity in all aspects			
Promote multiculturalism and American values of equality and inclusiveness in the college and for community oral health	CNU is established as a remarkably multicultural academic health center in one of the most diverse communities in California.	Promote multicultural activities that engage the CNU community and the larger regional community	<p>Achieve broad multicultural engagement with students, faculty and staff. Examples Celebracion de Salud, Indian dentistry day, Asian dental society activity, National Dental Association</p> <p>Engage Multicultural programs in the Northstate community: California state fair, other community events,</p> <p>International engagement with Asia for dental education and practice</p>	Dean Dean of student affairs and admissions	<p>Assess CNU activities and outcome assessments for these activities</p> <p>Assess in engagement survey</p>

Goal 5. Create exceptional facilities and infrastructure

Tactics:

Build an efficient infrastructure to support and sustain learning, teaching, communication, research and scholarship while keeping education affordable.

Tactics	Status February 2019	Development Plan	Critical Success Factors	Party responsible for reporting	Evidence of achievement
Build an efficient infrastructure to support and sustain learning, teaching, communication, research and scholarship while keeping education affordable.	<p>Sites are under consideration for development of clinical and preclinical facilities</p> <p>Library, anatomy, general labs and contemporary classroom access at CNU are being positioned for use by the CDM</p>	<p>Phase 1: Identify space for two clinics and one type 1 and 2 laboratory and simulation clinic</p> <p>Create plans with A-dec for the lab, simulation and first clinic.</p> <p>THIS WILL BE DEVELOPED TO ENROLL A CLASS OF 2023 LATE IN 2019 OR EARLY IN 2020/</p> <p>Complete construction in 2019 of lab and preclinical lab and in 2019-2020 for the first clinic</p>	<p>Completion of phase one of infrastructure plan in 2019</p> <p>Completion of phase 2 of infrastructure plan in 2021</p>	<p>Dean</p> <p>Dean of academic affairs</p> <p>Dean of clinical affairs</p>	<p>Timely enrollment of class</p> <p>Timely opening of clinics</p> <p>Effective operation of all facilities</p>

		Phase 2: Initiate construction on the second clinic in 2020 with vendor to be named for completion in 2021			
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Goal 6. Ensure financial sustainability and growth

Tactics:

Build a financially sustainable budget that will provide effective support of existing programs while being poised for expansion through strategic growth of programs

Tactic	Status February 2019	Development Plan	Critical Success Factors	Party responsible for	Evidence of Achievement
					54 Page

				reporting	
Build a financially sustainable budget that will provide effective support of existing programs while being poised for expansion through strategic growth of programs	The proforma and budget for the school of dentistry has been completed with the Chief Financial Officer accounting for sufficient funding and scaling up of programs for the next 10 years	<p>Expend funds for personnel, faculty and staff, for facilities, equipment and educational materials sufficient to enroll a class in late 2019 or 2020.</p> <p>Gain tuition funds during the first matriculation and growing to 4 classes of 80 student each</p> <p>Gain clinical income, grants, gifts and other sources of income to support programs.</p>	A balance sheet and annual closing statement demonstrating the COD in the black within the proposed return on investment.	<p>Dean</p> <p>President</p> <p>Chief financial officer.</p>	<p>Budget</p> <p>Balance sheets</p> <p>Annual report</p> <p>Audit results</p>



CURRICULUM STRUCTURE AND COURSE CATALOG:

Students will be engaged in a 45 week curriculum for the first 3 years, beginning in September for each year, and culminating in a DMD degree granted in June of the 4th year making the fourth year curriculum 40 weeks. Total curriculum weeks are 175.

A continuous series of didactic, small group learning, laboratory and clinical courses in:

Human Systems: Developing applied knowledge in the normal function and structure of human biology and the pathophysiology of diseases of human systems at all stages of life. Understanding and applying the implications for oral health exerted by these human systems and their associated diseases.

Odontology: In depth knowledge of the normal structure and function of the teeth, alveolar bone, and masticatory system at all stages of life. In-depth knowledge of the diseases of teeth, including caries, periodontal disease and masticatory disorders, the methods to diagnose, prevent, and treat odontologic diseases. Obtaining primary and advanced skills in the treatment of odontologic diseases.

Oral and Maxillofacial Studies: In-depth knowledge of the normal structure and function of the oral and maxillofacial region at all stages of life. In-depth knowledge of the diseases of this region including those of growth and development, neoplasia, degenerative diseases, infectious diseases, and trauma. Emphasis on OMS systems include oral mucosa, cutaneous diseases, the jaws, neurologic disorders, salivary gland disorders, paranasal sinuses, airway, and musculoskeletal diseases.

Behavioral and Social Sciences: Developing knowledge in human psychology and behavior impacting oral health and the interventions that positively and negatively impact oral health. Understanding the economic, regulatory and political environment for oral health practice. Understanding the sociologic, cultural, economic determinants of health and how to positively influence the health of communities and societies.

The 4 track diagonal curriculum:**Human Systems**

Case-based biomedical sciences: For the following Common Pathways courses (labeled CP Course) with the College of Medicine (COM), the clinical case presentations will include those oral cases presented by the CDM faculty, in addition to selected common cases with the COM. The supporting basic science with each courses will be Common Pathway anatomy, histology, embryology, biochemistry, immunology, microbiology, nutrition, pathology, pharmacology and physiology.

Course #	Course Title	Credits	Year	Term
HS 511	Hematology (CP Course)	4	DS 1	Fall

As described in COM curriculum with clinical case correlation by dental faculty. Correlated clinical cases related to oral health sciences will include: dental care in the hemophilia patient, acquired bleeding disorders in the dental patient, oral effects of anemia, and dental care for the hematology oncology patient.

Course #	Course Title	Credits	Year	Term
HS 521	Integumentary and Musculoskeletal Systems (CP Course)	7	DS 1	Fall

As described in COM curriculum with clinical case correlation by dental faculty. Correlated clinical cases related to oral health sciences will include vesiculobullous disease of the oral mucosa, oral manifestations of muscular dystrophy, oral cancer, myofascial pain dysfunction syndrome, arthritis in dental practice, osteoporosis and oral health.

Course #	Course Title	Credits	Year	Term
HS 512	Neuroscience (CP Course)	9	DS 1	Spring

As described in COM curriculum with clinical case correlation by dental faculty. Correlated clinical cases related to oral health sciences will include maxillofacial nerve injury, oral manifestations of Parkinson's disease, oral and maxillofacial movement disorders, trigeminal neuralgia, migraine and facial migraine, oral care of the stroke and spinal cord injured patient.

Course #	Course Title	Credits	Year	Term
HS 522	Cardiovascular and Pulmonary Systems (CP Course)	9	DS 1	Spring

As described in COM curriculum with clinical case correlation by dental faculty. Correlated clinical cases related to oral health sciences include: prevention, diagnosis, and immediate treatment of acute myocardial ischemia in dental practice, oral health aspects of obstructive sleep apnea, managing asthma in dental practice, congestive heart failure implications in oral health care, valvular heart disease implications in dental practice, Marfan's syndrome.

Course #	Course Title	Credits	Year	Term
HS 611	Renal System (CP Course)	5	DS 2	Fall

As described in COM curriculum with clinical case correlation by dental faculty. Correlated clinical cases related to oral health sciences include oral manifestations of renal failure/renal osteodystrophy/HPTH, dehydration and oliguria in odontogenic infection, acid/base considerations in fever and dental infection.

Course #	Course Title	Credits	Year	Term
HS 621	Gastroenterology (CP Course)	5	DS 2	Fall

As described in COM curriculum with clinical case correlation by dental faculty. Correlated clinical cases related to oral health sciences include oral effects of chronic liver failure, oral surgical considerations in Vitamin K dependent factor depletion in chronic hepatitis, oral manifestations of bulimia, Salivary gland disorders, concomitant disorders of the GI and oral microbiome, effects of mastication/salivary health on GI health, oral manifestations of patients with colonic polyps.

Course #	Course Title	Credits	Year	Term
HS 631	Endocrine System (CP Course)	5	DS 2	Fall

As described in COM curriculum with clinical case correlation by dental faculty. Correlated clinical cases related to oral health sciences include , oral health considerations in obesity, oral health impact of type 1 and type 2 diabetes, oral findings in endocrine disorders, e.g. multiple endocrine neoplasia, hyperthyroidism/hypothyroidism.

Course #	Course Title	Credits	Year	Term
HS 641	Clinical Pharmacology LAL	3	DS 2	Fall

This course will review the basics of pharmacokinetics and drug development and review the important clinical characteristics of the major drug categories including cardiac, pulmonary, GI, GU, endocrine, musculoskeletal, psychotropic, neurologic, dermatologic drugs, antibiotics,

Course #	Course Title	Credits	Year	Term
HS 642	Clinical Pharmacology 2/Oral Pharmacology LAL	3	DS 2	Spring

This course will review the major drugs used in dental practice. Emphasis on analgesics, pain and anxiety control, antibiotics. Other drugs of oral diseases including oral mucosal diseases, diseases of the dental pulp and periodontium, paranasal sinuses, and those for musculoskeletal problems of the head and neck. Correlation of drugs in the general pharmacopeia with oral health impact for HS 641 will concentrate on side effects of the oral region including examples of xerostomia, superinfection with thrush, tardive dyskinesia, among others.

Course #	Course Title	Credits	Year	Term
HS 721	Junior Year Medicine Seminar <i>SEM</i>	2	DS 3	Fall

Weekly case-based seminars presenting existing dental and comprehensive care patients and their medical comorbidities. Cases will be selected from existing active patients as well as from standardized patients, for the D3 class with evidence based review of relevant medical findings and their impact on oral health and clinical interventions. This will be done with a purpose to mitigate risk and improve patient care outcomes.

Course #	Course Title	Credits	Year	Term
HS 722	Junior Year Medicine Seminar <i>SEM</i>	2	DS 3	Spring

Complex cases will be selected beyond the level of HS 721 including those commonly requiring medical surgical intervention in concurrence with oral health care. Examples such as oncology patients, obstetric patients, and transplant patients will be examined. Weekly case-based seminars presenting existing dental and comprehensive care patients and their medical comorbidities will be continued in the seminar as well.

Course #	Course Title	Credits	Year	Term
HS 821	Senior Year Medicine Seminar <i>SEM</i>	2	DS 4	Fall

Weekly case-based seminars presenting existing dental and comprehensive care patients and their medical comorbidities. Continued development of advanced case-based patient presentations including those on hospitalized patients.

Course #	Course Title	Credits	Year	Term
HS 822	Senior Year Medicine Seminar <i>SEM</i>	2	DS 4	Spring

Weekly case-based seminars presenting existing dental and comprehensive care patients and their medical comorbidities. Development of advanced knowledge of cases presenting for medical treatment for which dental consultation is needed in the preanesthetic presurgical patient and in concurrence with major systemic disease including trauma, stroke, myocardial infarction.

Odontology

Course #	Course Title	Credits	Year	Term
Odont 511	Foundations of Odontology <i>LAL, LAB and CLIN</i>	6	DS 1	Fall

This course will introduce students to infection control, the dental office and clinical care site, and provide initial skill in interaction with the patient and the patient's oral cavity. Students will enter the clinical setting with faculty and upper level students to provide limited aspects of oral care and join the oral health care team.

Course #	Course Title	Credits	Year	Term
Odont 521	Dental Anatomy <i>LAL and LAB</i>	6	DS 1	Fall

Anatomy of the teeth and associated structures is presented including the masticatory apparatus. Clinical correlations affecting function such as sleep disorders, temporomandibular disorders and growth and development anomalies are clinical correlates to explain function and structure in dental anatomy.

Course #	Course Title	Credits	Year	Term
Odont 522	Cariology <i>LAL</i>	3	DS 1	Spring

The biology, phenotype, epidemiology, anatomical changes from caries is presented. The prevention of caries through CAMBRA is developed as well as strategies for management at all stages of the disease. The course introduces the pathways of caries as a regional and systemic disease.

Course #	Course Title	Credits	Year	Term
Odont 611	Operative Dentistry <i>LAL and LAB</i>	6	DS 2	Fall

The surgical treatment of caries and degenerative and congenital diseases of the enamel and dentin is presented through the development of technical skills to remove diseased portions of the teeth and to provide anatomical functional direct restorations of teeth. Prevention and minimally invasive procedures for caries management is emphasized. Laboratory session focus on the development of procedures and psychomotor skills using surgical armamentarium in a simulated clinical setting for the treatment of caries and other diseases of the enamel and dentin.

Course #	Course Title	Credits	Year	Term
Odont 621	Periodontology <i>LAL and LAB</i>	3	DS 2	Fall

The normal structure and function of the periodontium is presented. The pathology, microbiology, immunology, and pathophysiology of diseases of the periodontium is presented. Prevention, chronic disease management, and nonsurgical/minimally invasive procedures for periodontal diseases is emphasized. Laboratory session focus on the development of procedures and psychomotor skills using surgical armamentarium in a simulated clinical setting for the treatment of diseases of the periodontium.

Course #	Course Title	Credits	Year	Term
Odont 622	Periodontology <i>LAL and LAB</i>	3	DS 2	Spring

In-depth understanding of the etiology and progression of chronic periodontal diseases is developed in this course. The influence of systemic diseases such as HIV, diabetes mellitus, and obesity on the health of the periodontium is explored. Surgical interventions for the treatment of diseases of the periodontium is presented. The laboratory is focused on advanced techniques including flap surgery, guided tissue regeneration, socket preservation among others, as well as continued development of skills in curettage.

Course #	Course Title	Credits	Year	Term
Odont 632	Prosthodontics and Implant Dentistry: Removable Prosthodontics <i>LAL and LAB</i>	6	DS 2	Spring

The anatomic and pathophysiologic aspects of partial and full edentulism is presented. Development, construction, placement and maintenance of full and partial removable prosthodontic restorations is presented. The laboratory will include impressions, jaw occlusal registrations, gnathology, cast development and mounting, development of wax rims and occlusal scheme and teeth mounting.

Course #	Course Title	Credits	Year	Term
Odont 642	Endodontology: Diseases of the Pulp and Pathways of Odontogenic Infection, Endodontic Therapy and Technique <i>LAL and LAB</i>	3	DS 2	Spring

The diagnosis and treatment of the diseases of the dental pulp throughout life is presented. The biologic basis for treatment of diseases of the pulp is developed as well as the rationale for these methods. The laboratory will introduce students to the ortho-endodontic therapy methods including the use of magnification, access the pulp canals, instrumentation of the canals and obliteration of the pulpectomy site to clinical standards.

Course #	Course Title	Credits	Year	Term
Odont 662	Comprehensive Care Family Dentistry <i>CLIN and LAB</i>	3	DS 2	Spring

Treatment of caries and periodontal disease with discipline based faculty from operative dentistry, prosthodontics, endodontology and periodontology is carried out with the DS 2 as an active participant in the care team that includes a DS 3 and DS 4. Students will participate in case presentations, medical record assessment and recording, and other aspects of the clinic activities. The laboratory will include a simulated clinic visit including OSCE record and electronic health record.

Course #	Course Title	Credits	Year	Term
Odont 741	Prosthodontics and Implant Dentistry: Fixed Prosthodontics <i>LAL and LAB</i>	6	DS 3	Fall

The indirect restoration of teeth and the indirect replacement of missing teeth with crowns and bridges is presented. Treatment planning for these restorations including occlusal, periodontal, caries assessment is presented. Other methods for indirect restoration including partial coverage indirect restoration is presented. The introduction of digital techniques for impression and CadCam restoration development is presented. The laboratory will provide practice with the surgical armamentarium for tooth preparation for fixed prosthetic restoration, for impressions with analog and digital methods and for the construction of fixed indirect restorations. The laboratory will also teach methods for provisional restoration of the fixed prosthodontic patient.

Course #	Course Title	Credits	Year	Term
Odont 761	Comprehensive Care Family Dentistry <i>CLIN</i>	8	DS 3	Fall

This daily clinic will focus on students developing their family of patients in conjunction with other members of their team headed by the faculty team leader. Emphasis on diagnosis and treatment planning and completion of initial urgent procedures will be carried out.

Course #	Course Title	Credits	Year	Term
Odont 752	Periodontology Seminar <i>SEM</i>	2	DS 3	Spring

Using a case-based format, the treatment planning, outcome assessment, management of medical and dental comorbidities among others of the patient with diseases of the periodontium is presented. Patient-centered, health systems informed, and culturally aware aspects of care are discussed through the case-based format.

Course #	Course Title	Credits	Year	Term
Odont 762	Comprehensive Care Family Dentistry <i>CLIN</i>	8	DS 3	Spring

This daily clinic will further develop the completion of Phase 1 therapy, disease control mitigation of risk and initiation of preventive care in the patient family. The student will develop this under the leadership of the team leader. The student will also begin aspects of Phase 2 therapy, reconstructive dentistry and address other comorbidities in patient care.

Course #	Course Title	Credits	Year	Term
Odont 841	Periodontology Seminar <i>SEM</i>	2	DS 4	Fall

Using case-based format, interdisciplinary problems especially with orthodontics, endodontics and prosthodontic consideration will be developed through patient presentations of patients of record or via the OSCE format. Further exploration of comorbidities in periodontal diseases will be developed.

Course #	Course Title	Credits	Year	Term
Odont 851	Prosthodontics and Implant Dentistry: Implant Surgery and Prosthodontic Reconstruction <i>LAL and LAB</i>	3	DS 4	Fall

The replacement of missing teeth utilizing dental implants is presented. This course includes the biomechanics of implants, concepts of osseointegration, restoration options for implants, implant systems and the placement of implants. The laboratory will teach the placement of implants including appropriate assessment and osteotomies, and the restoration of implants using indirect and direct techniques.

Course #	Course Title	Credits	Year	Term
Odont 861	Comprehensive Care Family Dentistry <i>CLIN</i>	8	DS 4	Fall

This clinical practicum will focus on the daily clinical activities of a practicing dentist including all intake, comprehensive care, case management issue extant under the leadership of the team leader. The DS 4 will also demonstrate leadership of the oral healthcare team including DS2 and 3 students and the dental assisting and dental hygiene staff through cooperation and assessment of outcomes of care.

Course #	Course Title	Credits	Year	Term
Odont 862	Comprehensive Care Family Dentistry <i>CLIN</i>	8	DS 4	Spring

The final semester of comprehensive care family dentistry will focus on the completion of phase 2 care for patients of record, increasing facility in providing initial evaluation and care of the dental patient, and addressing complex issues in care including those associated to overall health, stages of life, cultural awareness among others.

Oral and Maxillofacial Studies

Course #	Course Title	Credits	Year	Term
OMFS 511	Foundations of Dental Medicine <i>LAL</i>	3	DS 1	Fall

This course will focus on introduction to the patient/doctor relationship, the role of dental medicine in health care, the scientific basis of the pathophysiology, diagnostic methods, and treatment modalities of major oral diseases. Examples will include congenital diseases such as cleft lip and palate, degenerative diseases such as rheumatoid arthritis, neoplastic disease such as oral squamous cancer, traumatic diseases such as facial fracture, and infectious disease such as HPV. This course includes a review of biochemistry relevant to the medical school first and second year HS courses to match the coursework provided to the MD students in foundations of medicine.

Course #	Course Title	Credits	Year	Term
OMFS 512	Oral Microbiology/Immunology <i>LAL</i>	3	DS 1	Spring

The oral microbiome in health and disease is presented including the ecologic niches of the oral region: periodontium, teeth, mucosa, nasopharynx, and salivary glands. The virology of the upper airway mouth and pharynx is presented including HPV, HIV, and acute viral diseases. The presence of prions and their potential role in disease is presented. The host response resulting in homeostasis or the initiation of infection is reviewed

Course #	Course Title	Credits	Year	Term
OMFS 532	Surgical Anatomy of the Head and Neck <i>LAL and LAB</i>	2	DS 1	Spring

The structures of the viscerocranium are presented including osteology, myology, cranial nerve peripheral anatomy, salivary glands, lymphatics, arterial supply and venous drainage. In-depth understanding of fascial planes, infratemporal fossa, triangles of the neck, myology of the mandible and maxilla will be presented with clinical illustrations as to their utility in dental medicine practice.

Course #	Course Title	Credits	Year	Term
OMFS 621	Dental Medicine at All Stages of Life <i>LAL</i>	3	DS 2	Fall

Growth, development, function and the human experience from birth to death will be presented including the impact of oral health and oral health interventions, prevention, disease promotion and treatment at all stages. This topic is developed from the biologic, social, economic and cultural aspects of the human experience.

Course #	Course Title	Credits	Year	Term
OMFS 631	Dental Anesthesiology 1: Local Anesthesia <i>LAL and LAB</i>	3	DS 2	Fall

The pharmacology of local anesthesia, armamentarium for administration and technique for administration is presented. Local and systemic complications of administration, contraindications and comorbidities are presented. The laboratory will demonstrate and practice technique of local anesthesia administration on analogy and haptic simulators.

Course #	Course Title	Credits	Year	Term
OMFS 641	Oral Radiology 1 <i>LAL and LAB</i>	3	DS 2	Fall

The physics of ionizing radiation and the development of Roentgen's methods are presented. The components of clinical equipment to emit radiation and sensors, both analog and digital are presented. The interpretation of oral radiographs, periapical and bite wing radiographs is developed. Intraoral radiographs using a simulator are performed in the laboratory.

Course #	Course Title	Credits	Year	Term
OMFS 632	Dental Anesthesiology 2: Pain and Anxiety Control, Analgesia, Medical Management of Local Anesthesia Patients <i>LAL and LAB</i>	3	DS 2	Spring

The risks of local anesthesia detection and management are presented. Understanding pain and anxiety in dental practice through assessment methods is presented. The pharmacologic and nonpharmacological means of mitigating pain and anxiety in dental care is presented. This includes the use of nitrous oxide, oral anxiolysis, and parenteral drugs.

Course #	Course Title	Credits	Year	Term
OMFS 642	Oral Pathology/Oral Medicine 1 <i>LAL and LAB</i>	3	DS 2	Spring

The significant tumors, anomalies, oral manifestations of systemic disease and other pathologies of the oral and maxillofacial region are presented. The laboratory will focus on the gross pathology and microscopic pathology of the oral and maxillofacial region

Course #	Course Title	Credits	Year	Term
OMFS 652	Orthodontics and Craniofacial Growth and Development <i>LAL and LAB</i>	3	DS 2	Spring

Principles of craniofacial growth and development will be presented. Abnormalities leading to malocclusion and dentofacial deformities will be shown. Methods of diagnosing disorders of dental facial growth and development will be understood and utilized by students. Orthodontic interventions for these conditions including methods, and outcomes will be shown. The laboratory will concentrate on diagnosis and orthodontic treatment methods.

Course #	Course Title	Credits	Year	Term
OMFS 751	Oral Radiology 2 <i>LAL and LAB</i>	3	DS 3	Fall

The understanding of Panoramic, planar films, CT, MRI. Nuclear medicine, and non-ionizing methods of image acquisition is presented. Comparison of these methods and appropriate case selection for these studies is presented. The utility in treatment planning and integration with other digital treatment planning methods is shown. The diagnosis of pathology via these methods is developed.

Course #	Course Title	Credits	Year	Term
OMFS 761	Principles of Oral Surgery <i>LAL and LAB</i>	3	DS 3	Fall

The principles of aseptic technique, flap design, surgical access, surgical hemostasis, infection prevention, and wound healing are presented. Technique for the removal of erupted and non-erupted teeth, both surgically and via forceps and elevator is presented. Preprosthetic surgical technique and minor soft tissue surgery including biopsy is presented. The laboratory will focus on the surgical and nonsurgical removal of teeth and on soft tissue surgery and biopsy.

Course #	Course Title	Credits	Year	Term
OMFS 771	Pediatric Dentistry <i>LAL and LAB</i>	3	DS 3	Fall

Child development and child management in the clinical setting will be developed from a holistic and family based perspective. Major diseases in growth and development of the oral cavity will be elucidated. The development of the deciduous and mixed dentition along with craniofacial development is presented. Caries diagnosis, treatment and prevention in the deciduous dentition is shown. The laboratory will provide simulated clinical experiences in caries treatment, deciduous crowns, space maintenance, and care of the pediatric patient.

Course #	Course Title	Credits	Year	Term
OMFS 742	Oral Pathology/Oral Medicine 2 <i>LAL</i>	3	DS 3	Spring

Further development of the oral manifestations of systemic disease is presented with emphasis on diabetes, hematologic bleeding disorders, hematologic malignancies, lymphomas, myeloma, xerostomic diseases, autoimmune disease, maxillofacial movement disorders, other neurologic diseases such as Parkinson's, with oral manifestations.

Course #	Course Title	Credits	Year	Term
OMFS 752	Clinical Clerkship: Pediatric Dentistry <i>4 weeks, 30 hours per week plus call</i> <i>CLIN</i>	8	DS 3	Spring

The student will engage in clinical experiences in the pediatric dentistry clinic as a member of the care team, treating patients under the supervision of pediatric dentistry faculty. Consultation on pediatric patients referred for oral conditions via pediatric medicine will occur.

Course #	Course Title	Credits	Year	Term
OMFS 762	Advanced Topics in Oral and Maxillofacial Surgery <i>LAL</i>	2	DS 3	Spring

Understanding of major conditions of the oral and maxillofacial region requiring surgical intervention is presented. This includes diagnostic features, techniques for corrective surgery and outcome assessment. Categories include the treatment of facial trauma, ablative tumor surgery of the head and neck, cleft lip and palate surgery, craniofacial surgery, orthognathic surgery, reconstructive surgery of the jaws and face, and surgical treatment of temporomandibular disorders.

Course #	Course Title	Credits	Year	Term
OMFS 772	Clinical Clerkship: Oral and Maxillofacial Surgery <i>4 weeks, 30 hours per week plus call</i> <i>CLIN</i>	8	DS 3	Spring

The students will enter the oral and maxillofacial surgery care team for this clerkship including the care of patients for dentoalveolar surgery, major maxillofacial surgery and complex conditions of the head and neck. Clinical experience in ambulatory oral surgery and anesthesia and assisting for maxillofacial surgery in the operating room including emergency and trauma care occurs. Participation in hospital rounds and conferences occurs.

Course #	Course Title	Credits	Year	Term
OMFS 851	Oral Radiology Seminar <i>SEM</i>	2	DS 4	Fall

This case-based seminar will present findings using all methods in OMFS 641 and OMFS 751 to demonstrate through active learning the radiographic findings in key diseases of the oral and maxillofacial region.

Course #	Course Title	Credits	Year	Term
OMFS 862	Oral Pathology/Oral Medicine Seminar <i>SEM</i>	2	DS 4	Spring

Concentration on oral medicine will include the risk assessment and management of complex systemic diseases related to dental medicine care in dental practice. Case-based discussion on the dental medicine patient with HIV, ongoing chemotherapy for malignancy, osteoporosis/osteopenia among others will be presented by students in seminar format.

Course #	Course Title	Credits	Year	Term
OMFS 872	Clinical Clerkship: Orthodontics <i>4 hours per week for 8 weeks</i> <i>CLIN</i>	2	DS 4	Spring

Students will enter the orthodontic care team providing diagnostic and treatment services for patients undergoing orthodontic care under the auspices of orthodontic faculty in College of Dental Medicine clinics.

Behavioral and Social Sciences

Course #	Course Title	Credits	Year	Term
BSS 501	Managing Student Life <i>LAL and Lab</i>	1	DS 1	Fall

Resilience, sustainability as a student and future health professional will be presented. Managing student debt, stress management, effects of social media, interpersonal relationships, and ethics in student practice will be discussed. The problems of drug and alcohol abuse will be shown. Respect in the University including cultural, gender, and sexual conduct issues will be presented. Students will be made aware of resources to promote student wellbeing.

Course #	Course Title	Credits	Year	Term
BSS 522	Ethics in Dental Medicine and Health Care <i>LAL</i>	2	DS 1	Spring

The fundamentals of dental and medical ethics are presented including beneficence and non-maleficence. The Helsinki statement and other aspects of human research guidelines are presented including the role of Human Studies committees. The care of animals in biomedical research is discussed as well as the ethical use of human tissue in clinical care, transplant medicine etc. Ethical financial relationships and the underlying law behind them in clinical practice is discussed. The role of the criminal, tort system, the Board of Dentistry of California, and the ADA in dental ethics is presented.

Course #	Course Title	Credits	Year	Term
BSS 662	Behavioral Medicine (CP Course) <i>LAL, Clinical</i>	3	DS 2	Spring

In this course aspects of clinical psychology of importance in dental practice is presented. Case based learning will include: minor and major psychiatric illnesses impacting on oral health and the provision of oral health care; elder, spousal and child abuse; dental fear; and, dental phobias.

Course #	Course Title	Credits	Year	Term
BSS 701	Dental Public Health <i>LAL</i>	2	DS 3	Fall

The fundamentals of public health are presented including health and public health measures for health protection, protection from disease and health promotion. The surgeon general's report, 2000, updated 2019, on the status of oral health in America is presented. WHO assessment of oral health globally is presented. Population based initiative to improve oral health are discussed with a focus on clean water and fluoride exposure.

Course #	Course Title	Credits	Year	Term
BSS 721	Practice Management 1 <i>LAL</i>	2	DS 3	Fall

Addressing issues of student debt, career path, and modes of practice will be presented. Operating a dental practice via solo or group practice model and in health systems based practice will be discussed. Issues including human resources management, the actions of the care team in practice and financial responsibility and accounting will be presented.

Course #	Course Title	Credits	Year	Term
BSS 861	Clinical Clerkship: Community-based Education <i>4 weeks, 30 hours per week plus call</i> CLIN	8	DS 4	Fall

Affiliated health systems based practices will accept CNU students into their care teams where senior students will provide clinical care under the supervision of Volunteer Community-Based Faculty in those sites. Suitable transportation and housing will be arranged for where needed. The purpose of the course is to provide community engagement with the constituencies served, to gain experience in community-based clinical care and to interact with the interprofessional and intraprofessional care team

Course #	Course Title	Credits	Year	Term
BSS 871	Seminar in Dental Public Health SEM	2	DS 4	Fall

This weekly seminar develops through cased based discussions led by student teams the public health issues in oral health in California and globally including access to care, social determinants of oral health, scope of practice issues, insurance and payment systems for oral health, access to fluoride, immunizations especially for HPV, and health protection for vulnerable populations such as children and elderly.

Course #	Course Title	Credits	Year	Term
BSS 822	Practice Management 2 SEM and LAB	2	DS 4	Spring

The simulation of dental practices in various models will be developed by students in groups including addressing issues of hiring, overhead, interaction with vendors, staff development, marketing, accounting and all operations in dental practice. The regulatory environment for pricing, dental insurance, health insurance will be reviewed as well as all aspects of the operation of dental practices.

Course #	Course Title	Credits	Year	Term
BSS 862	Clinical Clerkship: Community-based Education <i>4 weeks, 30 hours per week plus call</i> CLIN	8	DS 4	Spring

This course will be at a second community-based rotation site to elaborate on the activities of the first rotation and engage a new community and a new clinic. In addition to comprehensive care experience, the student will compare and contrast communities and clinical care entities and provide a reflective essay on their community care experience.

Course #	Course Title	Credits	Year	Term
BSS 872	Senior Elective Clinical Clerkship <i>CLIN</i>	6	DS 4	Spring

D4 students will select from additional clerkships available at clinical sites either discipline based or comprehensive care in odontology, oral and maxillofacial studies or human studies. Examples include comprehensive care at a remote clinic (odontology), dental specialty clerkship in oral maxillofacial surgery (OMFS), clerkship in internal medicine (Human Studies), or population health study abroad or in the United States (BSS).

Credit Hours and Student Contact Hours

Curriculum Theme	Credit Hours	Year	Credit Hours	Contact Hours
Human Systems	58	Year 1	55	1140
Odontology	84	Year 2	66	1380
OMFS	62	Year 3	60	1590
BSS	36	Year 4	59	1470
Total	240		240	5580



California Northstate University College of Medicine

Academic Calendar: 2019 - 2020

09/06/2018

MS1 – Phase A

Event	Start Date	End Date
Orientation – M1	07/24/2019	07/26/2019
White Coat Ceremony – M1	08/17/2019	
Fall Semester: 07/29/2019 – 12/20/2019		
Course	Start Date	End Date
Foundations of Clinical Medicine	07/29/2019	09/20/2019
Hematology	09/23/2019	10/25/2019
Integumentary and Musculoskeletal Systems	10/28/2019	12/20/2019
Spring Semester: 01/06/2020 – 05/29/2020		
Neuroscience	01/06/2020	03/13/2020
Cardiovascular and Pulmonary Systems	03/23/2020	05/29/2020

MS2 – Phase A

Fall Semester: 08/05/2019 – 12/20/2019		
Course	Start Date	End Date
Renal System	08/05/2019	09/13/2019
Gastrointestinal System	09/16/2019	11/01/2019
Endocrine System	11/04/2019	12/13/2019
Spring Semester: 01/06/2020 – 06/24/2020		
Reproductive System	01/06/2020	02/14/2020
Behavioral Medicine	02/17/2020	03/13/2020
Stages of Life	03/23/2020	05/01/2020
CBSE Review/Study; Elective Period	05/02/2020	06/24/2020

Longitudinal Courses – M1 & M2

FALL 2019

SPRING 2020

Course	Start Date	End Date	Start Date	End Date
Medical Skills – M1	07/29/2019	12/20/2019	01/06/2020	05/29/2020
Medical Skills – M2	08/05/2019	12/20/2019	01/06/2020	05/01/2020
Masters Colloquium – M1	07/29/2019	12/20/2019	01/06/2020	05/29/2020
Masters Colloquium – M2	08/05/2019	12/20/2019	01/06/2020	05/01/2020
SDSSP – will start in the Spring 2020 semester for M1 students and continues into the Fall 2020 semester of their M2 year.				



California Northstate University College of Medicine

Academic Calendar: 2019 - 2020

09/06/2018

MS3 – Phase B - Clinical Clerkships

Fall Semester: 07/01/2019 – 12/31/2019		
Event	Start Date	End Date
Clerkship Orientation – M3	06/27/2019	06/28/2019
Start of Clinical Clerkships – M3	07/01/2019	12/31/2019
M3 Clerkship Schedule - TBD		
Spring Semester: 01/01/2020 – 05/29/2020		
Clinical Clerkships – M3	01/01/2020	05/29/2020
M3 Clerkship Schedule - TBD		

MS4 – Phase C – Elective Rotations

Fall Semester: 06/08/2019 – 12/31/2019		
Event	Start Date	End Date
Elective Rotations – M4	06/08/2019	12/31/2019
M4 Elective Rotation Schedule - TBD		
Spring Semester: 01/01/2020 – 05/15/2020		
M4 Elective Rotation Schedule - TBD	01/01/2020	05/15/2020
Graduation Clearance Day – M4	05/15/2020	
Graduation Ceremony – M4	05/16/2020	

*M3 & M4 Elective Rotations are continuous throughout the 2019-2020 calendar year.

*Add/Drop deadline for Elective courses is 5 days from the start of instruction.

Rising M3: Summer Session

05/20/2019 – 06/26/2019		
Event	Start Date	End Date
CBSE Review/Study*; Elective Period – M2 & M3	05/20/2019	06/26/2019

*see Exam/Review schedule for specific dates.

Exams/Review/Research Day Schedule

Event	Start Date	End Date	EXAMS	Start Date
CNU Research Day	12/13/2019		CBSE #1 – M2	03/28/2020
Kaplan Assessment Exam	12/16/2019		CBSE #2 – M2	05/02/2020
Kaplan Review Course	12/17/2019	12/21/2019	CBSE #3 – M2 > M3	05/29/2020
			CBSE #4 – M2 > M3	06/24/2020
			CCSE – M3	05/29/2020



California Northstate University
College of Medicine
Academic Calendar: 2019 - 2020

09/06/2018

University Holidays

Holiday	Date	Holiday	Date
Independence Day	07/04/2019	Martin Luther King	01/20/2020
Labor Day	09/02/2019	President's Day	02/17/2020
Thanksgiving	11/28 – 11/29/2019	Spring Break – M1 & M2	3/16 -3/20/2020
Winter Break	12/23/2019 – <i>cohort start date varies</i>	Memorial Day	05/25/2020



Fall 2020 Schedule of Courses

Week	Monday	Tuesday	Wednesday	Thursday	Friday
1. JUL 29- AUG 2	10-12 FDM 1-3 DA 3-5 DAL	9-10 MSL 10-12 FDM 1-3 DA 3-5 DAL	10-12 FDM 1-3 DA 3-5 DAL	9-10 MSL 10-12 FDM 3-5 DAL	10-11 FDM 1-3 DA 3-5 DAL
2. AUG 5-9	10-12 FDM 1-3 DA: FORMATIVE EXAM 3-5 DAL	9-10 MSL 10-12 FDM 1-3 DA 3-5 DAL	10-11 FDM 1-3 DA 3-5 DAL	9-10 MSL 10-12 FDM 3-5 DAL	10-12 FDM 1-3 DA 3-5 DAL
3. AUG 12- 16	10-12 FDM: FORMATIVE EXAM 1-3 DA 3-5 DAL	9-10 MSL 10-12 FDM 1-3 DA 3-5 DAL	10-12 FDM 1-3 DA 3-5 DAL	9-10 MSL 10-12 FDM 3-5 DAL	10-12 FDM 1-3 DA 3-5 DAL
4. AUG 19- 23	10-12 FDM 1-3 DA 3-5 DAL	9-10 MSL 10-11 FDM 1-3 DA 3-5 DAL	10-11 FDM 1-3 DA 3-5 DAL	9-10 MSL 10-11 FDM 3-5 DAL	10-11 FDM 1-3 DA 3-5 DAL
5. AUG 26- 30	10-12 FDM 1-3 DA: FORMATIVE EXAM 3-5 DAL	9-10 MSL 10-11 FDM 1-3 DA 3-5 DAL	10-11 FDM 1-3 DA 3-5 DAL	9-10 MSL 10-11 FDM 3-5 DAL	10-11 FDM 1-3 DA 3-5 DAL
6. SEP 3-6	HOLIDAY	9-10 MSL 10-11 FDM 1-3 DA 3-5 DAL	10-11 FDM 1-3 DA 3-5 DAL	9-10 MSL 10-11 FDM 3-5 DAL	10-11 FDM 1-3 DA 3-5 DAL
7. SEP 9-13	10-12 FDM: FORMATIVE EXAM	9-10 MSL 10-11 FDM 1-3 DA	10-11 FDM 1-3 DA 3-5 DAL	9-10 MSL 10-11 FDM 3-5 DAL	10-11 FDM 1-3 DA 3-5 DAL

	1-3 DA 3-5 DAL	3-5 DAL			
8. SEP 16-20	10-12 FDM 1-3 DA 3-5 DAL	9-10 MSL 10-11 FDM 1-3 DA 3-5 DAL	10-11 FDM 1-3 DA: FINAL EXAM 3-5 DAL	9-10 MSL: FINAL EXAM 10-11 FDM 3-5 DAL	10-11 FDM: FINAL EXAM 1-3 DA: FINAL LAB EXAM 3-5 DAL
9. SEP 23-27	8-10 HEM 10-12 HEM 1-3 HEM 3-5 FOO	8-10 HEM 10-12 MS/CDM 1-3 FOO 3-5 FOO LAB	8-10 HEM 10-12 MS/CDM 1-3 FOO 3-5 FOO LAB	8-10 HEM 10-12 MS/CDM 1-3 FOO 3-5 FOO LAB	8-10 HEM 10-12 HEM 1-3 FOO 2-5 FOO LAB
10. SEP 30- OCT 4	8-10 HEM 10-12 HEM 1-3 HEM 3-5 FOO	8-10 HEM 10-12 FOO 1-3 FOO 3-5 FOO LAB	8-10 HEM 10-12 MS/CDM 1-3 FOO 3-5 FOO LAB	8-10 HEM 10-12 MS/CDM 1-3 FOO 3-5 FOO LAB	8-10 HEM 10-12 MS/CDM 1-3 FOO 3-5 FOO LAB
11. OCT 7-11	8-10 HEM 10-12 HEM 1-3 HEM 3-5 FOO	8-10 HEM 10-12 FOO 1-3 FOO 3-5 FOO LAB	8-10 HEM 10-12 MS/CDM 1-3 FOO 3-5 FOO LAB	8-10 HEM 10-12 MS/CDM 1-3 FOO 3-5 FOO LAB	8-10 HEM 10-12 MS/CDM 1-3 FOO 3-5 FOO LAB
12. OCT 14-18	8-10 HEM 10-12 HEM 1-3 HEM 3-5 FOO	8-10 HEM 10-12 FOO 1-3 FOO 3-5 FOO LAB	8-10 HEM 10-12 MS/CDM 1-3 FOO 3-5 FOO LAB	8-10 HEM 10-12 MS/CDM 1-3 FOO 3-5 FOO LAB	8-10 HEM 10-12 MS/CDM 1-3 FOO 3-5 FOO LAB
13. OCT 21-25	8-10 HEM 10-12 HEM 1-3 HEM 3-5 FOO	8-10 HEM 10-12 FOO 1-3 FOO 3-5 FOO LAB	8-10 HEM 10-12 MS/CDM 1-3 FOO 3-5 FOO LAB	8-10 HEM 10-12 MS/CDM 1-3 FOO 3-5 FOO LAB	8-10 HEM 10-12 MS/CDM 1-3 FOO 3-5 FOO LAB
14. OCT 28- NOV 1	8-10 MSI 3-5 FOO	8-10 MSI 1-3 FOO 3-5 FOO LAB	8-12 MSI 1-3 MS/CDM 3-5 FOO	8-10 MSI 10-12 MS/CDM 1-3MS/CDM 3-5 FOO	8-10 MSI 10-12 MS/CDM
15. NOV 4-8	8-10 MSI 10-12 MSI 1-3 MSI 3-5 MS/CDM	8-10 MSI 10-12 MSI 1-3 MS/CDM 3-5 FOO	8-12 MSI 1-3 MS/CDM	10-12 MSI 1-3 MS/CDM	10-12 MSI 1-3 MS/CDM

16. NOV 11-15	8-10 MSI 10-12 MSI 1-3 MSI	8-10 MSI 1-3 MS/CDM	8-12 MSI 1-3 MS/CDM	8-12 MSI 1-3 MS/CDM	8-10 MSI 10-12 MSI
17. NOV 18-22	8-10 MSI 10-12 MSI 1-3 MSI	8-10 MSI	8-12 MSI 1-3 MS/CDM	8-12 MSI 1-3 MS/CDM	10-12 MSI 1-3 MS/CDM
18. NOV 25-27	8-10 MSI 10-12 MSI 1-3 MSI	8-10 MSI 1-3 MS/CDM	8-12 MSI 1-3 MS/CDM	8-12 MSI 1-3 MS/CDM	10-12 MSI 1-3 MS/CDM
19. DEC 2-6	8-10 MSI 10-12 MSI 1-3 MSI	8-10 MSI 1-3 MS/CDM	8-12 MSI 1-3 MS/CDM	8-12 MSI 1-3 MS/CDM	10-12 MSI 1-3 MS/CDM
20. DEC 9-13	8-10 MSI 10-12 MSI 1-3 MSI	8-10 MSI 1-3 MS/CDM	8-12 MSI 1-3 MS/CDM	10-12 MSI 1-3 MS/CDM	10-12 MSI 1-3 MS/CDM
21. DEC 16-20	8-10 MSI 10-12 MSI 1-3 MSI	8-10 MSI	8-12 MSI 1-3 MS/CDM	10-12 MSI 1-3 MS/CDM	10-12 MSI

HEM = Hematology

MSI = Musculoskeletal and Integumentary Systems

DA = Dental Anatomy

DAL = Dental Anatomy lab

FDM = Foundations of Dental Medicine

MS/CDM = Medical Skills/College of Dental Medicine

MSL = Managing Student Life

FOO = Foundations of Odontology

Spring 2021 Schedule of Courses

Week	Monday	Tuesday	Wednesday	Thursday	Friday
1. JAN 6-10	8-9 NEURO 9-10 MS/CDM 10-12 NEURO 1-3 NEURO 3-5 ETHICS	8-10 NEURO 9-12 LAB 1-2 NEURO 3-5 ETHICS	8-12 NEURO 1-3 NEURO 3-5 ETHICS	8-10 NEURO 10-12 MS/CDM 1-3 MS/CDM 3-5 ETHICS	8-10 NEURO 10-12 MS/CDM 1-3 ETHICS
2. JAN 13-17	8-9 NEURO 9-10 MS/CDM 10-12 NEURO 1-3 NEURO 3-5 ETHICS	8-10 NEURO 9-12 LAB 1-2 NEURO 3-5 ETHICS	8-12 NEURO 1-3 NEURO 3-5 ETHICS	8-10 NEURO 10-12 MS/CDM 1-3 MS/CDM 3-5 ETHICS	8-10 NEURO 10-12 MS/CDM 1-3 ETHICS
3. JAN 20-24	HOLIDAY	8-10 NEURO 9-12 LAB 1-2 NEURO 3-5 ETHICS	8-12 NEURO 1-3 NEURO 3-5 ETHICS	8-10 NEURO 10-12 MS/CDM 1-3 MS/CDM 3-5 ETHICS	8-10 NEURO 10-12 MS/CDM 1-3 ETHICS
4. JAN 27-31	8-9 NEURO 9-10 MS/CDM 10-12 NEURO: FORMATIVE EXAM 1-3 NEURO 3-5 ETHICS	8-10 NEURO 9-12 LAB 1-2 NEURO 3-5 ETHICS	8-12 NEURO 1-3 NEURO 3-5 ETHICS	8-10 NEURO 10-12 MS/CDM 1-3 MS/CDM 3-5 ETHICS	8-10 NEURO 10-12 MS/CDM 1-3 ETHICS
5. FEB 3-7	8-11 NEURO: SUMMATIVE MID TERM 11-12 NEURO 1-3 NEURO 3-5 ETHICS	8-10 NEURO 9-12 LAB 1-2 NEURO 3-5 ETHICS	8-12 NEURO 1-3 NEURO 3-5 ETHICS	8-10 NEURO 10-12 MS/CDM 1-3 MS/CDM 3-5 ETHICS	8-10 NEURO 10-12 MS/CDM 1-3 ETHICS
6. FEB 10-14	8-9 NEURO 9-10 MS/CDM 10-12 NEURO 1-3 NEURO 3-5 CARI	8-10 NEURO 9-12 LAB 1-2 NEURO 3-5 CARI	8-12 NEURO 1-3 NEURO 3-5 CARI	8-10 NEURO 10-12 MS/CDM 1-3 MS/CDM 3-5 CARI	8-10 NEURO 10-12 MS/CDM 1-5 CARI
7. FEB 17-21	HOLIDAY	8-10 NEURO 9-12 LAB 1-2 NEURO 3-5 CARI	8-12 NEURO 1-3 NEURO 3-5 CARI	8-10 NEURO 10-12 MS/CDM 1-3 MS/CDM 3-5 CARI	8-10 NEURO 10-12 MS/CDM 1-5 CARI
8. FEB 24-28	8-9 NEURO 9-10 MS/CDM 10-12 NEURO 1-3 NEURO 3-5 CARI	8-10 NEURO 9-12 LAB 1-2 NEURO 3-5 CARI	8-12 NEURO 1-3 NEURO 3-5 CARI	8-10 NEURO 10-12 MS/CDM 1-3 MS/CDM 3-5 CARI	8-10 NEURO 10-12 MS/CDM 1-5 CARI

9. MAR 2-6	8-9 NEURO 8-12 NEURO: SUMMATIVE EXAM 1-5 CARI	8-10 NEURO 9-12 LAB 1-2 NEURO 3-5 CARI	8-12 NEURO: LAB SUMMATIVE 1-5 CARI	8-10 NEURO 10-12 MS/CDM 1-3 MS/CDM 3-5 CARI	8-10 NEURO 10-12 MS/CDM 1-5 CARI
10. MAR 9-13	8-9 NEURO 9-10 MS/CDM 10-12 NEURO 1-3 NEURO 3-5 CARI	8-10 NEURO 9-12 LAB 1-2 NEURO 3-5 CARI	8-12 NEURO 1-3 NEURO 3-5 CARI	8-10 NEURO 10-12 MS/CDM 1-3 MS/CDM 3-5 CARI	8-10 NEURO 10-12 MS/CDM 1-5 CARI
11. MAR 16-20	8-12 CVP 1-4 CVP 4-5 H&N	8-9 CVP 9-12 LAB 1-5 H&N	8-10 H&N 10-12 CVP 1-4 CVP 4-5 H&N	8-10 CVP 10-12 MS/CDM 1-3 MS/CDM 3-5 H&N	8-12 CVP 1-5 H&N
12. MAR 23-27	8-10 CVP: QUIZ 10-12: CVP 1-4 CVP 4-5 H&N	8-9 CVP 9-12 LAB 1-5 H&N	8-10 H&N 10-12 CVP 1-4 CVP 4-5 H&N	8-10 CVP 10-12 MS/CDM 1-3 MS/CDM 3-5 H&N	8-12 CVP 1-5 H&N
13. MAR 30 – APR 3	8-12 CVP 1-4 CVP 4-5 H&N	8-9 CVP 9-12 LAB 1-5 H&N	8-10 H&N 10-12 CVP 1-4 CVP 4-5 H&N	8-10 CVP 10-12 MS/CDM 1-3 MS/CDM 3-5 H&N	8-12 CVP 1-5 H&N
14. APR 6-10	8-10 CVP: QUIZ 10-12: CVP 1-4 CVP 4-5 H&N	8-9 CVP 9-12 LAB: MIDTERM 1-5 H&N	8-10 H&N 10-12 CVP 1-4 CVP 4-5 H&N	8-10 CVP 10-12 MS/CDM 1-3 MS/CDM 3-5 H&N	8-12 CVP 1-5 H&N
15. APR 13-17	8-12 CVP 1-4 CVP 4-5 H&N	8-9 CVP 9-12 LAB 1-5 H&N	8-10 H&N 10-12 CVP 1-4 CVP 4-5 H&N	8-10 CVP 10-12 MS/CDM 1-3 MS/CDM 3-5 H&N	8-12 CVP 1-5 H&N
16. APR 20-24	8-12 CVP: SUMMATIVE MIDTERM 1-4 CVP 4-5 OMB	8-9 CVP 9-12 LAB 1-5 OMB	8-10 OMB 10-12 CVP 1-4 CVP 4-5 OMB	8-10 CVP 10-12 MS/CDM 1-3 MS/CDM 3-5 OMB	8-12 CVP 1-5 OMB
17. APR 27-MAY 1	8-12 CVP 1-4 CVP 4-5 OMB	8-9 CVP 9-12 LAB 1-5 OMB	8-10 OMB 10-12 CVP 1-4 CVP 4-5 OMB	8-10 CVP 10-12 MS/CDM 1-3 MS/CDM 3-5 OMB	8-12 CVP 1-5 OMB
18. MAY 4-8	8-10 CVP: QUIZ 10-12 CVP 1-4 CVP 4-5 OMB	8-9 CVP 9-12 LAB 1-5 OMB	8-10 OMB 10-12 CVP 1-4 CVP 4-5 OMB	8-10 CVP 10-12 MS/CDM 1-3 MS/CDM 3-5 OMB	8-12 CVP 1-5 OMB

19. MAY 11-15	8-12 CVP 1-4 CVP 4-5 OMB	8-9 CVP 9-12 LAB 1-5 OMB	8-10 OMB 10-12 CVP 1-4 CVP 4-5 OMB	8-10 CVP 10-12 MS/CDM 1-3 MS/CDM 3-5 OMB	8-12 CVP 1-5 OMB
20. MAY 18-22	8-12 CVP 1-4 CVP 4-5 OMB	8-9 CVP 9-12 LAB 1-5 OMB	8-10 OMB 10-12 CVP 1-4 CVP 4-5 OMB	8-10 CVP 10-12 MS/CDM 1-3 MS/CDM 3-5 OMB	8-12 CVP 1-5 OMB
21. MAY 25-29	8-12 CVP: SUMMATIVE EXAM 1-4 CVP 4-5 OMB	8-9 CVP 9-12 LAB 1-5 OMB	8-10 OMB 10-12 CVP 1-4 CVP: LAB SUMMATIVE EXAM 4-5 OMB	8-10 CVP 10-12 MS/CDM 1-3 MS/CDM 3-5 OMB	8-12 CVP 1-5 OMB

NEURO = Neurology

CVP = Cardiovascular and Pulmonary

CARI = Cariology

OMB = Oral Microbiology/Immunology

H&N = Surgical Anatomy of the Head and Neck

ETHICS = Ethics in Dental Medicine and Health Care

Fall 2021 Schedule of Courses

Week	Monday	Tuesday	Wednesday	Thursday	Friday
1. JUL 26-30	8-11 REN 11-12 CP1 1-5 REN	8-10 CP1 10-12 MS/CDM 1-5 CP1	8-10 CP1 10-12 REN 1-5 REN	8-12 CP1 1-3 REN 3-5 MS/CDM	8-12 REN 1-3 CP1 3-5 CP1
2. AUG 2-6	8-11 REN 11-12 CP1 1-5 REN	8-10 CP1 10-12 MS/CDM 1-5 CP1	8-10 CP1 10-12 REN 1-5 REN	8-12 CP1 1-3 REN 3-5 MS/CDM	8-12 REN 1-3 CP1 3-5 CP: FORMATIVE EXAM
3. AUG 9-13	8-11 REN 11-12 CP1 1-5 REN	8-10 CP1 10-12 MS/CDM 1-5 CP1	8-10 CP1 10-12 REN 1-5 REN	8-12 CP1 1-3 REN 3-5 MS/CDM	8-12 REN 1-3 CP1 3-5 CP1
4. AUG 16-20	8-11 REN 11-12 CP1 1-5 REN	8-10 CP1 10-12 MS/CDM 1-5 CP1	8-10 CP1 10-12 REN 1-5 REN	8-12 CP1 1-3 REN 3-5 MS/CDM	8-12 REN 1-5 CP1: FINAL EXAM
5. AUG 23-27	8-11 REN 11-12 OP DEN 1-5 REN	8-10 OP DEN 10-12 MS/CDM 1-5 OP DEN	8-10 OP DEN 10-12 REN 1-5 REN	8-12 OP DEN 1-3 REN 3-5 MS/CDM	8-12 REN 1-3 OP DEN 3-5 OP DEN
6. AUG 30-SEP	8-11 REN 11-12 OP DEN 1-5 REN	8-10 OP DEN 10-12 MS/CDM 1-5 OP DEN	8-10 OP DEN 10-12 REN 1-5 REN	8-12 OP DEN 1-3 REN 3-5 MS/CDM	8-12 REN 1-3 OP DEN 3-5 OP DEN: FORMATIVE EXAM
7. SEP 7-10	8-11 REN 11-12 OP DEN 1-5 REN	8-10 OP DEN 10-12 MS/CDM 1-5 OP DEN	8-10 OP DEN 10-12 REN 1-5 REN	8-12 OP DEN 1-3 REN 3-5 MS/CDM	8-12 REN 1-3 OP DEN 3-5 OP DEN
8. SEP 13-17	8-11 REN 11-12 OP DEN 1-5 REN	8-10 OP DEN 10-12 MS/CDM 1-5 OP DEN	8-10 OP DEN 10-12 REN 1-5 REN	8-12 OP DEN 1-3 REN 3-5 MS/CDM	8-12 REN 1-3 OP DEN 3-5 OP DEN
9. SEP 20-24	8-11 GI 11-12 OP DEN 1-5 GI	8-10 OP DEN 10-12 GI 1-3 MS/CDM 3-5 OP DEN	8-10 OP DEN 10-12 GI 1-5 GI	8-12 OP DEN 1-3 GI 3-5 MS/CDM	8-12 GI 1-3 OP DEN 3-5 OP DEN: FORMATIVE EXAM
10. SEP 27 – OCT 1	8-11 GI 11-12 OP DEN 1-5 GI	8-10 OP DEN 10-12 GI 1-3 MS/CDM 3-5 OP DEN	8-10 OP DEN 10-12 GI 1-5 GI	8-12 OP DEN 1-3 GI 3-5 MS/CDM	8-12 GI 1-3 OP DEN 3-5 OP DEN
11. OCT 4-8	8-11 GI: FORMATIVE EXAM	8-10 OP DEN 10-12 GI 1-3 MS/CDM 3-5 OP DEN	8-10 OP DEN 10-12 GI 1-5 GI	8-12 OP DEN 1-3 GI 3-5 MS/CDM	8-12 GI 1-5 OP DEN: FINAL EXAM

	11-12 OP DEN 1-5 GI				
12. OCT 11-15	8-11 GI: EXAM 11-12 PERIO 1-5 GI	8-10 PERIO 10-12 GI 1-3 MS/CDM 3-5 PERIO	8-10 PERIO 10-12 GI 1-5 GI	8-12 PERIO 1-3 GI 3-5 MS/CDM	8-12 GI 1-3 PERIO 3-5 PERIO
13. OCT 18-22	8-11 GI 11-12 PERIO 1-5 GI	8-10 PERIO 10-12 GI 1-3 MS/CDM 3-5 PERIO: FORMATIVE EXAM	8-10 PERIO 10-12 GI 1-5 GI	8-12 PERIO 1-3 GI 3-5 MS/CDM	8-12 GI 1-3 PERIO 3-5 PERIO
14. OCT 25-29	8-11 GI 11-12 PERIO 1-5 GI	8-10 PERIO 10-12 GI 1-3 MS/CDM 3-5 PERIO	8-10 PERIO 10-12 GI 1-5 GI	8-12 PERIO 1-3 GI 3-5 MS/CDM	8-12 GI 1-3 PERIO 3-5 PERIO: FINAL EXAM
15. NOV 1-5	8-11 GI: EXAM 11-12 DA 1 1-5 GI	8-10 DA 1 10-12 GI 1-3 MS/CDM 3-5 DA 1	8-10 DA 1 10-12 GI 1-5 GI	8-12 DA 1 1-3 GI 3-5 MS/CDM	8-12 GI 1-3 DA1 3-5 DA1
16. NOV 8-12	8-11 END 11-12 DA 1 1-5 END	8-10 DA 1 10-12 END 1-3 MS/CDM 3-5 DA 1: FORMATIVE EXAM	8-10 DA 1 10-12 END 1-5 END	8-12 DA 1 1-3 END 3-5 MS/CDM	8-12 END 1-3 DA1 3-5 DA1
17. NOV15-19	8-11 END 11-12 DA 1 1-5 END	8-10 DA 1 10-12 END 1-3 MS/CDM 3-5 DA 1	8-10 DA 1 10-12 END 1-5 END	8-12 DA 1 1-3 END 3-5 MS/CDM	8-12 END 1-5 DA1: FINAL EXAM
18. NOV 22-26	8-11 END 11-12 OR1 1-5 END: EXAM	8-10 OR1 10-12 END 1-3 MS/CDM 3-5 OR1	8-10 OR1 10-12 END 1-5 END	HOLIDAY	HOLIDAY
19. NOV 29-DEC 3	8-11 END 11-12 OR1 1-5 END	8-10 OR1 10-12 END 1-3 MS/CDM 3-5 OR1	8-10 OR1 10-12 END 1-5 END	8-12 OR1 1-3 END 3-5 MS/CDM	8-12 END: FORMATIVE EXAM 1-3 OR1 3-5 OR1
20. DEC 6-10	8-11 END 11-12 OR1 1-5 END	8-10 OR1 10-12 END 1-3 MS/CDM 3-5 OR1	8-10 OR1 10-12 END 1-5 END	8-12 OR1 1-3 END 3-5 MS/CDM	8-12 END 1-3 OR1 3-5 OR1
21. DEC 13-17	8-11 END 11-12 OR1 1-5 END: SUMMATIVE EXAM	8-10 OR1 10-12 END 1-3 MS/CDM 3-5 OR1	8-10 OR1 10-12 END 1-5 END	8-12 OR1 1-3 END 3-5 MS/CDM	8-12 END: FINAL EXAM 1-3 OR1 3-5 OR1

REN = Renal

GI = Gastrointestinal

END = Endocrine

CP1 = Clinical Pharmacology 1

PERIO = Periodontology

OP = Operative Dentistry

DA1 = Dental Anesthesiology 1: Local Anesthesia

OR1 = Oral Radiology 1

Spring 2022 Schedule of Courses

Week	Monday	Tuesday	Wednesday	Thursday	Friday
1. JAN 3-7	8-10 CP 2 10-12 PERIO 1-5 CCFD	8-10 CCFD 10-12 PERIO 1-5 CP2	8-10 CCFD 10-12 CP2 1-5 PERIO	8-10 CCFD 10-12 CP2 1-5 PERIO	8-10 CCFD 10-12 CP2 1-5 PERIO
2. JAN 10-14	8-10 CP 2 10-12 PERIO 1-5 CCFD	8-10 CCFD 10-12 PERIO 1-5 CP2	8-10 CCFD 10-12 CP2 1-5 PERIO	8-10 CCFD 10-12 PERIO 1-5 CP2	8-10 CCFD 10-12 PERIO 1-5 CP2
3. JAN 17-21	HOLIDAY	8-10 CCFD 10-12 PERIO 1-5 CP2	8-10 CCFD 10-12 CP2 1-5 PERIO	8-10 CP 2 10-12 PERIO 1-5 CCFD	8-10 CP 2 10-12 PERIO 1-5 CCFD
4. JAN 24-28	8-10 CP 2 10-12 PERIO 1-5 CCFD	8-10 CCFD 10-12 PERIO 1-5 CP2	8-10 CCFD 10-12 CP2 1-5 PERIO	8-10 CP 2 10-12 PERIO 1-5 CCFD	8-10 CP 2 10-12 PERIO 1-5 CCFD EXAM
5. JAN 31-FEB 4	8-10 CP 2 10-12 PERIO 1-5 CCFD	8-10 CCFD 10-12 PERIO 1-5 CP2	8-10 CCFD 10-12 CP2 1-5 PERIO	8-10 CCFD 10-12 PERIO 1-5 CP2 EXAM	8-10 CCFD 10-12 CP2 1-5 PERIO EXAM
6. FEB 7-FEB11	8-12 PROSTHO 1-5 ENDO	8-10 PROSTHO 10-12 LAB 1-3 ENDO 3-5 LAB	8-12 PROSTHO 1-5 ENDO	8-10 PROSTHO 10-12 LAB 1-3 ENDO 3-5 LAB	8-12 PROSTHO 1-5 ENDO
7. FEB 14- FEB18	8-12 PROSTHO 1-5 ENDO	8-10 PROSTHO 10-12 LAB 1-3 ENDO 3-5 LAB	8-12 PROSTHO 1-5 ENDO	8-10 PROSTHO 10-12 LAB 1-3 ENDO 3-5 LAB	8-12 PROSTHO 1-5 ENDO
8. FEB 21-25	HOLIDAY	8-10 PROSTHO 10-12 LAB 1-3 ENDO 3-5 LAB	8-12 PROSTHO 1-5 ENDO	8-10 PROSTHO 10-12 LAB 1-3 ENDO 3-5 LAB	8-12 PROSTHO 1-5 ENDO
9. FEB 28-MAR 4	8-12 PROSTHO 1-5 ENDO	8-10 PROSTHO 10-12 LAB 1-3 ENDO 3-5 LAB	8-12 PROSTHO 1-5 ENDO	8-10 PROSTHO 10-12 LAB 1-3 ENDO 3-5 LAB	8-12 PROSTHO 1-5 ENDO
10. MAR 7-11	8-12 PROSTHO 1-5 ENDO	8-10 PROSTHO 10-12 LAB 1-3 ENDO 3-5 LAB	8-12 PROSTHO 1-5 ENDO	8-10 PROSTHO 10-12 LAB 1-3 ENDO 3-5 LAB	8-12 PROSTHO 1-5 ENDO
11. MAR 14-18	8-10 DA 2 10-12 ORTHO 1-5 OP	8-12 ORTHO 1-3 OP 3-5 DA2	8-10 OP 10-12 ORTHO 1-5 DA2	8-10 DA 2 10-12 ORTHO 1-5 OP	8-12 ORTHO 1-3 OP 3-5 DA2

12. MAR 21-25	8-10 DA 2 10-12 ORTHO 1-5 OP	8-12 ORTHO 1-3 OP 3-5 DA2	8-10 OP 10-12 ORTHO 1-5 DA2	8-10 DA 2 10-12 ORTHO 1-5 OP	8-12 ORTHO 1-3 OP 3-5 DA2
13. MAR 28-APR 1	8-10 DA 2 10-12 ORTHO 1-5 OP	8-12 ORTHO 1-3 OP 3-5 DA2	8-10 OP 10-12 ORTHO 1-5 DA2	8-10 DA 2 10-12 ORTHO 1-5 OP	8-12 ORTHO 1-3 OP 3-5 DA2
14. APR 4-8	8-10 DA 2 10-12 ORTHO 1-5 OP	8-12 ORTHO 1-3 OP 3-5 DA2	8-10 OP 10-12 ORTHO 1-5 DA2	8-10 DA 2 10-12 OP 1-5 ORTHO	8-10 OP 10-12 ORTHO 1-5 DA2
15. APR 11-15	8-10 DA 2 10-12 ORTHO 1-5 OP	8-12 ORTHO 1-3 OP 3-5 DA2	8-10 OP 10-12 ORTHO 1-5 DA2	8-10 DA 2 10-12 ORTHO 1-5 OP	8-10 OP 10-12 ORTHO 1-5 DA2
16. APR 18-22	8-10 DA 2 10-12 ORTHO 1-5 OP	8-12 ORTHO 1-3 OP 3-5 DA2	8-10 OP 10-12 ORTHO 1-5 DA2	8-10 ORTHO 10-12 OP 1-5 DA 2	8-10 OP 10-12 ORTHO 1-5 DA2
17. APR 25-29	8-12 ALL STAGES 1-5 BEH MED	8-12 ALL STAGES 1-5 BEH MED	8-12 ALL STAGES 1-5 BEH MED	8-12 ALL STAGES 1-5 BEH MED	8-12 ALL STAGES 1-5 BEH MED
18. MAY 2-6	8-12 ALL STAGES 1-5 BEH MED	8-12 ALL STAGES 1-5 BEH MED	8-12 ALL STAGES 1-5 BEH MED	8-12 ALL STAGES 1-5 BEH MED	8-12 ALL STAGES 1-5 BEH MED
19. MAY 9-13	8-12 ALL STAGES 1-5 BEH MED	8-12 ALL STAGES 1-5 BEH MED	8-12 ALL STAGES 1-5 BEH MED	8-12 ALL STAGES 1-5 BEH MED	8-12 ALL STAGES 1-5 BEH MED
20. MAY 16-20	8-12 ALL STAGES 1-5 BEH MED	8-12 ALL STAGES 1-5 BEH MED	8-12 ALL STAGES 1-5 BEH MED	8-12 ALL STAGES 1-5 BEH MED	8-12 ALL STAGES 1-5 BEH MED
21. MAY 23-27	8-12 ALL STAGES 1-5 BEH MED	8-12 ALL STAGES 1-5 BEH MED	8-12 ALL STAGES 1-5 BEH MED	8-12 ALL STAGES 1-5 BEH MED	8-12 ALL STAGES 1-5 BEH MED

CP 2 = Clinical Pharmacology 2/Oral Pharmacology

PERIO = Periodontology

PROSTHO = Prosthodontics and Implant Dentistry: Removable Prosthodontics

CCFD = Comprehensive Care Family Dentistry

ENDO = Endodontology, Diseases of the Pulp and Pathways of Odontogenic Infection

DA 2 = Dental Anesthesiology 2: Pain and Anxiety Control, Analgesia, Medical Management of Local Anesthesia

OP1 = Oral Pathology/Oral Medicine 1

ORTHO = Orthodontics and Craniofacial Growth and Development

BEH MED = Behavioral Medicine

ALL STAGES = Dental Medicine at all Stages of Life

CNU CDM ASSESSMENT PLAN

Assessment	Instrument Used/ Administrator/Deadline	Assessment Committee Liaison	Action Plan Responsibility	Action Plan Deadline for Reporting	Action Plan Implementation Deadline
Admissions					
Interview Survey (Interview Day Experience)	Results from the survey reported by Student Affairs by end of May, annually, for Admissions Cycle just ended.	Dean of Student Affairs	Admissions Office and Admissions Committee	Beginning of September	Action plan to be implemented September through May Action Plan to be completed by May
Analysis of Applicant Pool	Results from spreadsheet reported by Jason McDowell by beginning of September, annually, for Admissions Cycle just ended.	Dean of Student Affairs	Admissions Office to use for recruitment	End of September	Action plan to be implemented September through May Action Plan to be completed by May
Demographics of Entering Class	Information from WebAdmit to be retrieved by Dean of Student Affairs by end of October or beginning of November, annually.	Dean of Student Affairs	Admissions Office to use for recruitment	End of September	Action plan to be implemented September through May Action Plan to be completed by May
Survey of Students Declining Admissions Offer (Post Candidate Interview Survey)	Results from the survey reported by Dean of Student Affairs by beginning of September, annually, for Admissions Cycle just ended.	Dean of Student Affairs	Admissions Office to use for recruitment	End of September	Action plan to be implemented September through May Action Plan to be completed by May
Student Affairs					
Success of Tutoring on Student Achievement	Information to be reported by Dean of Academic Affairs by end of June, annually.	Dean of Academic Affairs	Student Affairs Office (in collaboration with Academic Affairs Office)	End of July	Action plan to be implemented September through May Action Plan to be completed by May
CODA Student Survey – Alumni Survey	Results from survey reported by the CODM Program by Dean of Academic Affairs annually.	Dean of Academic Affairs	Assessment & Curriculum Committees	August	Action plan to be implemented August through May Action plan to be completed by May
CODA Student Survey – Graduating Student Survey	Results from survey reported by the CODM program by Dean of Academic Affairs, annually.	Dean of Academic Affairs	Assessment & Curriculum Committees	August	Action plan to be implemented August through May Action plan to be completed by May
Graduating Exit Survey	Results from SurveyMonkey reported by the CODM program the end of June, annually.	Dean of Academic Affairs	DMD Program	August	Action plan to be implemented August through May Action plan to be completed by May
Faculty & Staff Development					
Faculty Development Activities	Results from Faculty development survey	Dean of Faculty Affairs	Chair of the Faculty Development Committee	End of April this year, Then Sep of every other year.	End of April this year, should have annual plan starting Sep of every year
Faculty Development Activity Completion Form (Mega Link)	Report of Faculty Development Activities	Dean of Faculty Affairs	Chair of the Faculty Development Committee	End of April	End of April

	(survey monkey collected data)				
	Report of Faculty Development Organized in house Seminars (with evaluations)	Dean of Faculty Affairs	Dean of Faculty Affairs	September	September
CODA Survey - Faculty Survey	Results from survey submitted by the DMD program through the office of Academic Affairs by June, annually.	Dean of Faculty Affairs	Office of Academic Affairs	December	January
Staff Development Activities Staff Development Activity Completion Form (Mega Link)	Results from staff development survey administered by Faculty Development Committee in August, every two years	Dean of Faculty Affairs	Faculty Development committee	September	October
Curriculum					
Interprofessional Education	Grading rubric uploaded into ExamSoft	Dean of Faculty Affairs	Rubric uploaded into ExamSoft	End of July	End of September
Supervisor Evaluation of Faculty	Self-evaluation form/meeting to review the form by Dean of Faculty Affairs	Dean of Faculty Affairs	Individual Faculty	End of July	Beginning of the semester (August or January)
Peer Review of Faculty	Peer Evaluation forms by Faculty selected by Dean of Faculty Affairs	Dean of Faculty Affairs	Individual Faculty	End of each course	By next time course is offered
Student Evaluation of Course & Instructor	Survey Monkey\Administered by Department Administrative Assistant	Administrative Assistant	Course coordinator as well as other Instructors for the course	End of each course	By next time course is offered
CODA Survey - Practicum/Internship Evaluation	CODA Survey - Practicum/Internship Evaluation	Dean of Clinical Training	Dean of Clinical Training	End of August	Action plan to be implemented August through August
Student-Supervisor Evaluations	Mutual student-supervisor midpoint and final evaluation; student evaluation of the site; preceptor evaluation	Individual students/Supervisors	Dean of Clinical Training	End of August	Action plan to be implemented August through August
Student Learning and Progress					
Course Learning Outcomes Report	Summative Exam mapped to learning outcomes and direct assessment of student learning using CLO rubrics: Project, Paper, Presentation, Performance, case study, etc. Results from ExamSoft Reports by Dean of Academic Affairs every December and June, Time2Track results by Dean of Clinical Training	Dean of Academic Affairs/Dean of Clinical Training	Assessment Committee	January and May	Next cycle
Program Learning Outcomes Report	Direct assessment of student learning using PLO rubrics: Project, Paper, Presentation, Performance, case study, etc. Results from ExamSoft	Dean of Academic Affairs/Dean of Clinical Training	Assessment Committee	May	Beginning of the academic year
Institutional Learning Outcomes Report	Direct assessment of student learning using ILO rubrics: Project, Paper, Presentation, Performance, case study, etc. Results from ExamSoft	Dean of Academic Affairs/Dean of Clinical Training	Assessment Committee	May	Beginning of the academic year

Co-curricular Learning Outcomes	Direct assessment of student learning using CoCuLO rubrics: Project, Paper, Presentation, Performance, case study, etc. Results from ExamSoft	Dean of Academic Affairs/Dean of Clinical Training	Assessment Committee	May	Beginning of the academic year
Grade Distribution Reports	Shared by Dean of Academic Affairs every Summer (Office of Academic Affairs)	Dean of Academic Affairs	Office of Academic Affairs	July	Beginning of the academic year
College					
Full Program Review including analysis of academic alerts, student progression (# on 5 year plan, # dismissed)	Program review conducted every 5 years by the College in conjunction with Institutional Effectiveness	Dean of Academic Affairs	Dean of the CODM program	2024-2025 (every 5 years)	Fall



DMD Co-Curricular Learning Outcomes (CoCuLOs)

CoCuLO	Initial	Developing	Developed	Proficient
1. Social Awareness and Cultural Sensitivity Students demonstrate awareness of and responsiveness to social and cultural differences by adapting behaviors appropriately and using effective interpersonal skills	<ul style="list-style-type: none"> Does not demonstrate awareness of others' feelings in relation to social or cultural differences Does not adapt behaviors to current social or cultural situations 	<ul style="list-style-type: none"> Demonstrates some demonstrate awareness of others' feelings in relation to social or cultural differences Demonstrates ability to adapt behaviors to current social or cultural situations 	<ul style="list-style-type: none"> Generally demonstrates awareness of others' feelings in relation to social or cultural differences Frequently demonstrates ability to adapt behaviors to current social or cultural situations 	<ul style="list-style-type: none"> Consistently demonstrates awareness of others' feelings in relation to social or cultural differences Consistently demonstrates ability to adapt behaviors to current social or cultural situations, as displayed by use of all of the following: appropriate language, use respectful tone, verification of understanding
2. Professionalism and Advocacy Students demonstrate professional behavior with other healthcare professionals and advocate for initiatives to improve patient care	<ul style="list-style-type: none"> Does not consistently demonstrate professional attitudes or behaviors Does not advocate for initiatives to improve patient care 	<ul style="list-style-type: none"> Demonstrates some professional attitudes and behaviors Occasionally advocates for initiatives to improve patient care 	<ul style="list-style-type: none"> Generally demonstrates professional attitudes and behaviors Often demonstrates ability to use these behaviors and values to improve healthcare 	<ul style="list-style-type: none"> Consistently demonstrates professional attitudes and behaviors Consistently demonstrates ability to use these behaviors and values to improve healthcare
3. Self-Awareness and Learning Students demonstrate self-awareness through reflection and	<ul style="list-style-type: none"> Does not demonstrate self-awareness of own biases impacting ability to work with others 	<ul style="list-style-type: none"> Demonstrates minimal self-awareness of own biases impacting ability to work with others 	<ul style="list-style-type: none"> Often demonstrates self-awareness of own biases impacting ability to work with others 	<ul style="list-style-type: none"> Consistently demonstrates self-awareness of own biases impacting ability to work with others

DMD CoCuLo Proficiency Rubric

appropriate planning of self-directed learning and career advancement	<ul style="list-style-type: none"> • Does not show ability to reflect on own knowledge, skills, abilities, and experiences • Does not seek opportunities for personal growth and self-directed learning 	<ul style="list-style-type: none"> • Demonstrates rudimentary ability to reflect on own knowledge, skills, abilities, and experiences. • Occasionally seeks opportunities for personal growth and self-directed learning 	<ul style="list-style-type: none"> • Demonstrates some ability to reflect on own knowledge, skills, and experiences • Often seeks opportunities for personal growth and self-directed learning 	<ul style="list-style-type: none"> • Demonstrates ability to reflect on own knowledge, skills, and experiences • Regularly seeks opportunities for personal growth and self-directed learning
4. Innovation/ Entrepreneurship Students demonstrate innovation and creativity in accomplishing professional goals	<ul style="list-style-type: none"> • Does not demonstrate innovation and creativity in accomplishing professional goals 	<ul style="list-style-type: none"> • Demonstrates minimal innovation and creativity in accomplishing professional goals 	<ul style="list-style-type: none"> • Demonstrates innovation and creativity but professional goals may not be feasible or appropriate 	<ul style="list-style-type: none"> • Consistently demonstrates innovation and creativity in accomplishing professional goals
5. Public Health and Education Students apply learned skills to deliver public health initiatives and education to the community	<ul style="list-style-type: none"> • Does not apply learned skills to deliver public health initiatives and education to the community 	<ul style="list-style-type: none"> • Demonstrates difficulty applying learned skills to deliver public health initiatives and education to the community 	<ul style="list-style-type: none"> • Demonstrates sufficient application of learned skills to deliver public health initiatives and education to the community 	<ul style="list-style-type: none"> • Demonstrates appropriate and effective application of learned skills to deliver public health initiatives and education to the community
6. Service and Leadership Students demonstrate the ability to lead and work collaboratively with others to accomplish shared goals	<ul style="list-style-type: none"> • Functions to satisfy personal needs rather than those of the healthcare team 	<ul style="list-style-type: none"> • Demonstrates minimal ability to contribute toward shared goals 	<ul style="list-style-type: none"> • Generally contributes toward shared goals 	<ul style="list-style-type: none"> • Consistently contributes toward shared goals



DMD Institutional Learning Outcomes (ILOs)

ILO 1: Critical thinking: Exercise reasoned judgment to assess technical information and make well-informed decisions using evidence-based approaches

Indicator	Initial	Developing	Developed	Proficient
1.1. Demonstrates identification of problem or issues within the field of oral health	<ul style="list-style-type: none"> Does not correctly identify the problem or issue being considered Does not demonstrate understanding of the dental factors that contribute to the diagnosis 	<ul style="list-style-type: none"> Identifies the problem or issue but does not demonstrate awareness of all the factors impacting decision making Demonstrates understanding of some possible dental factors that contribute to current patient state 	<ul style="list-style-type: none"> Correctly identifies the problem or issue but does not demonstrate awareness of all factors impacting decision making Demonstrates understanding of most dental factors that contribute to the diagnosis 	<ul style="list-style-type: none"> Correctly identifies all of the primary factors associated with problem or issue impacting decision making Demonstrates thorough understanding of all possible dental factors that contribute to the diagnosis
1.2. Demonstrates identification of resources in the field of oral health	<ul style="list-style-type: none"> Does not identify appropriate resources in the field of oral health 	<ul style="list-style-type: none"> Identifies a few resources needed in the field of oral health 	<ul style="list-style-type: none"> Identifies most of the resources needed in the field of oral health 	<ul style="list-style-type: none"> Correctly identifies all appropriate resources in the field of oral health
1.3. Finds and interprets data needed for critical thinking and decision making regarding oral health	<ul style="list-style-type: none"> Does not demonstrate understanding of the data needed for critical thinking and decision making relating to oral health 	<ul style="list-style-type: none"> Demonstrates a rudimentary ability to interpret data relating to oral health 	<ul style="list-style-type: none"> Demonstrates the ability to interpret data relating to oral health 	<ul style="list-style-type: none"> Demonstrates an advanced ability to correctly interpret oral health data
1.4. Demonstrates knowledge of alternatives when evaluating for possible solutions	<ul style="list-style-type: none"> Does not evaluate possible alternatives for treatment or diagnosis 	<ul style="list-style-type: none"> Does not effectively evaluate alternative treatment or diagnostic solutions 	<ul style="list-style-type: none"> Evaluates possible treatment and diagnostic solutions leading to a logical decision 	<ul style="list-style-type: none"> Effectively and thoroughly considers and evaluates possible diagnostic and treatment solutions

1.5. Proposes and selects appropriate oral health solutions	<ul style="list-style-type: none"> Does not propose solutions to the patient's needs 	<ul style="list-style-type: none"> Proposes solutions without consideration of alternatives 	<ul style="list-style-type: none"> Solutions chosen demonstrate consideration of most of the strengths, weaknesses, and consequences of the decision 	<ul style="list-style-type: none"> Proposes solutions that are appropriate to the situation and demonstrate consideration of all relevant strengths, weaknesses, and consequences
1.6. Presents rationale for course of action regarding oral health treatment plans and decisions.	<ul style="list-style-type: none"> Does not adequately provide rationale for treatment decision 	<ul style="list-style-type: none"> Provides rationale for decision but does not integrate into treatment plan 	<ul style="list-style-type: none"> Provides rationale for decision with solid, supporting evidence from available dental literature and/or case factors 	<ul style="list-style-type: none"> Provides rationale for decision with appropriate and relevant supporting case evidence, and integrates findings into treatment plan

ILO 2: Written communication. Demonstrate the ability to write coherent, supported, and logically structured prose

Indicators	Initial	Developing	Developed	Proficient
2.1. Demonstrates knowledge and awareness of intended audience	<ul style="list-style-type: none"> Does not demonstrate oral health knowledge or awareness of audience for which the document is intended 	<ul style="list-style-type: none"> Demonstrates a rudimentary ability to craft a document appropriate for its audience 	<ul style="list-style-type: none"> Demonstrates ability to craft a document appropriate for its audience 	<ul style="list-style-type: none"> Demonstrates an advanced ability to craft documents appropriate for the audience
2.2. Demonstrates clear and logical thought	<ul style="list-style-type: none"> Does not demonstrate clear or logical thought in their documentation 	<ul style="list-style-type: none"> Writing does not sufficiently conceptualize case variables or analyze subject under discussion 	<ul style="list-style-type: none"> Demonstrates general clear or logical thought in their documentation 	<ul style="list-style-type: none"> Research and clinical documentation demonstrates clear and focused thinking
2.3. Demonstrates support for and development of ideas	<ul style="list-style-type: none"> Does not explain or develop ideas 	<ul style="list-style-type: none"> Demonstrates minimal support for ideas 	<ul style="list-style-type: none"> Writing contains examples that generally support ideas 	<ul style="list-style-type: none"> Supports ideas with relevant, clear, impactful examples
2.4. Demonstrates appropriate use of evidence to support arguments	<ul style="list-style-type: none"> Demonstrates an attempt to use proper citations to support ideas 	<ul style="list-style-type: none"> Uses credible and relevant sources to support ideas appropriate in the study of oral health 	<ul style="list-style-type: none"> Consistently uses credible and relevant sources to support ideas 	<ul style="list-style-type: none"> Demonstrates skillful use of credible and relevant sources to develop and support ideas
2.5. Demonstrates appropriate use of language, syntax, and mechanics	<ul style="list-style-type: none"> Has excessive or severe errors in language usage 	<ul style="list-style-type: none"> Generally conveys meaning to readers with clarity, though writing may include some errors 	<ul style="list-style-type: none"> Language conveys meaning to readers and writing contains very few errors 	<ul style="list-style-type: none"> Uses language effectively and skillfully to communicate meaning to readers

ILO 3: Oral communication: Demonstrates oral communication skills

Indicators	Initial	Developing	Developed	Proficient
3.1. Demonstrates knowledge and awareness of intended audience of constituencies	<ul style="list-style-type: none"> Does not demonstrate knowledge or awareness of audience for which the communication is intended 	<ul style="list-style-type: none"> Demonstrates a rudimentary ability to communicate in a manner appropriate to the audience 	<ul style="list-style-type: none"> Demonstrates ability to communicate appropriate to the audience 	<ul style="list-style-type: none"> Demonstrates an advanced ability to communicate in a manner appropriate to the audience
3.2. Demonstrates clear and logical thought in discussing aspects of oral health	<ul style="list-style-type: none"> Does not demonstrate clear or logical thought in their communication 	<ul style="list-style-type: none"> Communication does not sufficiently conceptualize case variables or analyze subject under discussion 	<ul style="list-style-type: none"> Demonstrates general clear or logical thought in their communication 	<ul style="list-style-type: none"> Communication demonstrates clear and focused thinking
3.3. Demonstrates effective use of language in their communication	<ul style="list-style-type: none"> Does not know professional language or uses jargon Does not know the proper technical language regarding mental health treatment 	<ul style="list-style-type: none"> Demonstrates inaccurate use of language or uses jargon in professional communications Utilizes scientific language that is incomprehensible to patients 	<ul style="list-style-type: none"> Demonstrates appropriate use of professional language and minimal jargon Utilizes generalized language to interact with patients 	<ul style="list-style-type: none"> Demonstrates use of appropriate, professional language Utilizes generalized language to interact with patients
3.4. Demonstrates appropriate active listening techniques when addressing questions relating to oral health	<ul style="list-style-type: none"> Does not acknowledge other viewpoints Has great difficulty answering questions 	<ul style="list-style-type: none"> Demonstrates little attempt to recognize other viewpoints Answers are simplistic and lack intellectual depth 	<ul style="list-style-type: none"> Recognizes and carefully weighs other viewpoints Adequately answers patient questions 	<ul style="list-style-type: none"> Listens to questions with a consideration of alternative viewpoints Answers questions thoughtfully referencing evidence
3.5. Orally communicates meaning of oral healthcare to audience	<ul style="list-style-type: none"> Vocal delivery is too soft or too fast Long, unintended silences and/or speech disruptions frequently distract audience Speaker makes no attempt to engage audience 	<ul style="list-style-type: none"> Vocal delivery is audible Speech rate or volume disruptions occasionally distract from comprehension Attempts to engage audience 	<ul style="list-style-type: none"> Vocal delivery is varied and dynamic Speech rate, volume, and tone enhance listener interest and facilitate understanding Generally engages audience 	<ul style="list-style-type: none"> Vocal delivery is varied and dynamic Speech rate, volume, and tone enhance listener interest and facilitate understanding Thoroughly engages audience
3.6. Utilizes non-verbal means to enhance message	<ul style="list-style-type: none"> Eye contact, body language, and facial expressions are inappropriate 	<ul style="list-style-type: none"> Eye contact, body language, and facial expressions neither enhance nor hinder oral effectiveness 	<ul style="list-style-type: none"> Use of eye contact, body language, and facial expressions are mostly consistent with the verbal message 	<ul style="list-style-type: none"> Use of eye contact, body language, and facial expressions that are consistent with the verbal message

ILO 4: Professionalism. Interact with respect, empathy, diplomacy, and cultural competence

Indicators	Initial	Developing	Developed	Proficient
4.1. Demonstrates professional attitudes and behaviors expected from a dentist	<ul style="list-style-type: none"> Does not generally demonstrate professional attitudes or behaviors expected from a dentist 	<ul style="list-style-type: none"> Demonstrates some attitudes and behaviors that may be characteristic of a dentist 	<ul style="list-style-type: none"> Generally demonstrates attitudes and behaviors expected from a dentist 	<ul style="list-style-type: none"> Consistently demonstrates attitudes and behaviors expected from a dentist
4.2. Demonstrates personal responsibility and accountability	<ul style="list-style-type: none"> Does not demonstrate personal accountability or responsibility for work completed 	<ul style="list-style-type: none"> Demonstrates minimal personal accountability and responsibility for work completed 	<ul style="list-style-type: none"> Demonstrates personal accountability and responsibility for the work completed 	<ul style="list-style-type: none"> Consistently demonstrates personal accountability and responsibility for work completed
4.3. Demonstrates respectful and sensitive behaviors to the cultural and linguistic needs of diverse patients	<ul style="list-style-type: none"> Does not demonstrate an awareness of patients' customs, beliefs, or perspectives Does not demonstrate awareness of linguistic needs of patients 	<ul style="list-style-type: none"> Demonstrates a minimal level of awareness of customs, beliefs, or perspectives of patients Demonstrates minimal awareness of cultural and linguistic needs of patients 	<ul style="list-style-type: none"> Demonstrates awareness of customs and beliefs Demonstrates awareness of the cultural and linguistic needs of patients 	<ul style="list-style-type: none"> Demonstrates awareness of customs, beliefs, or perspectives in patients Demonstrates full awareness and responds to the cultural and linguistic needs of patients
4.4. Demonstrates professional demeanor	<ul style="list-style-type: none"> Appears inattentive and impatient Uses inappropriate body language Dresses in attire that is inappropriate 	<ul style="list-style-type: none"> Appears unfocused and distracted Uses acceptable body language Dresses in attire that is not offensive 	<ul style="list-style-type: none"> Appears composed and focused Uses appropriate body language Dresses in attire that is professional 	<ul style="list-style-type: none"> Uses articulate, tactful, and diplomatic speech Uses professional body language Dresses in attire that is professional, and well-suited for the environment

ILO 5: Quantitative reasoning: Demonstrate ability to use mathematics and statistics in problem solving

Indicators	Initial	Developing	Developed	Proficient
5.1. Demonstrates ability to perform calculations and apply mathematical principles to solve problems	<ul style="list-style-type: none"> Does not demonstrate ability to apply mathematical principles 	<ul style="list-style-type: none"> Demonstrates ability to perform basic mathematical calculations but does not know how to apply mathematical principles to solve problems 	<ul style="list-style-type: none"> Demonstrates ability to perform most mathematical calculations accurately and to apply mathematical principles to solve problems 	<ul style="list-style-type: none"> Consistently demonstrates ability to perform mathematical calculations accurately and to appropriately apply mathematical principles to solve problems

5.2. Demonstrates understanding of experimental designs and methodology	<ul style="list-style-type: none"> Displays difficulty proposing a basic experiment or research project 	<ul style="list-style-type: none"> Comprehends basic experiments designed by others 	<ul style="list-style-type: none"> Evaluates research, method, and protocol to review valid and reliable research 	<ul style="list-style-type: none"> Proposes appropriate and innovative designs to address a new hypothesis and research question
5.3. Demonstrates logical and appropriate interpretation of data	<ul style="list-style-type: none"> Demonstrates a limited ability to interpret scientific data 	<ul style="list-style-type: none"> Attempts to interpret scientific data 	<ul style="list-style-type: none"> Demonstrates the ability to interpret scientific data 	<ul style="list-style-type: none"> Interprets data in the context of current scientific knowledge
5.4. Demonstrates logical thought patterns in generating conclusions	<ul style="list-style-type: none"> Does not generate conclusions based on current scientific data 	<ul style="list-style-type: none"> Demonstrates a rudimentary ability to generate conclusions based on current scientific data 	<ul style="list-style-type: none"> Demonstrates the ability to generate conclusions using scientific data 	<ul style="list-style-type: none"> Demonstrates an advanced ability to accurately generate conclusions using appropriate scientific data

ILO 6: Information literacy: Identify and search relevant libraries of information and databases; synthesize information obtained from primary literature using properly referenced citations

Indicators	Initial	Developing	Developed	Proficient
6.1. Demonstrates appropriate ability search and acquire resources	<ul style="list-style-type: none"> Does not identify or solicit help in obtaining external resources to support topic 	<ul style="list-style-type: none"> Identified resources may not be sufficient in quality and infrequently solicits guidance from library personnel 	<ul style="list-style-type: none"> Identifies resources appropriate for scientific inquiry and solicits guidance from library personnel 	<ul style="list-style-type: none"> Identifies a variety of relevant sources and regularly seeks guidance from library personnel
6.2. Demonstrates appropriate incorporation of references	<ul style="list-style-type: none"> Does not incorporate references relating to oral health 	<ul style="list-style-type: none"> Incorporates references from dental sources that do not clearly support ideas 	<ul style="list-style-type: none"> Incorporates relevant oral health references that generally supports ideas 	<ul style="list-style-type: none"> Incorporates relevant oral health references from respected sources
6.3. Demonstrates appropriate citation of references	<ul style="list-style-type: none"> Does not use citations 	<ul style="list-style-type: none"> Uses citations but they are not formatted in correct style 	<ul style="list-style-type: none"> Demonstrates use of appropriate citations in context 	<ul style="list-style-type: none"> Uses properly cited oral health references and includes all necessary information in reference list



DMD Program Learning Outcomes (PLOs)

PLO 1: Patient-Centered Care

Demonstrate understanding of healthcare disparities and cultural awareness and capability in patient counseling and providing appropriate patient advocacy

Indicators	Initial	Developing	Developed	Proficient
1.1. Education. Demonstrates ability to educate all audiences through effectively communicating information and assessing learning	<ul style="list-style-type: none"> Does not appropriately counsel patients Does not check for understanding, ask questions, and/or asks inappropriate questions. Does not demonstrate the ability to find and utilize appropriate resources and references necessary for providing accurate counseling, consultation and education 	<ul style="list-style-type: none"> Counsels patients but leaves out pertinent information needed by patient Communicates with basic level of clarity but does not always check for understanding or rephrase when confusion occurs. Demonstrates the ability to find a one or two resources, yet the resources are not the best or most appropriate for providing accurate counseling, consultation and education 	<ul style="list-style-type: none"> Generally demonstrates empathy, communicates accurate information clearly, checks for understanding Seeks to ensure understanding and generally asks questions. Frequently demonstrates the ability to find and utilize appropriate resources and references necessary for providing accurate counseling, consultation and education 	<ul style="list-style-type: none"> Consistently demonstrates empathy, communicates accurate information clearly, checks for understanding Ensures understanding and asks appropriate questions. Consistently demonstrates the ability to find and utilize appropriate resources and references for providing accurate patient counseling, consultation and education
1.2. Patient advocacy. Represents the patient's best interests	<ul style="list-style-type: none"> Does not demonstrate the ability represent a patient's best interest 	<ul style="list-style-type: none"> Demonstrates awareness of issues that impact a patient Demonstrates minimal ability to articulate these issues but does not demonstrate ability to sufficiently advocate on a patient's behalf 	<ul style="list-style-type: none"> Demonstrates sufficient awareness of issues that impact a patient Demonstrates ability to articulate these issues Demonstrates ability to sufficiently advocate on a patient's behalf 	<ul style="list-style-type: none"> Demonstrates full awareness of the most important issues that impact a patient Demonstrates ability to clearly and effectively articulate these issues Demonstrates ability to effectively advocate on a patient's behalf

PLO 2: Evidence-Based Care.

Apply sound, current, and evidence-based oral healthcare within the scope of general dentistry

Indicators	Initial	Developing	Developed	Proficient
2.1. Patient-centered care. Demonstrates ability to provide patient-centered care as the medication expert (collect and interpret evidence, prioritize, formulate assessments and recommendations, implement, monitor and adjust plans, and document activities)	<ul style="list-style-type: none"> Does not demonstrate ability to provide patient-centered care at the medication expert level; e.g., demonstrates ability to collect but not sufficiently interpret evidence, does not prioritize, formulates basic assessments and recommendations, does not sufficiently monitor and adjust plans nor document activities. 	<ul style="list-style-type: none"> Demonstrates ability to provide patient-centered care as the medication expert in some, but not all, areas as follows: collect and interpret evidence, prioritize, formulate assessments and recommendations, implement, monitor and adjust plans, and document activities 	<ul style="list-style-type: none"> Demonstrates ability to provide patient-centered care as the medication expert (generally demonstrates ability to collect and interpret evidence, prioritize, formulate assessments and recommendations, implement, monitor and adjust plans, and document activities) 	<ul style="list-style-type: none"> Demonstrates ability to provide sufficient patient-centered care as the expert (collects and interprets evidence, prioritizes, formulates assessments and recommendations, implements, monitors and adjusts plans, and documents activities)
2.2. Systems management. Demonstrates ability to manage patient healthcare needs using human, financial, technological, and physical resources to optimize the safety and efficacy of medication use systems	<ul style="list-style-type: none"> Does not demonstrate understanding of oral healthcare delivery systems parts Does not demonstrate understanding of the forces that influence components of the oral healthcare delivery system, including their connection to patient care Does not demonstrate understanding of any challenges to systems that affect oral healthcare delivery Does not demonstrate understanding of how to work with different subsystems to deliver oral healthcare 	<ul style="list-style-type: none"> Demonstrates understanding of some parts of oral healthcare delivery systems but does not identify how they are related to each other Demonstrates understanding of some forces that influence the parts of healthcare delivery systems, but demonstrate minimal understanding of their connection to patient care Demonstrates understanding of some challenges that can affect delivery of oral healthcare Demonstrates some understanding of how to work with different subsystems and how they 	<ul style="list-style-type: none"> Demonstrates understanding of most major components of oral healthcare systems and their respective relationships Demonstrates understanding of the forces that influence the components of healthcare delivery systems, and demonstrate some understanding of their influence on the quality of patient care Demonstrates understanding of most challenges that can affect delivery of oral healthcare, but does not demonstrate complete comprehension of the effects Demonstrates basic 	<ul style="list-style-type: none"> Demonstrates understanding of the major components of oral healthcare systems, their respective relationships, and their functions related to patient care Demonstrates thorough understanding of the forces that influence components of healthcare delivery systems and demonstrate full understanding of their influence and implications on the quality of patient care Demonstrates understanding of pertinent challenges to specific aspects of healthcare delivery by demonstrating abilities to thoroughly

		function to deliver oral healthcare, but demonstrate minimal awareness or understanding of one's own role within the oral healthcare delivery system	understanding of how to work with different subsystems and how they function to deliver oral healthcare and demonstrate some understanding of one's role within the oral healthcare delivery system, but does not necessarily demonstrate application of knowledge in a manner that maximizes the quality of oral healthcare	discuss the implications for the appropriate parts of oral health care delivery systems Demonstrates excellent understanding of how to work with different subsystems involved while also demonstrating understanding of one's role within the subsystems, and demonstrate appropriate application of knowledge in a manner that maximizes the quality of oral healthcare
2.3. Health and wellness. Designs prevention, intervention, and educational strategies for individuals and communities to manage chronic disease and improve oral health and wellness	<ul style="list-style-type: none"> Does not demonstrate understanding of how the arts can be utilized to optimize patients' well-being 	<ul style="list-style-type: none"> Demonstrates knowledge of some of the ways that the arts can be utilized to optimize patients' well-being 	<ul style="list-style-type: none"> Demonstrates sufficient knowledge of multiple ways that the arts can be utilized to optimize patients' well-being 	<ul style="list-style-type: none"> Demonstrates thorough knowledge of the ways that the arts can be utilized to optimize patients' well-being and creatively applies this knowledge to improve well-being and the practice and delivery of oral healthcare
2.4. Population-based care. Demonstrates understanding of how population-based care influences patient-centered care and the development of practice guidelines and evidence-based best practices	<ul style="list-style-type: none"> Does not demonstrate awareness of population-based care. 	<ul style="list-style-type: none"> Demonstrates minimal understanding of population-based care and how it influences patient-centered care Does not demonstrate awareness of how these notions influence the development of practice guidelines 	<ul style="list-style-type: none"> Demonstrates sufficient understanding of population-based care and how it influences patient-centered care Demonstrates sufficient understanding of how population-based care influences the development of practice guidelines and best practices for patient care 	<ul style="list-style-type: none"> Demonstrates superb understanding of population-based care and how it influences patient-centered care Demonstrates superb understanding of how population-based care influences the development of practice guidelines and demonstrates knowledge of best practices for patient care

PLO 3: Culturally Competent, Empathic Communication.

Demonstrate patient centered, empathic and culturally competent communication and interpersonal skills

Indicators	Initial	Developing	Developed	Proficient
3.1. Empathy. Demonstrates the ability to communicate with the patient empathically.	<ul style="list-style-type: none"> Does not demonstrate the ability to communicate with the patient empathically. 	<ul style="list-style-type: none"> Demonstrates some ability, but experiences lapses in the ability to communicate empathically 	<ul style="list-style-type: none"> Demonstrates the ability to communicate empathically, with few lapses. 	<ul style="list-style-type: none"> Demonstrates an advanced ability, and never experiences lapses in communicating empathically.
3.2. Cultural competence. Demonstrates the ability to engage in communication with the patient that is culturally aware and accepting.	<ul style="list-style-type: none"> Does not demonstrate communication and interactions that convey respect or concern for patients and the community. Does not demonstrate an awareness of customs, beliefs, or perspectives in diverse patients Does not demonstrate awareness of cultural and linguistic needs of patients in order to communicate health information 	<ul style="list-style-type: none"> Demonstrates communication and interactions characteristic of a minimal level of respect, and little concern for patients and the community is apparent through use of some appropriate communication, but student does not employ follow-up questions for clarification, when necessary, and student provides inappropriate detail in responses Demonstrates a minimal level of awareness of customs, beliefs, or perspectives in diverse patients Demonstrates minimal awareness of cultural and linguistic needs of patients; either does not or only attempt to adapt behaviors, but does so ineffectively, to communicate health information 	<ul style="list-style-type: none"> Demonstrates appropriate communication and interactions that are characteristic of a basic level of respect, and concern for patients and the community is apparent through use of appropriate communication, where student uses some clear, but not necessarily relevant or detailed, follow-up questions and responses Demonstrates awareness of customs and beliefs, but may not clarify with patients about personal perspectives Demonstrates awareness of the cultural and linguistic needs of diverse patients, and adapt behaviors to communicate health information, but communication may not be effective 	<ul style="list-style-type: none"> Demonstrates professional communication and interactions by showing empathy, respect, and concern for patients and the community through use of appropriate communication where follow-up questions (as needed) and responses are clear, relevant, and detailed Demonstrates awareness of customs, beliefs, or perspectives in diverse patients; ask appropriate questions to clarify perspectives and perceptions in diverse patients Demonstrates full awareness of and responsiveness to cultural and linguistic needs of diverse patients by adapting behaviors appropriately in order to effectively communicate health information

PLO 4: Oral and Written Communication.

Demonstrate sound oral and written communications in patient care

Indicators	Initial	Developing	Developed	Proficient
4.1. Oral communication. Demonstrate sound oral communication in patient care.	<ul style="list-style-type: none"> • Does not demonstrate logical reasoning in oral communications in patient care. • Does not demonstrate the ability to cite sound evidence that support ideas within presentations or discussions. 	<ul style="list-style-type: none"> • Demonstrates some logical reasoning in oral communications in patient care but demonstrates some lapses. • Demonstrates some ability to cite sound evidence that support ideas within presentations or discussions, but demonstrates some lapses. 	<ul style="list-style-type: none"> • Generally demonstrates logical reasoning in oral communications in patient care. • Generally demonstrates the ability to cite sound evidence that support ideas within presentations or discussions. 	<ul style="list-style-type: none"> • Consistently demonstrates logical reasoning in oral communications in patient care. • Consistently demonstrates the ability to cite sound evidence that support ideas within presentations or discussions.
4.2. Written communication. Demonstrate sound written communication in patient care.	<ul style="list-style-type: none"> • Does not demonstrate logical reasoning in written communications in patient care. • Does not demonstrate the written ability to cite sound evidence that support ideas. 	<ul style="list-style-type: none"> • Demonstrates some logical reasoning in written communications in patient care but demonstrates some lapses. • Demonstrates some written ability to cite sound evidence that support ideas, but demonstrates some lapses. 	<ul style="list-style-type: none"> • Generally logical reasoning in written communications in patient care. • Generally demonstrates the written ability to cite sound evidence that support ideas. 	<ul style="list-style-type: none"> • Consistently demonstrates logical reasoning in written communications in patient care. • Consistently demonstrates the written ability to cite sound evidence that support ideas.

PLO 5: Critical Thinking.

Utilize critical thinking, problem solving skills and systemic thinking in assessing and making reasoned, evidence-based decisions in patient care

Indicators	Initial	Developing	Developed	Proficient
5.1. Problem solving. Identifies problems; explore and prioritize potential strategies; and designs, implements, and evaluates viable solutions	<ul style="list-style-type: none"> • Is not able to correctly identify the problem or issue being considered. • Does not identify appropriate resources. Includes extraneous information or inappropriate or insufficient resources. • Does not demonstrate understanding of the content of materials reviewed. Makes inappropriate inferences. • Does not evaluate possible alternatives or generates ideas that are illogical or extraneous to issue at hand. • Does not propose a solution or does not articulate decision. Does not adequately provide rationale for selected alternative or decision 	<ul style="list-style-type: none"> • Identifies the problem or issue but does not demonstrate awareness of all the factors associated with the problem or issues that impact decision making. • Identifies a few, but not all, resources needed for decision making. • Demonstrates ability to interpret some information and data but not all. • Does not fully or effectively evaluate alternative solutions. • Proposes a decision with many apparent weaknesses (i.e., not feasible, lack of regard for consequences, lack of supporting evidence, illogical, irrelevant to issue at hand, etc.). Provides rationale for selected alternative or decision but does not build a solid position with supporting evidence. Is unable to defend decision or course of action. 	<ul style="list-style-type: none"> • Correctly identifies problem or issue being considered and demonstrates adequate awareness of the factors associated with this problem or issue that impact decision making. • Identifies most of the resources needed. • Demonstrates ability to interpret most information and data. • Considers and evaluates possible solutions in a way that generally leads to a logical decision or course of action. • Proposes a solution that does not contain apparent weaknesses that may or may not be the obvious clear choice. Solutions chosen demonstrate consideration of most of the strengths, weaknesses, feasibility, effects, consequences, relevance, etc.). Provides rationale for selected alternative or decision which includes some solid supporting evidence. Is able to defend decision or course of action at a basic level. 	<ul style="list-style-type: none"> • Consistently correctly identifies the problem or issue being considered and all of the primary factors associated with this problem or issue that impact decision making. Articulates the importance of these factors. • Identifies all appropriate resources. • Demonstrates ability to correctly interpret information and data needed for appropriate decision making. Demonstrates awareness of importance of these data in decision-making process. • Considers and evaluates possible solutions effectively and thoroughly. Evaluation leads to sound, logical, and “best” decision or course of action. • Proposes a solution that is entirely appropriate to the situation at hand. Solutions chosen demonstrate consideration of all of the important and relevant strengths, weaknesses, feasibility, effects, consequences, etc.). Provides rationale for selected alternative or

				decision and builds a solid position with appropriate and relevant supporting evidence. Effectively defends decision or course of action.
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PLO 6: Ethics and Professionalism.

Demonstrating professionalism and ethical decision making

Indicators	Initial	Developing	Developed	Proficient
6.1. Professionalism. Demonstrates behaviors and values that are consistent with the trust given to the profession by patients, other healthcare providers, and society	<ul style="list-style-type: none"> Does not consistently demonstrate professional attitudes and behaviors (altruism, excellence, duty, accountability, honesty, and integrity) Demonstrates frequent lapses in accountability or quality of work 	<ul style="list-style-type: none"> Demonstrates some professional attitudes and behaviors yet there is inconsistency that may impede on the quality of work or treatment of patients and other healthcare team members (altruism, excellence, duty, accountability, honesty, and integrity) 	<ul style="list-style-type: none"> Generally demonstrates most of the professional attitudes and behaviors (altruism, excellence, duty, accountability, honesty, and integrity) that are required in the profession Demonstrates ability to use these behaviors and values to improve healthcare 	<ul style="list-style-type: none"> Consistently demonstrates the professional attitudes and behaviors that uphold the integrity and competence of the work and the treatment of patients and other healthcare team professionals (altruism, excellence, duty, accountability, honesty, and integrity) Consistently uses these behaviors and values to improve healthcare
6.2. Ethics. Demonstrates the ability to make decisions consistent with the values of practitioners and scholars of oral healthcare.	<ul style="list-style-type: none"> Does not make ethical decisions consistent with the values of practitioners and scholars of oral healthcare. 	<ul style="list-style-type: none"> Demonstrates the ability to exercise ethical decision making, and a rudimentary knowledge of ethics within oral healthcare. 	<ul style="list-style-type: none"> Demonstrates the ability to exercise clear and ethical decision making, and a sufficient knowledge of ethics within oral healthcare. 	Demonstrates the ability to exercise clear and ethical decision making, and an advanced knowledge of ethics within oral healthcare.

PLO 7: Biomedical Sciences Knowledge.

Demonstrate an understanding of the fundamentals of biomedical sciences and apply them appropriately in oral healthcare

Indicators	Initial	Developing	Developed	Proficient
7.1. Diagnostic and pharmacologic. Demonstrates the ability to describe how to deliver patient assessments, knowledge of medicines, and delivering diagnoses.	<ul style="list-style-type: none"> Does not demonstrate the ability to describe diagnostic and pharmacologic knowledge related to oral health. 	<ul style="list-style-type: none"> Demonstrates a rudimentary ability to describe diagnostic and pharmacologic knowledge related to oral health. 	<ul style="list-style-type: none"> Demonstrates a sufficient ability to describe diagnostic and pharmacologic knowledge related to oral health. 	<ul style="list-style-type: none"> Demonstrates an advanced ability to describe diagnostic and pharmacologic knowledge related to oral health.
7.2. Orofacial pain/temporomandibular/ Sleep disorder. Demonstrates the ability to describe the anatomical, physiological, and neurological basis; classification, epidemiology, and etiology; and assessments and treatments of orofacial pain, temporomandibular joint disease, and sleep disorders.	<ul style="list-style-type: none"> Does not demonstrate the ability to describe scientific or assessment knowledge related to OFP/TMJ disease and sleep disorders. 	<ul style="list-style-type: none"> Demonstrates a rudimentary ability to describe scientific or assessment knowledge related to OFP/TMJ disease and sleep disorders. 	<ul style="list-style-type: none"> Demonstrates a sufficient ability to describe scientific or assessment knowledge related to OFP/TMJ disease and sleep disorders. 	<ul style="list-style-type: none"> Demonstrates an advanced ability to describe scientific or assessment knowledge related to OFP/TMJ disease and sleep disorders.
7.3. Maxillofacial pathology Demonstrates the ability to describe the scientific aspects of head and neck diseases, as well as knowledge of assessment and diagnosis.	<ul style="list-style-type: none"> Does not demonstrate the ability to describe the scientific or assessment knowledge related to head and neck diseases. 	<ul style="list-style-type: none"> Demonstrates a rudimentary ability to describe the scientific or assessment knowledge related to head and neck diseases. 	<ul style="list-style-type: none"> Demonstrates a sufficient ability to describe the scientific or assessment knowledge related to head and neck diseases. 	<ul style="list-style-type: none"> Demonstrates an advanced ability to describe the scientific or assessment knowledge related to head and neck diseases.

PLO 8: Practice Management.

Apply legal, regulatory, and business management concepts related to the provision of oral healthcare services

Indicators	Initial	Developing	Developed	Proficient
8.1. Legal aspects Applies legal and regulatory concepts related to the provision of oral healthcare services.	<ul style="list-style-type: none"> Does not demonstrate an understanding or the ability to apply legal and regulatory concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates a rudimentary understanding and ability to apply legal and regulatory concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates a sound understanding and ability to apply legal and regulatory concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates an advanced understanding and ability to apply legal and regulatory concepts related to the provision of oral healthcare sciences.
8.2. Business management Applies business management concepts to the provision of oral healthcare services.	<ul style="list-style-type: none"> Does not demonstrate an understanding or the ability to apply business management concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates a rudimentary understanding and ability to apply business management concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates a sound understanding and ability to apply business management concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates an advanced understanding and ability to apply business management concepts related to the provision of oral healthcare sciences.



CNUCDM Graduation Competencies

The CNUCDM DMD graduate will:

1. Demonstrate patient interaction that provides able and personable communication with the patient that addresses all clinical issues and addresses concerns in an empathetic and culturally aware fashion
2. Provide verbal and written patient presentation that demonstrates the ability to present key findings and organize them in a fashion to make appropriate care decisions.
3. Utilize all pertinent biomedical knowledge to influence and optimize the care of the patient
4. Apply knowledge with critical thinking developed in the care of patients across all pertinent multiple domains.
5. Demonstrate the ability to comfortably apply clinical skills for dental procedures in a fashion that promotes the continued development of skills, patient confidence, and consideration for applying more advanced skills when needed.
6. Apply the tenets of ethical behavior and professionalism with exemplary leadership empathy, clinical behavioral understanding customized to the patient's needs.
7. Integrate all aspects of the practice management, systems-based practice, legal and regulatory requirements of practice and consistently applies this knowledge as a skill in clinical practice.

(Note each of these is measured in the Competency Evaluation grading rubrics for clinical competencies with the following titles in Appendix 2-24 competency evaluation general rubric for clinical dentistry CE as follows)

Patient interaction
Patient presentation
Application of biomedical knowledge
Critical thinking
Clinical skills

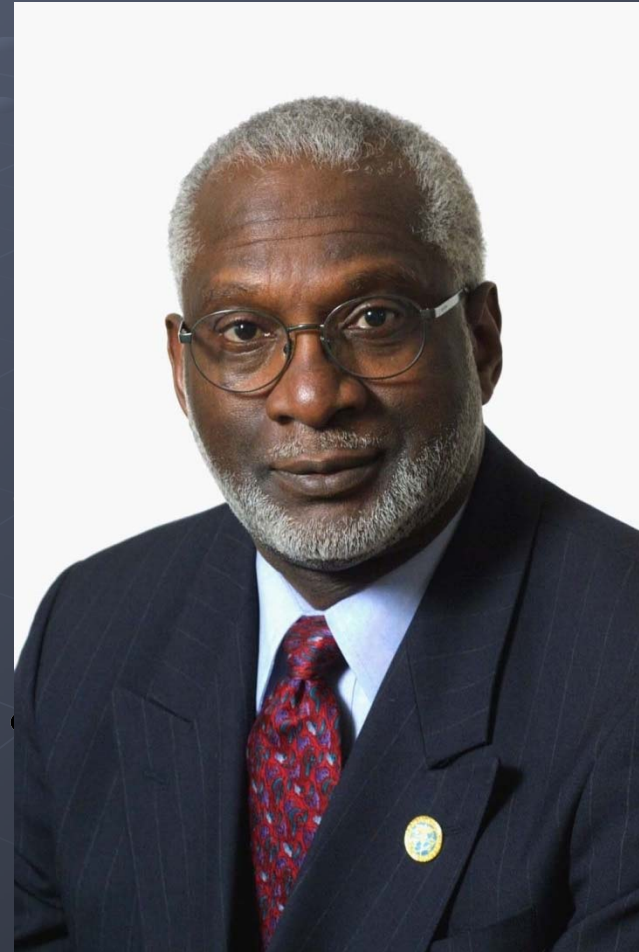
Ethical behavior/ professionalism
Practice management/systems based practice/ Legal regulatory

Odontogenic Infections and Exodontia in dental practice Calibration of CNU protocols

Leon A. Assael DMD

What is the status of oral health in America? David Satcher MD

- a “silent epidemic” of dental and oral diseases is affecting some population groups. This burden of disease restricts activities in school, work, and home, and often significantly diminishes the quality of life. Those who suffer the worst oral health are found among the poor of all ages, with poor children and poor older Americans particularly vulnerable. Members of racial and ethnic minority groups also experience a disproportionate level of oral health problems. Individuals who are medically compromised or who have disabilities are at greater risk for oral diseases, and, in turn, oral diseases further jeopardize their health.



Burden of Oral Disease in US

- Dental caries, >50% of preschoolers and 280 million americans
- Periodontal disease: active in >50%
- Oral cancer: 30,000 new cases per year with 40% five year survival
- Cleft lip and palate: 1/600 births
- Temporomandibular disorders: 30-40% of adult population

Evaluation of the patient with odontalgia

- History
- What is VAS pain scale
- How long
- What qualities
- What relieves pain
- What worsens pain
- Fever, malaise, loss of PO intake

Recent cases

Infection

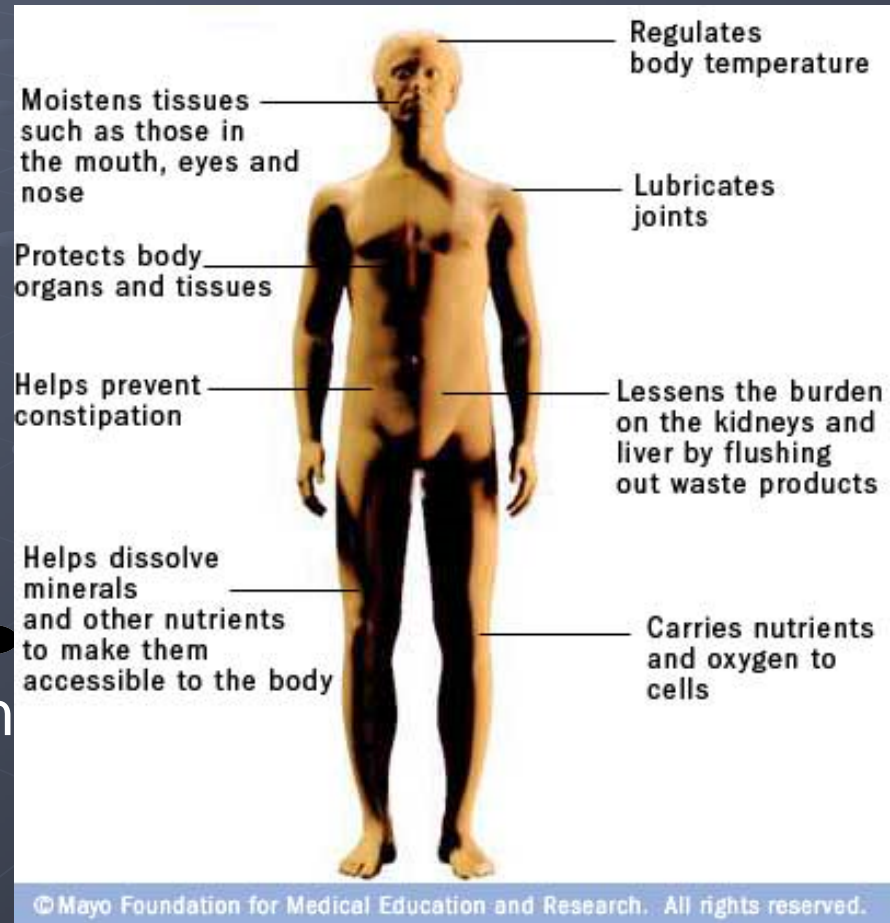
- 32 year old man with infected #31 extracted, neck swelling postoperatively
- Place on oral antibiotic
- Drainage from socket
- Fever, sepsis
- Hospitalization
- Mediastinitis
- Death

Bleeding

- Full mouth extraction 52 yr old
- Undiagnosed/not worked up Hepatitis C
- Postoperative bleeding
- Eventual INR of 10
- Bleeding continues
- GI bleed
- Stroke
- Death

dehydration

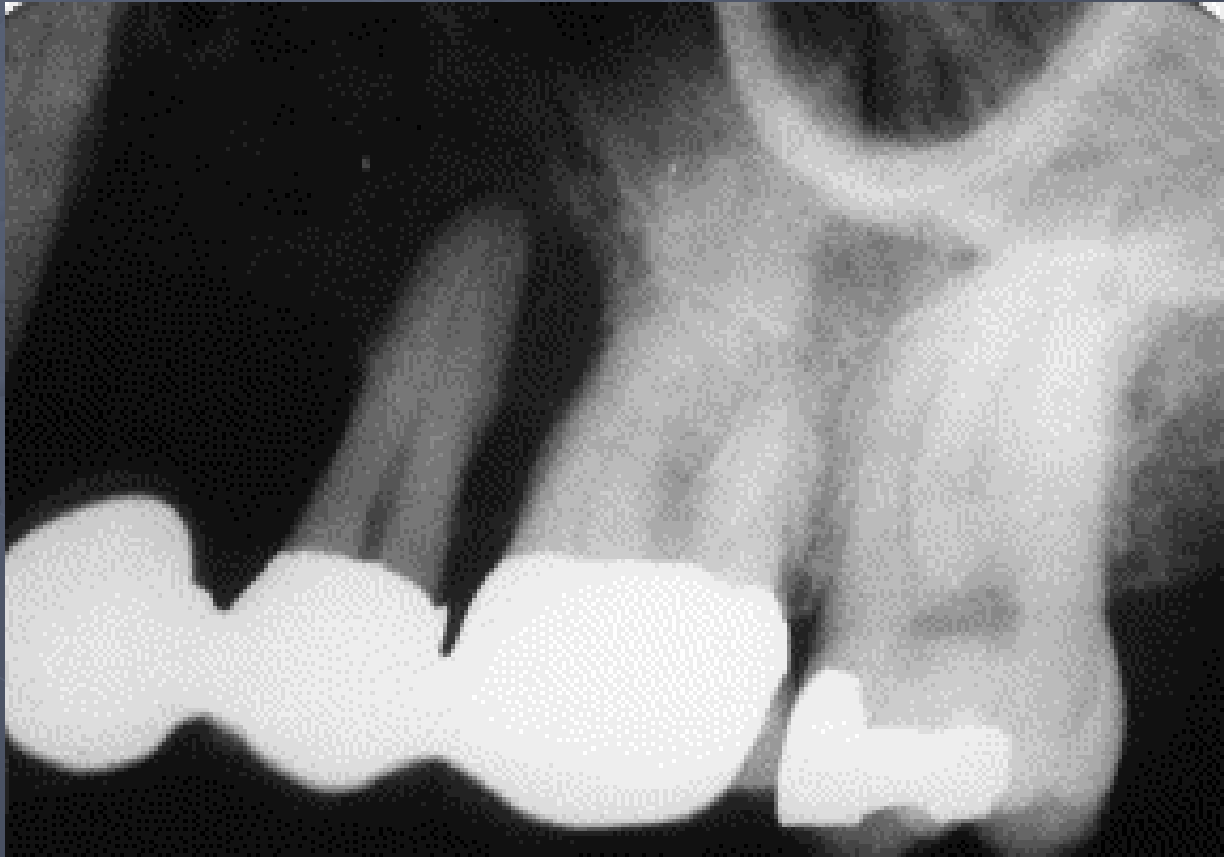
- Less than 2 liters intake per day
- Heat, no air conditioning
- Fever
- Xerostomia
- Dark low volume urine
- Tachycardia, hypotension



Differential diagnosis of odontalgia

- Caries
- Periodontal disease
- Sinusitis
- Bells palsy
- Other herpetic or nonherpetic virus
- Neuralgia
- Myogenous Pain
- Vascular pain/headache

Be suspicious of atypical
appearance

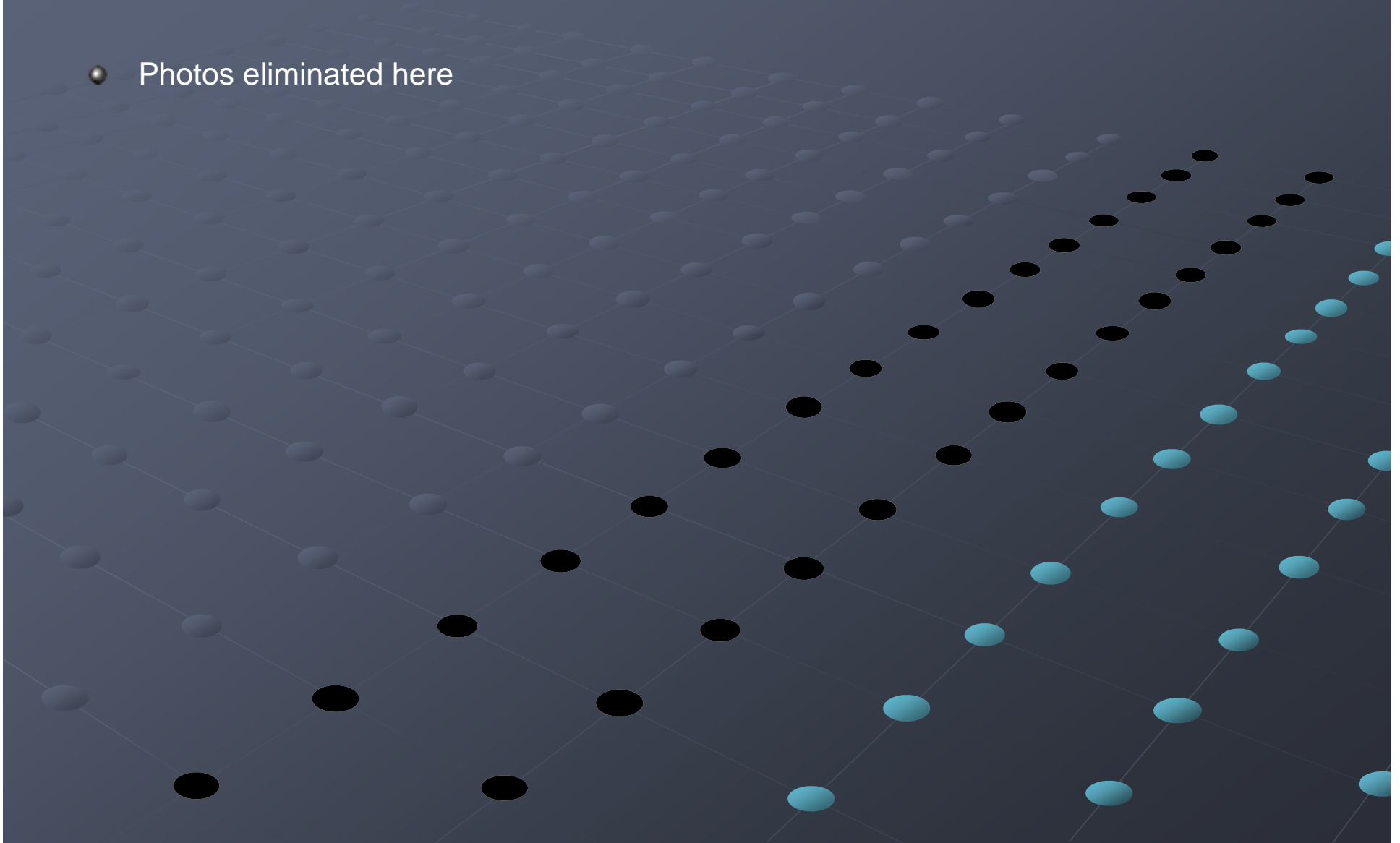


Exam in odontalgia

- Rubor
- Dolor
- Calor
- Tumor
- Vital signs
- Tenderness
- Swelling
- Trismus
- Dysphonia
- Dysphagia
- Dyspnea
- Eye signs

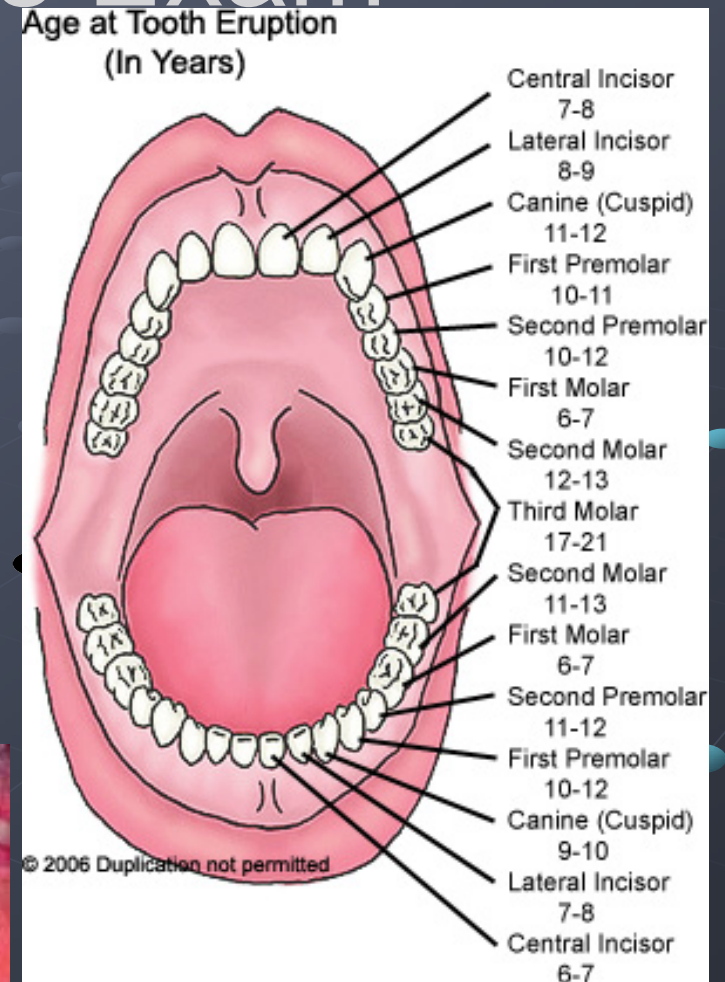
Thorough head and neck exam

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Dental/Osseous Exam

- Inspection
- Palpation
- Percussion
- Fetor

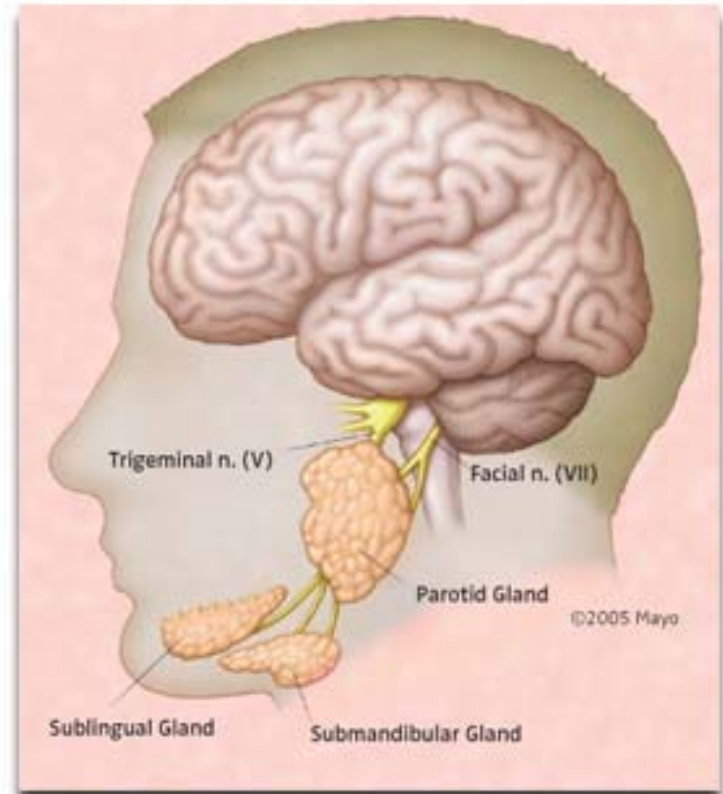




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Salivary Gland Exam

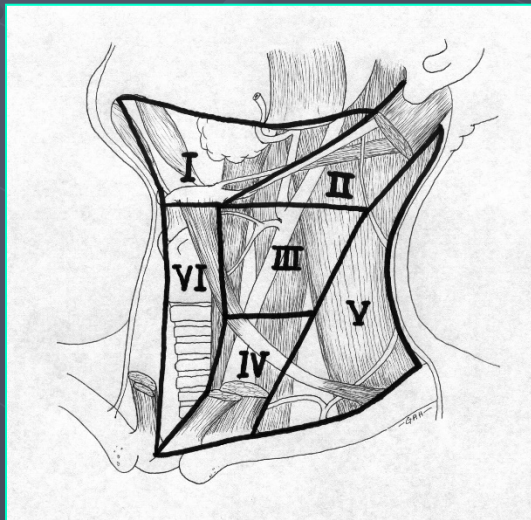
- Submandibular gland and duct
- Sublingual gland and duct
- Parotid Gland and duct
- Palpate for masses and assess flow should be clear and easily expressed



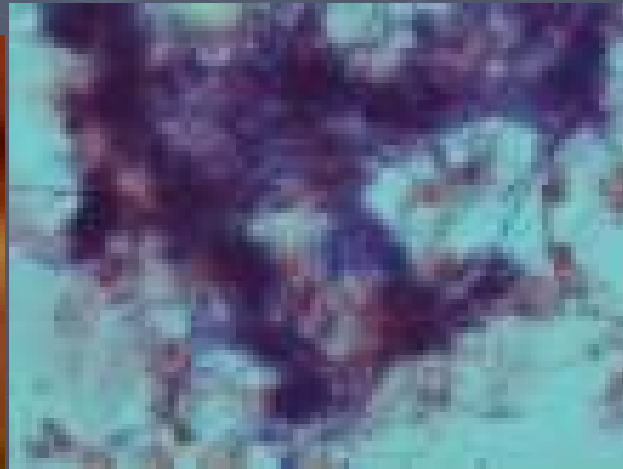
Neck Exam

- Lymph nodes
- Submandibular gland
- Trachea
- Thyroid
- Carotids

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Dental Caries

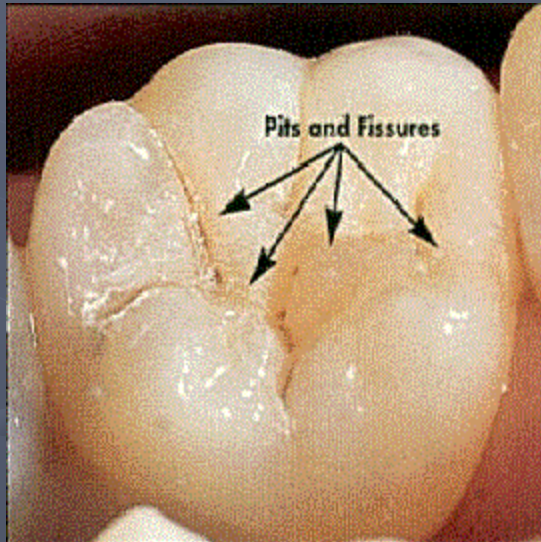


Caries, an infectious disease

- 70-90% of children by the second grade
- Over 1 million lost school days each year due to odontalgia
- Developing pain behavior/subsequent drug use?
- The MOST common unmet health need



Pit and Fissure vs. Smooth Surface Caries



Early childhood (milkbottle) caries

- Diet
- Hygiene
- Exposure to pathogens
- Fluoride dose
- Vitamin D dose
- Aluminum and heavy metal exp.

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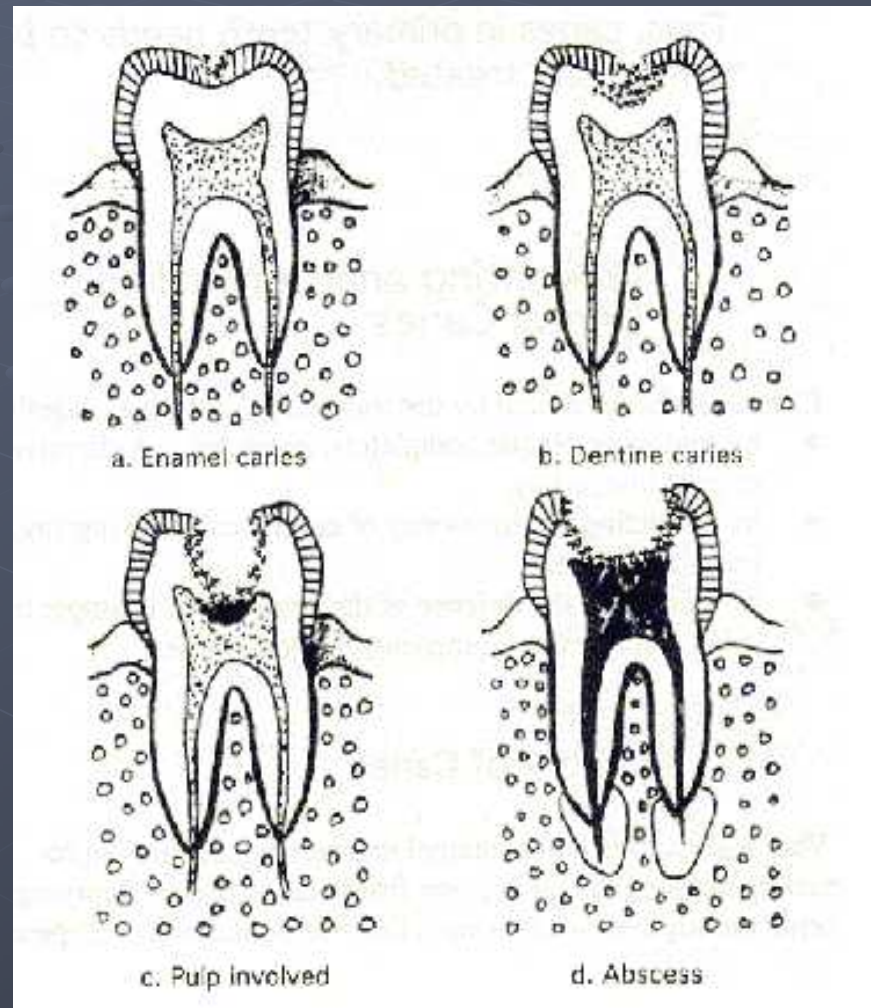


Meth mouth



- Smooth surface rapidly advancing caries associated with Methamphetamine use
- Xerostomia, immunosuppression, diet
- Psychosocial aspects of addiction

Stages of Caries



Swelling

- How much
- Where
- Changes over how many hours/days
- Look for secondary findings especially difficulty handling secretions, “grandpa sitting in the chair posture”
- Assess fever, hydration

Assessing swelling



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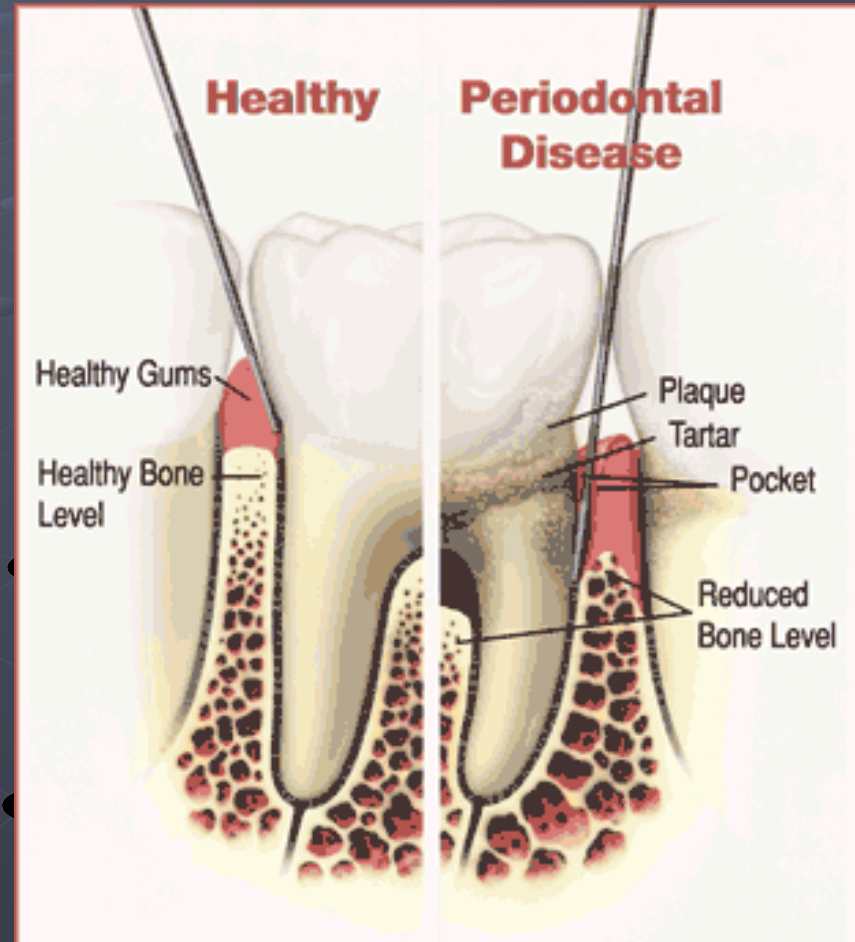
Caries and head and neck infection

- Catastrophic potential
 - Airway obstruction
 - Sepsis
 - Necrotizing fasciitis
 - Cavernous sinus thrombosis

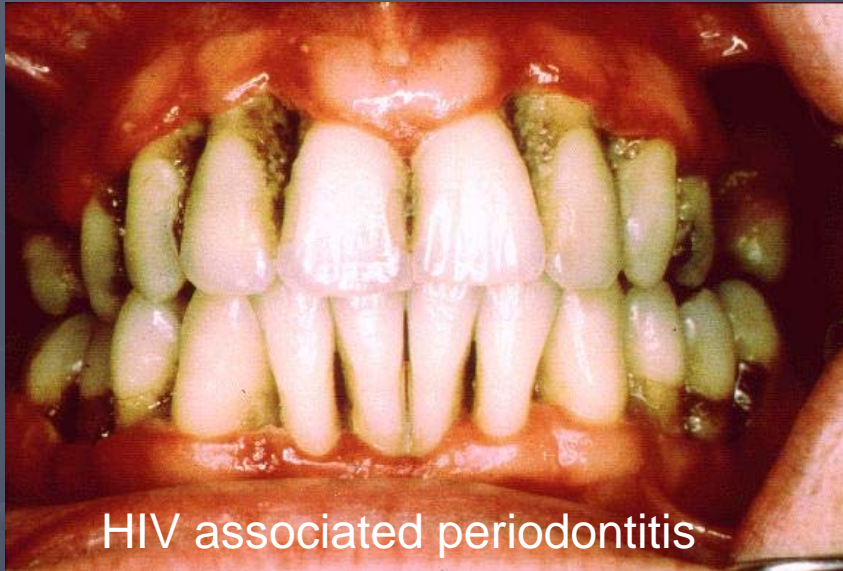
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Periodontal Disease

- Most common oral disease
- Mixed anaerobic infection
- Most common reason for tooth loss
- Linked to systemic disease especially atherosclerotic diseases



Some Systemic causes of Rapid progression of PD



- HIV
- Cigarettes
- Osteopenia
- Osteomalacia/rickets
- Scurvy
- Betel nuts
- Leukemia

Medical or surgical management of Abscess?

● Medical

- Patient not medically fit for procedure
- Needs STAT referral due to complexity
- Tooth will be opened and saved

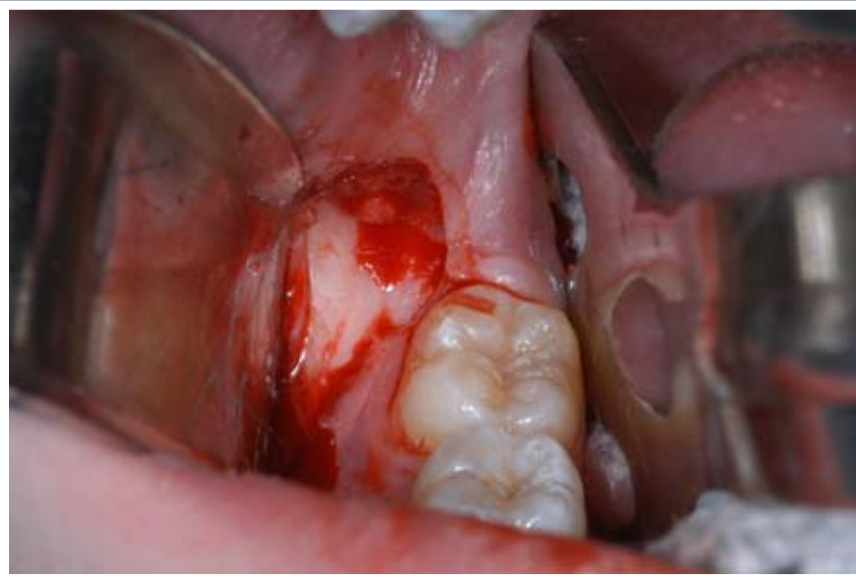
● Surgical

- Never let the sun set on undrained pus!
- Only vestibular drainage is done properly in the office
- Exodontia if the tooth can be extracted without significant surgical trauma e.g.
- Elevator and forceps!

NOT third molars:
too much anticipated trauma



Eliminate pericoronitis BEFORE extraction



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Management

- Osseous injuries

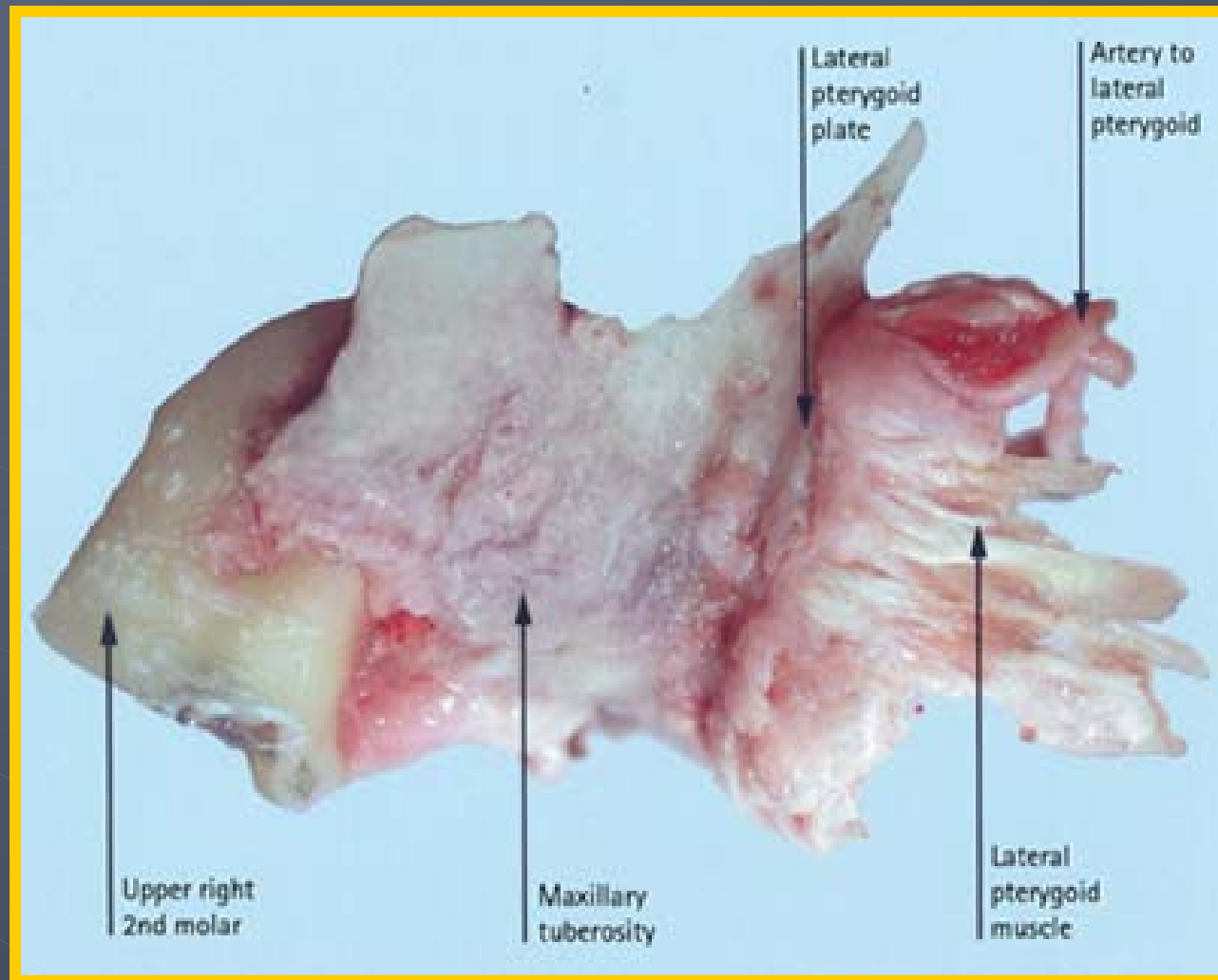
- Management – multiple, dictated by specific problem

- Tooth – bone removed together with tooth

- If clean morselize and replace

- Fracture of tuberosity

- Reposition and restore contour



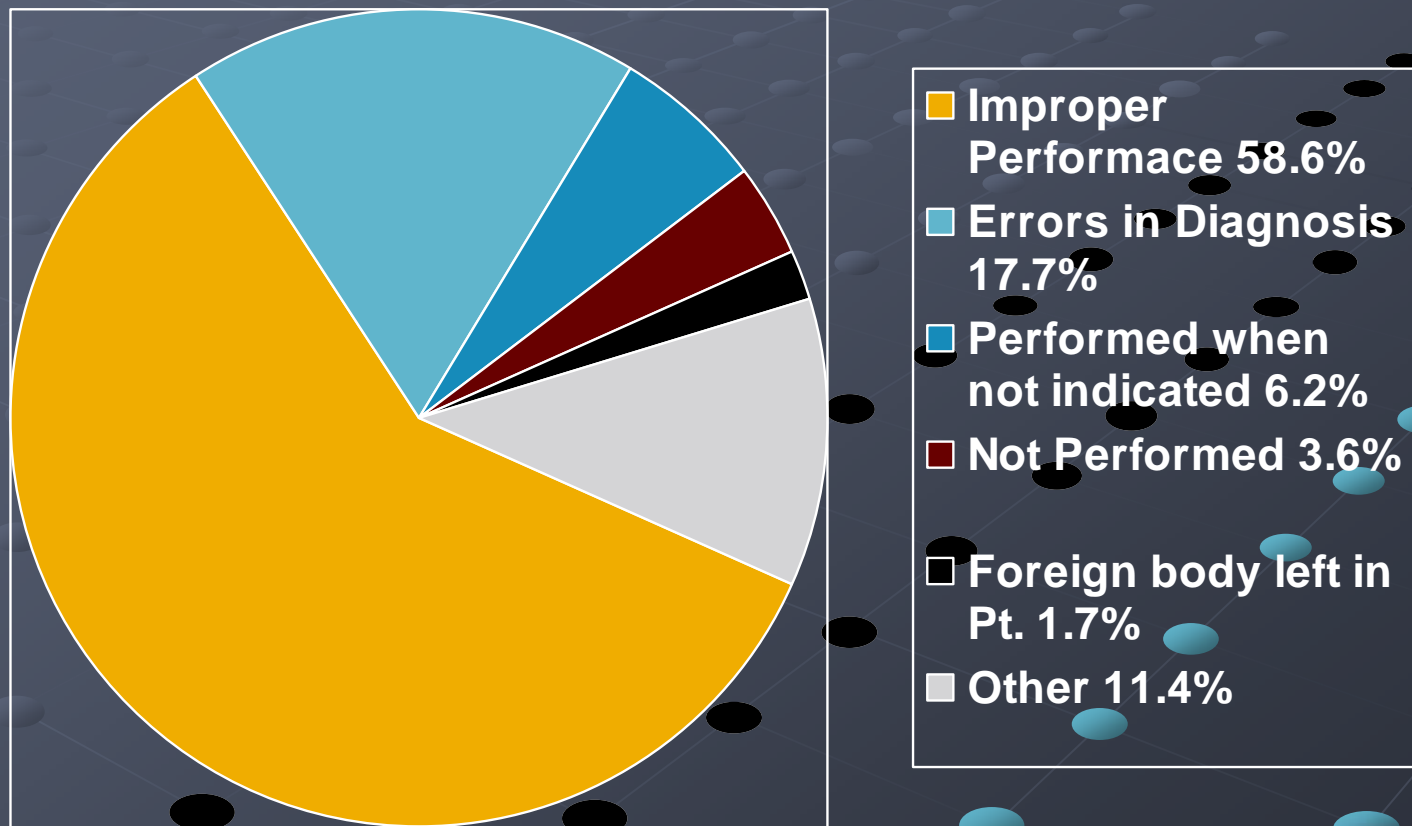
Oro-antral communication

- Preventive – preoperative evaluation
 - Root – sinus relation
 - History of pre-existing sinus disease
- Diagnosis
 - Look and listen
 - Nose blow test NOT generally recommended
- Sequelae
 - Oro-antral (O-A) fistula
 - Acute to chronic sinusitis

Oro-Antral Communication Treatment

- Small hole, less than 3 mm.
 - Obturation with bone, suture
- Medium size
 - Obturation with bone, gelfoam, primary closure
- Large
 - Flap surgery

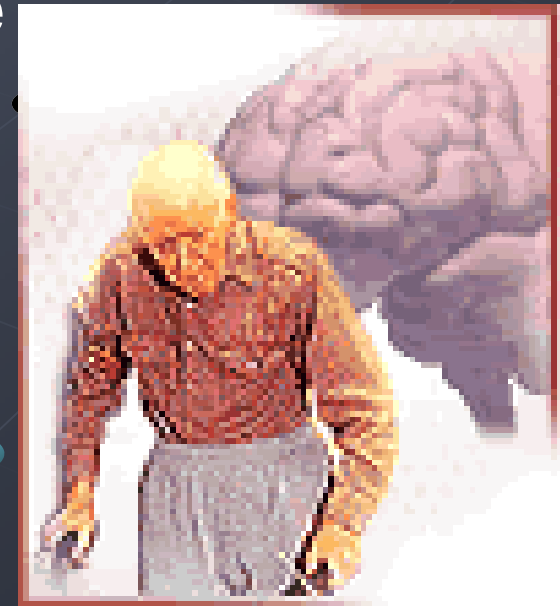
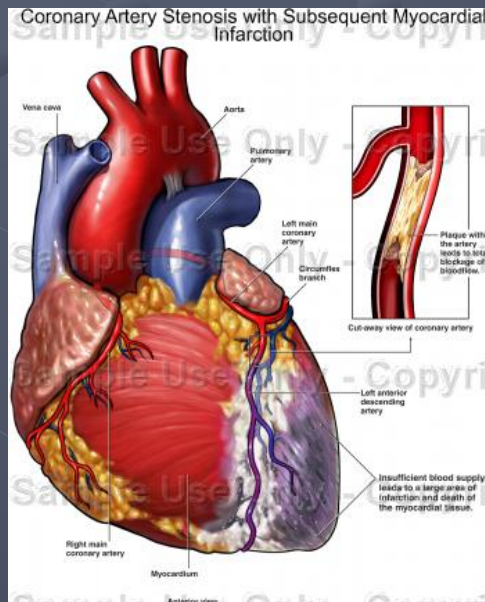
Most Prevalent Dental Misadventures



Pregnancy, Aging and other complicating factors

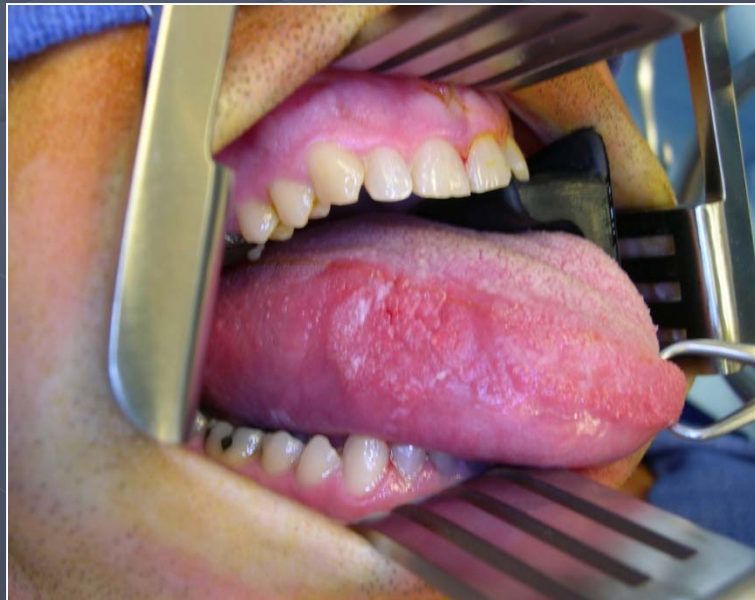
Photos eliminated here

- Premature low birth weight babies
- Myocardial Infarction
- Senile dementia
- Stroke



Always Consider other pathology: all uninitiated HCP's e.g. physicians will think this is an infections

- SCC dx Nearly all by dental professionals
- Most likely dental hygienest
- None by physicians



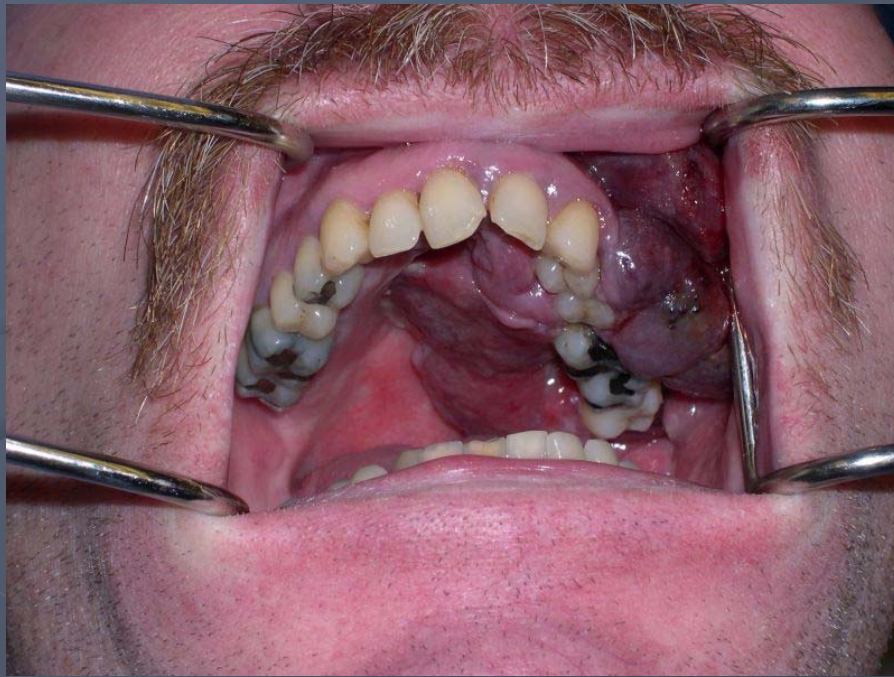
The mouth is a mirror

- A thorough oral examination can detect signs of nutritional deficiencies as well as a number of systemic diseases, including microbial infections, immune disorders, injuries, and some cancers. Indeed, the phrase *the mouth is a mirror* has been used to illustrate the wealth of information that can be derived from examining oral tissues.



Systemic disease in oral cavity

Extranodal B cell lymphoma



Graft v. Host



Antibiotic Considerations in the Dental Surgery Patient



Antibiotic Considerations

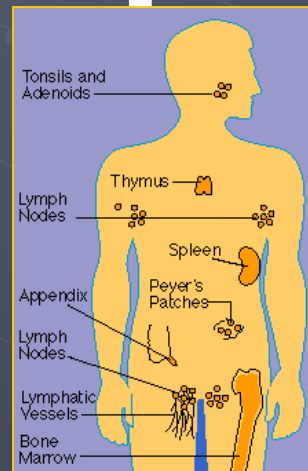
Antibiotics



Surgery



Immune
System



Antibiotic Considerations

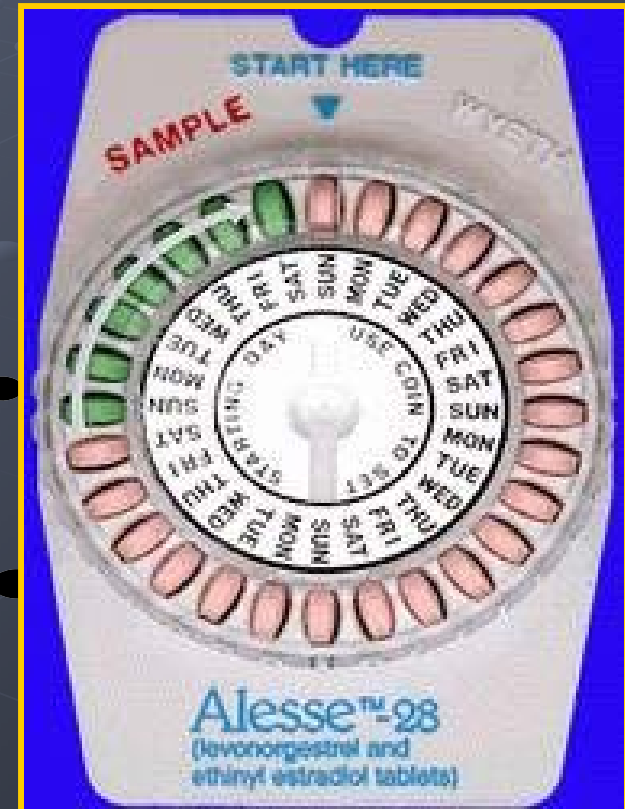
- Oral Contraceptives
- Antibiotic Failures
- Antibiotic Theory
- Antibiotic Prophylaxis
- Immunocompromised Patients & Antibiotics
- Pregnancy & Antibiotics



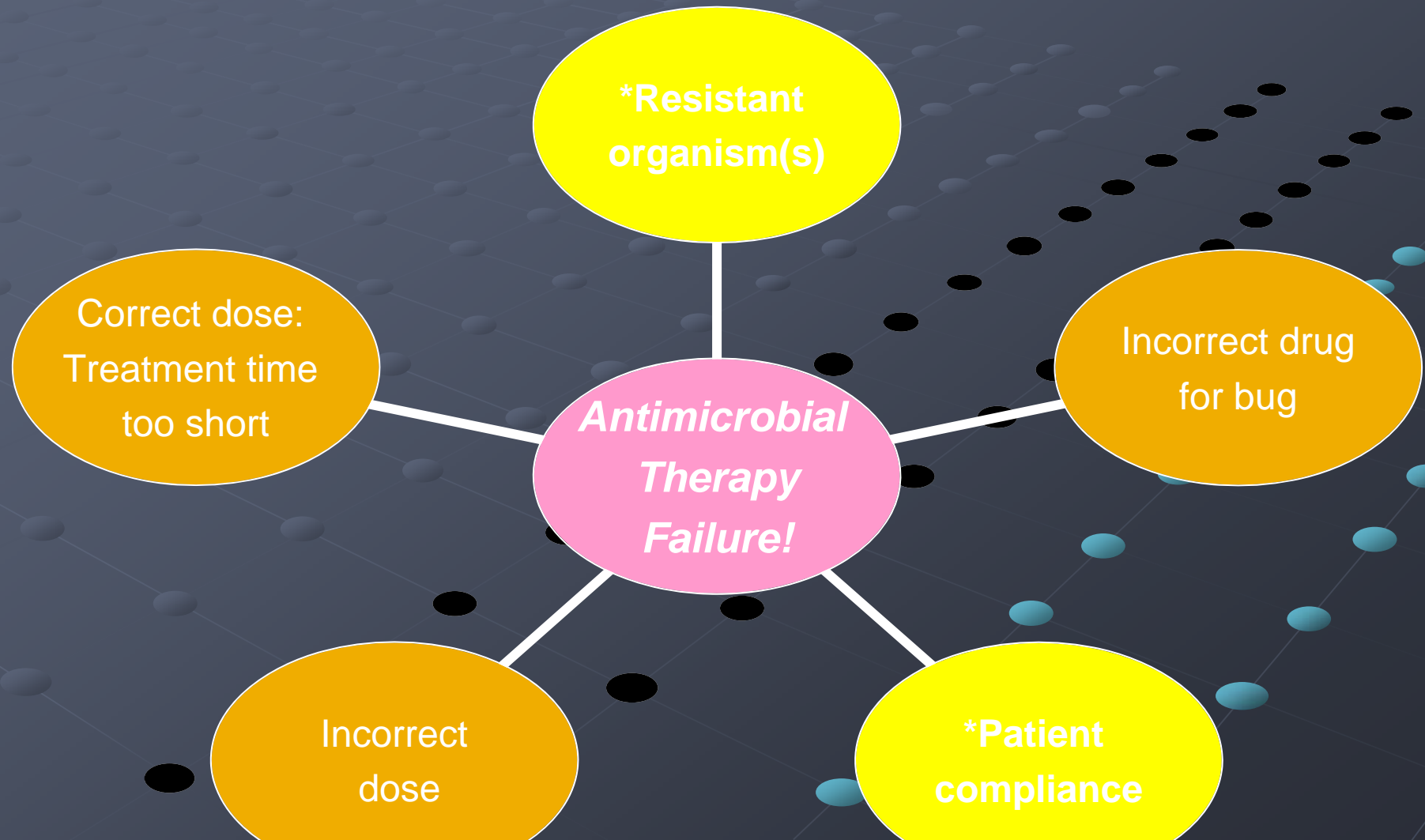
Antibiotic Considerations

● Oral contraceptives

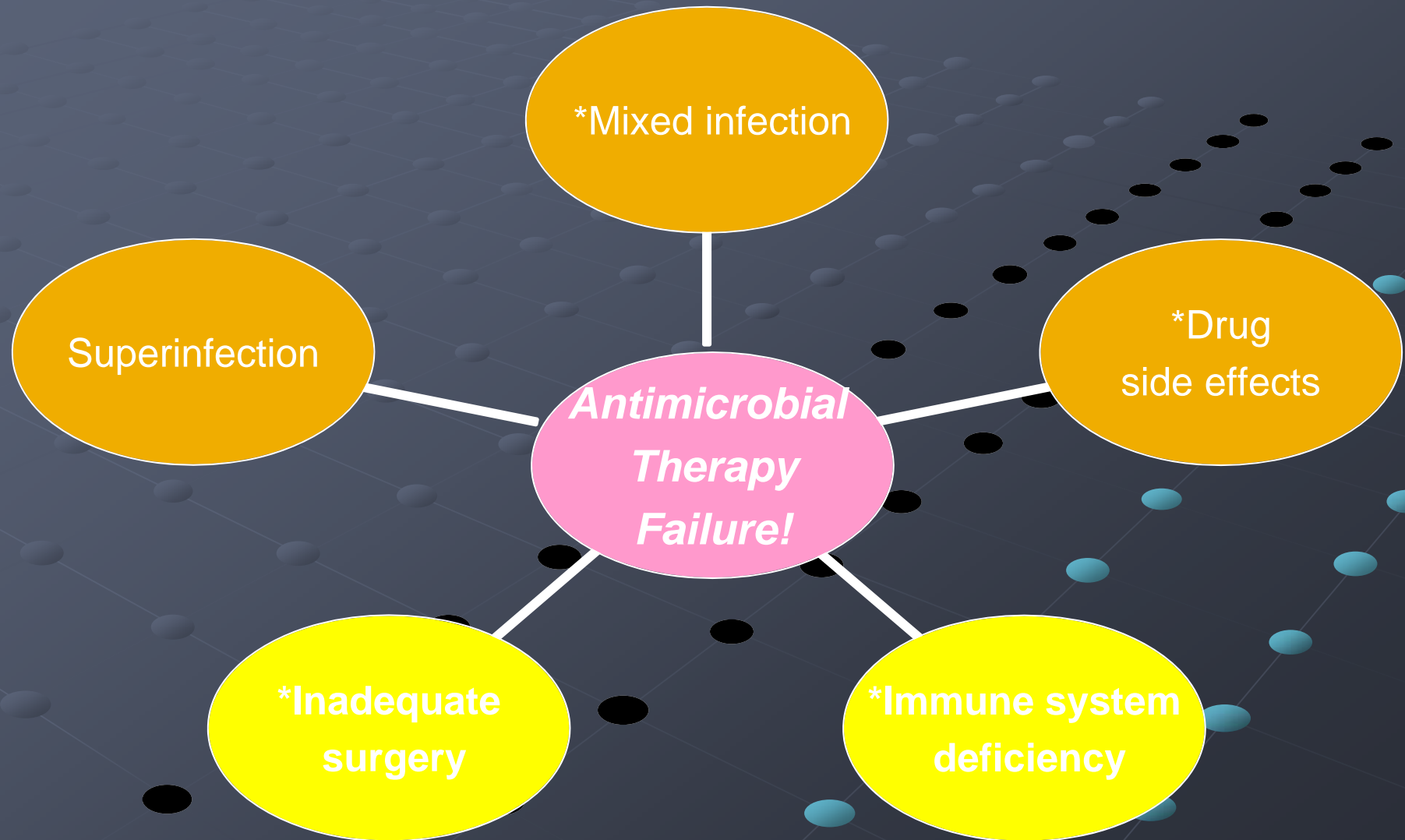
- >99% effective if used properly
- Contraceptive failure (? due to antibiotic killing bacteria needed for proper birth control pill absorption)
- Ampicillin, Tetracycline, Penicillin, Flagyl, Erythromycin have case reports



Antibiotic Considerations



Antibiotic Considerations



Antibiotic Considerations

<u>Bactericidal</u> Antibiotics	<u>Bacteriostatic</u> Antibiotics
Penicillin(s)	*Clindamycin
Cephalosporin(s)	Tetracycline(s)
Metronidazole	Erythromycin
Vancomycin	Clarithromycin
Aminoglycosides	Azithromycin
Ciprofloxacin	Sulfa

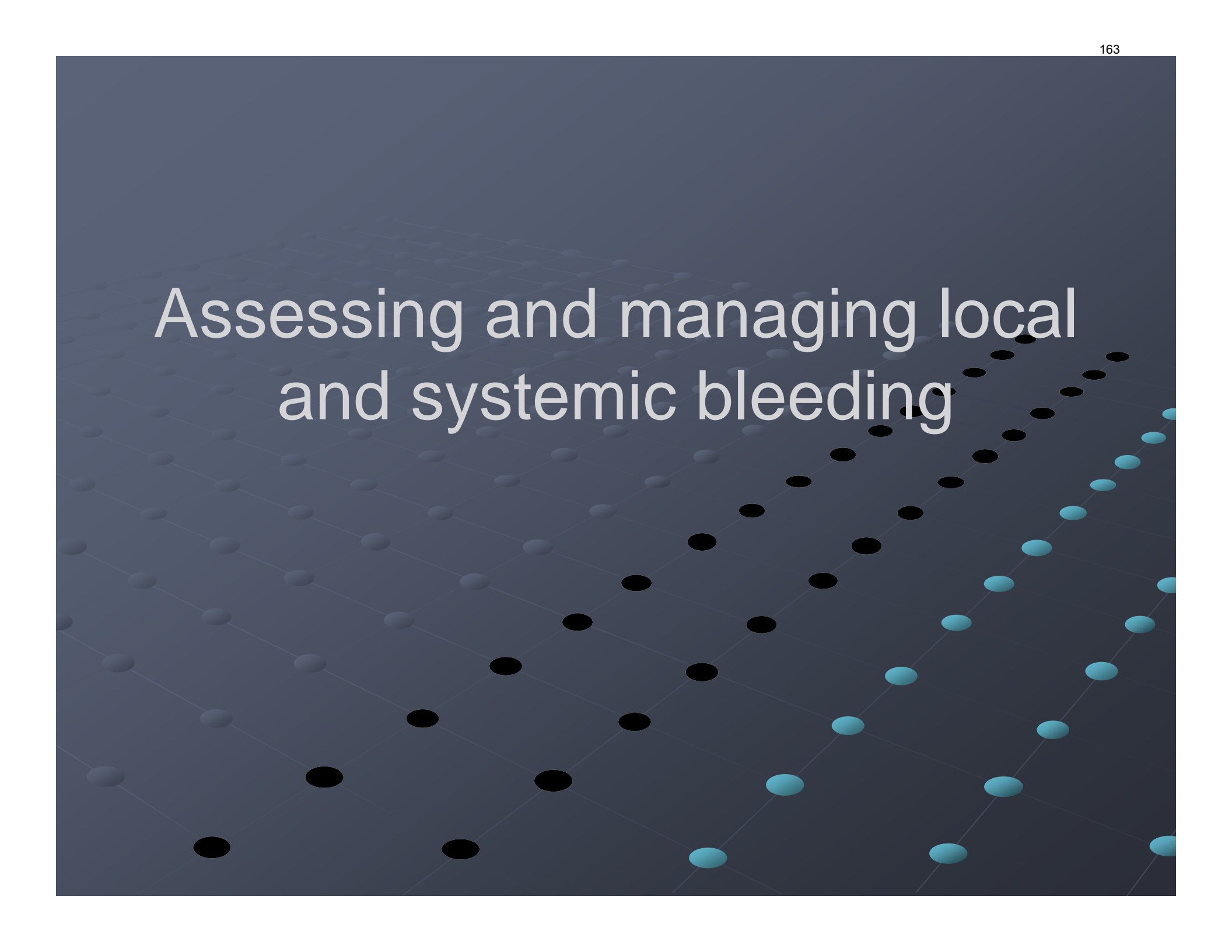
Odontogenic Infection

- Pen VK 500 mg qid for 7 days
- Clindamycin 300 mg. Tid
- LESS EFFECTIVE AT MORE THAN 10 TIMES THE COST

Antibiotic Considerations

Antibiotic Use During Pregnancy and Breast Feeding				
Drug	FDA Cat.	Pregnancy	Risk	Breast Feeding
Penicillin	B	Yes		Yes
Erythromycin	B	Yes (avoid estolate)		Yes
Cephalosporin	B	Yes		Yes
Tetracycline	D	Avoid	Tooth discoloration Inhibits bone formation	Avoid
Flagyl	B	?	Carcinogenic?	?
Clindamycin	B	Yes		Yes (?)

Assessing and managing local and systemic bleeding

The background of the slide is a dark blue-grey color. It features a faint, light-grey grid pattern. Overlaid on this grid are numerous small, semi-transparent dots. The dots are primarily grey, but there are also black dots and a diagonal line of teal dots that runs from the bottom right towards the center of the slide.

Local Factors

- Blood Supply
 - Anatomy
 - Pre-existing disease
 - Infection
 - Injury
 - Tumor/vascular malformation
- Mean Wound Blood Pressure
 - Patient position
- Vasodilation/vasoconstriction
 - (e.g. xylocaine, epinephrine)
- Tamponade
- Patient Compliance

Systemic Factors

- Mean Systemic Blood Pressure
- Platelets, number and function
- Clotting factor function
 - Anticoagulant drugs
- Clotting factor amounts
- Liver function
- Tissue/serum PH
- Body temperature
- Medications
- Diet

Prevention

Assessing Risk of Bleeding

- What procedure
- What illnesses/history
- What Drugs
- Assess organ function

What procedure

- If extractions how many?
- Is it a “closed space” procedure?
- “open space” procedures, will it ooze?
- Full mouth extraction =250-500cc,. Blood loss
- Floor of mouth, infratemporal fossae bleeding can be extensive
- E.g. Open extraction sockets

What Illnesses/ medical history

- History of bleeding after surgery
- Easy bruising
- Heavy menses
- Anemia/pancytopenia
Fatigue/asthenia
- Drug abuse
- Liver disease
- ?undetected von willebrands
- Collagen diseases
- Thrombocytopenia
- Iron deficiency, hemolytic anemias
- Bone marrow supp.
- Vit K dependent factor depletion

Occult bleeding disorders

- Von Willebrands Disease
- Idiopathic thrombocytopenic purpura:
Cyclical thrombocytopenia
- Occult Salicilate use: herbs
- Mild hemophilias

What Drugs

- Aspirin
 - 20-25% increase
- Lovenox
 - No increase in bleeding
- Coumadin
 - Generally acceptable in therapeutic range, reduce if low risk for thromboembolic event, assess risk of consumptive coagulopathy
 - More elevation of INR with antibiotics!

Drugs (cont)

- Antibiotics enhance absorption of coumadin and will raise INR!
- Consumptive coagulopathy will occur if existing clotting factors are depleted by the surgical insult, worsened by fever and infection.

Drugs (cont)

- Patients on coumadin with high risk for thromboembolic catastrophe include
 - Peripheral vascular disease,
 - lost leg
 - Atrial fibrillation,
 - stroke
 - History of pulmonary embolism,
 - fatal lung embolism

Assess organ/clotting function

- Prothrombin time/INR
- Bleeding time
- LFT's
- CBC with platelets

Primary and Secondary Hemostasis

● Primary Hemostasis

- “Platelet plug”
- Minutes to hours

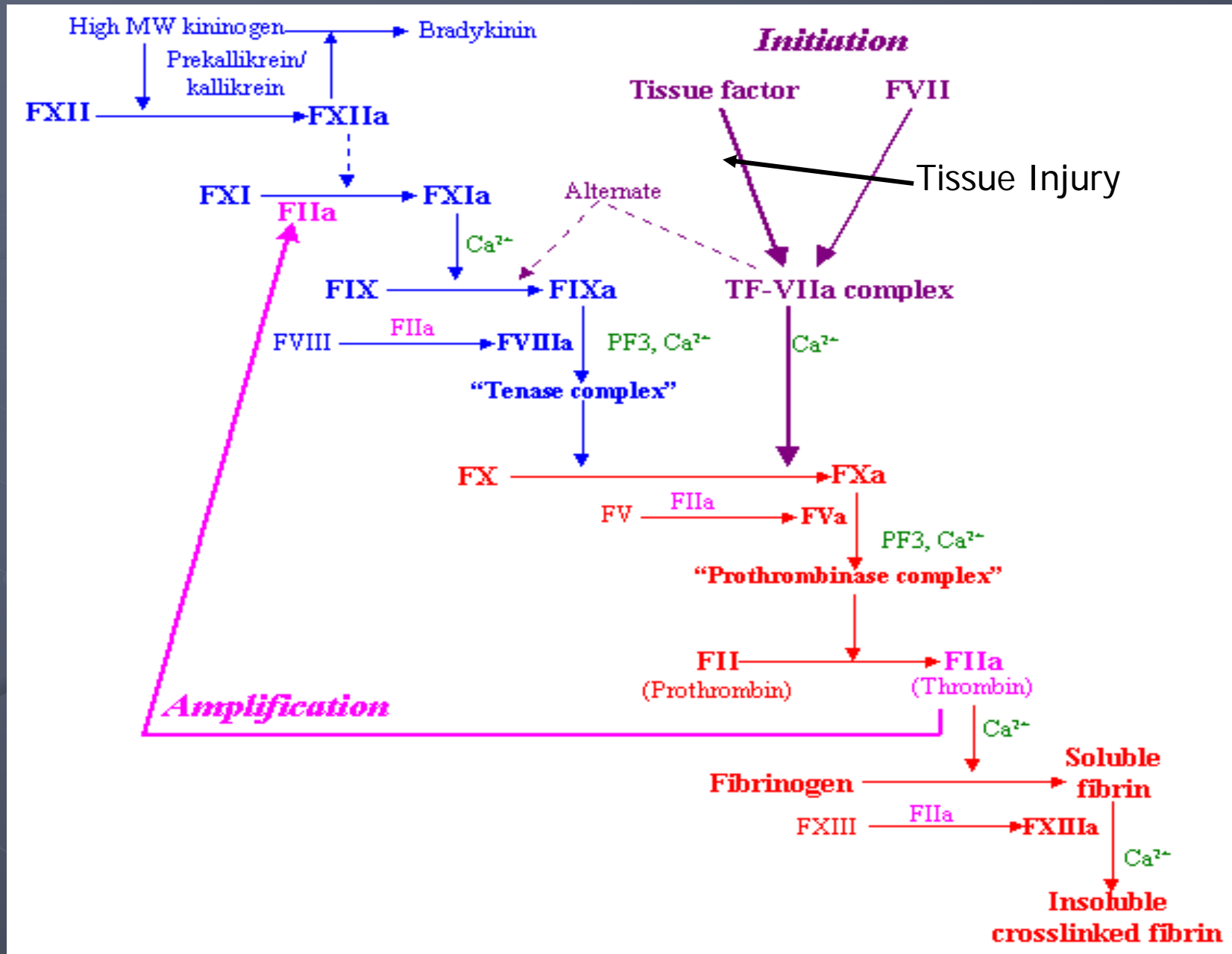
● Secondary Hemostasis

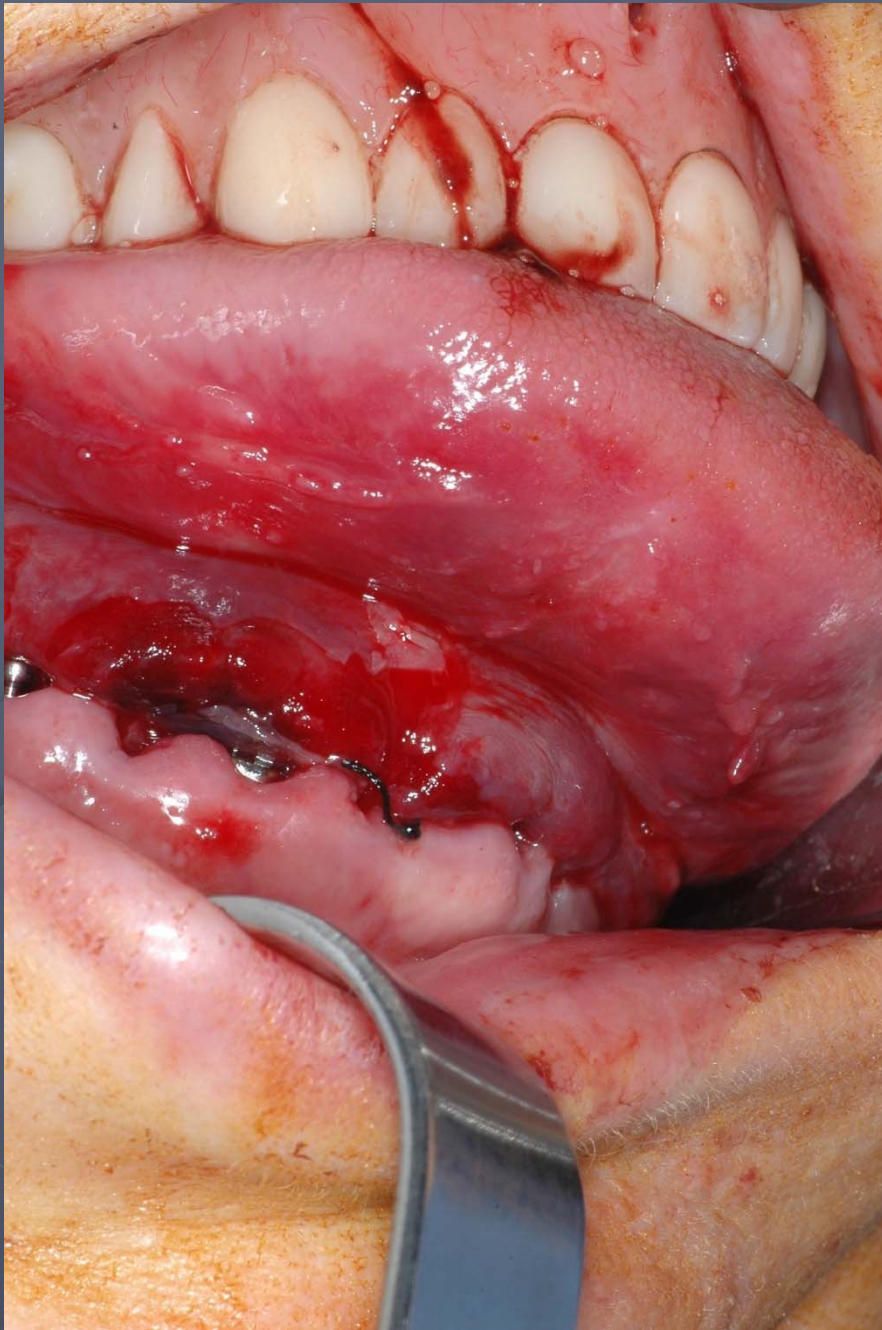
- “coagulation cascade”
- Hours to days
- Formation of fibrin

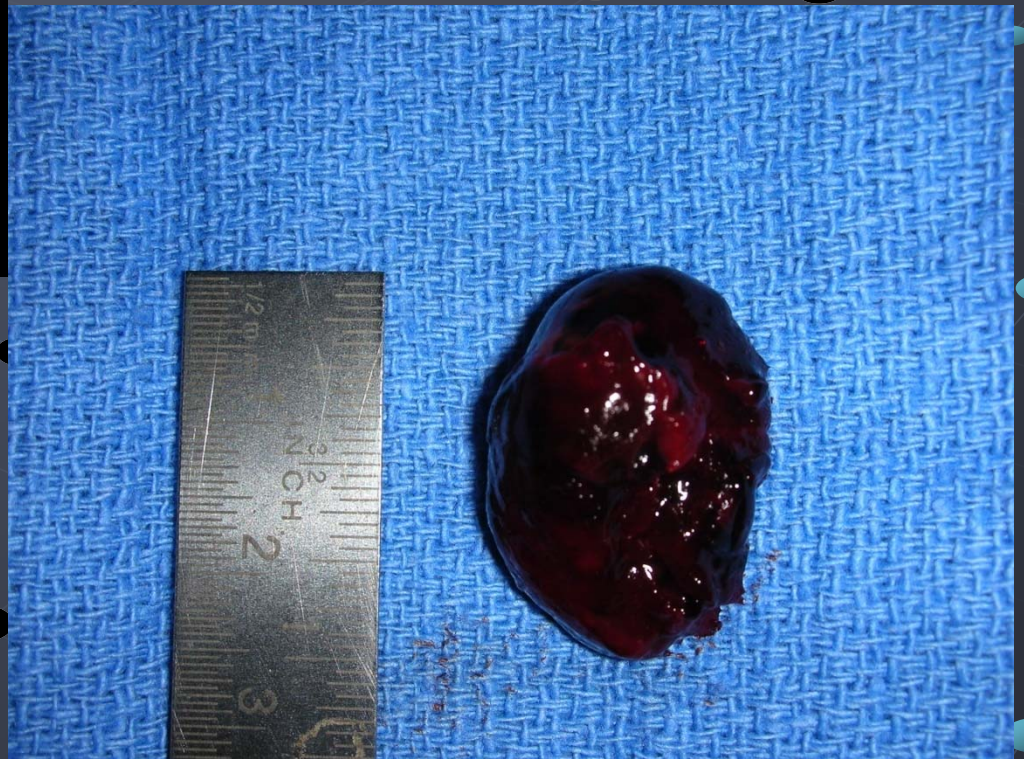
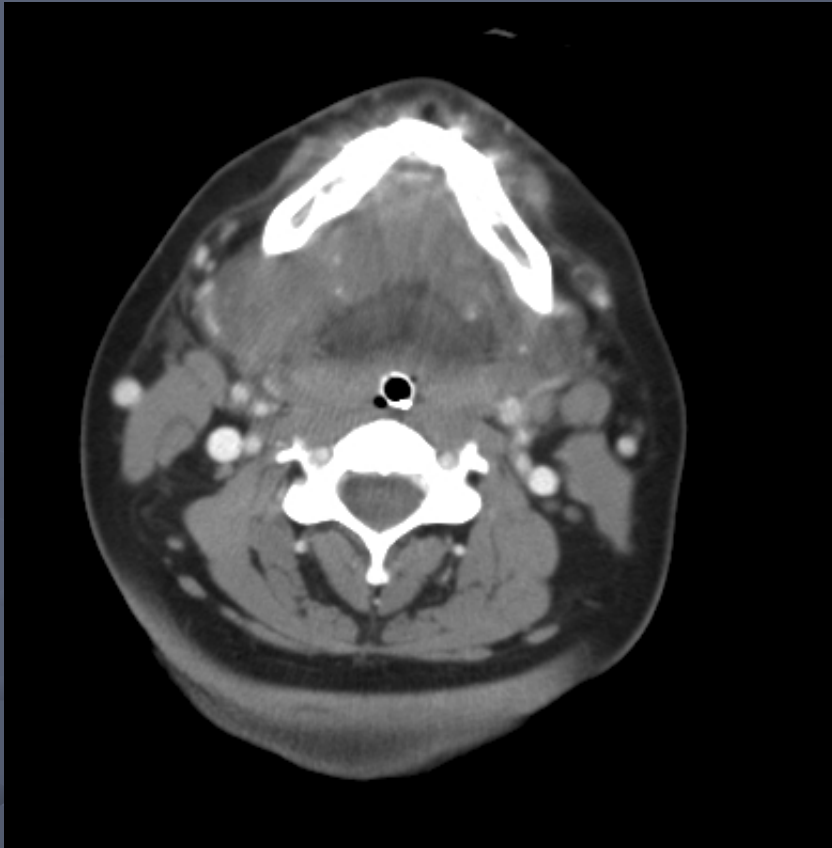
Primary Hemostasis

- Collagen exposed at injury site
- Platelets adhere to collagen
 - Vessel spasm
- von Willebrand's factor released
- Platelet aggregation
- Platelet plug stabilized
 - Fibrin

Secondary Hemostasis: The coagulation cascade









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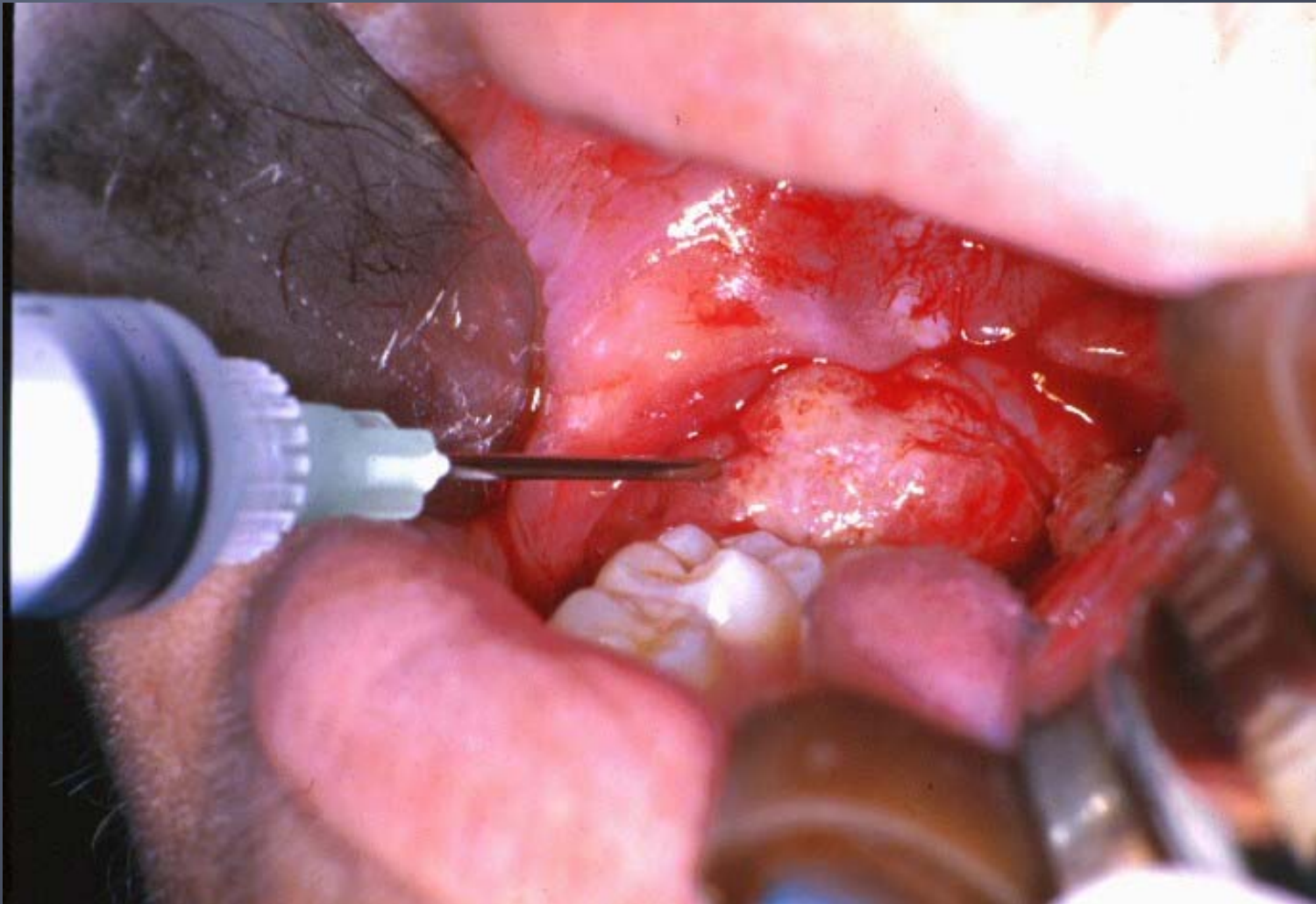
Vascular lesions of the jaws

● Neoplasms

- Hemangiomas
- Hemangiopericytoma, hemangioendothelioma
- Giant Cell/aneurysmal bone cyst

● Hemartomas

- Venous
- Mixed
- Arterial







Photos eliminated here

Secondary Bleeding

● SEE PATIENT!

- Identify source/site
- Anesthetize area – blocks preferred
 - Crush – bone
 - Clamp & tie
 - Pack
 - Suture – “stick tie”



Photos eliminated here

Local hemostatic tools

- Gelfoam
- Surgicel
- Topical Thrombin
- Avitene
- Collacoat
- Bone wax
- Cyanoacrylate glue

Other local measures

- Amicar
- Fibrin glue
- Platelet rich plasma (PRP)

Local Hemostasis Tools

	Disorder	Rationale	Tool
Coumadin therapy	INR, secon hemostasis	Bypass clot cascade	Topical thrombin
Thrombocytopenia	Primary hemostasis	Initial clot matrix	Avitene
Slow open wound ooze	Wound surface	Matrix for wound surface	Gelfoam Surgicel
Arterial bleed from bone	Blood pressure	tamponade	Bone wax

Local tools (cont)

	Disorder	Rationale	Tool
Classic hemophilia	Intrinsic syst, fact VIII	Prevent fibinolysis	Amicar Topical thrombin
Facial trauma ooze	Vasodilation Contusion	Wound adhesion	Fibrin glue

Systemic Control

Depends on the underlying problem

- Platelets
 - DDAVP
 - Humate P
 - FFP
 - Vitamin K
 - Factors
 - Activated factor VIIa
 - Blood
- Thrombocytopenia
 - von Willebrand's disease
 - DIC
 - INR 10
 - Hemophilia
 - Ongoing blood loss despite surgical/medical control measures
 - Massive bleeding from trauma

Hemostasis is a Shared Responsibility

Assael, LA. Journal of Oral and
Maxillofacial Surgery 61.12: 2003

Postoperative analgesia axioms

- Ibuprofen as effective as narcotic
- Patients should not get new Rx if not used as instructed.
- No narcotics by phone for patient not of record in your practice.
- Patients prefer narcotics combinations
- Drug abusers prefer non-combination narcotics
 - Street value from 1-5 dollars per miligram!
 - Non combination pills can be melted and injected.



Postoperative Instructions (a process, not a form alone)

● Patient understands

- Procedure performed
- Activity
- Supervision
- Diet
- Hygiene
- Wound care
- Medications
- Precautions
- Call me for
- Form includes Recapitulation of above items
- 24/7 contact information

Must see postops.

- Swelling
 - Trismus
 - Difficulty handling oral secretions
 - dyspnea
 - Lack of po
 - Fever
- Have local hospital and OMS resources in place before you need them



Primary Tooth Pulp Therapy

Treatment Planning Considerations in Primary Dentition

- Prevention and Caries Risk Status
- Types of Restorations
 - Composites, crown types (SSC vs. zirconium)
- Pulp Therapy
 - Pulp capping: indirect & direct
 - Pulpotomy
 - Pulpectomy
- Alternatives
 - No treatment
 - Extractions
- Behavior Management (not in this course)

Why Preserve Primary Teeth?

Answers for Parents

- Primary reason: Premature loss of primary teeth may lead to changes in arch length
- Mesial drift of permanent teeth → leads to malocclusion
 - Translation: Crowding & possible need for expensive orthodontics in future
- Enhancement of mastication & possibly minimizing developing periodontal issues
- Prevents the potential for psychological effects of premature tooth loss – teasing by peers
- Possibly aids in speech development, maintenance and production**

Primary Diagnostic Processes & Considerations

- Clinical History
- Clinical Assessment
 - Caries – extent and type
 - Delay treatment in uncooperative or very young children (e.g., silver diamine txmt)
 - Need for pulp therapy?
 - Arch evaluation
- Radiographs



Clinical History: Issue of Pain & Possible Pulp Therapy

Type, Timing, and Periodicity of Pain	Recommended Treatment
Usually specific stimuli Thermal Chemical <u>Variously Intermittent & of short duration</u>	Reversible pulpitis → vital therapy (e.g., pulpotomy) Sometimes children do not report pain, especially very young children
Spontaneous Nocturnal “Constant”, dull, throbbing	Irreversible pulpitis → nonvital therapy (e.g., pulpectomy or extraction)

Clinical Assessment of Pulpal Status – Other Clinical Signs/Symptoms

- Extent & depth of lesion
- Color of lesion
- Mobility of tooth
- Soft tissue swelling
 - parulis
- Lymphadenopathy
- Sensitivity to percussion
- Pulp testing
 - Electrical
 - Thermal
 - Percussion
- Pulp exposure –
hemorrhagic vs. necrotic

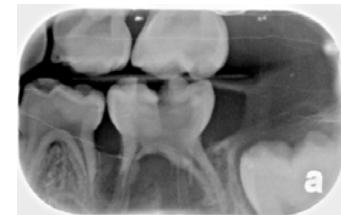
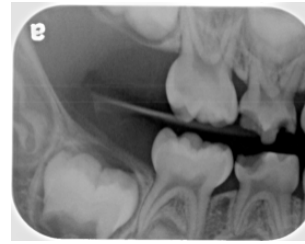
Radiographic Examination

- Bitewings best for visualization of furcation (lots of accessory canals)
- Follow-up with periapicals of affected teeth
- Compare lamina dura and furcal area of questionable teeth with contralateral and



Radiographs give clues...

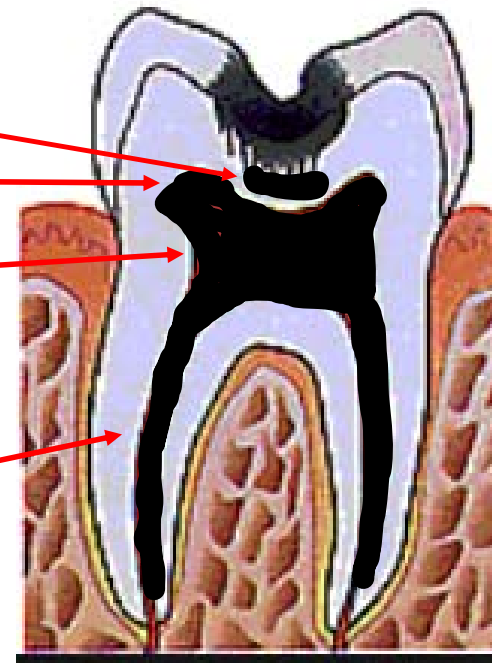
- Deep caries with possible or definite pulp involvement
- Deep restorations close to pulp horn
- Pulp changes (calcification or obliteration)
- Successful or failing pulpotomy or pulpectomy
- Periapical or inter-radicular radiolucencies
- Pathologic resorption
 - Internal—inflammation of vital pulp
 - External—nonvital pulp with extensive inflammation



What Are Our Choices For Pulp Therapy?

Vital & Non-Vital Pulp Treatment

- Vital Pulp
 - Indirect pulp cap (IPC)
 - Direct pulp cap (DPC)
 - Pulpotomy
 - Partial Pulpotomy/Cvek
- Non-vital pulp
 - Pulpectomy
 - Extraction

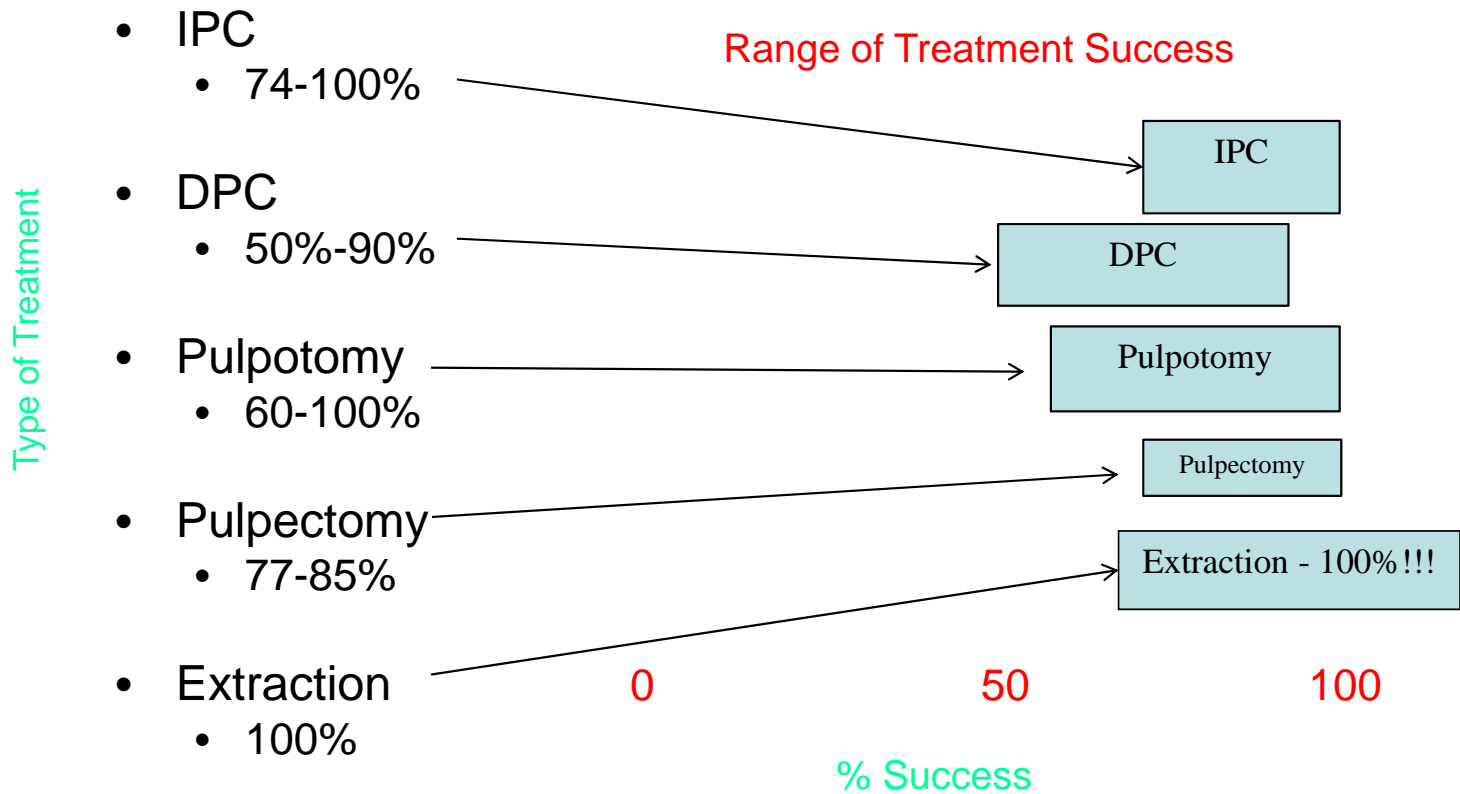


Things to Consider

- Patient caries risk implications
- Patient's medical condition
 - Healthy versus immunocompromised
- Radiographic pathology
 - Resorption—internal or external
- Value of involved tooth in child's development
 - Primary 1st molar
 - Primary 2nd molar
- Restorability of teeth
- Near exfoliation date



Reported Success Rates



Vital Pulp: Option 1

The Indirect Pulp Cap (IPC)

This type of treatment is NOT new, but it is the latest rage in pediatric dentistry

Indirect Pulp Cap: What it is?

- Minor amount of carious dentin near pulp preserved to avoid pulp exposure
- Covered and sealed with biocompatible material (e.g. MTA, Vitrebond)



Indirect Pulp Capping

Objectives:

- Arrest caries process
- Promote dentin sclerosis
- Stimulate tertiary dentin formation
- Remineralizing affected dentin



Indirect Pulp Capping

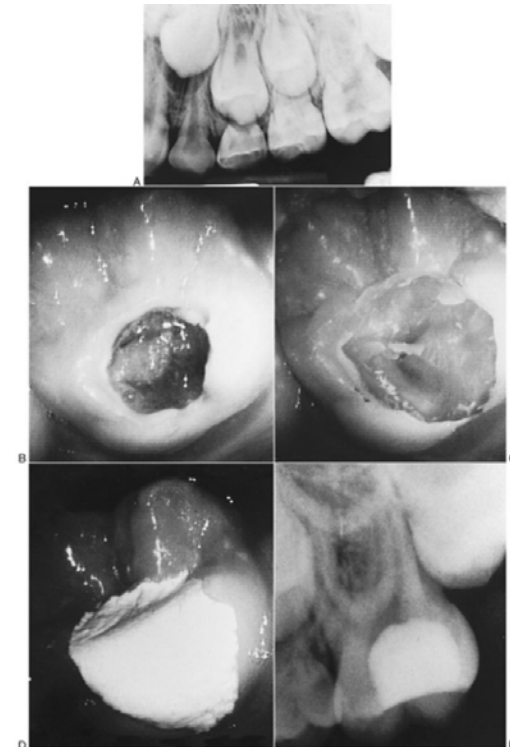
Indications:

- Tooth with deep carious lesions
- No signs/symptoms of irreversible pulpitis
- High possibility of pulp exposure if continue prepping (but dentin is less affected & more “hard”)
- No pulp exposure during preparation



How to do it

- Remove gross caries
 - Large round bur is best
- Leave caries over pulp horn to avoid exposure
- Extend walls of cavity to sound tooth structure
 - To achieve adequate seal
- Cover affected area with agent (e.g., MTA, Vitrebond)
- Restore
 - Interim vs. definitive
 - Re-enter in 6-8 weeks vs 6-8 months?



Agents used for IPC

- Calcium
- RMGI
- Mineral aggregates



therapy for
primary dentition

Vital Pulp: Option 2


The Direct Pulp Cap

Direct Pulp Cap: What is it, exactly?

- Application of medicament or dental material in direct, intimate contact with mechanically exposed pulpal tissue.
- Generally contraindicated in carious pulp exposures
 - Microorganisms present or introduced into pulp and lead to inflammation



Direct Pulp Capping Agents

- Ca(OH)_2
 - pH 12
 - Has been shown to cause internal resorption in carious exposures
- MTA
 - Excellent non-toxic choice for pulp capping
 - More dentin bridging in shorter time and less inflammation than calcium hydroxide
 - Some brands are expensive – but quality outcome!!
 -
- Glass ionomer cement 
 - Vitrebond™ is a RMGI base/liner and is **NOT** recommended for direct contact with pulpal tissue

Prognostic Indicators

- Size of exposure
- Bleeding
 - Inverse relationship between amount of bleeding and DPC success
- Keep pulp moist!!!
 - Do not desiccate, but instead irrigate with saline or LA solution (i.e. sterile solution)
- Success
 - 80-90% in absence of inflammation

Vital Pulp: Option 3

The Pulpotomy

Pulpotomy

Contraindications

- Mechanical or carious exposure
 - Absence of spontaneous pain
 - Absence of swelling or abscess
 - Restorable tooth
- Presence of fistula or swelling
 - Evidence of necrotic pulp
 - Uncontrolled pulpal hemorrhage
 - PA or furcal radiolucency
 - Pathologic resorption of pulp
 - Less than 1/3 of root remaining

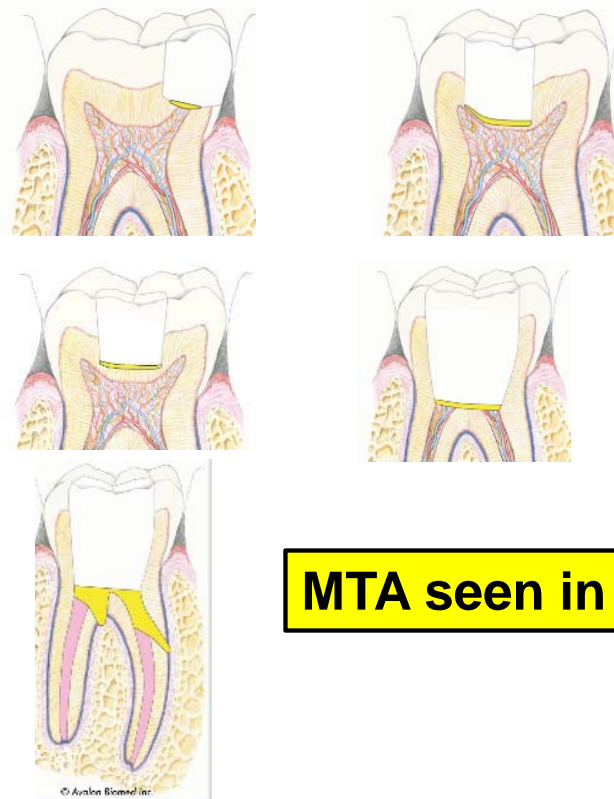
Medicaments

- Fixatives
 - Formocresol ; gluteraldehyde
- Mineralizing & bacteriostatic
 - Calcium hydroxide
- Palliative/sealers
 - ZOE
- Bioactive agents
 - MTA
- Coagulants
 - Ferric sulfate
 - Aluminum chloride
 - Epinephrine
- Antibiotics/antimicrobials
 - Sodium hypochlorite
 - Chlorhexidine
- Glucocorticoids
 - Corticosteroids
- Bone and osteogenic proteins

MTA is used successfully for everyday dental procedures

Vital Pulp Therapy for Primary and Permanent teeth

- Pulp-capping
- Cavity Liner
- Base Material
- Pulpotomy
- Perforation repair



MTA seen in yellow

Documented Complications of Pulpotomy Medicaments

- Formocresol
 - Internal resorption
 - Decreased success over time
 - Mutagenicity concerns
- MTA – “the growing rage”
 - Pulp canal obliteration
- Ferric Sulfate
 - Can achieve hemostasis prior to clinical assessment and character of pulp→failure.
Therefore apply moist cotton pellet to pulp stumps for 1 min prior to application of FS
- Calcium Hydroxide
 - Internal resorption

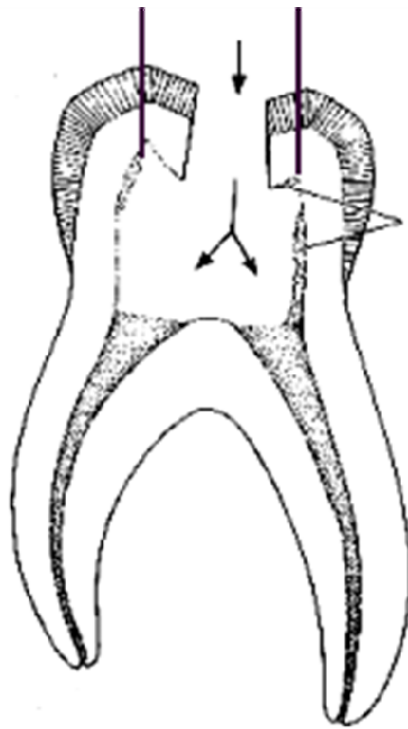
Pulpotomy: How to do it

- Pulpal access
 - 330 burr to remove roof of pulp chamber (man hole cover)
 - High speed w/H₂O ??
- Pulpal debridement
 - 6-round
 - Slow speed
 - Stay away from inter-radicular floor area
 - Spoon excavator as needed



Definitely need a rubber dam!!!!

Pulpotomy Illustrations

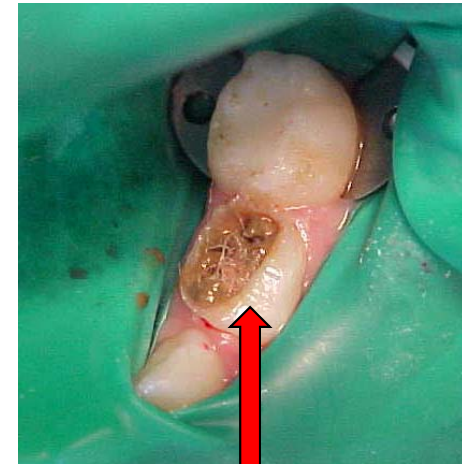
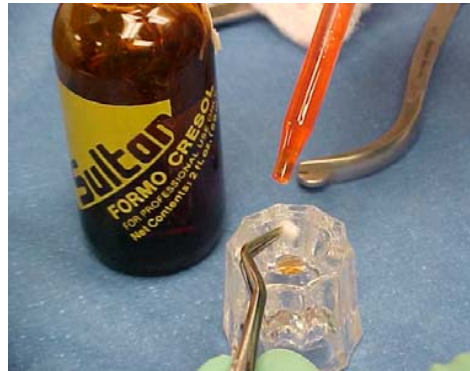


What is wrong with this picture?



Pulpotomy How-to

- Pulpal hemostasis
 - Moist cotton pellet
 - Chlorhexidine or NaOCl
- Pulpal medicament
 - Chlorhexidine or NaOCl (4-5 min)
 - FC very dry (1-5 min)
 - FS (15 sec)
- Pulpal coverage
 - **MTA (only with Chlorhexidine or NaOCl)**
 - ZOE/IRM (fortified ZOE)
 - VITRABOND
- Fit, trim, crimp, cement SSC



Be sure to take out the cotton balls before placing IRM/ZOE





Formocresol Future & Its Replacement

- Formocresol – banded in California; likely has questionable future in US despite lack of evidence-based harmful effects on body
- MTA (Mineral Trioxide Aggregate) – the new “king”
 - Mixture of Portland cement, dicalcium silicate, tricalcium silicate, tricalcium aluminate, gypsum, and tetracalcium aluminoferrite
 - Has excellent biocompatibility, alkaline pH, radiopacity, high sealing capacity, can induce formation of dentin, cementum and bone



Option 4: Non-Vital Pulp Therapy

Pulpectomy
or
Extraction + Space Maintenance

Pulpectomy Indications

- Necrotic pulpal tissue or...
- Coronal tissue and tissue entering the pulp canals are apparently vital but hyperemic
- May have history of pulpitis



Pulpectomy Contraindications

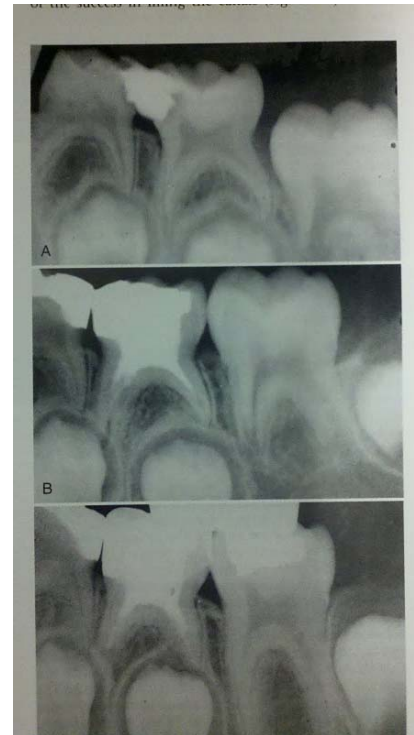
- Non-restorable tooth
- Radiographic internal resorption of roots
- Teeth with mechanical or carious perforations of pulpal floor
- Excessive pathologic root resorption involving more than one third of the root
- Loss of bony support and loss of PDL attachment
- Dentigerous or follicular cyst

Pulpectomy Medicaments

- Zinc Oxide Eugenol
- Calcium Hydroxide
- Diapex/Vitapex
 - Calcium Hydroxide 30% + 40% iodoform

Pulpectomy How-to

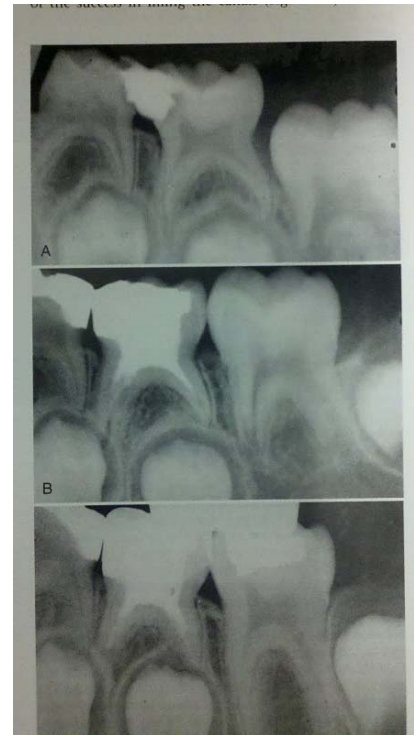
- Remove coronal pulp as in pulpotomy
- Remove pulp remnants from root canals with broach
- Instrument 2-3mm short of radiographic apex
 - NiTi files
 - Use RC Prep + NaOCl
- Irrigate with NaOCl
- Irrigate with sterile saline
- Dry canals with sterile paper-point

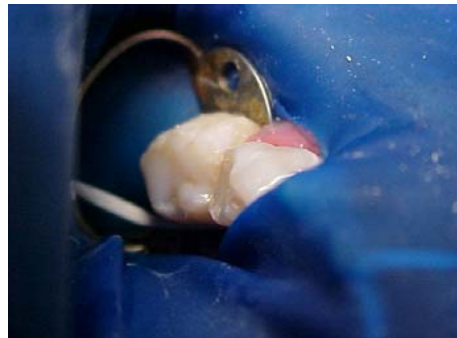
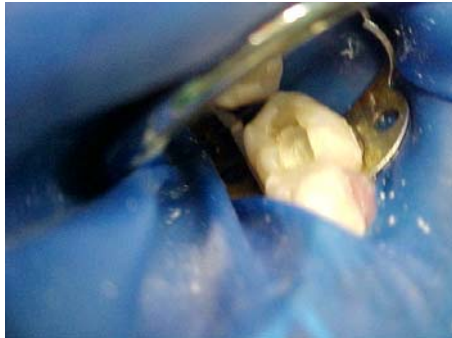
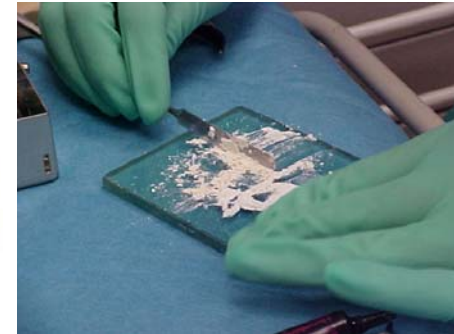
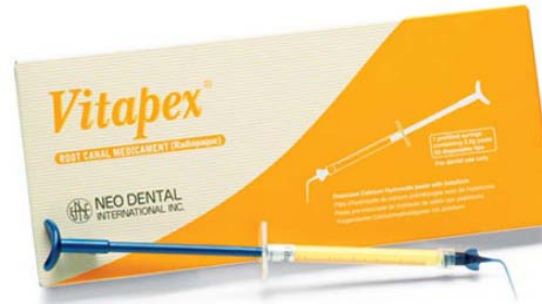
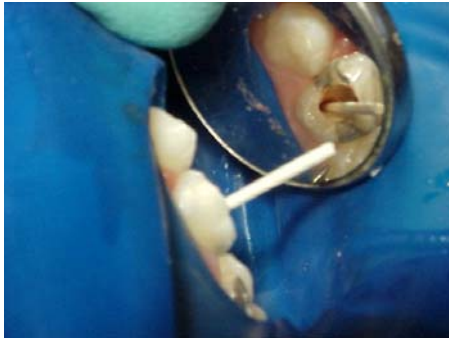




Pulpectomy How-to

- Apply medicament
 - Use thick mix of ZOE rolled into point to fill canal
 - Syringe Diapex/Vitapex into canal
- Condense with pluggers or with blunt paper points
- Take radiograph
- Restore





FOLLOW UP IS OF UTMOST IMPORTANCE!

Radiographs at least every year!

Possible Complications

- Failure
 - Radiographic pathology
 - Clinical pathology (mobility, symptoms, fistula)
- Over-retention of tooth
 - Ectopic eruption of premolar → crossbite
- Retention of obturation material in tissue
 - ZOE

Last Option: Extraction

- Definitive treatment
 - 2-3 week healing period
- Possible space maintenance needs
 - Band & loop(s)
 - Lower lingual holding arch
 - Transpalatal arch

Extraction – Possible Complications

- Root fracture
 - Significant elevation decreases this likelihood
- Root tip difficult to visualize and/or remove
 - Depending on its closeness to developing premolar – can be left & is likely resorbed
- Possible deflection of erupting premolar with cross-bite/scissor

Questions?



California Northstate University

College of Dental Medicine

Site Evaluation Checklist: This is reviewed upon initiation and continuously with every site for which DMD students will have clinical rotations associated to BSS courses at CNUCDM.

Externship Site's Recommended Characteristics

1. Provide chair side assisting for students
2. Rotation needs to accommodate minimum of 1 student per week (as usual M-F) continuously
3. Ability to have 8 week rotations, with no clinic on the last Friday of the rotation so students can travel back to campus for mandatory debriefing session
4. Work in the E*Value to document clinical activity
5. Appointing, training, Calibration of supervising faculty, preferably 2 per site. Initial one day calibration exercise, then annual CE and twice yearly site visit for calibration.
6. Students will require site orientation per individual clinic
7. Students will be experienced in all procedures they provide. CNU will provide a status report on Competency evaluations and student experience before each rotation.
8. Need current, valid TAA (Teaching Affiliate Agreement) as per College of Dental Medicine and CODA (Commission on Dental Accreditations) requirements
9. Housing must be available and provided if site is more than 1 hour away
10. Internet access for students
11. Clinically adequate equipment
12. VCF (Volunteer Clinic Faculty) appointment for supervising faculty
13. Site needs to have credentialing program that satisfies National Committee for Quality Assurance standards
14. Desirability and capability to supervise student clinical care and provide ongoing assessment
15. Diverse patient population that provides broad general dentistry experience
16. Reviewed during site visit: (imaging equipment; facility; operatories, including patient, doctor and assistant chairs; delivery system; sterilization; instruments & materials). For

distant sites, must ensure housing; availability of storage for food, personal items, etc.; laundry service if students are likely to stay at site for entire 8 week rotation).

17. Safety and security assessment
18. Transportation assessment
19. Assessment of quality clinical staff and operations
20. Opportunity for interprofessional education and among the oral health professions including dental hygiene and dental assisting.



College of Dental Medicine Program
Course-to-Program Learning Objectives (PLO) Curricular Map

LEGEND	I - Introduce	P - Practice	M - Master
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COURSE	PLO 1 Patient-Centered Care	PLO 2 Evidence-based Care	PLO 3 Culturally Competent, Empathic Communication	PLO 4 Oral and Written Communication	PLO 5 Critical Thinking	PLO 6 Ethics and Professionalism	PLO 7 Biomedical Science Knowledge	PLO 8 Practice Management	C
Year 1: Fall									27
Hematology		I		I	I		I		4
Integumentary and Musculoskeletal Systems		I		I	I		I		7
Foundations of Odontology	I	I	I	I	I	I	I	I	6
Dental Anatomy		I		I	I		I		6
Foundations of Dental Medicine	I	I	I	I	I	I	I	I	3
Managing Student Life				I	I	I		I	1
Year 1: Spring									28
Neuroscience		I			I		I		9

	PLO 1 Patient-Centered Care	PLO 2 Evidence-based Care	PLO 3 Culturally Competent, Empathic Communication	PLO 4 Oral and Written Communication	PLO 5 Critical Thinking	PLO 6 Ethics and Professionalism	PLO 7 Biomedical Science Knowledge	PLO 8 Practice Management	C
Cardiovascular and Pulmonary Systems		I		I	I		I		9
Cariology	I	I		I	I		I		3
Oral Microbiology/Immunology		I		I	I		I		3
Surgical Anatomy of the Head and Neck		I		I	I		I		2
Ethics in Dental Medicine and Health Care									2
Year 2: Fall									33
Renal System		I		I	I		I		5
Gastroenterology		I		I	I		I		5
Endocrine System		I		I	I		I		5
Clinical Pharmacology I	I	I	I	I	I		I		3
Operative Dentistry	I	I	I	I	I	I	I		6
Periodontology	I	I	I	I	I	I	I		3
Dental Anesthesiology 1, Local Anesthesia	I	I	I	I	I	I	I		3
Oral Radiology 1	I	I	I	I	I	I	I	I	3
Year 2: Spring									33
Clinical Pharmacology 2/Oral Pharmacology		P		P	P		P	P	3
Periodontology	P	P	P	P	P	P	P	P	3
Prosthodontics and Implant Dentistry: Removable Prosthodontics	I	I		I	I		I	I	6
Comprehensive Care Family Dentistry	P	P	P	P	P	P	P	P	3
Endodontology, Diseases of the Pulp and Pathways of Odontogenic Infection	I	I		I	I		I		3



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Assessment of Student Learning Outcomes' Handbook

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Learning Outcomes' Assessment at CNU

Learning Outcomes' Assessment

Learning outcomes assessment is the purposeful, systematic measurement of student learning at various levels of learning. The goal is a cycle of continued improvement of academic quality for the institution. Effective learning outcomes' assessment is always responsive to the following questions:

- What knowledge, skills, and attitudes will successful students have acquired upon graduation?
- How well do students perform relative to these learning outcomes?
- How can programs improve to provide a stronger academic experience to students?

Purpose of the Handbook

The purpose of this handbook is to assist CNU faculty, program chairs, and Directors of Assessment, and Assessment Committee Chairs in conducting learning outcomes' assessment. It is a step-by-step guide that expounds the basic concepts and processes, provides examples and strategies for meeting the specific requirements, and offers approaches for making assessment a useful tool in curricular renewal.

Learning Outcomes Assessment and Academic Quality

CNU has two processes for assessing academic quality: *Program Review* and *Learning Outcomes' Assessment*. Learning outcomes' assessment is an annual process by which faculty assess student mastery of program-level outcomes. Program review occurs every five years and examines programs' overall functioning by studying administrative data, graduate outcomes, and other measures of effectiveness. In addition, the program review also provides an opportunity for academic program faculty to examine learning outcomes data collected through the annual learning outcomes assessment.

Benefits of Learning Outcomes Assessment

When conducted properly, learning outcomes' assessment has benefits for the entire institution. It benefits students by ensuring they master the material of their degree program and by providing academic and professional programs that are responsive to both their own (and society's) needs. It benefits faculty by providing the tools necessary to lead curricular development. Finally, it benefits the entire institution by giving the institution documented evidence of student learning and achievement, thereby validating the institution is achieving its mission and goals.

Learning Outcomes' Assessment at CNU

At CNU, there are four primary groups directly involved with assessment activity.

- Faculty develop learning outcomes, assess student performance, and provide the necessary analysis to understand learning outcomes in their programs.
- Directors of Assessment manage the assessment process within their programs and submit yearly assessment reports that provide evidence of the activity.
- The Directors of Assessments work with the Vice President of Institutional Research and

Effectiveness to plan for appropriate assessment methodology and practices and provides support throughout the process. The Director of Assessment for each college coordinates the overall effort for the college's assessment activities with assistance from the Assessment Committee and Assessment Committee Chair.

- The University's Assessment Committee, consisting of representatives from all the schools and divisions in the University, reviews and advises assessment activity to keep the university aligned with requirements of regional accreditation. The college's Assessment Committees review student learning results from which specific recommendations for improvement are generated to be addressed program faculty. The student learning outcomes' reports are used to provide evidence, where appropriate, in the budget process.

Six steps of learning outcomes assessment

There are six steps of learning outcomes' assessment: develop/revise learning outcomes, design outcome measures, collect data, analyze and evaluate data, create assessment report, and plan for the next assessment cycle. The Assessment Handbook is divided into six sections addressing each of these steps. Each section provides a basic overview of the goals and purpose of the step, lists the specific activities for departments associated with the step, and offers suggestions and potential strategies for effectively completing the step.

SIX STEPS OF LEARNING ASSESSMENT

- 1. Develop/revise learning outcomes**
- 2. Design outcome measures**
- 3. Collect data**
- 4. Analyze and evaluate assessment data**
- 5. Write action plans and create annual assessment report**
- 6. Plan for next assessment cycle**

The ideas and suggestions for completing the steps are intended to provide useful information for faculty and department chairs. Since each academic department differs in terms of size, approach, and outlook, it is important to ensure that the assessment approach matches the needs of the program. Staff from the Office of Institutional Effectiveness are available to discuss ideas and plan for programs to build a learning outcomes' assessment program that meets its needs.

Cyclical nature of learning assessment

Since the primary goal of learning outcomes program assessment is continued improvement of the quality of education offered by CNU; the process is cyclical in nature. Assessment is an ongoing process that should grow and change as programs evolve and develop.

Section I: Developing Learning Outcomes

The first step in learning outcomes' assessment is the creation of outcomes, which reflect the core knowledge and material of the program. Most programs have previously developed learning outcomes, so this step of the process allows for reexamination and potential

Checklist of Needed Activity for Developing Learning Outcomes:

- ☐ Key learning outcomes developed
- ☐ Evidence of faculty participation in developing learning outcomes
- ☐ Verification that outcomes are; being performed by students, observable, and measurable⁴

revision. The development of learning outcomes should capitalize on the depth of knowledge of the faculty and thereby help shape the nature and direction of the program.

This section describes characteristics of strong learning outcomes, provides suggestions on how to develop outcomes, and discusses a process by which programs can scrutinize learning outcomes to ensure their strength.

Effective learning outcomes

Learning outcomes are statements that specify what students will be able to do or demonstrate as a result of earning their degrees. Effective outcomes are usually expressed as knowledge, skills, or abilities that students will possess upon successful completion of a program. They provide guidance for faculty regarding content, instruction, and evaluation, and serve as the basis for ensuring program effectiveness. Because we evaluate student performance in terms of specific actions, the strongest learning outcomes are measurable and observable.

Tool 1: Key questions to consider when drafting learning outcomes

- What is the most essential knowledge students need to have acquired upon successful completion of the program?
- Are there specific skills or abilities students need? What are they?
- How does the program attempt to shape students' attitudes or views regarding the discipline or profession?

Selecting the right verb

Given that learning outcomes focus on observable and measurable actions performed by students, the selection of an action verb for each outcome is crucial. Determining the best verb to use in a learning outcome can be challenging because of its need to accurately reflect the knowledge, skills and abilities being studied. *Tool 2: Common learning outcome action verbs* provides a brief list of verbs that are used in writing learning outcomes at the collegiate level.

Tool 2: Common learning outcome action verbs

Analyze	Demonstrate	Prepare
Apply	Design	Rate
Compare	Develop	Revise
Compile	Discuss	Select
Compute	Evaluate	Use
Create	Explain	Utilize
Critique	Predict	Write

Certain verbs are unclear and subject to different interpretations in terms of what action they are specifying. Verbs/verb phrases such as know, become aware of, appreciate, learn, understand, and become familiar with should be avoided; they frequently denote behavior that is not easily observed or measured.

Strengthening weak learning outcomes

Tool 3: Evaluating learning outcomes

5

- Is the action done by the students?
- Is the specified action observable?
- Can the specified action be measured?

The process for strengthening learning outcomes re-examines the original characteristics used of strong outcomes. By asking the three questions in *Tool 3: Evaluating learning outcomes*, weaknesses in learning outcomes emerge.

Revising learning outcomes

The process of writing learning outcomes is not simple. Determining the outcomes a program wants to examine can pose the first challenge. In addition, drafting the outcome often takes several revisions to develop a strong one that reflects the intentions of the faculty. However, the effort put into drafting strong outcomes will be returned through an easier time developing measures, collecting data, analyzing the results, and ultimately making recommendations for improvement. Strong outcomes will help to focus the entire process and allow for the most useful results from the assessment process.

Section II: Designing Outcome Measures

After developing learning outcomes, the second step in the assessment process is to select outcome measures. While learning outcomes describe the knowledge, skills and abilities that students should possess after instruction (or completion of the program), outcome measures are the specific tools and methods that generate data and information about students' performance relative to learning outcomes.

There are two types of outcome measures: direct measures and indirect measures. Each serves an important function in assessment, and when used together they provide a richer perspective on student learning by providing direct evidence and context to understand student performance.

Checklist of Needed Activity for Developing Outcome Measures:

- ☐ At least one direct measure for each learning outcomes
- ☐ Indirect measures that will facilitate understanding of the assessment data, when appropriate
- ☐ Evidence of faculty participation in the development of measures
- ☐ Established performance standards for each measure being used
- ☐ Expected results for each measure being used

→ **Direct measures** are methods for assessing actual samples of student work to provide evidence of student performance relative to the learning outcomes.

→ **Indirect measures** are methods for assessing secondary information on student learning that do not rely on actual samples of student work.

Each type of outcome measure serves a particular purpose. Direct measures assess the extent to which students' work meets the learning outcome performance standards. Indirect measures compliment direct measures by providing supportive evidence, information, and student perspective. Together they provide a richer perspective on student learning by providing direct evidence and context to understand student performance.

Outcome measures should meet three criteria

Regardless of the type of measure used, strong measures share three basic qualities:

- Provide sufficient data and information to measure the learning outcome
- Are not overly burdensome departments to collect
- Have established performance standards and expected results to help guide the analyses

Selecting direct measures

There are many issues to consider when selecting direct measures of learning. Programs should be creative in determining the most useful way to measure student performance, but at the same time ensure that the methods allow for meaning from interpretation and results. *Tool 1: Sample direct measures* provides a list of some of the more common methods within higher education and can help foster ideas for developing measures.

Tool 1: Sample direct measures

- Student Portfolio Evaluation
- Student Performances or OSCEs
- Tests and Examinations
- Thesis Evaluation
- Course-Embedded Assessments
- Pre-test/Post-test Evaluation

Course-embedded assessments are direct measures which use student work in specific courses to assess student learning. Students are already motivated to do their best on these assessments because they are conventionally graded on them. For example, if one learning outcome requires students to synthesize the literature on a topic in the field, student research papers may be evaluated using a rubric to assess how well they meet the learning outcome. Many classroom assignments can be used for course-embedded assessment as long as they assess a program's student learning outcome. Course-embedded assessment measures are often selected because they take place in the classroom, take advantage of student motivation to do well, and directly assess what is taught in the classroom.

Examinations: Many course-level learning Outcomes can be assessed by examinations given within the course. In some cases the outcomes measured by the examinations will be identical to the program's student learning outcomes and, the exam questions will assess both course and program outcomes. With some creativity, exam questions can also be written to cover broader Program Learning Outcomes (PLOs) without losing their validity for course grading. In programs without capstone courses, it might be possible to write a coordinated set of exam questions that provide a fuller picture of student learning when administered in exams across a series of courses.

Analysis of course papers: Course papers can be used as measures for student learning outcomes. Because students create these papers for a grade, they are motivated to do their best and these papers may reflect the students' best work. This process typically requires development of a rubric that focuses on program learning outcomes. Faculty groups read these same papers to assess the attainment of PLOs. This second reading should be done by someone other than the instructor or by others along with the instructor, as the purpose for the assessment is different from grading. Scoring rubrics for the papers, based on the relevant learning outcomes should be developed and shared with faculty raters prior to rating to promote inter-rater reliability.

Analysis of course projects and presentations: Products other than papers can also be assessed for attainment of program learning outcomes. For example, if students are required to give oral presentations, other faculty and even area professionals can be invited to these presentations and can serve as outside evaluators using the same rubric as other raters.

Student performances: In some areas, such as teaching or counseling, analysis of student classroom teaching, mock counseling sessions or other performances can provide useful measures of student learning. A standardized evaluation form is necessary to ensure consistency in assessment. One advantage of using performances is that they can be videotaped for later analysis.

Cross course measures are direct measures of student work across the program. Cross course measures examine students' work that incorporates multiple dimensions of knowledge, skills and abilities developed throughout the entire program. The most common types of cross course measures are capstone course papers and projects, and student portfolios.

Capstone courses: Capstone courses provide an opportunity to measure student learning, because this is where students are most likely to exhibit their cumulative understanding and competence in the discipline. One of the purposes of capstone courses is to provide an opportunity for students to "put it together," which typically requires students to integrate the knowledge, skills and abilities found in the program's learning outcomes.

Student portfolios: Compilations of students' work in their major can provide a rich and well-rounded view of student learning. The program usually specifies the work that goes into the portfolio or allows students to select examples based on established guidelines. By compiling a range of student work, portfolios can be used as the measure for more than one learning outcome. Portfolios can also be valuable for the student by providing a reflection of their skills and abilities. Portfolios do require strong, well-constructed rubrics to make the process of extracting assessment data manageable.

Internship supervisor evaluations: If the program has a number of students who are doing relevant internships or other work-based learning, standard evaluations by supervisors using a rubric designed to measure a particular learning outcome across the duration of the internship may provide data on attainment of learning outcomes. In addition, when programs exercise control over the content of internships, those settings can serve as capstone experiences where students can demonstrate their knowledge skills and abilities.

Selecting indirect measures

Like selecting direct measures, there are many issues to consider when selecting indirect measures of learning. Programs should be creative in determining the most useful way to measure student performance, but at the same time ensure that the methods allow for meaning from interpretation and results. *Tool 2: Sample indirect measures* provides a list of some of the more common methods within higher education and can help cultivate ideas for developing indirect measures.

CNU conducts two surveys each year that can be analyzed as indirect measures of learning. The Alumni Survey and the Graduating Student Survey both contain questions regarding the learning experience at CNU.

Tool 2: Sample indirect measures

- Graduating student and alumni surveys
- Employer and internship supervisor surveys
- Exit interviews and focus groups

In addition, programs are able to add supplemental questionnaires to the Alumni Survey that can be used to answer specific questions and issues of the program. The benefits of including these types of measures into department assessment plans are that they have built in comparisons by examining the program's responses relative to the University or school and they require limited work by chairs and faculty in collecting the data.

While University surveys may provide some insights into students learning experience, they sometimes lack the specificity needed by programs in their assessment activity. Accordingly the programs may need to conduct their own primary research to address the issues. These methods may be quantitative or qualitative in nature, but should still address the key issues of strong measures.

Internship Supervisor Survey: Internship supervisors may provide general feedback to programs regarding the overall performance of a group of students during the internship providing indirect evidence of attainment of learning outcomes. This should not be confused with internship supervisors' evaluation of student performance on specific learning outcomes.

Focus Groups: Focus Groups provide in-depth, qualitative interviews with a small number of carefully selected people who are thought to represent the population of interest (students in the program). For program assessment, students are brought together to discuss their perceptions of how well they achieved the program's learning outcomes.

Exit Interviews: Graduating students are interviewed individually to obtain feedback on the program. Data obtained can address strengths and weaknesses of the program and/or assess relevant concepts, theories or skills related to the program's learning outcomes.

Area Expert Comments: Comments made by area experts can be useful in gaining an overall understanding of how students will be judged in a given field. This differs from having experts use the same rubric faculty raters use, and instead focuses on their opinion of the quality of students' work and the program in general. This should not be considered a direct outcome measure but it can serve as a valuable indirect measure.

Establishing performance standards: When interpreting assessment results, it is useful to set a performance standard that specifies the acceptable level of student work or response. For each learning outcome the program should ask "What is an acceptable performance standard for this learning outcome?" This performance standard may be a passing score on an exam, a rubric rating of "meets program standards" on a student paper or another indicator of the quality of student work.

Establishing expected results: By setting expected results for the percentage of students meeting or exceeding performance standards before data collection begins, the program can gauge its effectiveness in helping students meet the learning outcomes. For example: Seventy-five percent of students met the performance standard set by the department for the outcome measure on ethical reasoning. This can be compared to the expected result of 80% meeting the performance standard which reveals an area for improvement.

Evaluating measures

It is possible to evaluate outcome measures by asking the three questions found in *Tool 3*:

Questions for evaluating outcome measure. If faculty and chairs are able to answer “yes” to all of three questions, it is likely that a strong set of measures has been developed.

Tool 3: Questions for evaluating outcome measures

- Does the measure provide sufficient data and information to analyze the learning outcome?
- Does the measure require a reasonable amount of work to collect?
- Does the measure establish performance standards to help guide the analysis?

Section III: Collecting Data

Data collection is the next step in the assessment process. This section will cover the process of collecting student work and indirect measures, rating work, and storing data. The collection process may seem like a daunting task, but with planning, it can move more smoothly and provide quality data and information about the programs learning outcomes.

The data collection process consists of three basic steps: **gathering** necessary student work and other information, **evaluating** the results, and **storing** the data. The **Gathering, Evaluating, and Storing** (GES) process is used for both direct and indirect measures; however some of the specific steps will vary. The key to simplifying the data collection process is planning. *Tool 1: Questions to ask in planning data collection* provides a number of questions to think about before gathering data.

Checklist of Needed Activity for Collecting Data:

- ☐ Direct data collected for each learning outcome and measure
- ☐ Indirect data collected, if appropriate
- ☐ Secure electronic database of both direct indirect measures
- ☐ Examples of the student work for each performance standard in either paper or electronic form.

Tool 1: Questions to ask in planning data collection	
Direct Measures	Indirect Measures
<ul style="list-style-type: none"> Where is the student work coming from? How will the student work be organized and stored for evaluation? When will it be evaluated? Who will be responsible for evaluating? How will the performance data be stored? How will it be secured? How will examples of student work be stored? Paper? Electronically? Are there FERPA issues to consider? 	<ul style="list-style-type: none"> Who will conduct the research for the measure? When will research be done? In a class? How will the results be tabulated or a categorized? If you are using institutional data, will special data analysis need to be done?

Step 1: Gathering

The process of gathering materials for direct measures varies greatly depending on the measures used. For course-embedded measures or capstone experiences, it is necessary to coordinate with the faculty member teaching the course to ensure the student work is collected and forwarded for assessment. If a portfolio is being used, it will be necessary to determine who is responsible for putting the portfolio together.

When using indirect measures, the gathering phase consists of conducting the necessary research (survey, focus group, or other measures). Indirect measures based on secondary analysis of

material (e.g. course syllabi) need these materials to be compiled. Programs should set a schedule that outlines the materials needed to simplify follow up and ensure all student work is collected.

Step 2: Evaluating

The evaluation phase for direct measures includes the examination of student's work by faculty to determine the level to which it meets the learning outcome. Because assessment looks to evaluate specific aspects of the student work, rubrics are often used as guidelines in the process.

Effective rubrics, standardized evaluation forms used to assess student work toward meeting learning outcomes, can be developed in many different ways to assist the evaluation process. They can describe qualitative as well as quantitative differences; and are often used to assess assignments, projects, portfolios, term papers, internships, essay tests, and performances. They allow multiple raters to assess student work effectively by increasing the consistency of ratings and decreasing the time required for assessment. The development of rubrics is covered in Appendix A: Rubric Toolbox.

Regardless of the type or style of rubric used, there are a few general principles to ensure they are effective. *Tool 2: Steps for using a rubric to evaluate student work* outlines the basic process of using rubrics.

Tool 2: Steps for using a rubric to evaluate student work

- Review the rubric with all raters to ensure it is consistently understood.
- Use the descriptors in each performance level to guide ratings
- Assign the rating that best represents the student's work

The key to achieving consistency between raters is conducting a “norming” session to allow faculty raters to reach consensus on the levels of student work at each level of the performance standard. *Tool 3: Steps to “norming” a rubric* provides the basic process of a norming session.

Tool 3: Steps in “norming” a rubric

- Explain to the raters how to use the rubric
- Provide samples of student work
- Discuss each sample and determine how raters determine scores
- Reach a general consensus on each level of the performance standard

For indirect measures that the department is conducting, the evaluation phase consists of the compiling of the results into a form that are meaningful to those doing the assessment. For survey data, this will generally include entering the data into a data set for analysis and generating the descriptive statistics. For more qualitative work such as focus groups, this part of the process maybe the extraction of any themes or ideas.

Step 3: Storing

There are two different storage issues which departments need to address. The first is an electronic storage system of all the data that are compiled from students' work and results from indirect measures.

For tracking direct (and some indirect) measures programs may create an electronic database/Excel spreadsheet to store all of their assessment data for later analysis.⁵ The database will typically list all students and their performance on the measure. *Tool 4: Example of a program database* illustrates how to compile the database of assessment data.

Tool 4: Example of a program database			LO 1: Portfolio Rating	LO 1: Senior Exit Interview	LO 2: Paper Rating from 300-level course
Last Name	First Name	Year			
Allan	Jane	Senior	4	More writing needed	4
Miller	Larry	Senior	5	Not present	5
Smith	Bob	Senior	3	More writing needed	3
Bloom	Desmond	Junior			
Jones	Robin	Junior			3
Smith	Troy	Junior			1

Because this database will have individual student information, it is very important to ensure it remains secure and that only faculty and staff involved in the assessment activity have access to the contents.

Many times, however, indirect measures may not be trackable by specific students. For these types of measures a descriptive report of the results will be useful as the program reviews the direct measures.

The second storage issue facing the department revolves around copies of student work and responses to questionnaires. It is generally advisable to retain copies of or access to the direct measures until the University Assessment Committee has reviewed the final report. If these examples contain either students' names or student id numbers, it will be necessary to maintain a secure filing system. *Tool 5: Protecting student identification* provides a procedure to limit inappropriate access to student information. While this requires a bit of work upfront, it can help the program avoid thorny issues later.

Additionally, it is recommended that samples of students' work be stored to document the assessment process. Generally for each direct measure, an example at each level of the performance standard should be saved. Electronic copies of student work can reduce space required for storage and allow the original work to be returned to the students. These documents can be scanned and stored as PDF files to help limit the amount of storage space necessary.

Tool 5: Protecting Student Identity

- Assign a unique numeric code to all students enrolled in program (Do not use student ID or Social Security Number)
- Store number in secured database
- Collect student work with name
- Print appropriate code on each example of student work
- Redact work to eliminate evidence of authorship

Student awareness of assessment activity and privacy issues

Students should be aware that their work may be used in the assessment purposes. *Tool 6: Syllabi statement regarding student work in assessment* provides an example of a statement that departments may want to use. By incorporating the statement on select or all program courses the department informs students about its assessment work.

Tool 6: Syllabi statement regarding the retention of student work

Notice:

Copies of your coursework including any submitted papers and/or portfolios may be kept on file for institutional research, assessment and accreditation purposes.

As noted in the section about keeping data work secure, student work is protected by The Family Educational Rights and Privacy Act (FERPA) (20 U.S.C. § 1232g; 34 CFR Part 99). To comply with FERPA regulations, student work should either be maintained in a secure system with access limited to those involved in assessment or should have all personally identifiable information removed. Even without a name, some student work is considered identifiable if it contains sufficient information about the student to enable the author to be identified.

Strategies for collecting data

By reviewing the original planning questions in *Tool 1: Questions to ask in planning data collection* before collecting data, programs can avoid many potential roadblocks in the data collection process. The following example lists three common roadblocks that can occur during this process and illustrates an effective plan for data collection.

Section IV: Analyzing Assessment Data

Analysis of data is the next step in the assessment process. Analysis is a process that provides better understanding of data and allows inferences to be made. It summarizes the data, enhances the value of information gathered and provides direction for decisions regarding program improvement. While data analysis can be relatively complex, for the purpose of assessment it is usually basic.

Checklist of Needed Activity for Analyzing Assessment Data:

- ☐ An indication of the number students participating in the assessment activity for each outcome measure
- ☐ The percentage of students who met or exceeded the performance standard for each outcome measure

This section discusses the core elements of data analysis and provides strategies for and examples of analysis. The underlying theme of this section is to illustrate how to link data to the learning outcomes and provide a basis for using data to improve student learning.

Before analyzing data

Two important steps should be completed before analyzing data. The first step is to review the data visually. Reviewing data has two benefits: It allows for the identification of outliers and possible mistakes, and it enables basic patterns or trends to emerge. For example, it may be clear that all students who took a particular class had difficulty with a particular outcome.

The second step of the process is to determine the appropriate method for analyzing the data. This can range from simply counting the number of successful students to higher powered statistical analyses. The two key factors are first to make sure the analysis method fits the data; and second, to ensure that method aligns with the program's needs. There are two types of data used in assessment each with different methods of analysis.

Categorical data are based on groupings or categories for the evaluation of student performance. For example a simple passed/failed score is categorical because there are two groups into which students can be placed. Often rubrics generate categorical data by using a scale of “exceeding expectations,” “meeting expectation,” and “failing to meet expectations”.

Numerical data are based on scales that reflect student performance. Tests which are scored based on the percentage of questions answered correctly generate numeric data.

Direct measures can generate either categorical or numerical data. Student's papers rated on an assessment rubric may be categorized as “meeting standard” or “failing to meet standard”. However the papers may be scored on a numerical scale indicating the overall quality of the paper with respect to the learning outcome.

Indirect measures can also generate either categorical or numerical data. By asking students on a questionnaire: “Did you have sufficient writing in the program?” a program would compile categorical data based on those saying “yes” and those saying “no.” However, by asking students to indicate how strongly they agree with a statement like “there was sufficient writing required in

my program”, numeric data could be generated by applying an agreement scale. (5 – Strongly agree, 4 – Agree, 3 – Neither, 2 – Disagree, 1 – Strongly disagree).

Analyzing assessment data

Once the data have been reviewed and the type determined, the process of analyzing data follows. *Tool 1: Methods for analyzing data* provides a brief overview of the basic methods used to analyze assessment data.

Assessment’s focus on student achievement of learning outcomes typically requires the determination of counts and percentages. Together they show clearly the number of students involved in the activity and the rate of successful display of the outcome. All data, regardless of type can be analyzed using counts and percentages. Numeric data has the additional benefit of being able to be analyzed using descriptive statistics. Mean, median, and mode provide useful information to interpret data by allowing for easier comparison between groups and tests for significant differences.

Tool 1: Methods for analyzing data

- **Percentage:** Proportion of total cases falling into a category
- **Mean:** Average of a set of scores
- **Median:** Middle value in an ascending list of scores
- **Mode:** Most frequent score
- **Standard Deviation:** Average distance of scores from the mean
- **Percentile:** Percentage of a distribution of scores that is equal to or below a specified value.

The impact of dispersion

By examining how data are distributed around measures of central tendency, particularly the mean and median, a richer understanding of the data emerges. The standard deviation represents the average deviation of scores about the mean. Small standard deviations in student performance indicate that performance levels varied little across students in the sample. Large standard deviations indicate a greater variability in levels of student performance. Standard deviations are commonly reported with the mean. Percentiles represent the percentage of a distribution of scores that are at or below a specified value. They are calculated by the formula $\text{Percentile} = S_b/n \times 100$, where S_b is the number of scores below the score of interest, and n is the total number of scores. They are often reported with the median which by definition is the 50th percentile. For example: a median score of 75 on a final exam would be the 50th percentile indicating 50% of students scored above 75 and 50% scored below. By examining the 25th, 50th, and 75th percentiles one can gain a sense of a student’s performance relative to the group.

Missing data and valid responses

Working with assessment data, there are many instances when data will not be available for every student. As a general rule, missing data should be excluded from calculations of percentages and descriptive statistics. If a program has ten (10) students, and eight (8) submit a needed paper for the assessment of an outcome; then eight (8) submitters become the basis of the analysis. Extending the example, if six (6) of the submitted papers meet or exceed the performance standard, then a program would indicate 75% of students submitting papers showed mastery of the outcome rather than 60% of all students in the program.

Presenting analysis

Tables and graphs are useful in presenting analysis because they focus attention to specific results. Tables are useful for reporting multiple percentages and frequencies, comparison of student performance with stated performance standards and some descriptive statistics. They provide an ordered way for readers to see results quickly for each outcome measure without having to search through text to find a particular result. Graphs can further enhance the visual impact of assessment. Graphical representations of results show differences in variables, which makes graphs highly effective in showcasing assessment results.

When sharing the results of program assessment it may be useful to report each learning outcome and outcome measure paired with the corresponding results of the analyses, which joins the multiple outcome measures (direct and indirect) for each learning outcome. Next, compare the results with the specified performance standard and discuss the implications of the data as they relate to the program. Both strengths and areas for improvement are discussed, because showcasing program success is just as important as identifying areas for improvement, when it comes to making data based decisions about the program.

When comparing student performance to specified performance standards, a table with the counts and percentages may be useful to summarize the data. The example in *Tool 2: Example of table of counts and percentages* shows data collected from 20 student portfolios for two learning outcomes. It indicates the number of students completing the portfolio component and the percentage who were below, met and above the performance standard. While 70% of students in the sample achieved or exceeded the standard, 30% were below the performance standard.

Tool 2: Example of table of counts and percentages				
	# of students evaluated	% of students		
		Below Performance Standard	Meeting Performance Standard	Above Performance Standard
Demonstrate critical thinking and writing skills within the discipline	20	30	50	20
Apply specialized knowledge within Trans Psych and related fields	18	5	5	90

The role of advanced statistical analysis

As a program's assessment activity and data increase, more advanced analysis may be useful in understanding student learning. It is possible to

- Study differences in performance to examine the effects of curricular change
- Conduct pre and post assessments to evaluate effect of specific learning experiences
- Compare program students to national performance on certification examinations

The Office of Institutional Effectiveness will work with programs looking to incorporate these and other types of analysis into their assessment activity.

Section V: Reporting Results

The next step of the cycle is reporting results of program assessment. This phase focuses on interpreting strengths, areas for improvement, and identifying recommendations to enhance student learning. There are two steps in writing the assessment report:

1. Working with faculty to understand assessment results
2. Writing the final assessment report

Working with faculty to understand assessment results

Including program faculty in all steps of the assessment process is important to ensure its meaningfulness and effectiveness. The inclusion of faculty insights is probably most important in interpreting results and identifying strategies for improving student learning. The methods used for sharing results is driven by character of the department, with some pouring over all the data generated and others simply reviewing summary analysis outlined in Section IV of the handbook. Using summary reports of assessment results, and the University Assessment Committee's review of the previous year's report will typically facilitate rich discussion and generate useful interpretation for the assessment report.

Checklist of Needed Activity for Reporting Assessment Results:

- ☐ One completed outcome-specific report for each learning outcome assessed during the year which includes results, interpretation, and implications
- ☐ An executive summary including a list of student learning outcomes, description of the overall findings, any challenges the program faced in its assessment activity, and Assessment Committee recommendations.
- ☐ An appendix of materials used in the assessment process including direct and indirect measures

Writing the assessment report

The assessment report is the document which summarizes a program's assessment activities, program decisions, and future directions. The report is reviewed by the University's Assessment Committee, and used by the academic program to evaluate its effectiveness. This report also serves as the principle evidence of learning outcomes assessment for institutional accreditation. It is typically compiled by the program chair and faculty based on the work outlined earlier in this Handbook. The report contains three components: Outcome Reports, Executive Summary, and Appendix of Supporting Material.

Outcome reports examine each learning outcome individually (see Appendix C). This section of the report is divided into three sections: Outcome and Past Assessment, Assessment Activity, and Interpretation of Results.

Outcome and Past Assessment gives an overview of past assessment activity with this learning outcome. This section gives a brief description of trends and general findings.

Assessment Activity describes each component of the assessment process. It includes the following sections:

Outcome measures includes a description of each measure used for this outcome by identifying how the measure was created, when it was implemented, and who used it. The description also indicates if it is a direct or indirect measure.

Performance standard defines the assessment criteria and how well students (overall) are expected to perform on this measure. This section also includes a justification for the expected performance level. For example, if a new outcome was added to the program, students may not be expected to perform at 80%, but rather 50%. It is important to explain the justification for this standard not only for the reviewers, but also to create and maintain a record for the program.

Data collection explains the collection procedures. A clear description of this process will also allow for easy replication in the future. *Tool 1: Data collection questions* gives a list of three basic questions to address when completing this section of the report.

Tool 1: Data collection questions

- *How were data collected?*
Did each professor ask students to submit 2 copies of papers so that one copy could be used for the assessment? Did the chair ask each faculty member to submit papers to him/her?
- *When was data collection?*
Fall semester? Spring semester?
- *Which students were included?*
Students in a specific course? Seniors? Juniors?

Analysis section describes results and how data were analyzed. The following questions should be addressed:

What approach was used to analyze data?

Average scores on a multiple-choice test? Percent rated in each category on a rubric?

What did you find?

What are your results?

Did you have the level of participation expected?

Did you receive data from all courses who should have contributed? How many participants are missing? Does the work received provide a good sample to determine if the learning outcome was or was not achieved?

Interpretation of results provides meaning to the data collected in the assessment process and includes the following three sections:

Extent this Learning Outcome has been achieved by students discusses how well students performed on each measure (direct and indirect) by summarizing information from **Analysis** section for each measure. In this section, the outcome

is viewed as a whole entity and not in its component parts as in the *Assessment Activity* section.

Program strengths and opportunities for improvement relative to assessment of outcome requires the program to define where students are performing at the highest and lowest, and what this means for the program. How do results indicate that the department is adequately supporting (or not supporting) this learning outcome?

Discuss planned curricular or program improvements for this year based on assessment of outcome.

This section describes the plan for action for the next year. Planned improvements usually address one of the following areas:

- Courses supporting learning outcomes
- Learning outcomes
- Measures (rubrics, tests, surveys)

Executive summary through its different sections provides a brief history of previous assessment activities and linkages to school and university mission. This section includes the following components:

Description of where documents are stored provides direction for finding assessment data. It is advisable for programs to retain (or have access to) student work generating assessment data for one year. This allows for easy reference while the University Assessment Committee is reviewing the report. This can be done either in paper form or electronically. Programs should maintain samples of student work for each level of performance standards used in the assessment activity (e.g. exceeding the standard) as part of the report to make future examination possible.

Lists of all outcomes past and present provides an ongoing history of learning outcomes for the program. All learning outcomes should be included in this list.

Description of linkage to departmental and university mission refers to specific aspects of the school and

university mission that relate to the program. Completing this section requires an explanation of how the program connects to the university mission and school plan. See *Tool 2: University Mission and Link to Strategic Plan* for further information.

Describe how the program implemented its planned improvements from last year
It is important to provide the program and reader an understanding of what occurred and why. The following information needs to be included in this section:

Tool 2: University Mission and Link to Strategic Plan

University Mission

To advance the Art and Science of Healthcare

See University portal for Strategic Plan

- Description of the specific planned improvement for each outcome
- How the program concluded that improvements needed to be made
- Who was involved in the implementation
- When the completion occurred

Tool 3: Example of Documentation of Implemented Planned Improvements

Outcome	Planned Improvement	Update (<i>Indicate when, where, and how planned improvement was completed. If planned improvement was not completed, please provide explanation.</i>)
Apply ethical reasoning in discussing applied issues.	Add a case-study assignment to course that reinforces ethical theories learned in previous course	The professor who primarily teaches course X reviewed the course syllabus and decided to add a homework assignment to week 5 in which students reflect on the ethical consideration of a research project.
Write a coherent argument using primary sources	Invite the library faculty to course X to review finding primary sources	We decided against this planned improvement because starting in the fall course X is no longer a requirement for the major. Instead we have decided to work with the library faculty to develop an online refresher that will be targeted to a series of elective courses

Response to University Assessment Committee Recommendations

Each program will receive a report from the Assessment Committee with one of the following boxes selected:

Report accepted as submitted – If this box was selected, indicate that your report was accepted as submitted.

Revisions required to accept report this year – If this box was selected, describe what actions taken to have report accepted.

Recommendations for next year's assessment process – If this box was selected, list each recommendation and if it was or was not implemented. A thorough response to this item gives context for why recommendations were or were not acted on.

Appendix of supporting materials is a compilation of materials that aids in the understanding of the outcome reports and the executive summary. *Tool 3: Items often included in assessment report appendices* lists the types of materials that are most commonly included. Appendices should include copies of all assessment instruments including rubrics. By including items such as rubrics and other measures in the appendices, those who read the assessment report will have a better understanding of how the results were achieved and a context for interpreting recommendations for improvement.

Tool 4: Items often included in assessment report appendices

- Notes from meetings with faculty
- Examples of outcomes measures
- Rubrics used to score student work
- Questionnaires used in indirect measures
- Charts and graphs illustrating results of data analyses
- Reports from institutional surveys

Section VI: Planning for the Next Assessment and Closing the Assessment Loop

Assessment is a cyclical process that builds on previous work and activity. The “assessment loop” is closed once a program takes findings from its assessment results, and implements changes based on those findings. Generally, assessment findings indicate a need to modify the assessment process or the academic program.

Checklist of Needed Activity for Planning and Implementing Changes:

- ☐ Results from current assessment cycle
- ☐ Draft of assessment report

Making any change also requires consideration of resources and developing a plan of action. The following section provides a framework for thinking about taking action to close the assessment loop.

Changes in the assessment process

When reviewing the assessment results, it is also important to evaluate the assessment process. This involves considering all aspects involved in creating the assessment report. Reviewing learning outcomes as well as approaches to gathering data will provide direction on improving the assessment process.

Learning outcomes

Tool 1: Re-assessing learning outcomes provides a structure for reviewing student learning outcomes. Based on findings from the student learning outcome assessment results, a program may want to retain, modify, or eliminate an outcome.

Tool 1: Re-assessing learning outcomes	
<u>Results from assessment activity</u>	<u>Likely use of outcome during next cycle</u>
Students not performing adequately relative to outcome	→ If recommendations impact student learning immediately, re-assess outcome using same measure during next cycle.
	→ If recommendations impact student learning over an extended timeframe; schedule re-assessment for later
Students performing adequately relative to outcome	→ If same results for the past 3 years, consider replacing this outcome. Potentially schedule re-assessment at an appropriate interval (e.g. three years)
Students performance relative to outcome yields unclear current results	→ If difficulty in determining appropriate level relates to outcome; re-write outcome and reassess during next cycle
	→ If difficulty relates to measures; retain outcome; revise measure; and re-assess during next year

Measures

In addition to changing outcomes, there might be a need to change the type of data collected. If results obtained were not as expected, it is also important to know if better information could be collected to demonstrate student learning. This change could vary from modifying items on a multiple-choice test to creating a new rubric for reviewing essays.

Data collection procedures

In addition to having the correct measures, it is also important to consider how data were collected in previous student learning assessments. Knowing who was included in the assessment data, and when data were collected are important to understanding if changes need to be made in data collection procedures.

Changes in the academic program

Results from the student learning assessment may indicate that program curricula need to be reviewed and adjusted. Mapping learning outcomes to the curriculum is the first step to understanding if changes are necessary. Changing how concepts are introduced and the timing of that introduction to students are two common findings from student learning assessments.

Mapping outcomes to the curriculum

Results may indicate a need to understand where students are introduced to concepts defined in the learning outcomes. Mapping learning outcomes to program courses is the first step in understanding where students are introduced to the material they need to master.

Examining concept reinforcement

Often programs will discover that students are introduced to the concept in the curriculum, but course assignments and planned experiences are not sufficient to help students master those concepts. This may lead to considering modifications in assignments, readings, or general teaching approaches to reinforce concepts with students. A program may also discover that a new course needs to be created to sufficiently address a learning outcome.

Examining course sequencing

Sometimes faculty will discover that the course provides sufficient support for the student to master the material, but course sequencing should be adjusted so that students are introduced to concepts that build on and complement each other. The student learning assessment process can be used as an audit of the programmatic educational experience.

Taking Action

Opportunities to improve the assessment process and curriculum may emerge from assessment results, but will not be realized without planning and implementation. The assessment loop is only closed if actions are taken to make modifications where necessary. Answering who, what, when, and where questions about assessment modifications are helpful to planning and implementing any changes. *Tool 2: Questions for planning change* provides a few questions to assist with mapping and implementing changes.

Tool 2: Questions for planning change

- Who will implement the changes?
- Who needs to be involved to make these changes successful?
- What will be changed?
- What needs to occur in order for things to change?
- When will the changes be put in place?
- Where will they be implemented?
- How will they be implemented?



Course Evaluation Form
College of Dental Medicine

Date: _____

Review Committee Members: _____

Course Name: _____

Course Director: _____

Years of course reviewed: _____

Material reviewed Checklist

Source Material	Yes	No
Syllabus		
Faculty CV's		
All Course materials (ppt, Canvas, lab manuals, video, source texts, etc.)		
Student course evaluations		
Student faculty evaluations		
Course director self-assessment		
Course auditor report		
PLO course links with CLOs		
ILO course links with CLOs		

Likert Scale on Key Issues

The course was well organized:

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Not Applicable
1	2	3	4	5	NA

The course was administered well:

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Not Applicable
1	2	3	4	5	NA

The course content was timely, contemporary and linked properly to ILOs and PLOs:

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Not Applicable
1	2	3	4	5	NA

The course integrated basic, behavioral and clinical sciences when indicated:

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Not Applicable
1	2	3	4	5	NA

The course was interprofessional:

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Not Applicable
1	2	3	4	5	NA

The evaluation methods were appropriate and administered properly:

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Not Applicable
1	2	3	4	5	NA

The student reviews of this course were positive:

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Not Applicable
1	2	3	4	5	NA

Narrative findings of the course review:

Recommendations:

Suggestions:

Signatures of the course review team

Name

Signature

Name

Signature

Name

Signature

Name

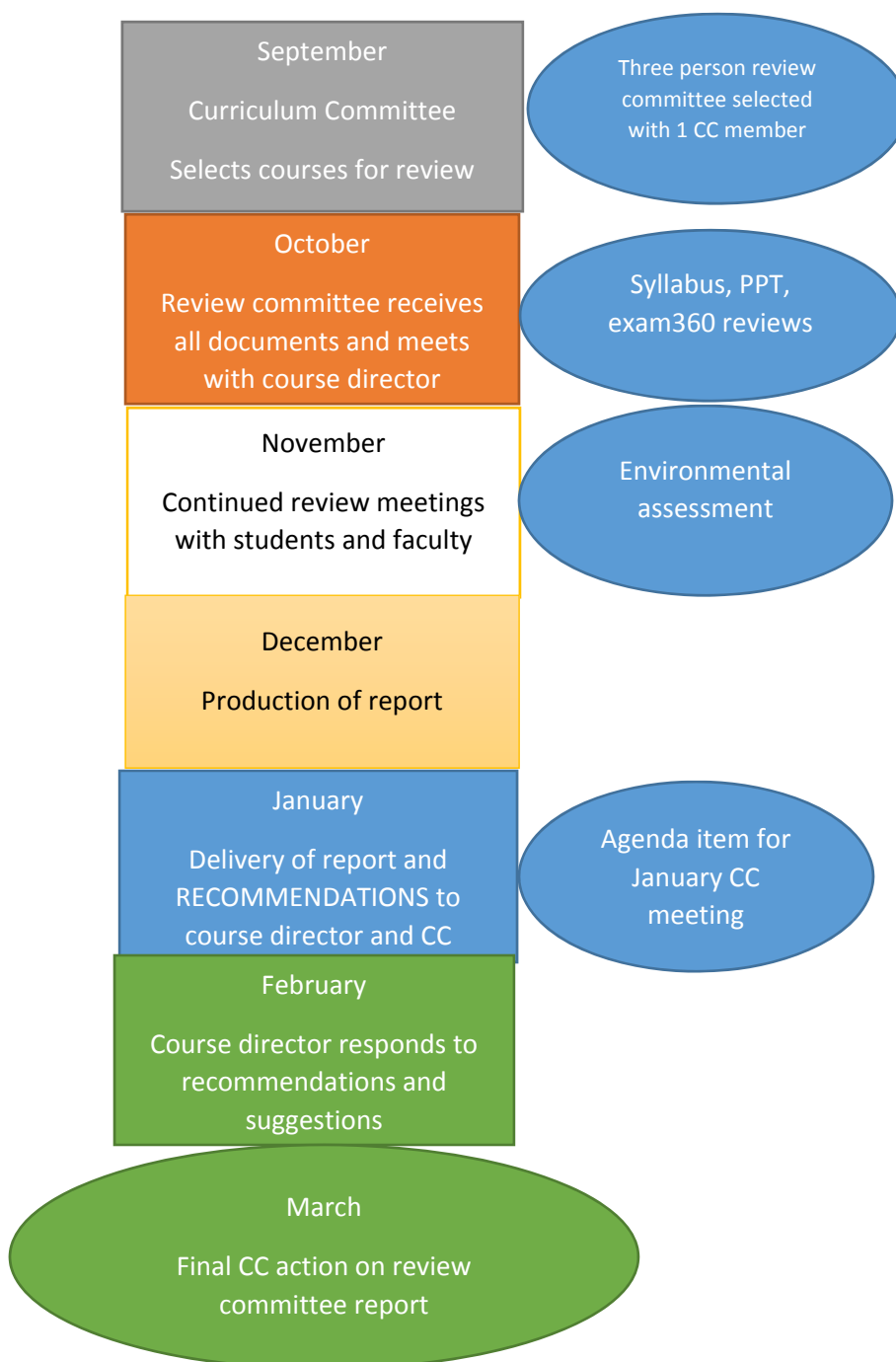
Signature



Course Review Flowchart

The following chart outlines the activities and sequence associated with course review. Every course, after the first, third, and fifth year of CNUCDM operation will undergo full course review. This is needed to optimize course content and engage faculty in the evolution of the academic program. The current plan is for full course review every 4 years thereafter.

While this flowchart is for the scheduled course reviews, the curriculum committee can enact an interim review as beneficial at any time.





COURSE REVIEW SCHEDULE

YEAR 1

Course Title	Semester	Units	Course review first cycle	Course review second cycle
Hematology	1	4	Winter 2021-22	Winter 2023-24
Integumentary and Musculoskeletal Systems	1	7	Winter 2021-22	Winter 2023-24
Foundations of Odontology	1	6	Winter 2021-22	Winter 2023-24
Dental Anatomy	1	6	Winter 2021-22	Winter 2023-24
Foundations of Dental Medicine	1	3	Winter 2021-22	Winter 2023-24
Managing Student Life	1	1	Winter 2021-22	Winter 2023-24
Neuroscience	2	9	Winter 2021-22	Winter 2023-24
Cardiovascular and Pulmonary Systems	2	9	Summer 2022	Summer 2024
Cariology	2	3	Summer 2022	Summer 2024
Oral Microbiology/Immunology	2	3	Summer 2022	Summer 2024
Surgical Anatomy of the Head and Neck	2	2	Summer 2022	Summer 2024
Ethics in Dental Medicine and Health Care	2	2	Summer 2022	Summer 2024

YEAR 2

Course Title	Semester	Units	Course Review First Cycle	Course Review Second Cycle
Renal System	1	5	Winter 2022-23	Winter 2024-25
Gastroenterology	1	5	Winter 2022-23	Winter 2024-25
Endocrine System	1	5	Summer 2023	Summer 2025
Clinical Pharmacology 1	1	3	Winter 2022-23	Winter 2024-25
Operative Dentistry	1	6	Summer 2023	Summer 2025
Periodontology (Fall and Spring)	1, 2	6	Summer 2023	Summer 2025
Dental Anesthesiology 1, Local Anesthesia	1	3	Summer 2023	Summer 2025
Oral Radiology 1	1	3	Winter 2022-23	Winter 2024-25
Clinical Pharmacology 2/Oral Pharmacology	2	3	Summer 2023	Summer 2025
Prosthodontics and Implant Dentistry: Removable Prosthodontics	2	6	Summer 2023	Summer 2025
Comprehensive Care Family Dentistry	2	3	Summer 2023	Summer 2025
Endodontology, Diseases of the Pulp and Pathways of Odontogenic Infection	2	3	Summer 2023	Summer 2025
Dental Anesthesiology 2: Pain and Anxiety Control, Analgesia, Medical Management of Local Anesthesia	2	3	Summer 2023	Summer 2025
Oral Pathology/Oral Medicine 1	2	3	Winter 2022-23	Winter 2024-25
Orthodontics and Craniofacial Growth and Development	2	3	Winter 2022-23	Winter 2024-25
Behavioral Medicine	2	3	Winter 2022-23	Winter 2024-25
Dental Medicine at all Stages of Life	2	3	Winter 2022-23	Winter 2024-25

YEAR 3

Course Title	Semester	Units	Course review first cycle	Course review second cycle
Junior Year Medicine Seminar (fall, spring)	1, 2	4	Winter 2023-24	Winter 2025-26
Prosthodontics and Implant Dentistry: Fixed Prosthodontics	1	6	Winter 2023-24	Winter 2025-26
Comprehensive Care Family Dentistry	1, 2	16	Winter 2023-24	Winter 2025-26
Oral Radiology 2	1	3	Winter 2023-24	Winter 2025-26
Principles of Oral Surgery	1	3	Winter 2023-24	Winter 2025-26
Pediatric Dentistry	1	3	Winter 2023-24	Winter 2025-26
Dental Public Health	1	2	Summer 2024	Summer 2026
Practice Management 1	1	2	Summer 2024	Summer 2026
Periodontology Seminar	2	2	Summer 2024	Summer 2026
Oral Pathology/Oral Medicine 2	2	3	Summer 2024	Summer 2026
Clinical Clerkship: Oral and Maxillofacial Surgery	2	8	Summer 2024	Summer 2026
Clinical Clerkship: Pediatric Dentistry	2	8	Summer 2024	Summer 2026

YEAR 4

Course Title	Semester	Units	Course Review First Cycle	Course Review Second Cycle
Senior Year Medicine Seminar	1, 2	4	Winter 2024-25	Winter 2026-27
Periodontology Seminar	1	2	Winter 2024-25	Winter 2026-27
Prosthodontics and Implant Dentistry: Implant Surgery and Prosthodontic Reconstruction	1	3	Winter 2024-25	Winter 2026-27
Comprehensive Care Family Dentistry	1, 2	16	Winter 2024-25	Winter 2026-27
Oral Radiology Seminar	1	2	Winter 2024-25	Winter 2026-27
Clinical Clerkship: Community-Based Education	1, 2	16	Summer 2025	Summer 2027
Seminar in Dental Public Health	1	2	Summer 2025	Summer 2027
Oral Pathology/Oral Medicine Seminar	2	2	Summer 2025	Summer 2027
Clinical Clerkship: Orthodontics	2	2	Summer 2025	Summer 2027
Advanced Topics in Oral and Maxillofacial Surgery	2	2	Summer 2025	Summer 2027
Practice Management 2	2	2	Summer 2025	Summer 2027
Clinical Electives	2	6	Summer 2025	Summer 2027



CRITICAL THINKING IN THE CURRICULUM

- A: Courses that employ case-based clinical decision making utilizing evidence based approaches to learning.
 B: Higher levels of Blooms Taxonomy to analyze and evaluate
 C: Simulations such as OSCE's are utilized
 D: Look backs at completed or in process care in the clinical setting is applied in seminars and during quality assurance by the clinical team
 E: Courses with critical thinking writing assignments
 F: Self-assessment: compare preclinical and clinical work outcomes to evidence-based care and standards of care
 G: Utilization of active learning methods

YEAR 1

Course Title	Semester	Units	A	B	C	D	E	F	G
Hematology	1	4	X	X	X				X
Integumentary and Musculoskeletal Systems	1	7	X	X	X				X
Foundations of Odontology	1	6	X	X	X	X		X	X
Dental Anatomy	1	6		X				X	
Foundations of Dental Medicine	1	3	X	X	X		X		X
Managing Student Life	1	1		X					X
Neuroscience	2	9	X	X	X				X
Cardiovascular and Pulmonary Systems	2	9	X	X	X				X
Cariology	2	3	X	X					X
Oral Microbiology/Immunology	2	3	X	X					X
Surgical Anatomy of the Head and Neck	2	2		X				X	X
Ethics in Dental Medicine and Health Care	2	2	X	X	X	X	X	X	X

- A: Courses that employ case-based clinical decision making utilizing evidence based approaches to learning.
 B: Higher levels of Blooms Taxonomy to analyze and evaluate
 C: Simulations such as OSCE's are utilized
 D: Look backs at completed or in process care in the clinical setting is applied in seminars and during quality assurance by the clinical team
 E: Courses with critical thinking writing assignments
 F: Self-assessment: compare preclinical and clinical work outcomes to evidence-based care and standards of care
 G: Utilization of active learning methods

YEAR 2

Course Title	Semester	Units	A	B	C	D	E	F	G
Renal System	1	5	X	X	X				X
Gastroenterology	1	5	X	X	X				X
Endocrine System	1	5	X	X	X				X
Clinical Pharmacology 1	1	3	X	X	X				X
Operative Dentistry	1	6	X	X	X			X	X
Periodontology (Fall and Spring)	1, 2	6	X	X	X			X	X
Dental Anesthesiology 1, Local Anesthesia	1	3	X	X	X			X	X
Oral Radiology 1	1	3	X	X	X			X	X
Clinical Pharmacology 2/Oral Pharmacology	2	3	X	X	X				X
Prosthodontics and Implant Dentistry: Removable Prosthodontics	2	6	X	X	X			X	X
Comprehensive Care Family Dentistry	2	3	X	X	X	X		X	X
Endodontology, Diseases of the Pulp and Pathways of Odontogenic Infection	2	3	X	X	X			X	X
Dental Anesthesiology 2: Pain and Anxiety Control, Analgesia, Medical Management of Local Anesthesia	2	3	X	X	X	X		X	X
Oral Pathology/Oral Medicine 1	2	3	X	X	X				X
Orthodontics and Craniofacial Growth and Development	2	3	X	X	X				X
Behavioral Medicine	2	3	X	X	X	X	X	X	X
Dental Medicine at all Stages of Life	2	3	X	X	X	X			X

- A: Courses that employ case-based clinical decision making utilizing evidence based approaches to learning.
 B: Higher levels of Blooms Taxonomy to analyze and evaluate
 C: Simulations such as OSCE's are utilized
 D: Look backs at completed or in process care in the clinical setting is applied in seminars and during quality assurance by the clinical team
 E: Courses with critical thinking writing assignments
 F: Self-assessment: compare preclinical and clinical work outcomes to evidence-based care and standards of care
 G: Utilization of active learning methods

YEAR 3

Course Title	Semester	Units	A	B	C	E	D		F	G
Junior Year Medicine Seminar (fall, spring)	1, 2	4	X	X	X	X	X		X	X
Prosthodontics and Implant Dentistry: Fixed Prosthodontics	1	6	X	X	X				X	X
Comprehensive Care Family Dentistry	1, 2	16	X	X	X	X	X		X	X
Oral Radiology 2	1	3	X	X	X	X			X	X
Principles of Oral Surgery	1	3	X	X	X				X	X
Pediatric Dentistry	1	3	X	X	X				X	X
Dental Public Health	1	2	X	X						X
Practice Management 1	1	2	X	X	X					X
Periodontology Seminar	2	2	X	X	X					X
Oral Pathology/Oral Medicine 2	2	3	X	X	X					X
Clinical Clerkship: Oral and Maxillofacial Surgery	2	8	X	X		X	X		X	X
Clinical Clerkship: Pediatric Dentistry	2	8	X	X		X	X		X	X

- A: Courses that employ case-based clinical decision making utilizing evidence based approaches to learning.
 B: Higher levels of Blooms Taxonomy to analyze and evaluate
 C: Simulations such as OSCE's are utilized
 D: Look backs at completed or in process care in the clinical setting is applied in seminars and during quality assurance by the clinical team
 E: Courses with critical thinking writing assignments
 F: Self-assessment: compare preclinical and clinical work outcomes to evidence-based care and standards of care
 G: Utilization of active learning methods

YEAR 4

Course Title	Semester	Units	A	B	C	D	E	F	G
Senior Year Medicine Seminar	1, 2	4	X	X		X	X	X	X
Periodontology Seminar	1	2	X	X		X	X	X	X
Prosthodontics and Implant Dentistry: Implant Surgery and Prosthodontic Reconstruction	1	3	X	X	X			X	X
Comprehensive Care Family Dentistry	1, 2	16	X	X		X		X	X
Oral Radiology Seminar	1	2	X	X		X		X	X
Clinical Clerkship: Community-Based Education	1, 2	16	X	X	X	X	X	X	X
Seminar in Dental Public Health	1	2	X	X			X		X
Oral Pathology/Oral Medicine Seminar	2	2	X	X		X		X	X
Clinical Clerkship: Orthodontics	2	2	X	X	X	X		X	X
Advanced Topics in Oral and Maxillofacial Surgery	2	2	X	X	X	X		X	X
Practice Management 2	2	2	X	X	X		X		X
Clinical Electives	2	6	X	X		X	X	X	X



Student Self-Assessment Form

CNUCDM

Odontology 611

Self-assessment/peer assessment/faculty assessment in the laboratory of Class 2 caries removal, tooth preparation, restoration.

Course #	Course Title	Credits	Year	Term
Odont 611	Operative Dentistry <i>LAL and LAB</i>	6	DS 2	Fall

The surgical treatment of caries and degenerative and congenital diseases of the enamel and dentin is presented through the development of technical skills to remove diseased portions of the teeth and to provide anatomical functional direct restorations of teeth. Prevention and minimally invasive procedures for caries management is emphasized. Laboratory session focus on the development of procedures and psychomotor skills using surgical armamentarium in a simulated clinical setting for the treatment of caries and other diseases of the enamel and dentin.

Self-assessment/peer assessment/faculty assessment in the laboratory of Class 2 caries removal, tooth preparation, restoration.

For each domain, utilize the course materials for comparison with ideal clinical procedural activities.

Process:

A: Self assess according to the following scale 1-4

1. Under development of knowledge and skill
2. Performing with few errors
3. Consistently achieving goals of intervention needing more practice
4. Proficient in the laboratory and capable of clinical care transition

B: Have peer assess according to the same scale

C: Faculty assessment according to same scale

D: Identify learning needs and create personal learning plan: Write notes in form

DOMAIN	Self-assessment	Peer assessment	Faculty assessment	Learning needs	Personal learning plan
Caries removal					
Understanding preparation concept					
Preparation completion					
Restoration completion					
Detection of deficits					
Problem solving, identifying reasons for deficits					



Competency Evaluation Grading Rubric

Including application of biomedical sciences, behavioral sciences, ethics and professionalism

Stage of life of patient (circle one)

1. Birth
2. Infant
3. Childhood
4. Adolescence
5. Adulthood
6. Old age
7. Moribund

	1: Inadequate performance	2: Deficient performance	3: Minimal competency	4: Capable clinician knowledge, skills, values	5: Entrusted Professional Activity	Grade 1-5
Patient interaction	Non-communicative, poor listening skills	Gaps in patient/doctor interaction that created obstacles in care	Able to communicate and patient accepted care and had questions addressed	Able and personable communication with patient that addressed and allayed concerns;	Strong empathic and knowledgeable patient interaction, both verbal and nonverbal;	

				culturally aware	culturally competent	
Patient presentation	Unable to present patient findings in coherent fashion	Major gaps in presenting key findings	Able to demonstrate key findings but needs assistance prioritizing them	Demonstrates ability to present key findings and organize them in a fashion to make appropriate care decisions	Can independently evaluate and prioritize all key findings to comprehensively and without error, carry out safe and effective care through integrated medical, surgical and oral health evaluation	
Application of biomedical knowledge	Unable to apply biomedical knowledge to the care of the patient	Applies some aspects of biomedical knowledge to the care of the patient but with notable deficiencies	Demonstrates that key findings are taken into account to direct care based upon biomedical findings	Utilizes all biomedical findings to influence and optimize the care of the patient	Applies in a comprehensive and interactive fashion, with follow-up information and questions, all biomedical aspects of care in real time and associated to the patient's immediate and long term needs.	
Critical thinking	No self-reflection or	Demonstrates some ability to	Able to utilize all necessary	Applies knowledge	Thoroughly able to synthesize,	

	ability to apply knowledge critically	utilize empiricism and logic in patient care	tools of critical thinking in patient care but continues to synthesize the utilization of biomedical knowledge	critically developed in the care of patients across multiple domains of biomedical knowledge	reflect and apply biomedical knowledge broadly with inquisitive spirit and capability	
Ethical behavior/ professionalism	Demonstrates unprofessional and/or unethical behavior in the clinical setting	Thorough lapses or lack of self-awareness, a noncritical lapse in professionalism or ethical behavior is noted	Carries out all treatment in an ethical and professional manner	Shows leadership, empathy, clinical behavioral understanding customized to the patient's needs to assure both perception and reality of demonstrating ethical behavior and professionalism	Is an exemplar in applying the tenets of ethical behavior and professionalism to the patient and all members of the care team and is emulated within the team for those qualities	

Comments: (Comments are required for all 1 or 2 grades components)



Competency Assessment:

Clinical Care Evaluation

Clinical procedure competency assessed: -

Patient ID: _____

Age: _____

Student name and ID#: _____

Faculty providing evaluation name & ID#: _____ Signature: _____

Responsible faculty (if different) name & ID#: _____ Signature: _____

	1: Inadequate performance	2: Deficient performance	3: Minimal competency	4: Capable clinician knowledge, skills, values	5: Entrusted Professional Activity	Grade 1-5
Patient interaction	Non-communicative, poor listening skills	Gaps in patient/doctor interaction that created obstacles in care	Able to communicate and patient accepted care and had questions addressed	Able and personable communication with patient that addressed and allayed concerns;	Strong empathic and knowledgeable patient interaction, both verbal and nonverbal;	

				culturally aware	culturally competent	
Patient presentation	Unable to present patient findings in coherent fashion	Major gaps in presenting key findings	Able to demonstrate key findings but needs assistance prioritizing them	Demonstrates ability to present key findings and organize them in a fashion to make appropriate care decisions	Can independently evaluate and prioritize all key findings to comprehensively and without error, carry out safe and effective care through integrated medical, surgical and oral health evaluation	
Application of biomedical knowledge	Unable to apply biomedical knowledge to the care of the patient	Applies some aspects of biomedical knowledge to the care of the patient but with notable deficiencies	Demonstrates that key findings are taken into account to direct care based upon biomedical findings	Utilizes all biomedical findings to influence and optimize the care of the patient	Applies in a comprehensive and interactive fashion, with follow-up information and questions, all biomedical aspects of care in real time and associated to the patient's immediate and long term needs.	
Critical thinking	No self-reflection or	Demonstrates some ability to	Able to utilize all necessary	Applies knowledge	Thoroughly able to synthesize,	

	ability to apply knowledge critically	utilize empiricism and logic in patient care	tools of critical thinking in patient care but continues to synthesize their utilization	critically developed in the care of this patient across multiple domains	reflect and apply knowledge broadly with inquisitive spirit and capability	
Clinical skills	No knowledge or capability of instrumentation, application of instruments towards the clinical task and is unable to perform	Understands fundamentals of biomedical knowledge, and procedural implementation of the technical components of the clinical care being provided, but demonstrates inconsistent ability to apply these elements	Understands fundamentals of biomedical knowledge, and procedural implementation of technical components of clinical care being provided and demonstrates ability to apply these elements	Demonstrates the ability to comfortably apply the clinical care being provided in a skillful fashion that promotes continued development of skills, patient confidence, and consideration for applying more advanced skills as needed	Is fully capable to perform the clinical care and skill being evaluated in a variety of clinical situations, with a diverse patient pool and complex clinical needs.	
Ethical behavior/ professionalism	Demonstrates unprofessional and/or unethical behavior in the clinical setting	Thorough lapses or lack of self-awareness, a noncritical lapse in professionalism or ethical behavior is noted	Carries out all treatment in an ethical and professional manner	Shows leadership, empathy, clinical behavioral understanding customized to the patient's needs to assure both perception	Is an exemplar in applying the tenets of ethical behavior and professionalism to the patient and all members of the care team and is emulated within the team	

				and reality of demonstrating ethical behavior and professionalism	for those qualities	
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Faculty Comments: (Comments are required for all 1 or 2 grades components)

Student self-assessment:



California Northstate College of Dental Medicine

Managing Student Life Course Syllabus

Course #	Course Title	Credits	Year	Term
BSS 501	Managing Student Life	1	DS 1	Fall

Credit Hour Policy

For each 15-week semester, one (1) hour of credit is assigned per hour each week of classroom or direct faculty didactic instruction (that is, per hour of lecture or student in-class time) and a minimum of two (2) hours of out-of-class student work (homework). For practicum and internship time, one (1) hour of credit is assigned per three (3) hours each week of student time spent in this activity.

Maximum Enrollment: 80

Calendar of Important Dates:

Date	
August 12, 2020	First day of Fall term for all DMD 1 students
September 30, 2020	Group project selection: one for each college of 20 students
December 1, 2020	Group projects, groups 1 and 2
December 8, 2020	Group projects, groups 3 and 4
December 15	Final reflective essay exam

Course Coordinator, Instructors and Contact Information

Richard Simonsen DDS (course co-director)

Room:

E mail

Office hours

Leon Assael DMD (Course co-director)

Room:

E-mail: leon.assael@cnsu.edu

Office hours: Wednesdays 12:00pm-1:00pm, and 3:00pm-4:00pm (or by appointment)

Holly Jacobson BA (course administrator)

Room: xxx

E mail: holly.jacobson@cnsu.edu

Classroom LAL and Meeting Times

Room: Classroom xxxx

Time: xxxx 1 hours per week

Course description

Resilience, sustainability as a student and future health professional will be presented. Each session will provide a mix of lecture and small group discussions. Managing student debt, stress management, effects of social media, interpersonal relationships, and ethics in student practice will be discussed. The problems of drug and alcohol abuse will be shown. Respect in the University including cultural, gender, and sexual conduct issues will be presented. Students will be made aware of resources to promote student wellbeing.

Prerequisite Courses

None

Prerequisite Knowledge

None

Required Textbook(s) and Material(s)

1. *ASDA managing student debt* <https://www.asdanet.org/index/get-involved/advocate/issues-and-legislative-priorities/Dental-Student-Debt>
2. *Dangers and opportunities for social media in medicine* <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3863578/>
3. Assael, L and McCormick, SS, *Ethical Decision Making in Dentistry* <https://books.google.com/books?id=6dItAwAAQBAJ&pg=PR6&dq=dental+ethics+suzanne+mccormick&hl=en&sa=X&ved=0ahUKEwjflqan2bnhAhWEop4KHbSKBqwQ6AEIKDAA#v=onepage&q=dental%20ethics%20suzanne%20mccormick&f=false>

Technology

1. Computer-assisted instruction (Clickers) and SCANTRON Sheets
2. Web-based course management (Canvas) and Examsoft
3. Audio/Video recordings where applicable
4. PowerPoint
5. Epic electronic health record
6. PACS, DICOM compatible imaging software
7. Dental operator

Evaluation Components

In keeping with the Team Based Learning (TBL) approach, grades will be determined as follows:

Individual Components	50%
Reflective essay exam	50%

Team Components	50%
Group PCS projects X1	40%
Peer Evaluation	10%

GRADING

All students must demonstrate minimal individual competency. Therefore, students earning less than 75% on the total Individual component score will not have team component scores added to calculate their final course grade. During the course, students who score less than 75% on individual components may be subject to periodic course content review and may receive an Academic Alert.

In order to progress from one semester to the next, students must pass all courses with a letter grade of C or higher and maintain a minimum cumulative grade point average (GPA) of 2.0. The breakdown for assignment of letter grades and grade points for each letter grade are as follows:

Percent	Letter Grade/Action
90.0 – 100%	A
80.0 – 89.9%	B
75.0 – 79.9%	C - Pass
60.0 – 74.9%	D – Requiring remediation (successful remediation recorded as C, unsuccessful remediation recorded as F)
Below 60.0%	F – Fail (course must be repeated)
Incomplete	I

Incomplete

During a semester, a student may not complete all required assignments and/or examinations due to extenuating circumstances, such as, but not limited to, an illness or a family emergency. In such

a case, the course director may give a grade of Incomplete for the course. The course with the incomplete grade has to be completed successfully within the time frame as being defined by the student's academic plan, normally in the same academic year, otherwise a leave of absence would be required.

Core-Course Policies

All students are required to adhere to the Academic Policies that impact on student progression and conduct while attending the DMD program, including the following: Academic Progression Policy, Excused Absence Policy, Exam Policy, Course Grade Appeal Policy, Course Add/Drop Policy and Attendance Policy. Refer to the current Student Handbook for the detailed policies.

Course Specific Policies

1. Group Projects cases are to be submitted via CANVAS by 11:59pm PST on the deadline indicated. Only one group member should submit the assignment on behalf of the group. The course coordinator reserves the right to deduct points for late submission (20% of assignment grade for every 24 hours the assignment is turned in late).
Presentation of PCS cases requires the active participation of each team member, preferably presenting the component of the case the student was responsible for developing. The teams will each have 30 minutes for presentation which is ample time for participation of each member
2. Grade appeal for any individual assignments (including exams) should be submitted to the course coordinator in writing within 5 business days of grade release.
3. There will be no rounding of the final grade for this course.

Topics and Schedule

(Subject to change. Updates will be posted to CANVAS and announced by email)

All readings are in Vital Source, or as assigned and posted to CANVAS

Date	Topics	Readings*	Instructor	Notes
Week 1 LAL	Axioms of success in dental school		Simonsen	
Week 2 LAL	Academic success in dental school		Wu	
Week 3 LAL	Managing student debt		Feng	
Week 4 LAL	Time management, exercise and wellness in dental school		Simonsen	
Week 5 LAL	Drug abuse in health professionals		Keating	videos
Week 6 LAL	Ethical and life affirming activity during the clinical practicum	McCormick/Assael	Assael	
Week 7 LAL	Cultural and gender boundaries in professional life		Simonsen	
Week 8 LAL	OSCE interview		Clinical faculty	
Week 9 LAL	Resiliency in didactic and clinical education		Dental faculty	
Week 10 LAL	The public health “gene”. How to apply it in your education		Glassman	
Week 11 LAL	Applying axioms of success in your education and practice		Simonsen	

Week 12 LAL	Clinical experience with patient history		Clinical faculty	
Week 13 LAL	Project presentations group 1 and 2		Dental faculty	
Week 14 LAL	Project presentations group 3 and 4		Dental faculty	
Week 15 LAL	Final reflective essay exam		Simonsen	

Course Learning Outcomes and links to Program Learning Outcomes (Appendix A) and Institutional Learning Outcomes (Appendix B)

No.	Course Learning Outcome	DMD PLO	DMD ILO	Learning Hierarchy ^b	Assessment Method
1	Develop an initial understanding of the parameters and the capability to succeed in dental school	1,2,3,4,7,8	1,3,4,6	1,2, 3	Group projects
2	Understand the impact of external forces of patient care, faculty inputs, debt and work life balance on individual dental education success	1,2,3,5,6,7,8	1,4,	2, 3	Final exam Reflective essay

^a plo's appendix A

^b Learning Hierarchy based on Bloom's Taxonomy with 1=Memorization and/or Comprehension; 2=Application and/or Analysis; 3=Synthesis and/or Evaluation.

Teaching/ Learning Methodology

1. LAL: Lecture and active learning

CLO Rubrics

CLO 1: Develop an initial understanding of the parameters and the capability to succeed in dental school

Indicators	Initial	Developing	Developed	Proficient
Demonstrates an understanding of the parameters and the capability to succeed in dental school	Does not understand managing student debt, stress management, effects of social media, interpersonal relationships, and ethics in student practice drug and alcohol abuse, respect in the University including cultural, gender, and sexual conduct issues or resources to promote student wellbeing.	Demonstrates rudimentary understanding of these domains but with evolving demonstration this knowledge	Has detailed understanding of their role as a successful dental student	Consistently demonstrates the ability participate at the level of their knowledge and skill as a dental student and can assist other students in these domains

CLO 2: Understand the impact of external forces of patient care, faculty inputs, debt and work life balance on individual dental education success

Indicators	Initial	Developing	Developed	Proficient
Understands the impact of external forces of patient care, faculty inputs, debt and work life balance on individual dental education success	Has no or limited knowledge of the effectors of student life and curriculum on success in dental school	Begins to exhibit knowledge of these domains and applies this knowledge in their student life	Is capable of managing the impact of these domains to effectively navigate student life	Is an exemplar and a mentor to others in understanding the external forces that must be adapted to in student life to promote success

Appendix A: Program Learning Outcomes (PLOs) CNU College of Dental Medicine

1. Patient-Centered Care: Demonstrate understanding of healthcare disparities and cultural awareness in patient counseling and patient advocacy
2. Evidence-Based Care: Apply current, evidence-based oral healthcare within the scope of general dentistry
3. Culturally competent, empathic communication: Demonstrate patient centered, empathic, and culturally competent communication and interpersonal skills
4. Oral and Written Communication: Demonstrate sound oral and written communications in patient care
5. Critical Thinking: Utilize critical thinking, problem solving skills and systemic thinking in assessing and making reasoned, evidence-based decisions in patient care
6. Ethics and Professionalism: Demonstrate professionalism and ethical decision making
7. Biomedical Sciences Knowledge: Demonstrate an understanding of the fundamentals of biomedical sciences and apply them appropriately in oral healthcare
8. Practice Management: Apply legal, regulatory and business management concepts related to provision of oral healthcare services

DMD Program Learning Outcomes (PLOs) Proficiency Rubric

PLO 1: Patient-Centered Care

Demonstrate understanding of healthcare disparities and cultural awareness and capability in patient counseling and providing appropriate patient advocacy

Indicators	Initial	Developing	Developed	Proficient
1.1. Education. Demonstrates ability to educate all audiences through effectively communicating information and assessing learning	<ul style="list-style-type: none"> • Does not appropriately counsel patients • Does not check for understanding, ask questions, and/or asks inappropriate questions. • Does not demonstrate the 	<ul style="list-style-type: none"> • Counsels patients but leaves out pertinent information needed by patient • Communicates with basic level of clarity but does not always check for understanding or 	<ul style="list-style-type: none"> • Generally demonstrates empathy, communicates accurate information clearly, checks for understanding • Seeks to ensure understanding and 	<ul style="list-style-type: none"> • Consistently demonstrates empathy, communicates accurate information clearly, checks for understanding • Ensures understanding and

	ability to find and utilize appropriate resources and references necessary for providing accurate counseling, consultation and education	rephrase when confusion occurs. • Demonstrates the ability to find a one or two resources, yet the resources are not the best or most appropriate for providing accurate counseling, consultation and education	generally asks questions. • Frequently demonstrates the ability to find and utilize appropriate resources and references necessary for providing accurate counseling, consultation and education	asks appropriate questions. • Consistently demonstrates the ability to find and utilize appropriate resources and references for providing accurate patient counseling, consultation and education
1.2. Patient advocacy. Represents the patient's best interests	• Does not demonstrate the ability represent a patient's best interest	• Demonstrates awareness of issues that impact a patient • Demonstrates minimal ability to articulate these issues but does not demonstrate ability to sufficiently advocate on a patient's behalf	• Demonstrates sufficient awareness of issues that impact a patient • Demonstrates ability to articulate these issues • Demonstrates ability to sufficiently advocate on a patient's behalf	• Demonstrates full awareness of the most important issues that impact a patient • Demonstrates ability to clearly and effectively articulate these issues • Demonstrates ability to effectively advocate on a patient's behalf

PLO 2: Evidence-Based Care.

Apply sound, current, and evidence-based oral healthcare within the scope of general dentistry

Indicators	Initial	Developing	Developed	Proficient
2.1. Patient-centered care. Demonstrates ability to provide patient-centered care as the medication expert (collect and interpret evidence, prioritize, formulate assessments and recommendations,	• Does not demonstrate ability to provide patient-centered care at the medication expert level; e.g., demonstrates ability to collect but not sufficiently interpret evidence, does not prioritize,	• Demonstrates ability to provide patient-centered care as the medication expert in some, but not all, areas as follows: collect and interpret evidence, prioritize, formulate assessments and	• Demonstrates ability to provide patient-centered care as the medication expert (generally demonstrates ability to collect and interpret evidence, prioritize, formulate assessments and	• Demonstrates ability to provide sufficient patient-centered care as the expert (collects and interprets evidence, prioritizes, formulates assessments and recommendations, implements,

implement, monitor and adjust plans, and document activities)	formulates basic assessments and recommendations, does not sufficiently monitor and adjust plans nor document activities.	recommendations, implement, monitor and adjust plans, and document activities	recommendations, implement, monitor and adjust plans, and document activities)	monitors and adjusts plans, and documents activities)
2.2. Systems management. Demonstrates ability to manage patient healthcare needs using human, financial, technological, and physical resources to optimize the safety and efficacy of medication use systems	<ul style="list-style-type: none"> • Does not demonstrate understanding of oral healthcare delivery systems parts • Does not demonstrate understanding of the forces that influence components of the oral healthcare delivery system, including their connection to patient care • Does not demonstrate understanding of any challenges to systems that affect oral healthcare delivery Does not demonstrate understanding of how to work with different subsystems to deliver oral healthcare 	<ul style="list-style-type: none"> • Demonstrates understanding of some parts of oral healthcare delivery systems but does not identify how they are related to each other • Demonstrates understanding of some forces that influence the parts of healthcare delivery systems, but demonstrate minimal understanding of their connection to patient care • Demonstrates understanding of some challenges that can affect delivery of oral healthcare • Demonstrates some understanding of how to work with different subsystems and how they function to deliver oral healthcare, but demonstrate minimal awareness or understanding of one's own role within the oral healthcare delivery system 	<ul style="list-style-type: none"> • Demonstrates understanding of most major components of oral healthcare systems and their respective relationships • Demonstrates understanding of the forces that influence the components of healthcare delivery systems, and demonstrate some understanding of their influence on the quality of patient care • Demonstrates understanding of most challenges that can affect delivery of oral healthcare, but does not demonstrate complete comprehension of the effects Demonstrates basic understanding of how to work with different subsystems and how they function to deliver oral healthcare and demonstrate some understanding of 	<ul style="list-style-type: none"> • Demonstrates understanding of the major components of oral healthcare systems, their respective relationships, and their functions related to patient care • Demonstrates thorough understanding of the forces that influence components of healthcare delivery systems and demonstrate full understanding of their influence and implications on the quality of patient care • Demonstrates understanding of pertinent challenges to specific aspects of healthcare delivery by demonstrating abilities to thoroughly discuss the implications for the appropriate parts of oral health care delivery systems Demonstrates excellent

			one's role within the oral healthcare delivery system, but does not necessarily demonstrate application of knowledge in a manner that maximizes the quality of oral healthcare	understanding of how to work with different subsystems involved while also demonstrating understanding of one's role within the subsystems, and demonstrate appropriate application of knowledge in a manner that maximizes the quality of oral healthcare
2.3. Health and wellness. Designs prevention, intervention, and educational strategies for individuals and communities to manage chronic disease and improve oral health and wellness	<ul style="list-style-type: none"> Does not demonstrate understanding of how the arts can be utilized to optimize patients' well-being 	<ul style="list-style-type: none"> Demonstrates knowledge of some of the ways that the arts can be utilized to optimize patients' well-being 	<ul style="list-style-type: none"> Demonstrates sufficient knowledge of multiple ways that the arts can be utilized to optimize patients' well-being 	<ul style="list-style-type: none"> Demonstrates thorough knowledge of the ways that the arts can be utilized to optimize patients' well-being and creatively applies this knowledge to improve well-being and the practice and delivery of oral healthcare
2.4. Population-based care. Demonstrates understanding of how population-based care influences patient-centered care and the development of practice guidelines and evidence-based best practices	<ul style="list-style-type: none"> Does not demonstrate awareness of population-based care. 	<ul style="list-style-type: none"> Demonstrates minimal understanding of population-based care and how it influences patient-centered care Does not demonstrate awareness of how these notions influence the 	<ul style="list-style-type: none"> Demonstrates sufficient understanding of population-based care and how it influences patient-centered care Demonstrates sufficient understanding of how population-based care influences the 	<ul style="list-style-type: none"> Demonstrates superb understanding of population-based care and how it influences patient-centered care Demonstrates superb understanding of how population-based care influences the

		development of practice guidelines	development of practice guidelines and best practices for patient care	development of practice guidelines and demonstrates knowledge of best practices for patient care
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PLO 3: Culturally Competent, Empathic Communication.

Demonstrate patient centered, empathic and culturally competent communication and interpersonal skills

Indicators	Initial	Developing	Developed	Proficient
3.1. Empathy. Demonstrates the ability to communicate with the patient empathically.	<ul style="list-style-type: none"> Does not demonstrate the ability to communicate with the patient empathically. 	<ul style="list-style-type: none"> Demonstrates some ability, but experiences lapses in the ability to communicate empathically 	<ul style="list-style-type: none"> Demonstrates the ability to communicate empathically, with few lapses. 	<ul style="list-style-type: none"> Demonstrates an advanced ability, and never experiences lapses in communicating empathically.
3.2. Cultural competence. Demonstrates the ability to engage in communication with the patient that is culturally aware and accepting.	<ul style="list-style-type: none"> Does not demonstrate communication and interactions that convey respect or concern for patients and the community. Does not demonstrate an awareness of customs, beliefs, or perspectives in diverse patients Does not demonstrate awareness of cultural and linguistic needs of patients in order to communicate health information 	<ul style="list-style-type: none"> Demonstrates communication and interactions characteristic of a minimal level of respect, and little concern for patients and the community is apparent through use of some appropriate communication, but student does not employ follow-up questions for clarification, when necessary, and student provides inappropriate detail in responses Demonstrates a minimal level of awareness of customs, beliefs, or perspectives in diverse patients Demonstrates minimal awareness of cultural and linguistic needs of patients; either does not or only attempt 	<ul style="list-style-type: none"> Demonstrates appropriate communication and interactions that are characteristic of a basic level of respect, and concern for patients and the community is apparent through use of appropriate communication, where student uses some clear, but not necessarily relevant or detailed, follow-up questions and responses Demonstrates awareness of customs and beliefs, but may not clarify with patients about personal perspectives Demonstrates awareness of the cultural and 	<ul style="list-style-type: none"> Demonstrates professional communication and interactions by showing empathy, respect, and concern for patients and the community through use of appropriate communication where follow-up questions (as needed) and responses are clear, relevant, and detailed Demonstrates awareness of customs, beliefs, or perspectives in diverse patients; ask appropriate questions to clarify perspectives and perceptions in diverse patients Demonstrates full awareness of and responsiveness to cultural and linguistic needs of

		to adapt behaviors, but does so ineffectively, to communicate health information	linguistic needs of diverse patients, and adapt behaviors to communicate health information, but communication may not be effective	diverse patients by adapting behaviors appropriately in order to effectively communicate health information
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PLO 4: Oral and Written Communication.

Demonstrate sound oral and written communications in patient care

Indicators	Initial	Developing	Developed	Proficient
4.1. Oral communication. Demonstrate sound oral communication in patient care.	<ul style="list-style-type: none"> Does not demonstrate logical reasoning in oral communications in patient care. Does not demonstrate the ability to cite sound evidence that support ideas within presentations or discussions. 	<ul style="list-style-type: none"> Demonstrates some logical reasoning in oral communications in patient care but demonstrates some lapses. Demonstrates some ability to cite sound evidence that support ideas within presentations or discussions, but demonstrates some lapses. 	<ul style="list-style-type: none"> Generally demonstrates logical reasoning in oral communications in patient care. Generally demonstrates the ability to cite sound evidence that support ideas within presentations or discussions. 	<ul style="list-style-type: none"> Consistently demonstrates logical reasoning in oral communications in patient care. Consistently demonstrates the ability to cite sound evidence that support ideas within presentations or discussions.
4.2. Written communication. Demonstrate sound written communication in patient care.	<ul style="list-style-type: none"> Does not demonstrate logical reasoning in written communications in patient care. Does not demonstrate the written ability to cite sound evidence that support ideas. 	<ul style="list-style-type: none"> Demonstrates some logical reasoning in written communications in patient care but demonstrates some lapses. Demonstrates some written ability to cite sound evidence that support ideas, but demonstrates some lapses. 	<ul style="list-style-type: none"> Generally logical reasoning in written communications in patient care. Generally demonstrates the written ability to cite sound evidence that support ideas. 	<ul style="list-style-type: none"> Consistently demonstrates logical reasoning in written communications in patient care. Consistently demonstrates the written ability to cite sound evidence that support ideas.

PLO 5: Critical Thinking.

Utilize critical thinking, problem solving skills and systemic thinking in assessing and making reasoned, evidence-based decisions in patient care

Indicators	Initial	Developing	Developed	Proficient
5.1. Problem solving. Identifies problems; explore and prioritize potential strategies; and designs, implements, and evaluates viable solutions	<ul style="list-style-type: none"> • Is not able to correctly identify the problem or issue being considered. • Does not identify appropriate resources. Includes extraneous information or inappropriate or insufficient resources. • Does not demonstrate understanding of the content of materials reviewed. Makes inappropriate inferences. • Does not evaluate possible alternatives or generates ideas that are illogical or extraneous to issue at hand. • Does not propose a solution or does not articulate decision. Does not adequately provide rationale for selected alternative or decision 	<ul style="list-style-type: none"> • Identifies the problem or issue but does not demonstrate awareness of all the factors associated with the problem or issues that impact decision making. • Identifies a few, but not all, resources needed for decision making. • Demonstrates ability to interpret some information and data but not all. • Does not fully or effectively evaluate alternative solutions. • Proposes a decision with many apparent weaknesses (i.e., not feasible, lack of regard for consequences, lack of supporting evidence, illogical, irrelevant to issue at hand, etc.). Provides rationale for selected alternative or decision but does not build a solid position with 	<ul style="list-style-type: none"> • Correctly identifies problem or issue being considered and demonstrates adequate awareness of the factors associated with this problem or issue that impact decision making. • Identifies most of the resources needed. • Demonstrates ability to interpret most information and data. • Considers and evaluates possible solutions in a way that generally leads to a logical decision or course of action. • Proposes a solution that does not contain apparent weaknesses that may or may not be the obvious clear choice. Solutions chosen demonstrate consideration of most of the strengths, weaknesses, feasibility, effects, consequences, relevance, etc.). 	<ul style="list-style-type: none"> • Consistently correctly identifies the problem or issue being considered and all of the primary factors associated with this problem or issue that impact decision making. Articulates the importance of these factors. • Identifies all appropriate resources. • Demonstrates ability to correctly interpret information and data needed for appropriate decision making. Demonstrates awareness of importance of these data in decision-making process. • Considers and evaluates possible solutions effectively and thoroughly. Evaluation leads to sound, logical, and “best” decision or course of action. • Proposes a solution that is entirely

		supporting evidence. Is unable to defend decision or course of action.	Provides rationale for selected alternative or decision which includes some solid supporting evidence. Is able to defend decision or course of action at a basic level.	appropriate to the situation at hand. Solutions chosen demonstrate consideration of all of the important and relevant strengths, weaknesses, feasibility, effects, consequences, etc.). Provides rationale for selected alternative or decision and builds a solid position with appropriate and relevant supporting evidence. Effectively defends decision or course of action.
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PLO 6: Ethics and Professionalism.

Demonstrating professionalism and ethical decision making

Indicators	Initial	Developing	Developed	Proficient
6.1. Professionalism. Demonstrates behaviors and values that are consistent with the trust given to the profession by patients, other healthcare providers, and society	<ul style="list-style-type: none"> Does not consistently demonstrate professional attitudes and behaviors (altruism, excellence, duty, accountability, honesty, and integrity) Demonstrates frequent lapses in accountability or quality of work 	<ul style="list-style-type: none"> Demonstrates some professional attitudes and behaviors yet there is inconsistency that may impede on the quality of work or treatment of patients and other healthcare team members (altruism, excellence, duty, accountability, honesty, and integrity) 	<ul style="list-style-type: none"> Generally demonstrates most of the professional attitudes and behaviors (altruism, excellence, duty, accountability, honesty, and integrity) that are required in the profession Demonstrates ability to use these behaviors and values to improve healthcare 	<ul style="list-style-type: none"> Consistently demonstrates the professional attitudes and behaviors that uphold the integrity and competence of the work and the treatment of patients and other healthcare team professionals (altruism, excellence, duty, accountability, honesty, and integrity) Consistently uses these behaviors and values to improve healthcare
6.2. Ethics. Demonstrates the ability to make decisions consistent with the values of practitioners and scholars of oral healthcare.	<ul style="list-style-type: none"> Does not make ethical decisions consistent with the values of practitioners and scholars of oral healthcare. 	<ul style="list-style-type: none"> Demonstrates the ability to exercise ethical decision making, and a rudimentary knowledge of ethics within oral healthcare. 	<ul style="list-style-type: none"> Demonstrates the ability to exercise clear and ethical decision making, and a sufficient knowledge of ethics within oral healthcare. 	Demonstrates the ability to exercise clear and ethical decision making, and an advanced knowledge of ethics within oral healthcare.

PLO 7: Biomedical Sciences Knowledge.

Demonstrate an understanding of the fundamentals of biomedical sciences and apply them appropriately in oral healthcare

Indicators	Initial	Developing	Developed	Proficient
7.1. Diagnostic and pharmacologic. Demonstrates the ability to describe how to deliver patient assessments, knowledge of medicines, and delivering diagnoses.	<ul style="list-style-type: none"> Does not demonstrate the ability to describe diagnostic and pharmacologic knowledge related to oral health. 	<ul style="list-style-type: none"> Demonstrates a rudimentary ability to describe diagnostic and pharmacologic knowledge related to oral health. 	<ul style="list-style-type: none"> Demonstrates a sufficient ability to describe diagnostic and pharmacologic knowledge related to oral health. 	<ul style="list-style-type: none"> Demonstrates an advanced ability to describe diagnostic and pharmacologic knowledge related to oral health.
7.2. Orofacial pain/temporomandibular/ Sleep disorder. Demonstrates the ability to describe the anatomical, physiological, and neurological basis; classification, epidemiology, and etiology; and assessments and treatments of orofacial pain, temporomandibular joint disease, and sleep disorders.	<ul style="list-style-type: none"> Does not demonstrate the ability to describe scientific or assessment knowledge related to OFP/TMJ disease and sleep disorders. 	<ul style="list-style-type: none"> Demonstrates a rudimentary ability to describe scientific or assessment knowledge related to OFP/TMJ disease and sleep disorders. 	<ul style="list-style-type: none"> Demonstrates a sufficient ability to describe scientific or assessment knowledge related to OFP/TMJ disease and sleep disorders. 	<ul style="list-style-type: none"> Demonstrates an advanced ability to describe scientific or assessment knowledge related to OFP/TMJ disease and sleep disorders.
7.3. Maxillofacial pathology Demonstrates the ability to describe the scientific aspects of head and neck diseases, as well as knowledge of assessment and diagnosis.	<ul style="list-style-type: none"> Does not demonstrate the ability to describe the scientific or assessment knowledge related to head and neck diseases. 	<ul style="list-style-type: none"> Demonstrates a rudimentary ability to describe the scientific or assessment knowledge related to head and neck diseases. 	<ul style="list-style-type: none"> Demonstrates a sufficient ability to describe the scientific or assessment knowledge related to head and neck diseases. 	<ul style="list-style-type: none"> Demonstrates an advanced ability to describe the scientific or assessment knowledge related to head and neck diseases.

PLO 8: Practice Management.

Apply legal, regulatory, and business management concepts related to the provision of oral healthcare services

Indicators	Initial	Developing	Developed	Proficient
8.1. Legal aspects Applies legal and regulatory concepts related to the provision of oral healthcare services.	<ul style="list-style-type: none"> Does not demonstrate an understanding or the ability to apply legal and regulatory concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates a rudimentary understanding and ability to apply legal and regulatory concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates a sound understanding and ability to apply legal and regulatory concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates an advanced understanding and ability to apply legal and regulatory concepts related to the provision of oral healthcare sciences.
8.2. Business management Applies business management concepts to the provision of oral healthcare services.	<ul style="list-style-type: none"> Does not demonstrate an understanding or the ability to apply business management concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates a rudimentary understanding and ability to apply business management concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates a sound understanding and ability to apply business management concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates an advanced understanding and ability to apply business management concepts related to the provision of oral healthcare sciences.

Appendix B

California Northstate University Institutional Learning Objectives

ILO 1: Critical thinking: Exercise reasoned judgment to assess technical information and make well-informed decisions using evidence-based approaches

ILO 2: Written communication. Demonstrate the ability to write coherent, supported, and logically structured prose

ILO 3: Oral communication: Demonstrates oral communication skills

ILO 4: Professionalism. Interact with respect, empathy, diplomacy, and cultural competence

ILO 5: Quantitative reasoning: Demonstrate ability to use mathematics and statistics in problem solving

ILO 6: Information literacy: Identify and search relevant libraries of information and databases; synthesize information obtained from primary literature using properly referenced citations

DMD Institutional Learning Outcomes (ILOs) Proficiency Rubric

ILO 1: Critical thinking: Exercise reasoned judgment to assess technical information and make well-informed decisions using evidence-based approaches

Indicator	Initial	Developing	Developed	Proficient
1.1. Demonstrates identification of problem or issues	<ul style="list-style-type: none"> Does not correctly identify the problem or issue being considered Does not demonstrate understanding of the psychological factors that contribute to current patient state 	<ul style="list-style-type: none"> Identifies the problem or issue but does not demonstrate awareness of all the factors impacting decision making Demonstrates understanding of some possible psychological 	<ul style="list-style-type: none"> Correctly identifies the problem or issue but does not demonstrate awareness of all factors impacting decision making Demonstrates understanding of most psychological 	<ul style="list-style-type: none"> Correctly identifies all of the primary factors associated with problem or issue impacting decision making Demonstrates thorough understanding of all possible psychological

		factors that contribute to current patient state	factors that contribute to the current patient state	factors that contribute to the current patient state
1.2. Demonstrates identification of resources	<ul style="list-style-type: none"> Does not identify appropriate resources 	<ul style="list-style-type: none"> Identifies a few resources needed 	<ul style="list-style-type: none"> Identifies most of the resources needed 	<ul style="list-style-type: none"> Correctly identifies all appropriate resources
1.3. Finds and interprets data needed for critical thinking and decision making	<ul style="list-style-type: none"> Does not demonstrate understanding of the data needed for critical thinking and decision making 	<ul style="list-style-type: none"> Demonstrates ability to interpret some data but not all 	<ul style="list-style-type: none"> Demonstrates ability to interpret most data 	<ul style="list-style-type: none"> Demonstrates ability to correctly interpret data needed for decision making
1.4. Demonstrates knowledge of alternatives when evaluating for possible solutions	<ul style="list-style-type: none"> Does not evaluate possible alternatives for treatment or diagnosis 	<ul style="list-style-type: none"> Does not effectively evaluate alternative treatment or diagnostic solutions 	<ul style="list-style-type: none"> Evaluates possible treatment and diagnostic solutions leading to a logical decision 	<ul style="list-style-type: none"> Effectively and thoroughly considers and evaluates possible diagnostic and treatment solutions
1.5. Proposes and selects appropriate solutions	<ul style="list-style-type: none"> Does not propose solutions to the client's needs 	<ul style="list-style-type: none"> Proposes solutions without consideration of alternatives 	<ul style="list-style-type: none"> Solutions chosen demonstrate consideration of most of the strengths, weaknesses, and consequences of the decision 	<ul style="list-style-type: none"> Proposes solutions that are appropriate to the situation and demonstrate consideration of all relevant strengths, weaknesses, and consequences
1.6. Presents rationale for course of action	<ul style="list-style-type: none"> Does not adequately provide rationale for treatment decision 	<ul style="list-style-type: none"> Provides rationale for decision but does not integrate into mental health treatment plan 	<ul style="list-style-type: none"> Provides rationale for decision with solid supporting evidence from available psychological literature and/or case factors 	<ul style="list-style-type: none"> Provides rationale for decision and with appropriate and relevant supporting case evidence and integrates findings into treatment plan

ILO 2: Written communication. Demonstrate the ability to write coherent, supported, and logically structured prose

Indicators	Initial	Developing	Developed	Proficient
2.1. Demonstrates knowledge and awareness of intended audience	<ul style="list-style-type: none"> Does not demonstrate knowledge or awareness of audience for which 	<ul style="list-style-type: none"> Demonstrates some ability to craft a document appropriate for its audience 	<ul style="list-style-type: none"> Demonstrates ability to craft a document appropriate for its audience 	<ul style="list-style-type: none"> Consistently demonstrates ability to craft documents appropriate for the audience

	the document is intended			
2.2. Demonstrates clear and logical thought	<ul style="list-style-type: none"> Does not demonstrate clear or logical thought in their documentation 	<ul style="list-style-type: none"> Writing does not sufficiently conceptualize case variables or analyze subject under discussion 	<ul style="list-style-type: none"> Demonstrates general clear or logical thought in their documentation 	<ul style="list-style-type: none"> Research and clinical documentation demonstrates clear and focused thinking
2.3. Demonstrates support for and development of ideas	<ul style="list-style-type: none"> Does not explain or develop ideas 	<ul style="list-style-type: none"> Demonstrates minimal support for ideas 	<ul style="list-style-type: none"> Writing contains examples that generally support ideas 	<ul style="list-style-type: none"> Supports ideas with relevant, clear, impactful examples
2.4. Demonstrates appropriate use of evidence to support arguments	<ul style="list-style-type: none"> Demonstrates an attempt to use proper citations to support ideas 	<ul style="list-style-type: none"> Uses credible and relevant sources to support ideas appropriate in the study of psychology 	<ul style="list-style-type: none"> Consistently uses credible and relevant sources to support ideas 	<ul style="list-style-type: none"> Demonstrates skillful use of credible and relevant sources to develop and support ideas
2.5. Demonstrates appropriate use of language, syntax, and mechanics	<ul style="list-style-type: none"> Has excessive or severe errors in language usage 	<ul style="list-style-type: none"> Generally conveys meaning to readers with clarity, though writing may include some errors 	<ul style="list-style-type: none"> Language conveys meaning to readers and writing contains very few errors 	<ul style="list-style-type: none"> Uses language effectively and skillfully to communicate meaning to readers

ILO 3: Oral communication: Demonstrates oral communication skills

Indicators	Initial	Developing	Developed	Proficient
3.1. Demonstrates knowledge and awareness of intended audience	<ul style="list-style-type: none"> Does not demonstrate knowledge or awareness of audience for which the communication is intended 	<ul style="list-style-type: none"> Demonstrates some ability to communicate in a manner appropriate to the audience 	<ul style="list-style-type: none"> Demonstrates ability to communicate appropriate to the audience 	<ul style="list-style-type: none"> Consistently demonstrates ability to communicate in a manner appropriate to the audience
3.2. Demonstrates clear and logical thought	<ul style="list-style-type: none"> Does not demonstrate clear or logical thought in their communication 	<ul style="list-style-type: none"> Communication does not sufficiently conceptualize case variables or analyze subject under discussion 	<ul style="list-style-type: none"> Demonstrates general clear or logical thought in their communication 	<ul style="list-style-type: none"> Communication demonstrates clear and focused thinking

3.3. Demonstrates effective use of language in their communication	<ul style="list-style-type: none"> • Does not know professional psychological language or uses jargon • Does not know the proper technical language regarding mental health treatment 	<ul style="list-style-type: none"> • Demonstrates inaccurate use of psychological language or uses jargon in professional communications • Utilizes scientific language that is incomprehensible to patients 	<ul style="list-style-type: none"> • Demonstrates appropriate use of professional language and minimal jargon • Utilizes generalized language to interact with patients 	<ul style="list-style-type: none"> • Demonstrates use of appropriate, professional language • Utilizes generalized language to interact with patients
3.4. Demonstrates appropriate active listening techniques when addressing questions	<ul style="list-style-type: none"> • Does not acknowledge other viewpoints • Has great difficulty answering questions 	<ul style="list-style-type: none"> • Demonstrates little attempt to recognize other viewpoints • Answers are simplistic and lack intellectual depth 	<ul style="list-style-type: none"> • Recognizes other viewpoints but has difficulty incorporating them into case conceptualization • Adequately answers patient questions 	<ul style="list-style-type: none"> • Listens to questions with a consideration of alternative viewpoints • Answers questions thoughtfully referencing evidence
3.5. Orally communicates meaning to audience	<ul style="list-style-type: none"> • Vocal delivery is too soft or too fast • Long, unintended silences and/or speech disruptions frequently distract audience • Speaker makes no attempt to engage audience 	<ul style="list-style-type: none"> • Vocal delivery is audible • Speech rate or volume disruptions occasionally distract from comprehension • Attempts to engage audience 	<ul style="list-style-type: none"> • Vocal delivery is varied and dynamic • Speech rate, volume, and tone enhance listener interest and facilitate understanding • Generally engages audience 	<ul style="list-style-type: none"> • Vocal delivery is varied and dynamic • Speech rate, volume, and tone enhance listener interest and facilitate understanding • Thoroughly engages audience
3.6. Utilizes non-verbal means to enhance message	<ul style="list-style-type: none"> • Eye contact, body language, and facial expressions are inappropriate 	<ul style="list-style-type: none"> • Eye contact, body language, and facial expressions neither enhance nor hinder oral effectiveness 	<ul style="list-style-type: none"> • Use of eye contact, body language, and facial expressions are mostly consistent with the verbal message 	<ul style="list-style-type: none"> • Use of eye contact, body language, and facial expressions that are consistent with the verbal message

ILO 4: Professionalism. Interact with respect, empathy, diplomacy, and cultural competence

Indicators	Initial	Developing	Developed	Proficient
4.1. Demonstrates professional attitudes and behaviors	<ul style="list-style-type: none"> • Does not generally demonstrate professional attitudes or behaviors expected from a dentist 	<ul style="list-style-type: none"> • Demonstrates some attitudes and behaviors that may be characteristic of a dentist 	<ul style="list-style-type: none"> • Generally demonstrates attitudes and behaviors expected from a dentist 	<ul style="list-style-type: none"> • Consistently demonstrates attitudes and behaviors expected from a dentist

4.2. Demonstrates personal responsibility and accountability	<ul style="list-style-type: none"> Does not demonstrate personal accountability or responsibility for work completed 	<ul style="list-style-type: none"> Demonstrates minimal personal accountability and responsibility for work completed 	<ul style="list-style-type: none"> Demonstrates personal accountability and responsibility for the work completed 	<ul style="list-style-type: none"> Consistently demonstrates personal accountability and responsibility for work completed
4.3. Demonstrates respectful and sensitive behaviors to the cultural and linguistic needs of diverse patients	<ul style="list-style-type: none"> Does not demonstrate an awareness of patients' customs, beliefs, or perspectives Does not demonstrate awareness of linguistic needs of patients 	<ul style="list-style-type: none"> Demonstrates a minimal level of awareness of customs, beliefs, or perspectives of patients Demonstrates minimal awareness of cultural and linguistic needs of patients 	<ul style="list-style-type: none"> Demonstrates awareness of customs and beliefs Demonstrates awareness of the cultural and linguistic needs of patients 	<ul style="list-style-type: none"> Demonstrates awareness of customs, beliefs, or perspectives in patients Demonstrates full awareness and responds to the cultural and linguistic needs of patients
4.4. Demonstrates professional demeanor	<ul style="list-style-type: none"> Appears inattentive and impatient Uses inappropriate body language Dresses in attire that is inappropriate 	<ul style="list-style-type: none"> Appears unfocused and distracted Uses acceptable body language Dresses in attire that is not offensive 	<ul style="list-style-type: none"> Appears composed and focused Uses appropriate body language Dresses in attire that is professional 	<ul style="list-style-type: none"> Uses articulate, tactful, and diplomatic speech Uses professional body language Dresses in attire that is professional, and well-suited for the environment

ILO 5: Quantitative reasoning: Demonstrate ability to use mathematics and statistics in problem solving

Indicators	Initial	Developing	Developed	Proficient
5.1. Demonstrates ability to perform calculations and apply mathematical principles to solve problems	<ul style="list-style-type: none"> Does not demonstrate ability to apply statistical or psychometric principles 	<ul style="list-style-type: none"> Demonstrates ability to perform basic statistical calculations but does not know how to apply psychometric principles to solve problems 	<ul style="list-style-type: none"> Demonstrates ability to perform most statistical calculations accurately and to apply psychometric principles to solve problems 	<ul style="list-style-type: none"> Consistently demonstrates ability to perform statistical calculations accurately and to appropriately apply psychometric principles to solve problems
5.2. Demonstrates understanding of experimental designs and methodology	<ul style="list-style-type: none"> Displays difficulty proposing a basic experiment or research project 	<ul style="list-style-type: none"> Comprehends basic experiments designed by others 	<ul style="list-style-type: none"> Evaluates research, method, and protocol to review valid and reliable research 	<ul style="list-style-type: none"> Proposes appropriate and innovative designs to address a new hypothesis and research question

5.3. Demonstrates logical and appropriate interpretation of data	<ul style="list-style-type: none"> • Demonstrates a limited ability to interpret scientific data 	<ul style="list-style-type: none"> • Attempts to interpret scientific data 	<ul style="list-style-type: none"> • Demonstrates the ability to interpret scientific data 	<ul style="list-style-type: none"> • Interprets data in the context of current scientific knowledge
5.4. Demonstrates logical thought patterns in generating conclusions	<ul style="list-style-type: none"> • Does not generate conclusions based on current scientific data and statistics 	<ul style="list-style-type: none"> • Generates conclusions that may be based on current scientific data and statistics 	<ul style="list-style-type: none"> • Generates conclusions using scientific and statistical data 	<ul style="list-style-type: none"> • Accurately generates conclusions using appropriate scientific and mathematical data

ILO 6: Information literacy: Identify and search relevant libraries of information and databases; synthesize information obtained from primary literature using properly referenced citations

Indicators	Initial	Developing	Developed	Proficient
6.1. Demonstrates appropriate ability search and acquire resources	<ul style="list-style-type: none"> Does not identify or solicit help in obtaining external resources to support topic 	<ul style="list-style-type: none"> Identified resources may not be sufficient in quality and infrequently solicits guidance from library personnel 	<ul style="list-style-type: none"> Identifies resources appropriate for scientific inquiry and solicits guidance from library personnel 	<ul style="list-style-type: none"> Identifies a variety of relevant sources and regularly seeks guidance from library personnel
6.2. Demonstrates appropriate incorporation of references	<ul style="list-style-type: none"> Does not incorporate references 	<ul style="list-style-type: none"> Incorporates references from psychological sources that do not clearly support ideas 	<ul style="list-style-type: none"> Incorporates relevant references that generally supports ideas 	<ul style="list-style-type: none"> Incorporates relevant references from respected psychological sources
6.3. Demonstrates appropriate citation of references	<ul style="list-style-type: none"> Does not use citations 	<ul style="list-style-type: none"> Uses citations but they are not formatted in APA style 	<ul style="list-style-type: none"> Demonstrates use of appropriate citations in context 	<ul style="list-style-type: none"> Uses properly cited references and includes all necessary information in reference list



California Northstate College of Dental Medicine

Ethics in Dental Medicine and Health Care Course Syllabus

Course #	Course Title	Credits	Year	Term
BSS 522	Ethics in Dental Medicine and Health Care	2	DS 1	Spring

Credit Hour Policy

For each 15-week semester, one (1) hour of credit is assigned per hour each week of classroom or direct faculty didactic instruction (that is, per hour of lecture or student in-class time) and a minimum of two (2) hours of out-of-class student work (homework). For practicum and internship time, one (1) hour of credit is assigned per three (3) hours each week of student time spent in this activity.

Maximum Enrollment: 80

Calendar of Important Dates:

Date	
January 10, 2021	First day of Spring Term all DMD 1 students
March 1, 2021	Assignment of first group case scenario
May 15, 2021	First 4 case scenarios presentation
May 22, 2021	Second 4 case scenarios presentation
May 30, 2021	Ethics Salons
June 8, 2021	Final Exam

Course Coordinator, Instructors and Contact Information

Richard Simonsen DDS (course co-director)

Room:

E mail

Office hours

Leon Assael DMD (course co-director)

Room:

E-mail: leon.assael@cnsu.edu

Office hours: Wednesdays 12:00pm-1:00pm, and 3:00pm-4:00pm (or by appointment)

Holly Jacobson BA (course administrator)

Room: xxx

E mail: holly.jacobson@cnsu.edu

Classroom and Meeting Times

Room: Classroom xxxx

Time: xxxx 2 hours per week

Course Description

The fundamentals of dental and medical ethics are presented including beneficence and non-maleficence. The Helsinki statement and other aspects of human research guidelines are presented including the role of Human Studies committees. The care of animals in biomedical research is discussed as well as the ethical use of human tissue in clinical care, transplant medicine etc. Ethical financial relationships and the underlying law behind them in clinical practice is discussed. The role of the criminal, tort system, the Board of Dentistry of California, and the ADA in dental ethics is presented.

Prerequisite Courses

None

Prerequisite Knowledge

None

Required Textbook(s) and Material(s)

McCormick, Suzanne Stucki, *Ethical Decision Making in Dentistry*, PMPH USA, 2017
electronic reserve CNU

Technology

1. Computer-assisted instruction (Clickers) and SCANTRON Sheets
2. Web-based course management (Canvas) and Examsoft
3. Audio/Video recordings where applicable
4. PowerPoint

5. Epic electronic health record
6. PACS, DICOM compatible imaging software
7. Dental operator

Evaluation Components

In keeping with the Team Based Learning (TBL) approach, grades will be determined as follows:

Individual Components	70%
Salon presentation	20%
Final exam	50%

Team Components	30%
Group case based	20%
Peer Evaluation	10%

GRADING

All students must demonstrate minimal individual competency. Therefore, students earning less than 75% on the total Individual component score will not have team component scores added to calculate their final course grade. During the course, students who score less than 75% on individual components may be subject to periodic course content review and may receive an Academic Alert.

In order to progress from one semester to the next, students must pass all courses with a letter a grade of C or higher and maintain a minimum cumulative grade point average (GPA) of 2.0. The breakdown for assignment of letter grades and grade points for each letter grade are as follows:

Percent	Letter Grade/Action
90.0 – 100%	A
80.0 – 89.9%	B
75.0 – 79.9%	C - Pass
60.0 – 74.9%	D – Requiring remediation (successful remediation recorded as C, unsuccessful remediation recorded as F)
Below 60.0%	F – Fail (course must be repeated)
Incomplete	I

Incomplete

During a semester, a student may not complete all required assignments and/or examinations due to extenuating circumstances, such as, but not limited to, an illness or a family emergency.

In such a case, the course director may give a grade of Incomplete for the course. The course with the incomplete grade has to be completed successfully within the time frame as being defined by the student's academic plan, normally in the same academic year, otherwise a leave of absence would be required.

Core-Course Policies

All students are required to adhere to the Academic Policies that impact on student progression and conduct while attending the DMD program, including the following: Academic Progression Policy, Excused Absence Policy, Exam Policy, Course Grade Appeal Policy, Course Add/Drop Policy and Attendance Policy. Refer to the current Student Handbook for the detailed policies.

Course Specific Policies

1. Group case-based projects are to be submitted via CANVAS by 11:59pm PST on the deadline indicated. Only one group member should submit the assignment on behalf of the group. The course coordinator reserves the right to deduct points for late submission (20% of assignment grade for every 24 hours the assignment is turned in late).
Presentation of PCS cases requires the active participation of each team member, preferably presenting the component of the case the student was responsible for developing.
2. Grade appeal for any individual assignments (including exams) should be submitted to the course coordinator in writing within 5 business days of grade release.
3. There will be no rounding of the final grade for this course.

Topics and Schedule

(Subject to change. Updates will be posted to CANVAS and announced by email)

All readings are in Vital Source, or as assigned and posted to CANVAS

EACH SESSION IS 2 HOURS

Date	Topics	Readings*	Instructor	Notes
Week 1	Fundamentals of dental ethics		Simonsen	
Week 2	Ethical Dilemmas in the education of dentists	McCormick, chapter 1	Assael	
Week 3	Ethics in licensure	McCormick, chapter 3	Keating	
Week 4	Ethics in treatment planning		Simonsen	

Week 5	Ethics in informed consent	McCormick, chapter 15	Cadra	videos
Week 6	First case based ethics salon		Clinical faculty	
Week 7	Patient autonomy, justice, veracity, Beneficence and nonmaleficence in dental practice		Simonsen	Project 1 case assignment to groups
Week 8	OSCE ethics patient interview		Clinical faculty	
Week 9	Ethics Cases Group 1		Clinical faculty	
Week 10	The ethical dilemmas of group practice, systems based practice, and individual practice.	McCormick chapter 4 and 6	Assael	
Week 11	Second case based ethics salon		Clinical faculty	
Week 12	Ethical business practices in dental practice		Chang	
Week 13	Ethics cases group 2		Keating	
Week 14	Summative session dental ethics		Simonsen	
Week 15	Final exam		Simonsen	

Course Learning Outcomes and links to Program Learning Outcomes (Appendix A) and Institutional Learning Outcomes (Appendix B)

No.	Course Learning Outcome	DMD PLO	DMD ILO	Learning Hierarchy ^b	Assessment Method
1	Understand the fundamental of ethics in dental education and practice	1,2,3,4,7,8	1,3,4,6	1,2, 3	Clinical evaluation Group projects
2	Be able to apply didactic knowledge of dental ethics to address clinical problems in dental practice.	1,2,3,5,6,7,8	1,4,	2, 3	Clinical assessment Quizzes Final exam

^a plo's appendix A

^b Learning Hierarchy based on Bloom's Taxonomy with 1=Memorization and/or Comprehension; 2=Application and/or Analysis; 3=Synthesis and/or Evaluation.

Teaching/ Learning Methodology

1. Didactic: lectures, required readings
2. Learning Activities: laboratory practice, OSCE, laboratory assignments/exercises, group project

CLO Rubrics

CLO 1: Understand the fundamental of ethics in dental education and practice

Indicators	Initial	Developing	Developed	Proficient
Understand the fundamental of ethics in dental education and practice	Only prior practical knowledge of ethics	Demonstrates rudimentary ability to relate ethical standards	Has detailed understanding of ethical responsibilities and can relate fundamentals	Consistently demonstrates the ability to apply ethical knowledge into practice

CLO 2: Be able to apply didactic knowledge of dental ethics to address clinical problems in dental practice

Indicators	Initial	Developing	Developed	Proficient
Apply didactic knowledge of ethics into clinical practice	Has no or limited knowledge of application of ethics into practice	Begins to exhibit application of didactic knowledge of ethics into practice	Consistently applies didactic knowledge of ethics into dental practice	Complete knowledge and skill in application of ethical standards and is able to reflect on these and augment them through integration and consideration of consequences of actions.

Appendix A

Program Learning Outcomes (PLOs) CNU College of Dental Medicine

1. Patient-Centered Care: Demonstrate understanding of healthcare disparities and cultural awareness in patient counseling and patient advocacy
2. Evidence-Based Care: Apply current, evidence-based oral healthcare within the scope of general dentistry
3. Culturally competent, empathic communication: Demonstrate patient centered, empathic, and culturally competent communication and interpersonal skills
4. Oral and Written Communication: Demonstrate sound oral and written communications in patient care
5. Critical Thinking: Utilize critical thinking, problem solving skills and systemic thinking in assessing and making reasoned, evidence-based decisions in patient care
6. Ethics and Professionalism: Demonstrate professionalism and ethical decision making
7. Biomedical Sciences Knowledge: Demonstrate an understanding of the fundamentals of biomedical sciences and apply them appropriately in oral healthcare
8. Practice Management: Apply legal, regulatory and business management concepts related to provision of oral healthcare services

DMD Program Learning Outcomes (PLOs) Proficiency Rubric

PLO 1: Patient-Centered Care

Demonstrate understanding of healthcare disparities and cultural awareness and capability in patient counseling and providing appropriate patient advocacy

Indicators	Initial	Developing	Developed	Proficient
1.1. Education. Demonstrates ability to educate all audiences through effectively communicating information and assessing learning	<ul style="list-style-type: none"> Does not appropriately counsel patients Does not check for understanding, ask questions, and/or asks inappropriate questions. Does not demonstrate the ability to find and utilize appropriate 	<ul style="list-style-type: none"> Counsels patients but leaves out pertinent information needed by patient Communicates with basic level of clarity but does not always check for understanding or rephrase 	<ul style="list-style-type: none"> Generally demonstrates empathy, communicates accurate information clearly, checks for understanding Seeks to ensure understanding and generally asks questions. Frequently demonstrates 	<ul style="list-style-type: none"> Consistently demonstrates empathy, communicates accurate information clearly, checks for understanding Ensures understanding and asks appropriate questions.

	resources and references necessary for providing accurate counseling, consultation and education	when confusion occurs. <ul style="list-style-type: none"> • Demonstrates the ability to find a one or two resources, yet the resources are not the best or most appropriate for providing accurate counseling, consultation and education 	the ability to find and utilize appropriate resources and references necessary for providing accurate counseling, consultation and education	<ul style="list-style-type: none"> • Consistently demonstrates the ability to find and utilize appropriate resources and references for providing accurate patient counseling, consultation and education
1.2. Patient advocacy. Represents the patient's best interests	<ul style="list-style-type: none"> • Does not demonstrate the ability represent a patient's best interest 	<ul style="list-style-type: none"> • Demonstrates awareness of issues that impact a patient • Demonstrates minimal ability to articulate these issues but does not demonstrate ability to sufficiently advocate on a patient's behalf 	<ul style="list-style-type: none"> • Demonstrates sufficient awareness of issues that impact a patient • Demonstrates ability to articulate these issues • Demonstrates ability to sufficiently advocate on a patient's behalf 	<ul style="list-style-type: none"> • Demonstrates full awareness of the most important issues that impact a patient • Demonstrates ability to clearly and effectively articulate these issues • Demonstrates ability to effectively advocate on a patient's behalf

PLO 2: Evidence-Based Care.

Apply sound, current, and evidence-based oral healthcare within the scope of general dentistry

Indicators	Initial	Developing	Developed	Proficient
2.1. Patient-centered care. Demonstrates ability to provide patient-centered care as the medication expert (collect	<ul style="list-style-type: none"> • Does not demonstrate ability to provide patient-centered care at the medication expert level; e.g., demonstrates ability to collect 	<ul style="list-style-type: none"> • Demonstrates ability to provide patient-centered care as the medication expert in some, but not all, areas as follows: collect and 	<ul style="list-style-type: none"> • Demonstrates ability to provide patient-centered care as the medication expert (generally demonstrates ability to collect and interpret 	<ul style="list-style-type: none"> • Demonstrates ability to provide sufficient patient-centered care as the expert (collects and interprets evidence,

and interpret evidence, prioritize, formulate assessments and recommendations, implement, monitor and adjust plans, and document activities)	but not sufficiently interpret evidence, does not prioritize, formulates basic assessments and recommendations, does not sufficiently monitor and adjust plans nor document activities.	interpret evidence, prioritize, formulate assessments and recommendations, implement, monitor and adjust plans, and document activities	evidence, prioritize, formulate assessments and recommendations, implement, monitor and adjust plans, and document activities)	prioritizes, formulates assessments and recommendations, implements, monitors and adjusts plans, and documents activities)
2.2. Systems management. Demonstrates ability to manage patient healthcare needs using human, financial, technological, and physical resources to optimize the safety and efficacy of medication use systems	<ul style="list-style-type: none"> • Does not demonstrate understanding of oral healthcare delivery systems parts • Does not demonstrate understanding of the forces that influence components of the oral healthcare delivery system, including their connection to patient care • Does not demonstrate understanding of any challenges to systems that affect oral healthcare delivery Does not demonstrate understanding of how to work with different subsystems to deliver oral healthcare	<ul style="list-style-type: none"> • Demonstrates understanding of some parts of oral healthcare delivery systems but does not identify how they are related to each other • Demonstrates understanding of some forces that influence the parts of healthcare delivery systems, but demonstrate minimal understanding of their connection to patient care • Demonstrates understanding of some challenges that can affect delivery of oral healthcare • Demonstrates some understanding of how to work with different subsystems and how they function to 	<ul style="list-style-type: none"> • Demonstrates understanding of most major components of oral healthcare systems and their respective relationships • Demonstrates understanding of the forces that influence the components of healthcare delivery systems, and demonstrate some understanding of their influence on the quality of patient care • Demonstrates understanding of most challenges that can affect delivery of oral healthcare, but does not demonstrate complete comprehension of the effects Demonstrates basic understanding of	<ul style="list-style-type: none"> • Demonstrates understanding of the major components of oral healthcare systems, their respective relationships, and their functions related to patient care • Demonstrates thorough understanding of the forces that influence components of healthcare delivery systems and demonstrate full understanding of their influence and implications on the quality of patient care • Demonstrates understanding of pertinent challenges to specific aspects of healthcare delivery by demonstrating abilities to thoroughly

		deliver oral healthcare, but demonstrate minimal awareness or understanding of one's own role within the oral healthcare delivery system	how to work with different subsystems and how they function to deliver oral healthcare and demonstrate some understanding of one's role within the oral healthcare delivery system, but does not necessarily demonstrate application of knowledge in a manner that maximizes the quality of oral healthcare	discuss the implications for the appropriate parts of oral health care delivery systems Demonstrates excellent understanding of how to work with different subsystems involved while also demonstrating understanding of one's role within the subsystems, and demonstrate appropriate application of knowledge in a manner that maximizes the quality of oral healthcare
2.3. Health and wellness. Designs prevention, intervention, and educational strategies for individuals and communities to manage chronic disease and improve oral health and wellness	<ul style="list-style-type: none"> • Does not demonstrate understanding of how the arts can be utilized to optimize patients' well-being 	<ul style="list-style-type: none"> • Demonstrates knowledge of some of the ways that the arts can be utilized to optimize patients' well-being 	<ul style="list-style-type: none"> • Demonstrates sufficient knowledge of multiple ways that the arts can be utilized to optimize patients' well-being 	<ul style="list-style-type: none"> • Demonstrates thorough knowledge of the ways that the arts can be utilized to optimize patients' well-being and creatively applies this knowledge to improve well-being and the practice and delivery of oral healthcare
2.4. Population-based care. Demonstrates understanding of	<ul style="list-style-type: none"> • Does not demonstrate awareness of 	<ul style="list-style-type: none"> • Demonstrates minimal understanding of population-based 	<ul style="list-style-type: none"> • Demonstrates sufficient understanding of population- 	<ul style="list-style-type: none"> • Demonstrates superb understanding of population-

how population-based care influences patient-centered care and the development of practice guidelines and evidence-based best practices	population-based care.	care and how it influences patient-centered care <ul style="list-style-type: none"> • Does not demonstrate awareness of how these notions influence the development of practice guidelines 	based care and how it influences patient-centered care <ul style="list-style-type: none"> • Demonstrates sufficient understanding of how population-based care influences the development of practice guidelines and best practices for patient care 	based care and how it influences patient-centered care <ul style="list-style-type: none"> • Demonstrates superb understanding of how population-based care influences the development of practice guidelines and demonstrates knowledge of best practices for patient care
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PLO 3: Culturally Competent, Empathic Communication.

Demonstrate patient centered, empathic and culturally competent communication and interpersonal skills

Indicators	Initial	Developing	Developed	Proficient
3.1. Empathy. Demonstrates the ability to communicate with the patient empathically.	<ul style="list-style-type: none"> Does not demonstrate the ability to communicate with the patient empathically. 	<ul style="list-style-type: none"> Demonstrates some ability, but experiences lapses in the ability to communicate empathically 	<ul style="list-style-type: none"> Demonstrates the ability to communicate empathically, with few lapses. 	<ul style="list-style-type: none"> Demonstrates an advanced ability, and never experiences lapses in communicating empathically.
3.2. Cultural competence. Demonstrates the ability to engage in communication with the patient that is culturally aware and accepting.	<ul style="list-style-type: none"> Does not demonstrate communication and interactions that convey respect or concern for patients and the community. Does not demonstrate an awareness of customs, beliefs, or perspectives in diverse patients Does not demonstrate awareness of cultural and linguistic needs of patients in order to communicate health information 	<ul style="list-style-type: none"> Demonstrates communication and interactions characteristic of a minimal level of respect, and little concern for patients and the community is apparent through use of some appropriate communication, but student does not employ follow-up questions for clarification, when necessary, and student provides inappropriate detail in responses Demonstrates a minimal level of awareness of customs, beliefs, or perspectives in diverse patients Demonstrates minimal awareness of 	<ul style="list-style-type: none"> Demonstrates appropriate communication and interactions that are characteristic of a basic level of respect, and concern for patients and the community is apparent through use of appropriate communication, where student uses some clear, but not necessarily relevant or detailed, follow-up questions and responses Demonstrates awareness of customs and beliefs, but may not clarify with patients about personal perspectives Demonstrates awareness of the cultural and 	<ul style="list-style-type: none"> Demonstrates professional communication and interactions by showing empathy, respect, and concern for patients and the community through use of appropriate communication where follow-up questions (as needed) and responses are clear, relevant, and detailed Demonstrates awareness of customs, beliefs, or perspectives in diverse patients; ask appropriate questions to clarify perspectives and perceptions in diverse patients Demonstrates full awareness of and responsiveness

		cultural and linguistic needs of patients; either does not or only attempt to adapt behaviors, but does so ineffectively, to communicate health information	linguistic needs of diverse patients, and adapt behaviors to communicate health information, but communication may not be effective	to cultural and linguistic needs of diverse patients by adapting behaviors appropriately in order to effectively communicate health information
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PLO 4: Oral and Written Communication.

Demonstrate sound oral and written communications in patient care

Indicators	Initial	Developing	Developed	Proficient
4.1. Oral communication. Demonstrate sound oral communication in patient care.	<ul style="list-style-type: none"> Does not demonstrate logical reasoning in oral communications in patient care. Does not demonstrate the ability to cite sound evidence that support ideas within presentations or discussions. 	<ul style="list-style-type: none"> Demonstrates some logical reasoning in oral communications in patient care but demonstrates some lapses. Demonstrates some ability to cite sound evidence that support ideas within presentations or discussions, but demonstrates some lapses. 	<ul style="list-style-type: none"> Generally demonstrates logical reasoning in oral communications in patient care. Generally demonstrates the ability to cite sound evidence that support ideas within presentations or discussions. 	<ul style="list-style-type: none"> Consistently demonstrates logical reasoning in oral communications in patient care. Consistently demonstrates the ability to cite sound evidence that support ideas within presentations or discussions.
4.2. Written communication. Demonstrate sound written communication in patient care.	<ul style="list-style-type: none"> Does not demonstrate logical reasoning in written communications in patient care. Does not demonstrate the written ability to cite sound evidence that support ideas. 	<ul style="list-style-type: none"> Demonstrates some logical reasoning in written communications in patient care but demonstrates some lapses. Demonstrates some written ability to cite sound evidence that support ideas, but demonstrates some lapses. 	<ul style="list-style-type: none"> Generally logical reasoning in written communications in patient care. Generally demonstrates the written ability to cite sound evidence that support ideas. 	<ul style="list-style-type: none"> Consistently demonstrates logical reasoning in written communications in patient care. Consistently demonstrates the written ability to cite sound evidence that support ideas.

PLO 5: Critical Thinking.

Utilize critical thinking, problem solving skills and systemic thinking in assessing and making reasoned, evidence-based decisions in patient care

Indicators	Initial	Developing	Developed	Proficient
5.1. Problem solving. Identifies problems; explore and prioritize potential strategies; and designs, implements, and evaluates viable solutions	<ul style="list-style-type: none"> • Is not able to correctly identify the problem or issue being considered. • Does not identify appropriate resources. Includes extraneous information or inappropriate or insufficient resources. • Does not demonstrate understanding of the content of materials reviewed. Makes inappropriate inferences. • Does not evaluate possible alternatives or generates ideas that are illogical or extraneous to issue at hand. • Does not propose a solution or does not articulate decision. Does not adequately provide 	<ul style="list-style-type: none"> • Identifies the problem or issue but does not demonstrate awareness of all the factors associated with the problem or issues that impact decision making. • Identifies a few, but not all, resources needed for decision making. • Demonstrates ability to interpret some information and data but not all. • Does not fully or effectively evaluate alternative solutions. • Proposes a decision with many apparent weaknesses (i.e., not feasible, lack of regard for consequences, lack of supporting evidence, illogical, irrelevant to 	<ul style="list-style-type: none"> • Correctly identifies problem or issue being considered and demonstrates adequate awareness of the factors associated with this problem or issue that impact decision making. • Identifies most of the resources needed. • Demonstrates ability to interpret most information and data. • Considers and evaluates possible solutions in a way that generally leads to a logical decision or course of action. • Proposes a solution that does not contain apparent weaknesses that may or may not be the obvious clear choice. Solutions chosen 	<ul style="list-style-type: none"> • Consistently correctly identifies the problem or issue being considered and all of the primary factors associated with this problem or issue that impact decision making. Articulates the importance of these factors. • Identifies all appropriate resources. • Demonstrates ability to correctly interpret information and data needed for appropriate decision making. Demonstrates awareness of importance of these data in decision-making process. • Considers and evaluates possible solutions effectively and thoroughly. Evaluation leads

	<p>rationale for selected alternative or decision</p>	<p>issue at hand, etc.). Provides rationale for selected alternative or decision but does not build a solid position with supporting evidence. Is unable to defend decision or course of action.</p>	<p>demonstrate consideration of most of the strengths, weaknesses, feasibility, effects, consequences, relevance, etc.). Provides rationale for selected alternative or decision which includes some solid supporting evidence. Is able to defend decision or course of action at a basic level.</p>	<p>to sound, logical, and “best” decision or course of action.</p> <ul style="list-style-type: none"> Proposes a solution that is entirely appropriate to the situation at hand. Solutions chosen demonstrate consideration of all of the important and relevant strengths, weaknesses, feasibility, effects, consequences, etc.). Provides rationale for selected alternative or decision and builds a solid position with appropriate and relevant supporting evidence. Effectively defends decision or course of action.
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PLO 6: Ethics and Professionalism.

Demonstrating professionalism and ethical decision making

Indicators	Initial	Developing	Developed	Proficient
6.1. Professionalism. Demonstrates behaviors and values that are consistent with the trust given to the profession by patients, other healthcare providers, and society	<ul style="list-style-type: none"> Does not consistently demonstrate professional attitudes and behaviors (altruism, excellence, duty, accountability, honesty, and integrity) Demonstrates frequent lapses in accountability or quality of work 	<ul style="list-style-type: none"> Demonstrates some professional attitudes and behaviors yet there is inconsistency that may impede on the quality of work or treatment of patients and other healthcare team members (altruism, excellence, duty, accountability, honesty, and integrity) 	<ul style="list-style-type: none"> Generally demonstrates most of the professional attitudes and behaviors (altruism, excellence, duty, accountability, honesty, and integrity) that are required in the profession Demonstrates ability to use these behaviors and values to improve healthcare 	<ul style="list-style-type: none"> Consistently demonstrates the professional attitudes and behaviors that uphold the integrity and competence of the work and the treatment of patients and other healthcare team professionals (altruism, excellence, duty, accountability, honesty, and integrity) Consistently uses these behaviors and values to improve healthcare
6.2. Ethics. Demonstrates the ability to make decisions consistent with the values of practitioners and scholars of oral healthcare.	<ul style="list-style-type: none"> Does not make ethical decisions consistent with the values of practitioners and scholars of oral healthcare. 	<ul style="list-style-type: none"> Demonstrates the ability to exercise ethical decision making, and a rudimentary knowledge of ethics within oral healthcare. 	<ul style="list-style-type: none"> Demonstrates the ability to exercise clear and ethical decision making, and a sufficient knowledge of ethics within oral healthcare. 	Demonstrates the ability to exercise clear and ethical decision making, and an advanced knowledge of ethics within oral healthcare.

PLO 7: Biomedical Sciences Knowledge.

Demonstrate an understanding of the fundamentals of biomedical sciences and apply them appropriately in oral healthcare

Indicators	Initial	Developing	Developed	Proficient
7.1. Diagnostic and pharmacologic. Demonstrates the ability to describe how to deliver patient assessments, knowledge of medicines, and delivering diagnoses.	<ul style="list-style-type: none"> Does not demonstrate the ability to describe diagnostic and pharmacologic knowledge related to oral health. 	<ul style="list-style-type: none"> Demonstrates a rudimentary ability to describe diagnostic and pharmacologic knowledge related to oral health. 	<ul style="list-style-type: none"> Demonstrates a sufficient ability to describe diagnostic and pharmacologic knowledge related to oral health. 	<ul style="list-style-type: none"> Demonstrates an advanced ability to describe diagnostic and pharmacologic knowledge related to oral health.
7.2. Orofacial pain/temporomandibular / Sleep disorder. Demonstrates the ability to describe the anatomical, physiological, and neurological basis; classification, epidemiology, and etiology; and assessments and treatments of orofacial pain, temporomandibular joint disease, and sleep disorders.	<ul style="list-style-type: none"> Does not demonstrate the ability to describe scientific or assessment knowledge related to OFP/TMJ disease and sleep disorders. 	<ul style="list-style-type: none"> Demonstrates a rudimentary ability to describe scientific or assessment knowledge related to OFP/TMJ disease and sleep disorders. 	<ul style="list-style-type: none"> Demonstrates a sufficient ability to describe scientific or assessment knowledge related to OFP/TMJ disease and sleep disorders. 	<ul style="list-style-type: none"> Demonstrates an advanced ability to describe scientific or assessment knowledge related to OFP/TMJ disease and sleep disorders.
7.3. Maxillofacial pathology Demonstrates the ability to describe the scientific aspects of head and neck diseases, as well as knowledge of assessment and diagnosis.	<ul style="list-style-type: none"> Does not demonstrate the ability to describe the scientific or assessment knowledge related to head and neck diseases. 	<ul style="list-style-type: none"> Demonstrates a rudimentary ability to describe the scientific or assessment knowledge related to head and neck diseases. 	<ul style="list-style-type: none"> Demonstrates a sufficient ability to describe the scientific or assessment knowledge related to head and neck diseases. 	<ul style="list-style-type: none"> Demonstrates an advanced ability to describe the scientific or assessment knowledge related to head and neck diseases.

PLO 8: Practice Management.

Apply legal, regulatory, and business management concepts related to the provision of oral healthcare services

Indicators	Initial	Developing	Developed	Proficient
8.1. Legal aspects Applies legal and regulatory concepts related to the provision of oral healthcare services.	<ul style="list-style-type: none"> Does not demonstrate an understanding or the ability to apply legal and regulatory concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates a rudimentary understanding and ability to apply legal and regulatory concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates a sound understanding and ability to apply legal and regulatory concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates an advanced understanding and ability to apply legal and regulatory concepts related to the provision of oral healthcare sciences.
8.2. Business management Applies business management concepts to the provision of oral healthcare services.	<ul style="list-style-type: none"> Does not demonstrate an understanding or the ability to apply business management concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates a rudimentary understanding and ability to apply business management concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates a sound understanding and ability to apply business management concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates an advanced understanding and ability to apply business management concepts related to the provision of oral healthcare sciences.

Appendix B

California Northstate University Institutional Learning Objectives

ILO 1: Critical thinking: Exercise reasoned judgment to assess technical information and make well-informed decisions using evidence-based approaches

ILO 2: Written communication. Demonstrate the ability to write coherent, supported, and logically structured prose

ILO 3: Oral communication: Demonstrates oral communication skills

ILO 4: Professionalism. Interact with respect, empathy, diplomacy, and cultural competence

ILO 5: Quantitative reasoning: Demonstrate ability to use mathematics and statistics in problem solving

ILO 6: Information literacy: Identify and search relevant libraries of information and databases; synthesize information obtained from primary literature using properly referenced citations

DMD Institutional Learning Outcomes (ILOs) Proficiency Rubric

ILO 1: Critical thinking: Exercise reasoned judgment to assess technical information and make well-informed decisions using evidence-based approaches

Indicator	Initial	Developing	Developed	Proficient
1.1. Demonstrates identification of problem or issues	<ul style="list-style-type: none"> Does not correctly identify the problem or issue being considered Does not demonstrate understanding of the psychological factors that contribute to current patient state 	<ul style="list-style-type: none"> Identifies the problem or issue but does not demonstrate awareness of all the factors impacting decision making Demonstrates understanding of some possible psychological factors that contribute to current patient state 	<ul style="list-style-type: none"> Correctly identifies the problem or issue but does not demonstrate awareness of all factors impacting decision making Demonstrates understanding of most psychological factors that contribute to the current patient state 	<ul style="list-style-type: none"> Correctly identifies all of the primary factors associated with problem or issue impacting decision making Demonstrates thorough understanding of all possible psychological factors that contribute to the current patient state

1.2. Demonstrates identification of resources	<ul style="list-style-type: none"> Does not identify appropriate resources 	<ul style="list-style-type: none"> Identifies a few resources needed 	<ul style="list-style-type: none"> Identifies most of the resources needed 	<ul style="list-style-type: none"> Correctly identifies all appropriate resources
1.3. Finds and interprets data needed for critical thinking and decision making	<ul style="list-style-type: none"> Does not demonstrate understanding of the data needed for critical thinking and decision making 	<ul style="list-style-type: none"> Demonstrates ability to interpret some data but not all 	<ul style="list-style-type: none"> Demonstrates ability to interpret most data 	<ul style="list-style-type: none"> Demonstrates ability to correctly interpret data needed for decision making
1.4. Demonstrates knowledge of alternatives when evaluating for possible solutions	<ul style="list-style-type: none"> Does not evaluate possible alternatives for treatment or diagnosis 	<ul style="list-style-type: none"> Does not effectively evaluate alternative treatment or diagnostic solutions 	<ul style="list-style-type: none"> Evaluates possible treatment and diagnostic solutions leading to a logical decision 	<ul style="list-style-type: none"> Effectively and thoroughly considers and evaluates possible diagnostic and treatment solutions
1.5. Proposes and selects appropriate solutions	<ul style="list-style-type: none"> Does not propose solutions to the client's needs 	<ul style="list-style-type: none"> Proposes solutions without consideration of alternatives 	<ul style="list-style-type: none"> Solutions chosen demonstrate consideration of most of the strengths, weaknesses, and consequences of the decision 	<ul style="list-style-type: none"> Proposes solutions that are appropriate to the situation and demonstrate consideration of all relevant strengths, weaknesses, and consequences
1.6. Presents rationale for course of action	<ul style="list-style-type: none"> Does not adequately provide rationale for treatment decision 	<ul style="list-style-type: none"> Provides rationale for decision but does not integrate into mental health treatment plan 	<ul style="list-style-type: none"> Provides rationale for decision with solid supporting evidence from available psychological literature and/or case factors 	<ul style="list-style-type: none"> Provides rationale for decision and with appropriate and relevant supporting case evidence and integrates findings into treatment plan

ILO 2: Written communication. Demonstrate the ability to write coherent, supported, and logically structured prose

Indicators	Initial	Developing	Developed	Proficient
2.1. Demonstrates knowledge and awareness of intended audience	<ul style="list-style-type: none"> Does not demonstrate knowledge or awareness of audience for which the document is intended 	<ul style="list-style-type: none"> Demonstrates some ability to craft a document appropriate for its audience 	<ul style="list-style-type: none"> Demonstrates ability to craft a document appropriate for its audience 	<ul style="list-style-type: none"> Consistently demonstrates ability to craft documents appropriate for the audience
2.2. Demonstrates clear and logical thought	<ul style="list-style-type: none"> Does not demonstrate clear or logical thought in their documentation 	<ul style="list-style-type: none"> Writing does not sufficiently conceptualize case variables or analyze subject under discussion 	<ul style="list-style-type: none"> Demonstrates general clear or logical thought in their documentation 	<ul style="list-style-type: none"> Research and clinical documentation demonstrates clear and focused thinking

2.3. Demonstrates support for and development of ideas	<ul style="list-style-type: none"> Does not explain or develop ideas 	<ul style="list-style-type: none"> Demonstrates minimal support for ideas 	<ul style="list-style-type: none"> Writing contains examples that generally support ideas 	<ul style="list-style-type: none"> Supports ideas with relevant, clear, impactful examples
2.4. Demonstrates appropriate use of evidence to support arguments	<ul style="list-style-type: none"> Demonstrates an attempt to use proper citations to support ideas 	<ul style="list-style-type: none"> Uses credible and relevant sources to support ideas appropriate in the study of psychology 	<ul style="list-style-type: none"> Consistently uses credible and relevant sources to support ideas 	<ul style="list-style-type: none"> Demonstrates skillful use of credible and relevant sources to develop and support ideas
2.5. Demonstrates appropriate use of language, syntax, and mechanics	<ul style="list-style-type: none"> Has excessive or severe errors in language usage 	<ul style="list-style-type: none"> Generally conveys meaning to readers with clarity, though writing may include some errors 	<ul style="list-style-type: none"> Language conveys meaning to readers and writing contains very few errors 	<ul style="list-style-type: none"> Uses language effectively and skillfully to communicate meaning to readers

ILO 3: Oral communication: Demonstrates oral communication skills

Indicators	Initial	Developing	Developed	Proficient
3.1. Demonstrates knowledge and awareness of intended audience	<ul style="list-style-type: none"> Does not demonstrate knowledge or awareness of audience for which the communication is intended 	<ul style="list-style-type: none"> Demonstrates some ability to communicate in a manner appropriate to the audience 	<ul style="list-style-type: none"> Demonstrates ability to communicate appropriate to the audience 	<ul style="list-style-type: none"> Consistently demonstrates ability to communicate in a manner appropriate to the audience
3.2. Demonstrates clear and logical thought	<ul style="list-style-type: none"> Does not demonstrate clear or logical thought in their communication 	<ul style="list-style-type: none"> Communication does not sufficiently conceptualize case variables or analyze subject under discussion 	<ul style="list-style-type: none"> Demonstrates general clear or logical thought in their communication 	<ul style="list-style-type: none"> Communication demonstrates clear and focused thinking
3.3. Demonstrates effective use of language in their communication	<ul style="list-style-type: none"> Does not know professional psychological language or uses jargon Does not know the proper technical language regarding mental health treatment 	<ul style="list-style-type: none"> Demonstrates inaccurate use of psychological language or uses jargon in professional communications Utilizes scientific language that is incomprehensible to patients 	<ul style="list-style-type: none"> Demonstrates appropriate use of professional language and minimal jargon Utilizes generalized language to interact with patients 	<ul style="list-style-type: none"> Demonstrates use of appropriate, professional language Utilizes generalized language to interact with patients
3.4. Demonstrates appropriate active listening techniques	<ul style="list-style-type: none"> Does not acknowledge other viewpoints 	<ul style="list-style-type: none"> Demonstrates little attempt to recognize other viewpoints 	<ul style="list-style-type: none"> Recognizes other viewpoints but has difficulty incorporating them 	<ul style="list-style-type: none"> Listens to questions with a consideration of

when addressing questions	<ul style="list-style-type: none"> • Has great difficulty answering questions 	<ul style="list-style-type: none"> • Answers are simplistic and lack intellectual depth 	into case conceptualization <ul style="list-style-type: none"> • Adequately answers patient questions 	alternative viewpoints <ul style="list-style-type: none"> • Answers questions thoughtfully referencing evidence
3.5. Orally communicates meaning to audience	<ul style="list-style-type: none"> • Vocal delivery is too soft or too fast • Long, unintended silences and/or speech disruptions frequently distract audience • Speaker makes no attempt to engage audience 	<ul style="list-style-type: none"> • Vocal delivery is audible • Speech rate or volume disruptions occasionally distract from comprehension • Attempts to engage audience 	<ul style="list-style-type: none"> • Vocal delivery is varied and dynamic • Speech rate, volume, and tone enhance listener interest and facilitate understanding • Generally engages audience 	<ul style="list-style-type: none"> • Vocal delivery is varied and dynamic • Speech rate, volume, and tone enhance listener interest and facilitate understanding • Thoroughly engages audience
3.6. Utilizes non-verbal means to enhance message	<ul style="list-style-type: none"> • Eye contact, body language, and facial expressions are inappropriate 	<ul style="list-style-type: none"> • Eye contact, body language, and facial expressions neither enhance nor hinder oral effectiveness 	<ul style="list-style-type: none"> • Use of eye contact, body language, and facial expressions are mostly consistent with the verbal message 	<ul style="list-style-type: none"> • Use of eye contact, body language, and facial expressions that are consistent with the verbal message

ILO 4: Professionalism. Interact with respect, empathy, diplomacy, and cultural competence

Indicators	Initial	Developing	Developed	Proficient
4.1. Demonstrates professional attitudes and behaviors	<ul style="list-style-type: none"> • Does not generally demonstrate professional attitudes or behaviors expected from a dentist 	<ul style="list-style-type: none"> • Demonstrates some attitudes and behaviors that may be characteristic of a dentist 	<ul style="list-style-type: none"> • Generally demonstrates attitudes and behaviors expected from a dentist 	<ul style="list-style-type: none"> • Consistently demonstrates attitudes and behaviors expected from a dentist
4.2. Demonstrates personal responsibility and accountability	<ul style="list-style-type: none"> • Does not demonstrate personal accountability or responsibility for work completed 	<ul style="list-style-type: none"> • Demonstrates minimal personal accountability and responsibility for work completed 	<ul style="list-style-type: none"> • Demonstrates personal accountability and responsibility for the work completed 	<ul style="list-style-type: none"> • Consistently demonstrates personal accountability and responsibility for work completed
4.3. Demonstrates respectful and sensitive behaviors to the cultural and linguistic needs of diverse patients	<ul style="list-style-type: none"> • Does not demonstrate an awareness of patients' customs, beliefs, or perspectives • Does not demonstrate awareness of linguistic needs of patients 	<ul style="list-style-type: none"> • Demonstrates a minimal level of awareness of customs, beliefs, or perspectives of patients • Demonstrates minimal awareness of cultural and linguistic needs of patients 	<ul style="list-style-type: none"> • Demonstrates awareness of customs and beliefs • Demonstrates awareness of the cultural and linguistic needs of patients 	<ul style="list-style-type: none"> • Demonstrates awareness of customs, beliefs, or perspectives in patients • Demonstrates full awareness and responds to the cultural and linguistic needs of patients

4.4. Demonstrates professional demeanor	<ul style="list-style-type: none"> • Appears inattentive and impatient • Uses inappropriate body language • Dresses in attire that is inappropriate 	<ul style="list-style-type: none"> • Appears unfocused and distracted • Uses acceptable body language • Dresses in attire that is not offensive 	<ul style="list-style-type: none"> • Appears composed and focused • Uses appropriate body language • Dresses in attire that is professional 	<ul style="list-style-type: none"> • Uses articulate, tactful, and diplomatic speech • Uses professional body language • Dresses in attire that is professional, and well-suited for the environment
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ILO 5: Quantitative reasoning: Demonstrate ability to use mathematics and statistics in problem solving

Indicators	Initial	Developing	Developed	Proficient
5.1. Demonstrates ability to perform calculations and apply mathematical principles to solve problems	<ul style="list-style-type: none"> • Does not demonstrate ability to apply statistical or psychometric principles 	<ul style="list-style-type: none"> • Demonstrates ability to perform basic statistical calculations but does not know how to apply psychometric principles to solve problems 	<ul style="list-style-type: none"> • Demonstrates ability to perform most statistical calculations accurately and to apply psychometric principles to solve problems 	<ul style="list-style-type: none"> • Consistently demonstrates ability to perform statistical calculations accurately and to appropriately apply psychometric principles to solve problems
5.2. Demonstrates understanding of experimental designs and methodology	<ul style="list-style-type: none"> • Displays difficulty proposing a basic experiment or research project 	<ul style="list-style-type: none"> • Comprehends basic experiments designed by others 	<ul style="list-style-type: none"> • Evaluates research, method, and protocol to review valid and reliable research 	<ul style="list-style-type: none"> • Proposes appropriate and innovative designs to address a new hypothesis and research question
5.3. Demonstrates logical and appropriate interpretation of data	<ul style="list-style-type: none"> • Demonstrates a limited ability to interpret scientific data 	<ul style="list-style-type: none"> • Attempts to interpret scientific data 	<ul style="list-style-type: none"> • Demonstrates the ability to interpret scientific data 	<ul style="list-style-type: none"> • Interprets data in the context of current scientific knowledge
5.4. Demonstrates logical thought patterns in generating conclusions	<ul style="list-style-type: none"> • Does not generate conclusions based on current scientific data and statistics 	<ul style="list-style-type: none"> • Generates conclusions that may be based on current scientific data and statistics 	<ul style="list-style-type: none"> • Generates conclusions using scientific and statistical data 	<ul style="list-style-type: none"> • Accurately generates conclusions using appropriate scientific and mathematical data

ILO 6: Information literacy: Identify and search relevant libraries of information and databases; synthesize information obtained from primary literature using properly referenced citations

Indicators	Initial	Developing	Developed	Proficient
6.1. Demonstrates appropriate ability search and acquire resources	<ul style="list-style-type: none"> Does not identify or solicit help in obtaining external resources to support topic 	<ul style="list-style-type: none"> Identified resources may not be sufficient in quality and infrequently solicits guidance from library personnel 	<ul style="list-style-type: none"> Identifies resources appropriate for scientific inquiry and solicits guidance from library personnel 	<ul style="list-style-type: none"> Identifies a variety of relevant sources and regularly seeks guidance from library personnel
6.2. Demonstrates appropriate incorporation of references	<ul style="list-style-type: none"> Does not incorporate references 	<ul style="list-style-type: none"> Incorporates references from psychological sources that do not clearly support ideas 	<ul style="list-style-type: none"> Incorporates relevant references that generally supports ideas 	<ul style="list-style-type: none"> Incorporates relevant references from respected psychological sources
6.3. Demonstrates appropriate citation of references	<ul style="list-style-type: none"> Does not use citations 	<ul style="list-style-type: none"> Uses citations but they are not formatted in APA style 	<ul style="list-style-type: none"> Demonstrates use of appropriate citations in context 	<ul style="list-style-type: none"> Uses properly cited references and includes all necessary information in reference list



California Northstate University College of Dental Medicine

Behavioral Medicine Course Syllabus

Course #	Course Title	Credits	Year	Term
BSS 662	Behavioral Medicine (CP Course) <i>LAL, Clin</i>	3	DS 2	Spring

Credit Hour Policy

For each 15-week semester, one (1) hour of credit is assigned per hour each week of classroom or direct faculty didactic instruction (that is, per hour of lecture or student in-class time) and a minimum of two (2) hours of out-of-class student work (homework). For practicum and internship time, one (1) hour of credit is assigned per three (3) hours each week of student time spent in this activity.

Maximum Enrollment: 80

Calendar of Important Dates:

Date	
	First day of Spring Term for all DMD 2 students

Course Coordinator, Instructors and Contact Information

Bret McLaughlin D. Psych. (course co-director)

Room:

E mail: bret.mccaughlin@cnsu.edu

Office hours

Leon Assael DMD (course co-director)

Room:

E-mail: leon.assael@cnsu.edu

Office hours: Wednesdays 12:00pm-1:00pm, and 3:00pm-4:00pm (or by appointment)

Holly Jacobson BA (course administrator)

Room: xxx

E mail: holly.jacobson@cnsu.edu**Classroom and Meeting Times**

Room: Classroom xxxx

Time: xxxx 2 hours per week

Clinic and meeting times

Room: Stone Lake Psychology Clinic

Time: 4 hours per week for 3 weeks per student

Course Description

In this course aspects of clinical psychology of importance in dental practice is presented. Cased base learning will include: minor and major psychiatric illnesses impacting on oral health and the provision of oral health care; elder, spousal and child abuse; dental fear; and, dental phobias.

Prerequisite Courses

None

Prerequisite Knowledge

None

Required Textbook(s) and Material(s)

1. *Bates guide to physical examination and history Taking- 11th edition*, Bickley, Lynn, Wolters Kluwer
2. Yagiela, *Pharmacotherapy and therapeutics for Dentistry*, Elsevier, 2018

3. Casamassimo, *Pediatric Dentistry, infancy through adolescence*, Elsevier 2017
4. Barlow, D. *Clinical Handbook of Psychological disorders*, the Guilford Press, 2014

Technology

1. Computer-assisted instruction (Clickers) and SCANTRON Sheets
2. Web-based course management (Canvas) and Examsoft
3. Audio/Video recordings where applicable
4. PowerPoint
5. Epic electronic health record
6. PACS, DICOM compatible imaging software
7. Psychology clinic

Evaluation Components

In keeping with the Team Based Learning (TBL) approach, grades will be determined as follows:

Individual Components	80%
First quiz	10%
Second Quiz	10%
Final exam	30%
Clinical evaluation practical	30%

Team Components	20%
Group PCS projects X2	10%
Peer Evaluation	10%

GRADING

All students must demonstrate minimal individual competency. Therefore, students earning less than 75% on the total Individual component score will not have team component scores added to calculate their final course grade. During the course, students who score less than 75% on individual components may be subject to periodic course content review and may receive an Academic Alert.

In order to progress from one semester to the next, students must pass all courses with a letter a grade of C or higher and maintain a minimum cumulative grade point average (GPA) of 2.0. The breakdown for assignment of letter grades and grade points for each letter grade are as follows:

Percent	Letter Grade/Action
90.0 – 100%	A
80.0 – 89.9%	B
75.0 – 79.9%	C - Pass

60.0 – 74.9%	D – Requiring remediation (successful remediation recorded as C, unsuccessful remediation recorded as F)
Below 60.0%	F – Fail (course must be repeated)
Incomplete	I

Incomplete

During a semester, a student may not complete all required assignments and/or examinations due to extenuating circumstances, such as, but not limited to, an illness or a family emergency. In such a case, the course director may give a grade of Incomplete for the course. The course with the incomplete grade has to be completed successfully within the time frame as being defined by the student's academic plan, normally in the same academic year, otherwise a leave of absence would be required.

Core-Course Policies

All students are required to adhere to the Academic Policies that impact on student progression and conduct while attending the DMD program, including the following: Academic Progression Policy, Excused Absence Policy, Exam Policy, Course Grade Appeal Policy, Course Add/Drop Policy and Attendance Policy. Refer to the current Student Handbook for the detailed policies.

Course Specific Policies

1. Group PCS cases are to be submitted via CANVAS by 11:59pm PST on the deadline indicated. Only one group member should submit the assignment on behalf of the group. The course coordinator reserves the right to deduct points for late submission (20% of assignment grade for every 24 hours the assignment is turned in late). Presentation of PCS cases requires the active participation of each team member, preferably presenting the component of the case the student was responsible for developing.
2. Grade appeal for any individual assignments (including exams) should be submitted to the course coordinator in writing within 5 business days of grade release.
3. There will be no rounding of the final grade for this course.

Topics and Schedule

(Subject to change. Updates will be posted to CANVAS and announced by email)

All readings are in Vital Source, or as assigned and posted to CANVAS

Each didactic session including LAL is 2 hours. Each clinical session is 4 hours. Students are divided into groups of 4 students (groups 1-20) for each of their 3 sessions. Each group of 4 will attend either Monday, Tuesday, Wednesday or Thursday clinic.

Date	Topics	Readings*	Instructor	Notes
Week 1 LAL	Introduction to behavioral sciences		McLaughlin/ Assael	

1: Clinic assignment	Groups 1,2,3,4 (4 students per day mon/tues/wed/thurs)		Clinical faculty and staff	
Week 2	Behavioral issues in dental practice		Assael	
2: Clinic assignment	Groups 5,6,7,8		Clinical faculty and staff	
Week 3 Psychological disorders 1	Panic disorder, phobias, PTSD	Barlow Chapter 1,2,3	McLaughlin	
Week 3: clinic assignment	Groups 9,10,11,12		Clinical faculty and staff	
Week 4: psychological disorders 2	OCD, anxiety disorder, depression	Barlow chapter 4,5,6,7,8	McLaughlin	
Week 4 Clinic assignment	Groups 13,14,15,16		Clinical faculty and staff	
Week 5: Psychological disorders 3	Borderline personality, bipolar disorder, schizophrenia and other psychoses	Barlow chapter 10,11,12,13	McLaughlin	Case assignments X4 to groups
Week 5 clinic assignment	Groups 17,18,19,20		Clinical faculty	
Week 6	Dental fear and anxiety		Assael	
Week 6 clinic	Groups 1,2,3,4 (4 students per day mon/tues/wed/thurs)		Clinical faculty	
Week 7	The patient behavioral history in dental practice.	Bates, chapter 3	Clinical faculty	
Week 7 clinic	Groups 5,6,7,8	Bates chapter 2 UCSD practical guide to clinical medicine	Keating	

Week 8	Psychotropic Pharmacopeia in dental practice	Yagiela, chapter 12	Cadra	
Week 8 clinic	Groups 9,10,11,12		Clinical faculty	
Week 9	Managing dental phobias, pain and anxiety in dental practice		Keating Assael Oral surgery fac	
Week 9 clinic	Groups 13,14,15,16		Clinical faculty and staff	
Week 10	Opioids use in dental patients and prescription opioids		Harold Tu	
Week 10 clinic	Groups 17,18,19,20		Clinical faculty	
Week 11	Other drug/alcohol abuse in dental practice		Harold Tu	
Week 11 clinic	Groups 1,2,3,4 (4 students per day mon/tues/wed/thurs)		Clinical faculty	
Week 12	Working with the behavioral health interprofessional team in collaborative practice models		Huong Le	
Week 12 clinic	Groups 5,6,7,8		faculty	
Week 13	Case presentations groups 1 and 2		Clinical faculty	
Week 13 clinic	Groups 9,10,11,12		Clinical faculty and staff	
Week 14	Case presentations groups 3 and 4		Clinical faculty	
Week 14 clinic	Groups 13,14,15,16		Clinical faculty	
Week 15	Final exam		Faculty	
Week 15 clinic	Groups 17,18,19,20		Clinical faculty	

**Course Learning Outcomes and links to Program Learning Outcomes (Appendix A)
and Institutional Learning Outcomes (Appendix B)**

No.	Course Learning Outcome	DMD PLO	DMD ILO	Learning Hierarchy ^b	Assessment Method
1	Develop an initial understanding and capability to assess behavioral issues in dental practice	1,2,3,4,7,8	1,3,4,6	1,2, 3	Clinical evaluation Group projects
2	Communicate with the behavioral science clinical team with regard to interprofessional collaborative practice issues	1,2,3,5,6,7,8	1,4,	2, 3	Clinical assessment Final exam

^a plo's appendix A

^b Learning Hierarchy based on Bloom's Taxonomy with 1=Memorization and/or Comprehension; 2=Application and/or Analysis; 3=Synthesis and/or Evaluation.

Teaching/ Learning Methodology

1. Didactic: lectures, required readings
2. Learning Activities: laboratory practice, OSCE, laboratory assignments/exercises, group project

CLO Rubrics

CLO 1: Develop an initial understanding and capability to assess behavioral issues in dental practice

Indicators	Initial	Developing	Developed	Proficient
Has an understanding and capability to assess behavioral issues in dental practice	Begins to apply behavioral sciences knowledge to the attendance of clinical issues in dental practice	Demonstrates ability be a clinical team member but with evolving demonstration of understanding their own role and the role of others in behavioral sciences	Has detailed understanding of behavioral sciences issues in dental practice and has the capability to apply that knowledge in the care of dental patients	Consistently demonstrates the ability participate at the level of their knowledge and skill as a clinical team member.

CLO 2: Communicate with the behavioral science clinical team with regard to interprofessional collaborative practice issues to improve patient care

Indicators	Initial	Developing	Developed	Proficient
Can communicate with the behavioral sciences team with regard to collaborative practice issues to improve patient care	Has no or limited knowledge of behavioral health professionals and their role in oral health care	Begins to exhibit knowledge of the capability of the behavioral health team as a resource in oral health practice	Can implement team approach to care with behavioral health in patient care with uncommon non critical errors	Creates features of a collaborative practice team in oral health and behavioral health

Appendix A

Program Learning Outcomes (PLOs) CNU College of Dental Medicine

1. Patient-Centered Care: Demonstrate understanding of healthcare disparities and cultural awareness in patient counseling and patient advocacy
2. Evidence-Based Care: Apply current, evidence-based oral healthcare within the scope of general dentistry
3. Culturally competent, empathic communication: Demonstrate patient centered, empathic, and culturally competent communication and interpersonal skills
4. Oral and Written Communication: Demonstrate sound oral and written communications in patient care
5. Critical Thinking: Utilize critical thinking, problem solving skills and systemic thinking in assessing and making reasoned, evidence-based decisions in patient care
6. Ethics and Professionalism: Demonstrate professionalism and ethical decision making
7. Biomedical Sciences Knowledge: Demonstrate an understanding of the fundamentals of biomedical sciences and apply them appropriately in oral healthcare
8. Practice Management: Apply legal, regulatory and business management concepts related to provision of oral healthcare services

DMD Program Learning Outcomes (PLOs) Proficiency Rubric

PLO 1: Patient-Centered Care

Demonstrate understanding of healthcare disparities and cultural awareness and capability in patient counseling and providing appropriate patient advocacy

Indicators	Initial	Developing	Developed	Proficient
1.1. Education. Demonstrates ability to educate all audiences through effectively communicating information and assessing learning	<ul style="list-style-type: none"> Does not appropriately counsel patients Does not check for understanding, ask questions, and/or asks inappropriate questions. 	<ul style="list-style-type: none"> Counsels patients but leaves out pertinent information needed by patient Communicates with basic level of clarity but 	<ul style="list-style-type: none"> Generally demonstrates empathy, communicates accurate information clearly, checks for understanding 	<ul style="list-style-type: none"> Consistently demonstrates empathy, communicates accurate information clearly, checks for understanding

	<ul style="list-style-type: none"> Does not demonstrate the ability to find and utilize appropriate resources and references necessary for providing accurate counseling, consultation and education 	<p>does not always check for understanding or rephrase when confusion occurs.</p> <ul style="list-style-type: none"> Demonstrates the ability to find a one or two resources, yet the resources are not the best or most appropriate for providing accurate counseling, consultation and education 	<ul style="list-style-type: none"> Seeks to ensure understanding and generally asks questions. Frequently demonstrates the ability to find and utilize appropriate resources and references necessary for providing accurate counseling, consultation and education 	<ul style="list-style-type: none"> Ensures understanding and asks appropriate questions. Consistently demonstrates the ability to find and utilize appropriate resources and references for providing accurate patient counseling, consultation and education
1.2. Patient advocacy. Represents the patient's best interests	<ul style="list-style-type: none"> Does not demonstrate the ability represent a patient's best interest 	<ul style="list-style-type: none"> Demonstrates awareness of issues that impact a patient Demonstrates minimal ability to articulate these issues but does not demonstrate ability to sufficiently advocate on a patient's behalf 	<ul style="list-style-type: none"> Demonstrates sufficient awareness of issues that impact a patient Demonstrates ability to articulate these issues Demonstrates ability to sufficiently advocate on a patient's behalf 	<ul style="list-style-type: none"> Demonstrates full awareness of the most important issues that impact a patient Demonstrates ability to clearly and effectively articulate these issues Demonstrates ability to effectively advocate on a patient's behalf

PLO 2: Evidence-Based Care.

Apply sound, current, and evidence-based oral healthcare within the scope of general dentistry

Indicators	Initial	Developing	Developed	Proficient
2.1. Patient-centered care. Demonstrates ability to provide	<ul style="list-style-type: none"> Does not demonstrate ability to provide patient-centered care at the 	<ul style="list-style-type: none"> Demonstrates ability to provide patient-centered care as the medication 	<ul style="list-style-type: none"> Demonstrates ability to provide patient-centered care as the medication 	<ul style="list-style-type: none"> Demonstrates ability to provide sufficient patient-centered

patient-centered care as the medication expert (collect and interpret evidence, prioritize, formulate assessments and recommendations, implement, monitor and adjust plans, and document activities)	medication expert level; e.g., demonstrates ability to collect but not sufficiently interpret evidence, does not prioritize, formulates basic assessments and recommendations, does not sufficiently monitor and adjust plans nor document activities.	expert in some, but not all, areas as follows: collect and interpret evidence, prioritize, formulate assessments and recommendations, implement, monitor and adjust plans, and document activities	expert (generally demonstrates ability to collect and interpret evidence, prioritize, formulate assessments and recommendations, implement, monitor and adjust plans, and document activities)	care as the expert (collects and interprets evidence, prioritizes, formulates assessments and recommendations, implements, monitors and adjusts plans, and documents activities)
2.2. Systems management. Demonstrates ability to manage patient healthcare needs using human, financial, technological, and physical resources to optimize the safety and efficacy of medication use systems	<ul style="list-style-type: none"> • Does not demonstrate understanding of oral healthcare delivery systems parts • Does not demonstrate understanding of the forces that influence components of the oral healthcare delivery system, including their connection to patient care • Does not demonstrate understanding of any challenges to systems that affect oral healthcare delivery Does not demonstrate understanding of how to work with different	<ul style="list-style-type: none"> • Demonstrates understanding of some parts of oral healthcare delivery systems but does not identify how they are related to each other • Demonstrates understanding of some forces that influence the parts of healthcare delivery systems, but demonstrate minimal understanding of their connection to patient care • Demonstrates understanding of some challenges that can affect delivery of oral healthcare • Demonstrates some understanding of how to work 	<ul style="list-style-type: none"> • Demonstrates understanding of most major components of oral healthcare systems and their respective relationships • Demonstrates understanding of the forces that influence the components of healthcare delivery systems, and demonstrate some understanding of their influence on the quality of patient care • Demonstrates understanding of most challenges that can affect delivery of oral healthcare, but does not demonstrate complete 	<ul style="list-style-type: none"> • Demonstrates understanding of the major components of oral healthcare systems, their respective relationships, and their functions related to patient care • Demonstrates thorough understanding of the forces that influence components of healthcare delivery systems and demonstrate full understanding of their influence and implications on the quality of patient care • Demonstrates understanding of pertinent challenges to specific aspects of healthcare

	subsystems to deliver oral healthcare	with different subsystems and how they function to deliver oral healthcare, but demonstrate minimal awareness or understanding of one's own role within the oral healthcare delivery system	comprehension of the effects Demonstrates basic understanding of how to work with different subsystems and how they function to deliver oral healthcare and demonstrate some understanding of one's role within the oral healthcare delivery system, but does not necessarily demonstrate application of knowledge in a manner that maximizes the quality of oral healthcare	delivery by demonstrating abilities to thoroughly discuss the implications for the appropriate parts of oral health care delivery systems Demonstrates excellent understanding of how to work with different subsystems involved while also demonstrating understanding of one's role within the subsystems, and demonstrate appropriate application of knowledge in a manner that maximizes the quality of oral healthcare
2.3. Health and wellness. Designs prevention, intervention, and educational strategies for individuals and communities to manage chronic disease and improve oral health and wellness	<ul style="list-style-type: none"> Does not demonstrate understanding of how the arts can be utilized to optimize patients' well-being 	<ul style="list-style-type: none"> Demonstrates knowledge of some of the ways that the arts can be utilized to optimize patients' well-being 	<ul style="list-style-type: none"> Demonstrates sufficient knowledge of multiple ways that the arts can be utilized to optimize patients' well-being 	<ul style="list-style-type: none"> Demonstrates thorough knowledge of the ways that the arts can be utilized to optimize patients' well-being and creatively applies this knowledge to improve well-being and the practice and delivery of oral healthcare

<p>2.4. Population-based care. Demonstrates understanding of how population-based care influences patient-centered care and the development of practice guidelines and evidence-based best practices</p>	<ul style="list-style-type: none"> • Does not demonstrate awareness of population-based care. 	<ul style="list-style-type: none"> • Demonstrates minimal understanding of population-based care and how it influences patient-centered care • Does not demonstrate awareness of how these notions influence the development of practice guidelines 	<ul style="list-style-type: none"> • Demonstrates sufficient understanding of population-based care and how it influences patient-centered care • Demonstrates sufficient understanding of how population-based care influences the development of practice guidelines and best practices for patient care 	<ul style="list-style-type: none"> • Demonstrates superb understanding of population-based care and how it influences patient-centered care • Demonstrates superb understanding of how population-based care influences the development of practice guidelines and demonstrates knowledge of best practices for patient care
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PLO 3: Culturally Competent, Empathic Communication.

Demonstrate patient centered, empathic and culturally competent communication and interpersonal skills

Indicators	Initial	Developing	Developed	Proficient
3.1. Empathy. Demonstrates the ability to communicate with the patient empathically.	<ul style="list-style-type: none"> Does not demonstrate the ability to communicate with the patient empathically. 	<ul style="list-style-type: none"> Demonstrates some ability, but experiences lapses in the ability to communicate empathically 	<ul style="list-style-type: none"> Demonstrates the ability to communicate empathically, with few lapses. 	<ul style="list-style-type: none"> Demonstrates an advanced ability, and never experiences lapses in communicating empathically.
3.2. Cultural competence. Demonstrates the ability to engage in communication with the patient that is culturally aware and accepting.	<ul style="list-style-type: none"> Does not demonstrate communication and interactions that convey respect or concern for patients and the community. Does not demonstrate an awareness of customs, beliefs, or perspectives in diverse patients Does not demonstrate awareness of cultural and linguistic needs of patients in order to communicate health information 	<ul style="list-style-type: none"> Demonstrates communication and interactions characteristic of a minimal level of respect, and little concern for patients and the community is apparent through use of some appropriate communication, but student does not employ follow-up questions for clarification, when necessary, and student provides inappropriate detail in responses Demonstrates a minimal level of awareness of customs, beliefs, or perspectives in diverse patients Demonstrates minimal awareness of 	<ul style="list-style-type: none"> Demonstrates appropriate communication and interactions that are characteristic of a basic level of respect, and concern for patients and the community is apparent through use of appropriate communication, where student uses some clear, but not necessarily relevant or detailed, follow-up questions and responses Demonstrates awareness of customs and beliefs, but may not clarify with patients about personal perspectives Demonstrates awareness of the cultural and 	<ul style="list-style-type: none"> Demonstrates professional communication and interactions by showing empathy, respect, and concern for patients and the community through use of appropriate communication where follow-up questions (as needed) and responses are clear, relevant, and detailed Demonstrates awareness of customs, beliefs, or perspectives in diverse patients; ask appropriate questions to clarify perspectives and perceptions in diverse patients Demonstrates full awareness of and responsiveness

		cultural and linguistic needs of patients; either does not or only attempt to adapt behaviors, but does so ineffectively, to communicate health information	linguistic needs of diverse patients, and adapt behaviors to communicate health information, but communication may not be effective	to cultural and linguistic needs of diverse patients by adapting behaviors appropriately in order to effectively communicate health information
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PLO 4: Oral and Written Communication.

Demonstrate sound oral and written communications in patient care

Indicators	Initial	Developing	Developed	Proficient
4.1. Oral communication. Demonstrate sound oral communication in patient care.	<ul style="list-style-type: none"> Does not demonstrate logical reasoning in oral communications in patient care. Does not demonstrate the ability to cite sound evidence that support ideas within presentations or discussions. 	<ul style="list-style-type: none"> Demonstrates some logical reasoning in oral communications in patient care but demonstrates some lapses. Demonstrates some ability to cite sound evidence that support ideas within presentations or discussions, but demonstrates some lapses. 	<ul style="list-style-type: none"> Generally demonstrates logical reasoning in oral communications in patient care. Generally demonstrates the ability to cite sound evidence that support ideas within presentations or discussions. 	<ul style="list-style-type: none"> Consistently demonstrates logical reasoning in oral communications in patient care. Consistently demonstrates the ability to cite sound evidence that support ideas within presentations or discussions.
4.2. Written communication. Demonstrate sound written communication in patient care.	<ul style="list-style-type: none"> Does not demonstrate logical reasoning in written communications in patient care. Does not demonstrate the written ability to cite sound evidence that support ideas. 	<ul style="list-style-type: none"> Demonstrates some logical reasoning in written communications in patient care but demonstrates some lapses. Demonstrates some written ability to cite sound evidence that support ideas, but demonstrates some lapses. 	<ul style="list-style-type: none"> Generally logical reasoning in written communications in patient care. Generally demonstrates the written ability to cite sound evidence that support ideas. 	<ul style="list-style-type: none"> Consistently demonstrates logical reasoning in written communications in patient care. Consistently demonstrates the written ability to cite sound evidence that support ideas.

PLO 5: Critical Thinking.

Utilize critical thinking, problem solving skills and systemic thinking in assessing and making reasoned, evidence-based decisions in patient care

Indicators	Initial	Developing	Developed	Proficient
5.1. Problem solving. Identifies problems; explore and prioritize potential strategies; and designs, implements, and evaluates viable solutions	<ul style="list-style-type: none"> • Is not able to correctly identify the problem or issue being considered. • Does not identify appropriate resources. Includes extraneous information or inappropriate or insufficient resources. • Does not demonstrate understanding of the content of materials reviewed. Makes inappropriate inferences. • Does not evaluate possible alternatives or generates ideas that are illogical or extraneous to issue at hand. • Does not propose a solution or does not articulate decision. Does not adequately provide 	<ul style="list-style-type: none"> • Identifies the problem or issue but does not demonstrate awareness of all the factors associated with the problem or issues that impact decision making. • Identifies a few, but not all, resources needed for decision making. • Demonstrates ability to interpret some information and data but not all. • Does not fully or effectively evaluate alternative solutions. • Proposes a decision with many apparent weaknesses (i.e., not feasible, lack of regard for consequences, lack of supporting evidence, illogical, irrelevant to 	<ul style="list-style-type: none"> • Correctly identifies problem or issue being considered and demonstrates adequate awareness of the factors associated with this problem or issue that impact decision making. • Identifies most of the resources needed. • Demonstrates ability to interpret most information and data. • Considers and evaluates possible solutions in a way that generally leads to a logical decision or course of action. • Proposes a solution that does not contain apparent weaknesses that may or may not be the obvious clear choice. Solutions chosen 	<ul style="list-style-type: none"> • Consistently correctly identifies the problem or issue being considered and all of the primary factors associated with this problem or issue that impact decision making. Articulates the importance of these factors. • Identifies all appropriate resources. • Demonstrates ability to correctly interpret information and data needed for appropriate decision making. Demonstrates awareness of importance of these data in decision-making process. • Considers and evaluates possible solutions effectively and thoroughly. Evaluation leads

	<p>rationale for selected alternative or decision</p>	<p>issue at hand, etc.). Provides rationale for selected alternative or decision but does not build a solid position with supporting evidence. Is unable to defend decision or course of action.</p>	<p>demonstrate consideration of most of the strengths, weaknesses, feasibility, effects, consequences, relevance, etc.). Provides rationale for selected alternative or decision which includes some solid supporting evidence. Is able to defend decision or course of action at a basic level.</p>	<p>to sound, logical, and “best” decision or course of action.</p> <ul style="list-style-type: none"> • Proposes a solution that is entirely appropriate to the situation at hand. Solutions chosen demonstrate consideration of all of the important and relevant strengths, weaknesses, feasibility, effects, consequences, etc.). Provides rationale for selected alternative or decision and builds a solid position with appropriate and relevant supporting evidence. Effectively defends decision or course of action.
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PLO 6: Ethics and Professionalism.

Demonstrating professionalism and ethical decision making

Indicators	Initial	Developing	Developed	Proficient
6.1. Professionalism. Demonstrates behaviors and values that are consistent with the trust given to the profession by patients, other healthcare providers, and society	<ul style="list-style-type: none"> Does not consistently demonstrate professional attitudes and behaviors (altruism, excellence, duty, accountability, honesty, and integrity) Demonstrates frequent lapses in accountability or quality of work 	<ul style="list-style-type: none"> Demonstrates some professional attitudes and behaviors yet there is inconsistency that may impede on the quality of work or treatment of patients and other healthcare team members (altruism, excellence, duty, accountability, honesty, and integrity) 	<ul style="list-style-type: none"> Generally demonstrates most of the professional attitudes and behaviors (altruism, excellence, duty, accountability, honesty, and integrity) that are required in the profession Demonstrates ability to use these behaviors and values to improve healthcare 	<ul style="list-style-type: none"> Consistently demonstrates the professional attitudes and behaviors that uphold the integrity and competence of the work and the treatment of patients and other healthcare team professionals (altruism, excellence, duty, accountability, honesty, and integrity) Consistently uses these behaviors and values to improve healthcare
6.2. Ethics. Demonstrates the ability to make decisions consistent with the values of practitioners and scholars of oral healthcare.	<ul style="list-style-type: none"> Does not make ethical decisions consistent with the values of practitioners and scholars of oral healthcare. 	<ul style="list-style-type: none"> Demonstrates the ability to exercise ethical decision making, and a rudimentary knowledge of ethics within oral healthcare. 	<ul style="list-style-type: none"> Demonstrates the ability to exercise clear and ethical decision making, and a sufficient knowledge of ethics within oral healthcare. 	Demonstrates the ability to exercise clear and ethical decision making, and an advanced knowledge of ethics within oral healthcare.

PLO 7: Biomedical Sciences Knowledge.

Demonstrate an understanding of the fundamentals of biomedical sciences and apply them appropriately in oral healthcare

Indicators	Initial	Developing	Developed	Proficient
7.1. Diagnostic and pharmacologic. Demonstrates the ability to describe how to deliver patient assessments, knowledge of medicines, and delivering diagnoses.	<ul style="list-style-type: none"> Does not demonstrate the ability to describe diagnostic and pharmacologic knowledge related to oral health. 	<ul style="list-style-type: none"> Demonstrates a rudimentary ability to describe diagnostic and pharmacologic knowledge related to oral health. 	<ul style="list-style-type: none"> Demonstrates a sufficient ability to describe diagnostic and pharmacologic knowledge related to oral health. 	<ul style="list-style-type: none"> Demonstrates an advanced ability to describe diagnostic and pharmacologic knowledge related to oral health.
7.2. Orofacial pain/temporomandibular / Sleep disorder. Demonstrates the ability to describe the anatomical, physiological, and neurological basis; classification, epidemiology, and etiology; and assessments and treatments of orofacial pain, temporomandibular joint disease, and sleep disorders.	<ul style="list-style-type: none"> Does not demonstrate the ability to describe scientific or assessment knowledge related to OFP/TMJ disease and sleep disorders. 	<ul style="list-style-type: none"> Demonstrates a rudimentary ability to describe scientific or assessment knowledge related to OFP/TMJ disease and sleep disorders. 	<ul style="list-style-type: none"> Demonstrates a sufficient ability to describe scientific or assessment knowledge related to OFP/TMJ disease and sleep disorders. 	<ul style="list-style-type: none"> Demonstrates an advanced ability to describe scientific or assessment knowledge related to OFP/TMJ disease and sleep disorders.
7.3. Maxillofacial pathology Demonstrates the ability to describe the scientific aspects of head and neck diseases, as well as knowledge of assessment and diagnosis.	<ul style="list-style-type: none"> Does not demonstrate the ability to describe the scientific or assessment knowledge related to head and neck diseases. 	<ul style="list-style-type: none"> Demonstrates a rudimentary ability to describe the scientific or assessment knowledge related to head and neck diseases. 	<ul style="list-style-type: none"> Demonstrates a sufficient ability to describe the scientific or assessment knowledge related to head and neck diseases. 	<ul style="list-style-type: none"> Demonstrates an advanced ability to describe the scientific or assessment knowledge related to head and neck diseases.

PLO 8: Practice Management.

Apply legal, regulatory, and business management concepts related to the provision of oral healthcare services

Indicators	Initial	Developing	Developed	Proficient
8.1. Legal aspects Applies legal and regulatory concepts related to the provision of oral healthcare services.	<ul style="list-style-type: none"> Does not demonstrate an understanding or the ability to apply legal and regulatory concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates a rudimentary understanding and ability to apply legal and regulatory concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates a sound understanding and ability to apply legal and regulatory concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates an advanced understanding and ability to apply legal and regulatory concepts related to the provision of oral healthcare sciences.
8.2. Business management Applies business management concepts to the provision of oral healthcare services.	<ul style="list-style-type: none"> Does not demonstrate an understanding or the ability to apply business management concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates a rudimentary understanding and ability to apply business management concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates a sound understanding and ability to apply business management concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates an advanced understanding and ability to apply business management concepts related to the provision of oral healthcare sciences.

Appendix B

California Northstate University Institutional Learning Objectives

ILO 1: Critical thinking: Exercise reasoned judgment to assess technical information and make well-informed decisions using evidence-based approaches

ILO 2: Written communication. Demonstrate the ability to write coherent, supported, and logically structured prose

ILO 3: Oral communication: Demonstrates oral communication skills

ILO 4: Professionalism. Interact with respect, empathy, diplomacy, and cultural competence

ILO 5: Quantitative reasoning: Demonstrate ability to use mathematics and statistics in problem solving

ILO 6: Information literacy: Identify and search relevant libraries of information and databases; synthesize information obtained from primary literature using properly referenced citations

DMD Institutional Learning Outcomes (ILOs) Proficiency Rubric

ILO 1: Critical thinking: Exercise reasoned judgment to assess technical information and make well-informed decisions using evidence-based approaches

Indicator	Initial	Developing	Developed	Proficient
1.1. Demonstrates identification of problem or issues	<ul style="list-style-type: none"> Does not correctly identify the problem or issue being considered Does not demonstrate understanding of the psychological factors that contribute to current patient state 	<ul style="list-style-type: none"> Identifies the problem or issue but does not demonstrate awareness of all the factors impacting decision making Demonstrates understanding of some possible psychological factors that contribute to current patient state 	<ul style="list-style-type: none"> Correctly identifies the problem or issue but does not demonstrate awareness of all factors impacting decision making Demonstrates understanding of most psychological factors that contribute to the current patient state 	<ul style="list-style-type: none"> Correctly identifies all of the primary factors associated with problem or issue impacting decision making Demonstrates thorough understanding of all possible psychological factors that contribute to the current patient state

1.2. Demonstrates identification of resources	<ul style="list-style-type: none"> Does not identify appropriate resources 	<ul style="list-style-type: none"> Identifies a few resources needed 	<ul style="list-style-type: none"> Identifies most of the resources needed 	<ul style="list-style-type: none"> Correctly identifies all appropriate resources
1.3. Finds and interprets data needed for critical thinking and decision making	<ul style="list-style-type: none"> Does not demonstrate understanding of the data needed for critical thinking and decision making 	<ul style="list-style-type: none"> Demonstrates ability to interpret some data but not all 	<ul style="list-style-type: none"> Demonstrates ability to interpret most data 	<ul style="list-style-type: none"> Demonstrates ability to correctly interpret data needed for decision making
1.4. Demonstrates knowledge of alternatives when evaluating for possible solutions	<ul style="list-style-type: none"> Does not evaluate possible alternatives for treatment or diagnosis 	<ul style="list-style-type: none"> Does not effectively evaluate alternative treatment or diagnostic solutions 	<ul style="list-style-type: none"> Evaluates possible treatment and diagnostic solutions leading to a logical decision 	<ul style="list-style-type: none"> Effectively and thoroughly considers and evaluates possible diagnostic and treatment solutions
1.5. Proposes and selects appropriate solutions	<ul style="list-style-type: none"> Does not propose solutions to the client's needs 	<ul style="list-style-type: none"> Proposes solutions without consideration of alternatives 	<ul style="list-style-type: none"> Solutions chosen demonstrate consideration of most of the strengths, weaknesses, and consequences of the decision 	<ul style="list-style-type: none"> Proposes solutions that are appropriate to the situation and demonstrate consideration of all relevant strengths, weaknesses, and consequences
1.6. Presents rationale for course of action	<ul style="list-style-type: none"> Does not adequately provide rationale for treatment decision 	<ul style="list-style-type: none"> Provides rationale for decision but does not integrate into mental health treatment plan 	<ul style="list-style-type: none"> Provides rationale for decision with solid supporting evidence from available psychological literature and/or case factors 	<ul style="list-style-type: none"> Provides rationale for decision and with appropriate and relevant supporting case evidence and integrates findings into treatment plan

ILO 2: Written communication. Demonstrate the ability to write coherent, supported, and logically structured prose

Indicators	Initial	Developing	Developed	Proficient
2.1. Demonstrates knowledge and awareness of intended audience	<ul style="list-style-type: none"> Does not demonstrate knowledge or awareness of audience for which the document is intended 	<ul style="list-style-type: none"> Demonstrates some ability to craft a document appropriate for its audience 	<ul style="list-style-type: none"> Demonstrates ability to craft a document appropriate for its audience 	<ul style="list-style-type: none"> Consistently demonstrates ability to craft documents appropriate for the audience
2.2. Demonstrates clear and logical thought	<ul style="list-style-type: none"> Does not demonstrate clear or logical thought in their documentation 	<ul style="list-style-type: none"> Writing does not sufficiently conceptualize case variables or analyze subject under discussion 	<ul style="list-style-type: none"> Demonstrates general clear or logical thought in their documentation 	<ul style="list-style-type: none"> Research and clinical documentation demonstrates clear and focused thinking

2.3. Demonstrates support for and development of ideas	<ul style="list-style-type: none"> Does not explain or develop ideas 	<ul style="list-style-type: none"> Demonstrates minimal support for ideas 	<ul style="list-style-type: none"> Writing contains examples that generally support ideas 	<ul style="list-style-type: none"> Supports ideas with relevant, clear, impactful examples
2.4. Demonstrates appropriate use of evidence to support arguments	<ul style="list-style-type: none"> Demonstrates an attempt to use proper citations to support ideas 	<ul style="list-style-type: none"> Uses credible and relevant sources to support ideas appropriate in the study of psychology 	<ul style="list-style-type: none"> Consistently uses credible and relevant sources to support ideas 	<ul style="list-style-type: none"> Demonstrates skillful use of credible and relevant sources to develop and support ideas
2.5. Demonstrates appropriate use of language, syntax, and mechanics	<ul style="list-style-type: none"> Has excessive or severe errors in language usage 	<ul style="list-style-type: none"> Generally conveys meaning to readers with clarity, though writing may include some errors 	<ul style="list-style-type: none"> Language conveys meaning to readers and writing contains very few errors 	<ul style="list-style-type: none"> Uses language effectively and skillfully to communicate meaning to readers

ILO 3: Oral communication: Demonstrates oral communication skills

Indicators	Initial	Developing	Developed	Proficient
3.1. Demonstrates knowledge and awareness of intended audience	<ul style="list-style-type: none"> Does not demonstrate knowledge or awareness of audience for which the communication is intended 	<ul style="list-style-type: none"> Demonstrates some ability to communicate in a manner appropriate to the audience 	<ul style="list-style-type: none"> Demonstrates ability to communicate appropriate to the audience 	<ul style="list-style-type: none"> Consistently demonstrates ability to communicate in a manner appropriate to the audience
3.2. Demonstrates clear and logical thought	<ul style="list-style-type: none"> Does not demonstrate clear or logical thought in their communication 	<ul style="list-style-type: none"> Communication does not sufficiently conceptualize case variables or analyze subject under discussion 	<ul style="list-style-type: none"> Demonstrates general clear or logical thought in their communication 	<ul style="list-style-type: none"> Communication demonstrates clear and focused thinking
3.3. Demonstrates effective use of language in their communication	<ul style="list-style-type: none"> Does not know professional psychological language or uses jargon Does not know the proper technical language regarding mental health treatment 	<ul style="list-style-type: none"> Demonstrates inaccurate use of psychological language or uses jargon in professional communications Utilizes scientific language that is incomprehensible to patients 	<ul style="list-style-type: none"> Demonstrates appropriate use of professional language and minimal jargon Utilizes generalized language to interact with patients 	<ul style="list-style-type: none"> Demonstrates use of appropriate, professional language Utilizes generalized language to interact with patients
3.4. Demonstrates appropriate active listening techniques	<ul style="list-style-type: none"> Does not acknowledge other viewpoints 	<ul style="list-style-type: none"> Demonstrates little attempt to recognize other viewpoints 	<ul style="list-style-type: none"> Recognizes other viewpoints but has difficulty incorporating them 	<ul style="list-style-type: none"> Listens to questions with a consideration of

when addressing questions	<ul style="list-style-type: none"> • Has great difficulty answering questions 	<ul style="list-style-type: none"> • Answers are simplistic and lack intellectual depth 	into case conceptualization <ul style="list-style-type: none"> • Adequately answers patient questions 	alternative viewpoints <ul style="list-style-type: none"> • Answers questions thoughtfully referencing evidence
3.5. Orally communicates meaning to audience	<ul style="list-style-type: none"> • Vocal delivery is too soft or too fast • Long, unintended silences and/or speech disruptions frequently distract audience • Speaker makes no attempt to engage audience 	<ul style="list-style-type: none"> • Vocal delivery is audible • Speech rate or volume disruptions occasionally distract from comprehension • Attempts to engage audience 	<ul style="list-style-type: none"> • Vocal delivery is varied and dynamic • Speech rate, volume, and tone enhance listener interest and facilitate understanding • Generally engages audience 	<ul style="list-style-type: none"> • Vocal delivery is varied and dynamic • Speech rate, volume, and tone enhance listener interest and facilitate understanding • Thoroughly engages audience
3.6. Utilizes non-verbal means to enhance message	<ul style="list-style-type: none"> • Eye contact, body language, and facial expressions are inappropriate 	<ul style="list-style-type: none"> • Eye contact, body language, and facial expressions neither enhance nor hinder oral effectiveness 	<ul style="list-style-type: none"> • Use of eye contact, body language, and facial expressions are mostly consistent with the verbal message 	<ul style="list-style-type: none"> • Use of eye contact, body language, and facial expressions that are consistent with the verbal message

ILO 4: Professionalism. Interact with respect, empathy, diplomacy, and cultural competence

Indicators	Initial	Developing	Developed	Proficient
4.1. Demonstrates professional attitudes and behaviors	<ul style="list-style-type: none"> • Does not generally demonstrate professional attitudes or behaviors expected from a dentist 	<ul style="list-style-type: none"> • Demonstrates some attitudes and behaviors that may be characteristic of a dentist 	<ul style="list-style-type: none"> • Generally demonstrates attitudes and behaviors expected from a dentist 	<ul style="list-style-type: none"> • Consistently demonstrates attitudes and behaviors expected from a dentist
4.2. Demonstrates personal responsibility and accountability	<ul style="list-style-type: none"> • Does not demonstrate personal accountability or responsibility for work completed 	<ul style="list-style-type: none"> • Demonstrates minimal personal accountability and responsibility for work completed 	<ul style="list-style-type: none"> • Demonstrates personal accountability and responsibility for the work completed 	<ul style="list-style-type: none"> • Consistently demonstrates personal accountability and responsibility for work completed
4.3. Demonstrates respectful and sensitive behaviors to the cultural and linguistic needs of diverse patients	<ul style="list-style-type: none"> • Does not demonstrate an awareness of patients' customs, beliefs, or perspectives • Does not demonstrate awareness of linguistic needs of patients 	<ul style="list-style-type: none"> • Demonstrates a minimal level of awareness of customs, beliefs, or perspectives of patients • Demonstrates minimal awareness of cultural and linguistic needs of patients 	<ul style="list-style-type: none"> • Demonstrates awareness of customs and beliefs • Demonstrates awareness of the cultural and linguistic needs of patients 	<ul style="list-style-type: none"> • Demonstrates awareness of customs, beliefs, or perspectives in patients • Demonstrates full awareness and responds to the cultural and linguistic needs of patients

4.4. Demonstrates professional demeanor	<ul style="list-style-type: none"> • Appears inattentive and impatient • Uses inappropriate body language • Dresses in attire that is inappropriate 	<ul style="list-style-type: none"> • Appears unfocused and distracted • Uses acceptable body language • Dresses in attire that is not offensive 	<ul style="list-style-type: none"> • Appears composed and focused • Uses appropriate body language • Dresses in attire that is professional 	<ul style="list-style-type: none"> • Uses articulate, tactful, and diplomatic speech • Uses professional body language • Dresses in attire that is professional, and well-suited for the environment
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ILO 5: Quantitative reasoning: Demonstrate ability to use mathematics and statistics in problem solving

Indicators	Initial	Developing	Developed	Proficient
5.1. Demonstrates ability to perform calculations and apply mathematical principles to solve problems	<ul style="list-style-type: none"> Does not demonstrate ability to apply statistical or psychometric principles 	<ul style="list-style-type: none"> Demonstrates ability to perform basic statistical calculations but does not know how to apply psychometric principles to solve problems 	<ul style="list-style-type: none"> Demonstrates ability to perform most statistical calculations accurately and to apply psychometric principles to solve problems 	<ul style="list-style-type: none"> Consistently demonstrates ability to perform statistical calculations accurately and to appropriately apply psychometric principles to solve problems
5.2. Demonstrates understanding of experimental designs and methodology	<ul style="list-style-type: none"> Displays difficulty proposing a basic experiment or research project 	<ul style="list-style-type: none"> Comprehends basic experiments designed by others 	<ul style="list-style-type: none"> Evaluates research, method, and protocol to review valid and reliable research 	<ul style="list-style-type: none"> Proposes appropriate and innovative designs to address a new hypothesis and research question
5.3. Demonstrates logical and appropriate interpretation of data	<ul style="list-style-type: none"> Demonstrates a limited ability to interpret scientific data 	<ul style="list-style-type: none"> Attempts to interpret scientific data 	<ul style="list-style-type: none"> Demonstrates the ability to interpret scientific data 	<ul style="list-style-type: none"> Interprets data in the context of current scientific knowledge
5.4. Demonstrates logical thought patterns in generating conclusions	<ul style="list-style-type: none"> Does not generate conclusions based on current scientific data and statistics 	<ul style="list-style-type: none"> Generates conclusions that may be based on current scientific data and statistics 	<ul style="list-style-type: none"> Generates conclusions using scientific and statistical data 	<ul style="list-style-type: none"> Accurately generates conclusions using appropriate scientific and mathematical data

ILO 6: Information literacy: Identify and search relevant libraries of information and databases; synthesize information obtained from primary literature using properly referenced citations

Indicators	Initial	Developing	Developed	Proficient
6.1. Demonstrates appropriate ability search and acquire resources	<ul style="list-style-type: none"> Does not identify or solicit help in obtaining external resources to support topic 	<ul style="list-style-type: none"> Identified resources may not be sufficient in quality and infrequently solicits guidance from library personnel 	<ul style="list-style-type: none"> Identifies resources appropriate for scientific inquiry and solicits guidance from library personnel 	<ul style="list-style-type: none"> Identifies a variety of relevant sources and regularly seeks guidance from library personnel
6.2. Demonstrates appropriate incorporation of references	<ul style="list-style-type: none"> Does not incorporate references 	<ul style="list-style-type: none"> Incorporates references from psychological sources that do not 	<ul style="list-style-type: none"> Incorporates relevant references that generally supports ideas 	<ul style="list-style-type: none"> Incorporates relevant references from respected psychological sources

		clearly support ideas		
6.3. Demonstrates appropriate citation of references	<ul style="list-style-type: none"> • Does not use citations 	<ul style="list-style-type: none"> • Uses citations but they are not formatted in APA style 	<ul style="list-style-type: none"> • Demonstrates use of appropriate citations in context 	<ul style="list-style-type: none"> • Uses properly cited references and includes all necessary information in reference list



THE HONOR CODE OF CALIFORNIA NORTHSTATE UNIVERSITY COLLEGE OF DENTAL MEDICINE

The Honor Code of California Northstate College of Dental Medicine (CNUCDM) is a formal code of conduct that emphasizes the four core principles of respect, honesty and integrity, legal and ethical behavior, and professionalism, to which all students, faculty, and staff are held responsible for maintaining:

- **RESPECT**

CNUCDM is dedicated to teaching, scholarly activity, research, and service in a respectful manner. We respect one another, our supporters, our colleagues, and our patients. We extend this respect to all persons, regardless of race, color, national origin, ancestry, citizenship, gender, gender identity, sexual orientation, age, religion, physical or mental disability, or veteran status. We promote good will amongst our diverse population and uphold the autonomy, dignity, and moral integrity of all persons. We respect the abilities, customs, beliefs, values, and opinions of others. As members of the dental medicine and healthcare professions community, we promote the good of every person in a caring, compassionate, and confidential manner, with respect to their right to privacy.

The following examples include, but are not limited to, acts that violate the respect principle of the Honor Code and will be subject to non-academic disciplinary action: assault, battery, or other act of physical violence against any person including patients, staff and faculty or those beyond CNU that reflect on the ethics and professionalism of the student, faculty or staff member; theft or destruction of property owned by or in the possession or control of CNUCDM or a member of the CNU community; slander, libel, or defamation (slander, libel, and defamation all involve lying) against CNU or a member of the CNU community; a hate crime against a member of the CNU community.

The acts described in the preceding sentence and other acts in violation of the respect principle will be subject to disciplinary action if they occur on or off campus. Such acts pertain to activities affecting any person in any location as they reflect upon the ethics and professionalism of a health profession.

- **HONESTY AND INTEGRITY**

CNUCDM is dedicated to teaching, scholarly activity, research, and service with honesty and integrity, both on and off campus. Dental medicine students have a duty to be truthful in professional and professional-patient relationships. We are committed to teaching, scholarly activity, and professional preparation in a team-based learning environment, in which all

individuals are personally accountable and adhere to the tenets of honesty and integrity in the classroom, in patient care, in research, and in the community. Cheating, plagiarism, and other forms of academic dishonesty are violations of this policy. Individual work is to be based primarily on the effort of the individual with outside resources credited where utilized. Team work and professional relationships are to be based on individual contributions and collaboration from all team members. All examinations, projects, and in or out-of-classroom assignments, whether individual or team-based, are expected to be performed and completed with the utmost degree of honesty and integrity.

The following examples include, but are not limited to, acts that violate the honesty and integrity principle of the Honor Code and will be subject to academic disciplinary action: cheating; plagiarism; claiming authorship of written material not so authored; claiming credit for research not so performed; claiming participation on a team project while not participating in the project; any form of academic dishonesty; theft or destruction of academic materials owned by CNUCDM or a member of the CNU community; theft or destruction of research materials owned by CNU or a member of the CNU community. The acts described in the preceding sentence and other acts in violation of the honesty and integrity principle will be subject to disciplinary action if they occur on or off campus.

- **LEGAL STANDARDS AND ETHICAL BEHAVIOR**

CNUCDM is dedicated to behavior that follows legal and ethical standards in teaching, scholarly activity, research, and service. We are committed to following the law, professional practice standards, and the ADA, and CDA Code of Conduct. We comply with and adhere to all federal, state, and local laws and regulations. We encourage all to act ethically in developing and advocating a culture of consideration for codes of ethics, values, and moral convictions of those who could be affected by our decisions. Whenever appropriate, we seek advice and counsel to determine the right course of action and to make the best decision on behalf of those who depend on us to do so.

The following examples include, but are not limited to, acts that violate the legal standards and ethical behavior principle of the Honor Code and will be subject to academic disciplinary action or non-academic disciplinary action as appropriate: any behavior which violates federal, state or local laws, or the policies or rules of any College or formal affiliate; violation of the pharmacy and health care related laws and regulations of the State of California and the California Board of Dentistry violation of the written standards of practice of the preceptors and practice sites participating in the CNUCDM experiential education program. The acts described in the preceding sentence and other acts in violation of the legal standards and ethical behavior principle will be subject to disciplinary action if they occur on or off campus.

- **PROFESSIONALISM**

CNUCDM is committed to providing teaching, scholarly activity, research, patient care, and service in a professional manner. We display professional attitudes, values, and behaviors in the classroom, at preceptor sites, and in the community. We encourage team work and team-based learning, with respect for differing points of views of team members. At the same time we expect individual competence, performance, and accountability in a professional manner. We serve as positive advocates for our profession by striving for excellence in the performance of our duties, while protecting the health and autonomy of our patients, and serving individual, community, and societal needs. We embrace the ADA Dentists Oath, the Dentists Prayer, the Hippocratic Oath, and the principles embodied within.

The following examples include, but are not limited to, acts that violate the professionalism principle of the Honor Code and will be subject to academic disciplinary action or non-academic disciplinary action as appropriate: any behavior which violates federal, state, or local laws, or the policies or rules of any College or formal affiliate; lewd, obscene or indecent conduct on any College owned or controlled building or property; unauthorized manufacture, sale, possession or use of any substance that causes chemical dependence or impairment; hazing; harassment; possession of a deadly weapon on campus or practice site. The acts described in the preceding sentence and other acts in violation of the professionalism principle will be subject to disciplinary action if they occur on or off campus. Violations of patient confidentiality or trust, unwanted social relationships/encounters with patients, quid pro quo actions directed at patients, or CNU community members are additional examples of possible demonstrations of unprofessional behavior.

Personal Accountability and Expectations

All students, faculty, and staff of the CNUCDM community are required to follow all applicable provisions of this Honor Code. We are all personally responsible and accountable for maintaining an environment and culture of respect, honesty, integrity, legal and ethical behavior, and professionalism. This environment and culture shall be extended off campus when dealing with a CNU related matter or a member of the CNU community, including, but not limited to patients, preceptors and practice sites participating in the CNU experiential education program.

It is understood that teamwork is necessary for ensuring and sustaining an environment and culture that support these core principles and related values.

As such, it is expected that all students, faculty, and staff of CNUCDM shall:

- Know the Honor Code,
- Uphold the Honor Code in daily life both on and off-campus,
- Promote the Honor Code and an environment and culture of respect, honesty, integrity, legal and ethical behavior, and professionalism,
- Report Honor Code violations to the appropriate personnel,
- Seek appropriate advice if unsure or in doubt, and
- Cooperate with investigations of Honor Code violations.

Consequences

Any and all violations of the Honor Code shall be processed as appropriate through the Honor Board, the Office of Academic Affairs, Office of Student Affairs, or the responsible governing body. Any person accused of academic or non-academic violations will be afforded fair jurisprudence and due process of law. Violations of an academic, professional, or other nature will be subject to appropriate disciplinary action, which may include, but is not limited to, warning, probation, remediation, suspension, dismissal, expulsion, or legal prosecution.

Reporting

Since dental faculty are licensees responsible for patient care and students are future licensees, it is the responsibility of all to report violations of the honor code appropriately and in a timely fashion.

Non-Retaliation

CNUCDM does not tolerate retaliation against individuals who report hateful, dishonest, illegal, unethical, unprofessional, or otherwise inappropriate acts. Anyone who retaliates against these individuals is in violation of the Honor Code and is subject to disciplinary action for that Honor Code violation.

Rewards

By knowing, understanding, embracing, and following the core principles of this Honor Code, we can ensure that CNUCDM will sustain an environment and culture that supports:

- An effective learning environment,
- An effective teaching environment,
- An effective working environment, and
- An institution with high quality members.

I have read, understand, and will embrace and follow the Honor Code of CNUCDM in teaching, scholarly activity, research and service.

SIGNED _____

Date _____

For Student File**HONOR CODE OF THE CALIFORNIA NORTHSTATE COLLEGE OF
DENTAL MEDICINE**

The Honor Code of California Northstate College of Dental Medicine (CNUCDM) is a formal code of conduct that emphasizes the four core principles of respect, honesty and integrity, legal and ethical behavior, and professionalism, to which all students, faculty, and staff are held responsible for maintaining.

I, _____, hereby acknowledge that I have received, read, understand, and will embrace and follow the Honor Code of California Northstate College of Dental Medicine in teaching, scholarly activity, research and service.

Signature _____ Date _____

College of Dental Medicine				
DIRECT ASSESSMENT OF STUDENT LEARNING IN PREPARATION FOR PROGRAM REVIEW				
Spring 2023	PLOs	Student Work	ILO	Student Work
	PLO 5: Critical Thinking	<p>Clinical Clerkships: Oral and Maxillofacial Surgery, Pediatric Dentistry: SOAP notes, clinical cases</p> <p>Comprehensive Care Family Dentistry: Summative clinical case study</p>	<p>ILO 1: Critical thinking. Exercise reasoned judgement to assess technical information and make well-informed decisions using evidence-based approaches.</p> <p>ILO 5: Quantitative reasoning. Demonstrate ability to use mathematics and statistics in problem solving.</p>	<p>Clinical Clerkships: Oral and Maxillofacial Surgery, Pediatric Dentistry: SOAP notes, clinical cases</p> <p>Comprehensive Care Family Dentistry: Summative clinical case study, summative exam</p>
	PLO 6: Ethics and Professionalism	<p>Clinical Clerkships: Oral and Maxillofacial Surgery and Pediatric Dentistry: Performances</p> <p>Comprehensive Care Family Dentistry: Reflection paper, presentation of clinical case, performance</p>	<p>ILO 4: Professionalism. Interact with respect, empathy, diplomacy, and cultural competence.</p>	<p>Clinical Clerkships: Oral and Maxillofacial Surgery and Pediatric Dentistry: Reflection paper and performances</p> <p>Comprehensive Care Family Dentistry: Reflection paper, presentation of clinical case, performance</p>
	PLO 4: Oral and Written Communication	<p>Clinical Clerkships: Oral and Maxillofacial Surgery and Pediatric Dentistry: Performance</p>	<p>ILO 2: Communication. Demonstrate the ability to write coherent, supported, and logically structured prose.</p>	<p>Clinical Clerkships: Oral and Maxillofacial Surgery and Pediatric Dentistry: Performance</p>

		Comprehensive Care Family Dentistry: presentation of clinical case, performance	ILO 3: Oral communication: Demonstrates oral communication skills ILO 6: Information literacy. Identify and search relevant libraries of information and databases; synthesize information obtained from primary literature using properly referenced citations.	Comprehensive Care Family Dentistry: presentation of clinical case, performance
	PLO 2: Evidence-Based Care	Clinical Clerkships: Oral and Maxillofacial Surgery and Pediatric Dentistry: SOAP notes, performance Comprehensive Care Family Dentistry: presentation of clinical case, paper and project		
	PLO 8: Practice Management	Comprehensive Care Family Dentistry: presentation of clinical case Clinical Clerkship: Pediatric Dentistry: paper		
	PLO 7: Biomedical Sciences Knowledge	Clinical Clerkships: Oral and Maxillofacial Surgery and Pediatric Dentistry: SOAP notes, performance		
	PLO 3: Culturally Competent,	Comprehensive Care Family		

	Empathic Communication	Dentistry: paper, performance Clinical Clerkship: Oral and Maxillofacial Surgery: performance Clinical Clerkship: Pediatric Dentistry: performance		
Fall 2023	PLO 5: Critical Thinking	Senior Year Medicine Seminar: clinical case study Periodontal Seminar: Clinical case study Prosthodontics and Implant Dentistry: clinical case study Implant Surgery and Prosthodontic Reconstruction: clinical case study Comprehensive Care Family Dentistry: clinical case study Seminar in Dental Public Health: presentation	ILO 1: Critical thinking. Exercise reasoned judgement to assess technical information and make well-informed decisions using evidence-based approaches. ILO 5: Quantitative reasoning. Demonstrate ability to use mathematics and statistics in problem solving	Senior Year Medicine Seminar: clinical case study Periodontal Seminar: clinical case study Prosthodontics and Implant Dentistry: clinical case study Implant Surgery and Prosthodontic Reconstruction: clinical case study Comprehensive Care Family Dentistry: clinical case study, summative exam Seminar in Dental Public Health: presentation
	PLO 6: Ethics and Professionalism	Senior Year Medicine	ILO 4: Professionalism. Interact with respect,	Senior Year Medicine

		<p>Seminar: presentation, reflection paper</p> <p>Periodontal Seminar: presentation, reflection paper</p> <p>Prosthodontics and Implant Dentistry: presentation, reflection paper</p> <p>Implant Surgery and Prosthodontic Reconstruction: presentation, reflection paper</p> <p>Comprehensive Care Family Dentistry: presentation, reflection paper</p> <p>Seminar in Dental Public Health: presentation</p>	empathy, diplomacy, and cultural competence.	<p>Seminar: presentation, reflection paper</p> <p>Periodontal Seminar: presentation, reflection paper</p> <p>Prosthodontics and Implant Dentistry: presentation, reflection paper</p> <p>Implant Surgery and Prosthodontic Reconstruction: presentation, reflection paper</p> <p>Comprehensive Care Family Dentistry: presentation, reflection paper</p> <p>Seminar in Dental Public Health: presentation</p>
	PLO 4: Oral and Written Communication	<p>Senior Year Medicine Seminar: presentation, paper</p> <p>Periodontal Seminar: presentation</p> <p>Prosthodontics and Implant Dentistry: presentation</p> <p>Implant Surgery and Prosthodontic</p>	<p>ILO 2: Communication. Demonstrate the ability to write coherent, supported, and logically structured prose</p> <p>ILO 3: Oral communication: Demonstrates oral communication skills</p> <p>ILO 6: Information literacy. Identify and search relevant libraries of information and databases; synthesize information obtained</p>	<p>Senior Year Medicine Seminar: presentation, paper</p> <p>Periodontal Seminar: presentation</p> <p>Prosthodontics and Implant Dentistry: presentation</p> <p>Implant Surgery and Prosthodontic</p>

		<p>Reconstruction: presentation</p> <p>Comprehensive Care Family Dentistry: presentation, clinical case study</p> <p>Seminar in Dental Public Health: presentation</p> <p>Clinical Clerkship: Community-based Education: presentation, research paper</p>	from primary literature using properly referenced citations	<p>Reconstruction: presentation</p> <p>Comprehensive Care Family Dentistry: presentation, clinical case study</p> <p>Seminar in Dental Public Health: presentation</p> <p>Clinical Clerkship: Community-based Education: presentation, research paper</p>
	PLO 2: Evidenced-Based Care	<p>Senior Year Medicine Seminar: paper, project, presentation</p> <p>Periodontal Seminar: clinical case study, paper</p> <p>Prosthodontics and Implant Dentistry: clinical case study</p> <p>Implant Surgery and Prosthodontic Reconstruction: clinical case study</p> <p>Comprehensive Care Family Dentistry: paper and presentation,</p>		

		<p>clinical case study</p> <p>Seminar in Dental Public Health: presentation</p> <p>Clinical Clerkship: Community-based Education: presentation, research paper</p>		
	PLO 3: Culturally Competent, Empathic Communication	Senior Year Medicine Seminar: performance, paper		
	PLO 8: Practice Management	<p>Senior Year Medicine Seminar: project and presentation</p> <p>Periodontal Seminar: clinical case study</p> <p>Prosthodontics and Implant Dentistry: clinical case study</p> <p>Implant Surgery and Prosthodontic Reconstruction: clinical case study</p> <p>Comprehensive Care Family Dentistry: presentation,</p>		

		<p>clinical case study</p> <p>Oral Radiology Seminar: paper</p> <p>Seminar in Dental Public Health: clinical case study</p> <p>Clinical Clerkship: Community-based Education: clinical case study, paper</p>		
	PLO 7: Biomedical Sciences Knowledge	<p>Senior Year Medicine Seminar: clinical case study, summative exam</p> <p>Periodontal Seminar: clinical case study, summative exam</p> <p>Prosthodontics and Implant Dentistry: clinical case study, summative exam</p> <p>Comprehensive Care Family Dentistry: clinical case study, summative exam</p> <p>Oral Radiology Seminar: Clinical case study, summative exam</p>		

		Clinical Clerkship: Community-based Education: clinical case study, summative exam Seminar in Dental Public Health: clinical case study, summative exam		
Spring 2024	PLO 5: Critical Thinking	Senior Year Medicine Seminar: Clinical case study Comprehensive Care Family Dentistry: clinical case study Oral Pathology/Oral Medicine Seminar: paper Clinical Clerkship: Orthodontics: SOAP notes Advanced Topics in Oral and Maxillofacial Surgery: SOAP notes Clinical Clerkship: Community-Based Education: presentation	ILO 1: Critical thinking. Exercise reasoned judgement to assess technical information and make well-informed decisions using evidence-based approaches.	Senior Year Medicine Seminar: clinical case study Comprehensive Care Family Dentistry: clinical case study Oral Pathology/Oral Medicine Seminar: paper Clinical Clerkship: Orthodontics: SOAP notes Advanced Topics in Oral and Maxillofacial Surgery: SOAP notes Clinical Clerkship: Community-Based Education: SOAP notes Practice Management: clinical case study

		Practice Management: clinical case study		
	PLO 6: Ethics and Professionalism	Senior Year Medicine Seminar: Presentation Comprehensive Care Family Dentistry: presentation Oral Pathology/Oral Medicine Seminar: presentation Clinical Clerkship: Orthodontics: performance Advanced Topics in Oral and Maxillofacial Surgery: performance Clinical Clerkship: Community-Based Education: presentation Practice Management: clinical case study	ILO 4: Professionalism. Interact with respect, empathy, diplomacy, and cultural competence	Senior Year Medicine Seminar: presentation Comprehensive Care Family Dentistry: presentation Oral Pathology/Oral Medicine Seminar: presentation Clinical Clerkship: Orthodontics: presentation Advanced Topics in Oral and Maxillofacial Surgery: presentation Clinical Clerkship: Community-Based Education: presentation Practice Management: clinical case study
	PLO 4: Oral and Written Communication	Senior Year Medicine Seminar: presentation, paper	ILO 2: Communication. Demonstrate the ability to write coherent, supported, and logically structured prose	Senior Year Medicine Seminar: presentation, paper

		<p>Comprehensive Care Family Dentistry: presentation, paper</p> <p>Oral Pathology/Oral Medicine Seminar: presentation, paper</p> <p>Clinical Clerkship: Orthodontics: paper</p> <p>Advanced Topics in Oral and Maxillofacial Surgery: paper</p> <p>Clinical Clerkship: Community-Based Education: presentation, paper</p> <p>Practice Management: clinical case study</p>	<p>ILO 3: Oral communication: Demonstrates oral communication skills</p>	<p>Comprehensive Care Family Dentistry: presentation, paper</p> <p>Oral Pathology/Oral Medicine Seminar: presentation, paper</p> <p>Clinical Clerkship: Orthodontics: paper</p> <p>Advanced Topics in Oral and Maxillofacial Surgery: paper</p> <p>Clinical Clerkship: Community-Based Education: presentation, paper</p> <p>Practice Management: clinical case study</p>
	PLO 2: Evidence-Based Care	<p>Senior Year Medicine Seminar: clinical case study</p> <p>Comprehensive Care Family Dentistry: clinical case study, paper and presentation</p>		

		Oral Pathology/Oral Medicine Seminar: paper, clinical case study Clinical Clerkship: Orthodontics: SOAP notes Advanced Topics in Oral and Maxillofacial Surgery: Clinical case study Clinical Clerkship: Community-Based Education: paper and presentation Practice Management: project		
	PLO 8: Practice Management	Senior Year Medicine Seminar: Project and presentation Comprehensive Care Family Dentistry: project and presentation Oral Pathology/Oral Medicine Seminar: paper Clinical Clerkship:		

		Orthodontics: paper Advanced Topics in Oral and Maxillofacial Surgery: project and presentation Clinical Clerkship: Community-Based Education: project and presentation Practice Management: project and presentation		
	PLO 7: Biomedical Sciences	Senior Year Medicine Seminar: clinical case study, summative exam Comprehensive Care Family Dentistry: clinical case study, summative exam Oral Pathology/Oral Medicine Seminar: clinical case study Advanced Topics in Oral and Maxillofacial Surgery:		

		clinical case study Clinical Clerkship: Community-Based Education: clinical case study Practice Management 2: clinical case study		
2024 Program Review				

CNU College of Dental Medicine Professionalism Concern Report (PCR)

Name of Person Being Reported: _____ This person is a: ☐ Student ☐ Faculty ☐ Staff

Name of Person Completing the PCR: _____ Date: _____

Which of the following unprofessional behaviors has the student exhibited? (Check all that apply):

Professional Responsibilities

- ☐ Uses illicit substances
- ☐ Uses alcohol, non-prescription or prescription drugs in a manner that compromises ability to contribute to patient care
- ☐ Fails to accept and internalize criticism and feedback
- ☐ Is unwilling to expand knowledge or competence
- ☐ Has inappropriate demeanor or appearance in the classroom or in the health care setting
- ☐ Fails to complete required tasks or requires constant reminders from staff or faculty
- ☐ Fails to notify appropriate staff in a timely manner of absences
- ☐ Fails to accept responsibility for own errors
- ☐ Consistently arrives late to commitments
- ☐ Repeatedly fails to respond to communications with student, staff, residents, faculty, or course/clerkship directors

Professional Relationships

- ☐ Engages in inappropriate relationships with patients
- ☐ Engages in inappropriate relationships with students, staff, residents, or faculty, disrupting the learning environment
- ☐ Acts disrespectfully towards others
- ☐ Treats standardized patients disrespectfully
- ☐ Engages in disruptive behavior in class or with health care team

Professional Ethic

- ☐ Behaves in a dishonest manner
- ☐ Misrepresents self, others, or members of the team to others
- ☐ Breaches patient confidentiality
- ☐ Acts in disregard for patient welfare
- ☐ Misuses cadavers or other scientific specimens
- ☐ Violates official course or clerkship policy
- ☐ Other:

Describe in detail the incident which prompted the completion of this form (attach additional pages, if needed).

If person being reported is a student, please also complete page 2 and return to Assistant Dean of Student Affairs.

Describe previous feedback and remediation which took place prior to the completion of this form (attach additional pages, if needed).

Student Comments:

I acknowledge that I have reviewed this evaluation with the course or clerkship director or Dean of Student Affairs and have the following comments:

Student's Signature: _____ Date: _____

Additional Faculty Member Notes:

Faculty Member's Signature: _____ Date: _____

Additional Assistant Dean of Student Affairs Comments:

Assistant Dean of Student Affairs Signature: _____ Date: _____



California Northstate University College of Dental Medicine
Foundations of Odontology Course Syllabus

Course #	Course Title	Credits	Year	Term
Odont 511	Foundations of Odontology <i>LAL, LAB and CLIN</i>	6	DS 1	Fall

Credit Hour Policy

For each 15-week semester, one (1) hour of credit is assigned per hour each week of classroom or direct faculty didactic instruction (that is, per hour of lecture or student in-class time) and a minimum of two (2) hours of out-of-class student work (homework). For practicum and internship time, one (1) hour of credit is assigned per three (3) hours each week of student time spent in this activity.

Maximum Enrollment: 80

Calendar of Important Dates:

Date	
August 12, 2020	First day of Fall term for all DMD 1 students
September 28, 2020	First quiz: patient intake
October 15, 2020	Submission of first Patient Case Study (PCS) performed on patient of record/Team activity
November 28, 2020	Submission of second PCS/Team activity
December 8, 2020	Second quiz: patient assessment
December 14, 2020	Final Clinical Evaluation: Practical
December 20, 2020	Final Examination: Didactic

Course Coordinator, Instructors and Contact Information

Kevin Keating DDS MS (course co-director)

Room:
 E mail kevin.keating@cnsu.edu
 Office hours

Leon Assael DMD (course co-director)

Room:
 E-mail: leon.assael@cnsu.edu
 Office hours: Wednesdays 12:00pm-1:00pm, and 3:00pm-4:00pm (or by appointment)

Holly Jacobson BA (course administrator)

Room: xxx
 E mail: holly.jacobson@cnsu.edu

Classroom and Meeting Times

Room: Classroom xxxx
 Time: xxxx 2 hours per week

Laboratory and Meeting times

Room: xxxx type 1 dental laboratory
 Time: xxxx 1 hours per week

Clinic and meeting times

Room: 2400 Maritime Drive CNUCDM clinic
 Time: 3 hours per week

Course Description

This course will introduce students to infection control, the dental office and clinical care site, and provide initial skill in interaction with the patient and the patient's oral cavity. Students will enter the clinical setting with faculty and upper level students to provide limited aspects of oral care and join the oral health care team. Students will gain initial understanding of the clinical encounter including history of present illness, social history, family history, medical history. Students will perform oral examination. Students will gain initial understanding of the electronic health record.

Prerequisite Courses

None

Prerequisite Knowledge

None

Required Textbook(s) and Material(s)

1. *Bates guide to physical examination and history Taking- 11th edition*, Bickley, Lynn, Wolters Kluwer
2. *Cottone, Practical infection control in dentistry*, Molinari J, Hare, J, 3rd edition, Wolters Kluwer
3. Epic Wisdom dental module training: www.epic.com
4. Maryland Mighty Tooth: School based dental sealant training program
5. https://www.mightytoothcurriculum.com/module4/mod4_0.html
6. Infection Prevention and Control in Dental Settings, Centers for Disease Control and Prevention, Atlanta, GA, 2019 <https://www.cdc.gov/oralhealth/infectioncontrol/index.html>
7. Laheij, A, Kistler, J, Belibasakis G, Valimaa, H, de Soet JJ, Healthcare associated viral and bacterial infections in dentistry, J Oral Microbiol doi 10.3402/jom.v4i0.17659
8. Assael L, nosocomial infection and fomites in oral and maxillofacial surgery, J oral maxillofac surg 63: 889-890, 2005
9. UCSD Practical Guide to clinical medicine, <https://meded.ucsd.edu/clinicalmed/head.htm>

Optional Textbook(s) and Material(s)

- *Sturdevant's Art and Science of Operative Dentistry*, Heymann, Swift, Ritter, Elsevier, 6th ed. (as a pre-read prior to DMD2 operative dentistry Odont 621)

Web Links

1. <https://bookshelf.vitalsource.com/#/>
2. www.Epic.com
3. https://www.mightytoothcurriculum.com/module4/mod4_0.html
4. <https://www.cdc.gov/oralhealth/infectioncontrol/index.html>
5. <https://meded.ucsd.edu/clinicalmed/head.htm>

Technology

- Computer-assisted instruction (Clickers) and SCANTRON Sheets
- Web-based course management (Canvas) and Examsoft
- Audio/Video recordings where applicable
- PowerPoint
- Epic electronic health record
- PACS, DICOM compatible imaging software
- Dental operator

Evaluation Components

In keeping with the Team Based Learning (TBL) approach, grades will be determined as follows:

Individual Components	80%
First quiz	10%
Second Quiz	10%
Final exam	30%
Clinical evaluation practical	30%

Team Components	20%
Group PCS projects	10%
Peer Evaluation	10%

GRADING

All students must demonstrate minimal individual competency. Therefore, students earning less than 75% on the

Total individual component score will not have team component scores added to calculate their final course grade. During the course, students who score less than 75% on individual components may be subject to periodic course content review and may receive an Academic Alert.

In order to progress from one semester to the next, students must pass all courses with a letter a grade of C or higher and maintain a minimum cumulative grade point average (GPA) of 2.0. The breakdown for assignment of letter grades and grade points for each letter grade are as follows:

Percent	Letter Grade/Action
90.0 – 100%	A
80.0 – 89.9%	B
75.0 – 79.9%	C - Pass
60.0 – 74.9%	D – Requiring remediation (successful remediation recorded as C, unsuccessful remediation recorded as F)
Below 60.0%	F – Fail (course must be repeated)
Incomplete	I

Incomplete

During a semester, a student may not complete all required assignments and/or examinations due to extenuating circumstances, such as, but not limited to, an illness or a family emergency. In such a case, the course director may give a grade of Incomplete for the course. The course with the incomplete grade has to be completed successfully within the time frame as being defined by the student's academic plan, normally in the same academic year, otherwise a leave of absence would be required.

Core-Course Policies

All students are required to adhere to the Academic Policies that impact on student progression and conduct while attending the DMD program, including the following: Academic Progression Policy, Excused Absence Policy, Exam Policy, Course Grade Appeal Policy, Course Add/Drop Policy and Attendance Policy. Refer to

the current Student Handbook for the detailed policies.

Course Specific Policies

1. Group PCS cases are to be submitted via CANVAS by 11:59pm PST on the deadline indicated. Only one group member should submit the assignment on behalf of the group. The course coordinator reserves the right to deduct points for late submission (20% of assignment grade for every 24 hours the assignment is turned in late).
Presentation of PCS cases requires the active participation of each team member, preferably presenting the component of the case the student was responsible for developing.
2. Grade appeal for any individual assignments (including exams) should be submitted to the course coordinator in writing within 5 business days of grade release.
3. There will be no rounding of the final grade for this course.

Topics and Schedule

(Subject to change. Updates will be posted to CANVAS and announced by email)

All readings are in Vital Source, or as assigned and posted to CANVAS

Date	Topics	Readings*	Instructor	Notes
Week 1 didactic	CDC guidelines for infection control	CDC infection control in dentistry	Assael	
Week 1 lab	Barrier technique, dental operatory components	CDC infection control in dentistry	Keating	
Week 1 clinic	Apply clinician infection control protocols		Clinical faculty and staff	
Week 2 didactic	Nosocomial Infection in dental practice	Health care associate viral and bacterial infections Laheij Assael, nosocomial infection	Keating	
Week 2 lab	Demonstration of aerosol and surface contamination, water lines, handpieces		Keating	videos
Week 2 clinic	Performance of equipment infection control in the clinic		Clinic staff	
Week 3 didactic	Introduction to the patient: interviewing	Bates: Chapter 1	Assael	Project 1 PCS assignment to groups
Week 3 lab	OSCE interview		Clinical faculty	
Week 3 clinic	Clinical experience with patient interviews		Clinical faculty	
Week 4 didactic	History of Present Illness Dental history Family and social history, past medical history, review of systems	Bates chapter 3	Assael	

Week 4 lab	Eliciting the history Quiz 1		Clinical faculty	Quiz 1
Week 4 clinic	Clinical experience with patient history		Clinical faculty	
Week 5 didactic	Initial oral and head and neck examination	Bates chapter 2 UCSD practical guide to clinical medicine	Keating	
Week 5 lab	Oral head and neck exam		Clinical faculty	
Week 5 clinic	Clinical experience with patient exam		Clinical faculty	
Week 6 didactic	Project presentations		Keating Assael	PCS 1 presentations
Week 6 lab	Project presentations			
Week 6 clinic	Clinic participation			
Week 7 didactic	Sealants 1	Maryland manual	Chan	
Week 7 lab	Sealant 1 lab	Maryland manual	Clinical faculty)	
Week 7 clinic	Sealant 1 clinic	Maryland manual	Clinical faculty	
Week 8 didactic	Sealants 2		Chan	
Week 8 LAB	Sealant 2 lab		Clinical faculty	
Week 8 Clinic	Sealant 2 clinic		Clinical faculty	
Week 9 didactic	In depth: history of present illness, family history, Social history, PMH, ROS	Bates Ch 1	Assael	PCS 2 ASSIGNMENT

Week 9 lab	Practice Patient interviews in OSCE format		Clinical faculty	
Week 9 clinic	Patient intakes		Clinical faculty	
Week 10 didactic	The electronic health record, introduction	EPIC manual	Assael	
Week 10 lab	Using the electronic health record		Clinical faculty	
Week 10 clinic	Observing the electronic health record in clinic		Clinical faculty	
Week 11 didactic	Dental assisting	PPT only	Keating	
Week 11 lab	Dental assisting lab		Clinical faculty	
Week 11 clinic	Assist in clinic		Clinical faculty	
Week 12 didactic	PCS presentations		Class	Pcs 2 presentations
Week 12 lab	PCS presentations		Class	
Week 12 clinic	Clinical experience		Clinical faculty	
Week 13 didactic	The electronic health record: compliance and business issues	Epic manual	Keating	Quiz 2
Week 13 lab	Clinical billing simulation, case based compliance module		Keating	
Week 13 clinic	Business office		Clinical faculty and staff	
Week 14 didactic	Integrating intake history, exam, electronic record and initial clinical encounters		Assael Keating	
Week 14 lab	Clinical encounter simulations		Clinical faculty	
Week 14 didactic	Participate in team care in clinic		Clinical faculty	
Week 15 didactic	Final exam didactic		Assael Keating	
Week 15 lab	Final exam practical		Clinical faculty	
Week 15 clinic	General clinic experience in team care		Clinical faculty	

Course Learning Outcomes and links to Program Learning Outcomes (Appendix A) and Institutional Learning Outcomes (Appendix B)

No.	Course Learning Outcome	DMD PLO	DMD ILO	Learning Hierarchy ^b	Assessment Method
1	Develop an initial understanding and capability to participate in the patient encounter as a clinical team member	1,2,3,4,7,8	1,3,4,6	1,2, 3	Clinical evaluation Group projects
2	Thoroughly implement all infection control measures in the dental setting to meet CDC standards	1,2,3,5,6,7,8	1,4,	2, 3	Clinical assessment Quizzes Final exam
3	Demonstrate ability to complete and record a thorough medical and dental medicine patient history	1,2,3,5	1,2,4,6	1,2	Clinical assessment Quizzes Final exam
4	Perform initial oral examination, place dental sealants in pediatric patients. Assist in dental care as a member of the care team.	1,2,3,4	1,2,4,5	2,3	Clinical assessment Quizzes Final exam
5	Demonstrate professionalism/ development of a professional identity as a dentist while participating as a student dentist in the patient care team	1,3,4	1,2,4,6	1,2,	Clinical assessment Quizzes Final exam

^a plo's appendix A

^b Learning Hierarchy based on Bloom's Taxonomy with 1=Memorization and/or Comprehension; 2=Application and/or Analysis; 3=Synthesis and/or Evaluation.

Teaching/ Learning Methodology

1. Didactic: lectures, required readings
2. Learning Activities: laboratory practice, OSCE, laboratory assignments/exercises, group project

CLO Rubrics

CLO 1: Develop an initial understanding and capability to participate in the patient encounter as a clinical team member

Indicators	Initial	Developing	Developed	Proficient
Participates with understanding and capability at an initial encounter level in patient care as clinical team member	Unable participate in clinical care effectively.	Demonstrates rudimentary ability be a clinical team member but with evolving demonstration of understanding their own role and the role of others	Demonstrates detailed understanding of their role as a team member and is usually effective in that role	Consistently demonstrates the ability participate at the level of their knowledge and skill as a clinical team member.

CLO 2: Thoroughly implement all infection control measures in the dental setting to meet CDC standards

Indicators	Initial	Developing	Developed	Proficient
Implements all criteria for infection control according to CDC standards	Demonstrates no or limited knowledge of infection control in health care	Begins to exhibit knowledge of infection control and understands general principles of disease transmission and its prevention	Implements barrier, sterilization, clean surgical technique consistently in patient care with uncommon non critical errors	Demonstrates complete knowledge and skill in infection control, able to perform all infection control tasks without error and able to teach and lead the oral health care team in infection control.

CLO 3: Demonstrates ability to complete and record a thorough medical and dental medicine patient history

Indicator	Initial	Developing	Developed	Proficient
Performs medical and dental medicine patient history to elicit information essential to completion of safe and effective clinical care.	Does not demonstrate an understanding of the patient history components or their importance.	Demonstrates a developing understanding of the patient history and its utility in guiding patient care	Demonstrates a comprehensive understanding of the role of the patient history and is able to capably elicit the history with few noncritical omissions	Consistently elicits, interprets and synthesizes the patient history as a guide to treatment decisions

CLO 4: Perform initial oral examination, place dental sealants in pediatric patients. Assist in dental care as a member of the care team

Indicators	Initial	Developing	Developed	Proficient
Performs exam for sealant placement and place sealants as a care team member.	Unable to assess the need for sealants, ability to place and skills to complete procedure.	Begins to develop skills in assigned tasks including assessment, isolation and use of materials.	Demonstrates adequate assessment, and placement of dental sealants with uncommon critical errors resulting in repeat procedures	Consistently demonstrates thorough ability to assess and use sealants without error at the time of placement

CLO 5: Demonstrate professionalism/ development of a professional identity as a dentist while participating as a student dentist in the patient care team

Indicators	Initial	Developing	Developed	Proficient
Functions collaboratively & effectively as a member of the team of DMD1	Unable to function collaboratively and effectively as a member of the team.	Functions somewhat collaboratively and effectively as a member of the team.	Functions collaboratively and generally effectively as a member of the	Consistently functions collaboratively and effectively as a member of the team.
Understands and exhibits the proper role of the dentist in clinical care	Unable to ascertain the role of the dentist in patient care	Demonstrates a developing understanding of the role of the dentist in improving patient health and well being	Demonstrates strong understanding of the value of oral health care as led by	Thoroughly can demonstrate and teach to the team the role of the dentist in health care
Demonstrates the highest level of ethics, empathy and cultural sensitivity in health care as a member of the team	Does not exhibit empathy, not guided by sound ethical principles and/or is not culturally sensitive	Demonstrates empathy and a developing understanding of the nuances of the ethical relationship between patient and doctor and has developing understanding of the role of culture and its role in improving health outcomes.	Demonstrates strong commitment to ethical patient care and strong motivation driven by empathy toward those afflicted with illness and those who need health care. Has cultural competence guiding care decisions.	Can consistently demonstrate understanding and exhibits all the features of medical ethics in the care of all patients. Can promote empathy in all team members and has a lifelong learning action plan implemented to address cultural and societal norms and expectations to optimize patient care and improve health

Appendix A

Program Learning Outcomes (PLOs) CNU College of Dental Medicine

1. Patient-Centered Care: Demonstrate understanding of healthcare disparities and cultural awareness in patient counseling and patient advocacy
2. Evidence-Based Care: Apply current, evidence-based oral healthcare within the scope of general dentistry
3. Culturally competent, empathic communication: Demonstrate patient centered, empathic, and culturally competent communication and interpersonal skills
4. Oral and Written Communication: Demonstrate sound oral and written communications in patient care
5. Critical Thinking: Utilize critical thinking, problem solving skills and systemic thinking in assessing and making reasoned, evidence-based decisions in patient care
6. Ethics and Professionalism: Demonstrate professionalism and ethical decision making
7. Biomedical Sciences Knowledge: Demonstrate an understanding of the fundamentals of biomedical sciences and apply them appropriately in oral healthcare
8. Practice Management: Apply legal, regulatory and business management concepts related to provision of oral healthcare services

DMD Program Learning Outcomes (PLOs) Proficiency Rubric

PLO 1: Patient-Centered Care

Demonstrate understanding of healthcare disparities and cultural awareness and capability in patient counseling and providing appropriate patient advocacy

Indicators	Initial	Developing	Developed	Proficient
1.1. Education. Demonstrates ability to educate all audiences through effectively communicating information and assessing learning	<ul style="list-style-type: none"> Does not appropriately counsel patients Does not check for understanding, ask questions, and/or asks inappropriate questions. 	<ul style="list-style-type: none"> Counsels patients but leaves out pertinent information needed by patient Communicates with basic level of clarity but does not always check for 	<ul style="list-style-type: none"> Generally demonstrates empathy, communicates accurate information clearly, checks for understanding 	<ul style="list-style-type: none"> Consistently demonstrates empathy, communicates accurate information clearly, checks for understanding

	<ul style="list-style-type: none"> Does not demonstrate the ability to find and utilize appropriate resources and references necessary for providing accurate counseling, consultation and education 	<p>understanding or rephrase when confusion occurs.</p> <ul style="list-style-type: none"> Demonstrates the ability to find a one or two resources, yet the resources are not the best or most appropriate for providing accurate counseling, consultation and education 	<ul style="list-style-type: none"> Seeks to ensure understanding and generally asks questions. Frequently demonstrates the ability to find and utilize appropriate resources and references necessary for providing accurate counseling, consultation and education 	<ul style="list-style-type: none"> Ensures understanding and asks appropriate questions. Consistently demonstrates the ability to find and utilize appropriate resources and references for providing accurate patient counseling, consultation and education
1.2. Patient advocacy. Represents the patient's best interests	<ul style="list-style-type: none"> Does not demonstrate the ability represent a patient's best interest 	<ul style="list-style-type: none"> Demonstrates awareness of issues that impact a patient Demonstrates minimal ability to articulate these issues but does not demonstrate ability to sufficiently advocate on a patient's behalf 	<ul style="list-style-type: none"> Demonstrates sufficient awareness of issues that impact a patient Demonstrates ability to articulate these issues Demonstrates ability to sufficiently advocate on a patient's behalf 	<ul style="list-style-type: none"> Demonstrates full awareness of the most important issues that impact a patient Demonstrates ability to clearly and effectively articulate these issues Demonstrates ability to effectively advocate on a patient's behalf

PLO 2: Evidence-Based Care.

Apply sound, current, and evidence-based oral healthcare within the scope of general dentistry

Indicators	Initial	Developing	Developed	Proficient
2.1. Patient-centered care. Demonstrates ability to provide patient-centered care as the medication expert (collect and interpret evidence, prioritize, formulate	<ul style="list-style-type: none"> Does not demonstrate ability to provide patient-centered care at the medication expert level; e.g., demonstrates ability to collect but not sufficiently 	<ul style="list-style-type: none"> Demonstrates ability to provide patient-centered care as the medication expert in some, but not all, areas as follows: collect and interpret evidence, prioritize, 	<ul style="list-style-type: none"> Demonstrates ability to provide patient-centered care as the medication expert (generally demonstrates ability to collect and interpret evidence, 	<ul style="list-style-type: none"> Demonstrates ability to provide sufficient patient-centered care as the expert (collects and interprets evidence, prioritizes, formulates assessments and

assessments and recommendations, implement, monitor and adjust plans, and document activities)	interpret evidence, does not prioritize, formulates basic assessments and recommendations, does not sufficiently monitor and adjust plans nor document activities.	formulate assessments and recommendations, implement, monitor and adjust plans, and document activities	prioritize, formulate assessments and recommendations, implement, monitor and adjust plans, and document activities)	recommendations, implements, monitors and adjusts plans, and documents activities)
2.2. Systems management. Demonstrates ability to manage patient healthcare needs using human, financial, technological, and physical resources to optimize the safety and efficacy of medication use systems	<ul style="list-style-type: none"> • Does not demonstrate understanding of oral healthcare delivery systems parts • Does not demonstrate understanding of the forces that influence components of the oral healthcare delivery system, including their connection to patient care • Does not demonstrate understanding of any challenges to systems that affect oral healthcare delivery Does not demonstrate understanding of how to work with different subsystems to deliver oral healthcare 	<ul style="list-style-type: none"> • Demonstrates understanding of some parts of oral healthcare delivery systems but does not identify how they are related to each other • Demonstrates understanding of some forces that influence the parts of healthcare delivery systems, but demonstrate minimal understanding of their connection to patient care • Demonstrates understanding of some challenges that can affect delivery of oral healthcare • Demonstrates some understanding of how to work with different subsystems and how they function to deliver oral healthcare, but demonstrate minimal awareness or understanding of one's own role within the oral 	<ul style="list-style-type: none"> • Demonstrates understanding of most major components of oral healthcare systems and their respective relationships • Demonstrates understanding of the forces that influence the components of healthcare delivery systems, and demonstrate some understanding of their influence on the quality of patient care • Demonstrates understanding of most challenges that can affect delivery of oral healthcare, but does not demonstrate complete comprehension of the effects Demonstrates basic understanding of how to work with different subsystems and how they function to deliver oral healthcare and 	<ul style="list-style-type: none"> • Demonstrates understanding of the major components of oral healthcare systems, their respective relationships, and their functions related to patient care • Demonstrates thorough understanding of the forces that influence components of healthcare delivery systems and demonstrate full understanding of their influence and implications on the quality of patient care • Demonstrates understanding of pertinent challenges to specific aspects of healthcare delivery by demonstrating abilities to thoroughly discuss the implications for the appropriate parts of oral health care delivery systems

		healthcare delivery system	demonstrate some understanding of one's role within the oral healthcare delivery system, but does not necessarily demonstrate application of knowledge in a manner that maximizes the quality of oral healthcare	Demonstrates excellent understanding of how to work with different subsystems involved while also demonstrating understanding of one's role within the subsystems, and demonstrate appropriate application of knowledge in a manner that maximizes the quality of oral healthcare
2.3. Health and wellness. Designs prevention, intervention, and educational strategies for individuals and communities to manage chronic disease and improve oral health and wellness	<ul style="list-style-type: none"> Does not demonstrate understanding of how the arts can be utilized to optimize patients' well-being 	<ul style="list-style-type: none"> Demonstrates knowledge of some of the ways that the arts can be utilized to optimize patients' well-being 	<ul style="list-style-type: none"> Demonstrates sufficient knowledge of multiple ways that the arts can be utilized to optimize patients' well-being 	<ul style="list-style-type: none"> Demonstrates thorough knowledge of the ways that the arts can be utilized to optimize patients' well-being and creatively applies this knowledge to improve well-being and the practice and delivery of oral healthcare
2.4. Population-based care. Demonstrates understanding of how population-based care influences patient-centered care and the development of practice guidelines and evidence-based best practices	<ul style="list-style-type: none"> Does not demonstrate awareness of population-based care. 	<ul style="list-style-type: none"> Demonstrates minimal understanding of population-based care and how it influences patient-centered care Does not demonstrate awareness of how these notions 	<ul style="list-style-type: none"> Demonstrates sufficient understanding of population-based care and how it influences patient-centered care Demonstrates sufficient understanding of how population- 	<ul style="list-style-type: none"> Demonstrates superb understanding of population-based care and how it influences patient-centered care Demonstrates superb understanding of how population-

		influence the development of practice guidelines	based care influences the development of practice guidelines and best practices for patient care	based care influences the development of practice guidelines and demonstrates knowledge of best practices for patient care
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PLO 3: Culturally Competent, Empathic Communication.

Demonstrate patient centered, empathic and culturally competent communication and interpersonal skills

Indicators	Initial	Developing	Developed	Proficient
3.1. Empathy. Demonstrates the ability to communicate with the patient empathically.	<ul style="list-style-type: none"> Does not demonstrate the ability to communicate with the patient empathically. 	<ul style="list-style-type: none"> Demonstrates some ability, but experiences lapses in the ability to communicate empathically 	<ul style="list-style-type: none"> Demonstrates the ability to communicate empathically, with few lapses. 	<ul style="list-style-type: none"> Demonstrates an advanced ability, and never experiences lapses in communicating empathically.
3.2. Cultural competence. Demonstrates the ability to engage in communication with the patient that is culturally aware and accepting.	<ul style="list-style-type: none"> Does not demonstrate communication and interactions that convey respect or concern for patients and the community. Does not demonstrate an awareness of customs, beliefs, or perspectives in diverse patients Does not demonstrate awareness of cultural and linguistic needs of patients in order to communicate health information 	<ul style="list-style-type: none"> Demonstrates communication and interactions characteristic of a minimal level of respect, and little concern for patients and the community is apparent through use of some appropriate communication, but student does not employ follow-up questions for clarification, when necessary, and student provides inappropriate detail in responses Demonstrates a minimal level of awareness of customs, beliefs, or perspectives in diverse patients Demonstrates minimal awareness of cultural and linguistic needs of patients; either does not or only attempt 	<ul style="list-style-type: none"> Demonstrates appropriate communication and interactions that are characteristic of a basic level of respect, and concern for patients and the community is apparent through use of appropriate communication, where student uses some clear, but not necessarily relevant or detailed, follow-up questions and responses Demonstrates awareness of customs and beliefs, but may not clarify with patients about personal perspectives Demonstrates awareness of the cultural and 	<ul style="list-style-type: none"> Demonstrates professional communication and interactions by showing empathy, respect, and concern for patients and the community through use of appropriate communication where follow-up questions (as needed) and responses are clear, relevant, and detailed Demonstrates awareness of customs, beliefs, or perspectives in diverse patients; ask appropriate questions to clarify perspectives and perceptions in diverse patients Demonstrates full awareness of and responsiveness to cultural and linguistic needs of

		to adapt behaviors, but does so ineffectively, to communicate health information	linguistic needs of diverse patients, and adapt behaviors to communicate health information, but communication may not be effective	diverse patients by adapting behaviors appropriately in order to effectively communicate health information
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PLO 4: Oral and Written Communication.

Demonstrate sound oral and written communications in patient care

Indicators	Initial	Developing	Developed	Proficient
4.1. Oral communication. Demonstrate sound oral communication in patient care.	<ul style="list-style-type: none"> Does not demonstrate logical reasoning in oral communications in patient care. Does not demonstrate the ability to cite sound evidence that support ideas within presentations or discussions. 	<ul style="list-style-type: none"> Demonstrates some logical reasoning in oral communications in patient care but demonstrates some lapses. Demonstrates some ability to cite sound evidence that support ideas within presentations or discussions, but demonstrates some lapses. 	<ul style="list-style-type: none"> Generally demonstrates logical reasoning in oral communications in patient care. Generally demonstrates the ability to cite sound evidence that support ideas within presentations or discussions. 	<ul style="list-style-type: none"> Consistently demonstrates logical reasoning in oral communications in patient care. Consistently demonstrates the ability to cite sound evidence that support ideas within presentations or discussions.
4.2. Written communication. Demonstrate sound written communication in patient care.	<ul style="list-style-type: none"> Does not demonstrate logical reasoning in written communications in patient care. Does not demonstrate the written ability to cite sound evidence that support ideas. 	<ul style="list-style-type: none"> Demonstrates some logical reasoning in written communications in patient care but demonstrates some lapses. Demonstrates some written ability to cite sound evidence that support ideas, but demonstrates some lapses. 	<ul style="list-style-type: none"> Generally logical reasoning in written communications in patient care. Generally demonstrates the written ability to cite sound evidence that support ideas. 	<ul style="list-style-type: none"> Consistently demonstrates logical reasoning in written communications in patient care. Consistently demonstrates the written ability to cite sound evidence that support ideas.

PLO 5: Critical Thinking.

Utilize critical thinking, problem solving skills and systemic thinking in assessing and making reasoned, evidence-based decisions in patient care

Indicators	Initial	Developing	Developed	Proficient
5.1. Problem solving. Identifies problems; explore and prioritize potential strategies; and designs, implements, and evaluates viable solutions	<ul style="list-style-type: none"> • Is not able to correctly identify the problem or issue being considered. • Does not identify appropriate resources. Includes extraneous information or inappropriate or insufficient resources. • Does not demonstrate understanding of the content of materials reviewed. Makes inappropriate inferences. • Does not evaluate possible alternatives or generates ideas that are illogical or extraneous to issue at hand. • Does not propose a solution or does not articulate decision. Does not adequately provide rationale for selected alternative or decision 	<ul style="list-style-type: none"> • Identifies the problem or issue but does not demonstrate awareness of all the factors associated with the problem or issues that impact decision making. • Identifies a few, but not all, resources needed for decision making. • Demonstrates ability to interpret some information and data but not all. • Does not fully or effectively evaluate alternative solutions. • Proposes a decision with many apparent weaknesses (i.e., not feasible, lack of regard for consequences, lack of supporting evidence, illogical, irrelevant to issue at hand, etc.). Provides rationale for selected alternative or decision but does not build a solid position with 	<ul style="list-style-type: none"> • Correctly identifies problem or issue being considered and demonstrates adequate awareness of the factors associated with this problem or issue that impact decision making. • Identifies most of the resources needed. • Demonstrates ability to interpret most information and data. • Considers and evaluates possible solutions in a way that generally leads to a logical decision or course of action. • Proposes a solution that does not contain apparent weaknesses that may or may not be the obvious clear choice. Solutions chosen demonstrate consideration of most of the strengths, weaknesses, feasibility, effects, consequences, relevance, etc.). 	<ul style="list-style-type: none"> • Consistently correctly identifies the problem or issue being considered and all of the primary factors associated with this problem or issue that impact decision making. Articulates the importance of these factors. • Identifies all appropriate resources. • Demonstrates ability to correctly interpret information and data needed for appropriate decision making. Demonstrates awareness of importance of these data in decision-making process. • Considers and evaluates possible solutions effectively and thoroughly. Evaluation leads to sound, logical, and “best” decision or course of action. • Proposes a solution that is entirely

		supporting evidence. Is unable to defend decision or course of action.	Provides rationale for selected alternative or decision which includes some solid supporting evidence. Is able to defend decision or course of action at a basic level.	appropriate to the situation at hand. Solutions chosen demonstrate consideration of all of the important and relevant strengths, weaknesses, feasibility, effects, consequences, etc.). Provides rationale for selected alternative or decision and builds a solid position with appropriate and relevant supporting evidence. Effectively defends decision or course of action.
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PLO 6: Ethics and Professionalism.

Demonstrating professionalism and ethical decision making

Indicators	Initial	Developing	Developed	Proficient
6.1. Professionalism. Demonstrates behaviors and values that are consistent with the trust given to the profession by patients, other healthcare providers, and society	<ul style="list-style-type: none"> Does not consistently demonstrate professional attitudes and behaviors (altruism, excellence, duty, accountability, honesty, and integrity) Demonstrates frequent lapses in accountability or quality of work 	<ul style="list-style-type: none"> Demonstrates some professional attitudes and behaviors yet there is inconsistency that may impede on the quality of work or treatment of patients and other healthcare team members (altruism, excellence, duty, accountability, honesty, and integrity) 	<ul style="list-style-type: none"> Generally demonstrates most of the professional attitudes and behaviors (altruism, excellence, duty, accountability, honesty, and integrity) that are required in the profession Demonstrates ability to use these behaviors and values to improve healthcare 	<ul style="list-style-type: none"> Consistently demonstrates the professional attitudes and behaviors that uphold the integrity and competence of the work and the treatment of patients and other healthcare team professionals (altruism, excellence, duty, accountability, honesty, and integrity) Consistently uses these behaviors and values to improve healthcare
6.2. Ethics. Demonstrates the ability to make decisions consistent with the values of practitioners and scholars of oral healthcare.	<ul style="list-style-type: none"> Does not make ethical decisions consistent with the values of practitioners and scholars of oral healthcare. 	<ul style="list-style-type: none"> Demonstrates the ability to exercise ethical decision making, and a rudimentary knowledge of ethics within oral healthcare. 	<ul style="list-style-type: none"> Demonstrates the ability to exercise clear and ethical decision making, and a sufficient knowledge of ethics within oral healthcare. 	Demonstrates the ability to exercise clear and ethical decision making, and an advanced knowledge of ethics within oral healthcare.

PLO 7: Biomedical Sciences Knowledge.

Demonstrate an understanding of the fundamentals of biomedical sciences and apply them appropriately in oral healthcare

Indicators	Initial	Developing	Developed	Proficient
7.1. Diagnostic and pharmacologic. Demonstrates the ability to describe how to deliver patient assessments, knowledge of medicines, and delivering diagnoses.	<ul style="list-style-type: none"> Does not demonstrate the ability to describe diagnostic and pharmacologic knowledge related to oral health. 	<ul style="list-style-type: none"> Demonstrates a rudimentary ability to describe diagnostic and pharmacologic knowledge related to oral health. 	<ul style="list-style-type: none"> Demonstrates a sufficient ability to describe diagnostic and pharmacologic knowledge related to oral health. 	<ul style="list-style-type: none"> Demonstrates an advanced ability to describe diagnostic and pharmacologic knowledge related to oral health.
7.2. Orofacial pain/temporomandibular/ Sleep disorder. Demonstrates the ability to describe the anatomical, physiological, and neurological basis; classification, epidemiology, and etiology; and assessments and treatments of orofacial pain, temporomandibular joint disease, and sleep disorders.	<ul style="list-style-type: none"> Does not demonstrate the ability to describe scientific or assessment knowledge related to OFP/TMJ disease and sleep disorders. 	<ul style="list-style-type: none"> Demonstrates a rudimentary ability to describe scientific or assessment knowledge related to OFP/TMJ disease and sleep disorders. 	<ul style="list-style-type: none"> Demonstrates a sufficient ability to describe scientific or assessment knowledge related to OFP/TMJ disease and sleep disorders. 	<ul style="list-style-type: none"> Demonstrates an advanced ability to describe scientific or assessment knowledge related to OFP/TMJ disease and sleep disorders.
7.3. Maxillofacial pathology Demonstrates the ability to describe the scientific aspects of head and neck diseases, as well as knowledge of assessment and diagnosis.	<ul style="list-style-type: none"> Does not demonstrate the ability to describe the scientific or assessment knowledge related to head and neck diseases. 	<ul style="list-style-type: none"> Demonstrates a rudimentary ability to describe the scientific or assessment knowledge related to head and neck diseases. 	<ul style="list-style-type: none"> Demonstrates a sufficient ability to describe the scientific or assessment knowledge related to head and neck diseases. 	<ul style="list-style-type: none"> Demonstrates an advanced ability to describe the scientific or assessment knowledge related to head and neck diseases.

PLO 8: Practice Management.

Apply legal, regulatory, and business management concepts related to the provision of oral healthcare services

Indicators	Initial	Developing	Developed	Proficient
8.1. Legal aspects Applies legal and regulatory concepts related to the provision of oral healthcare services.	<ul style="list-style-type: none"> Does not demonstrate an understanding or the ability to apply legal and regulatory concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates a rudimentary understanding and ability to apply legal and regulatory concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates a sound understanding and ability to apply legal and regulatory concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates an advanced understanding and ability to apply legal and regulatory concepts related to the provision of oral healthcare sciences.
8.2. Business management Applies business management concepts to the provision of oral healthcare services.	<ul style="list-style-type: none"> Does not demonstrate an understanding or the ability to apply business management concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates a rudimentary understanding and ability to apply business management concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates a sound understanding and ability to apply business management concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates an advanced understanding and ability to apply business management concepts related to the provision of oral healthcare sciences.

Appendix B

California Northstate University Institutional Learning Objectives

ILO 1: Critical thinking: Exercise reasoned judgment to assess technical information and make well-informed decisions using evidence-based approaches

ILO 2: Written communication. Demonstrate the ability to write coherent, supported, and logically structured prose

ILO 3: Oral communication: Demonstrates oral communication skills

ILO 4: Professionalism. Interact with respect, empathy, diplomacy, and cultural competence

ILO 5: Quantitative reasoning: Demonstrate ability to use mathematics and statistics in problem solving

ILO 6: Information literacy: Identify and search relevant libraries of information and databases; synthesize information obtained from primary literature using properly referenced citations

DMD Institutional Learning Outcomes (ILOs) Proficiency Rubric

ILO 1: Critical thinking: Exercise reasoned judgment to assess technical information and make well-informed decisions using evidence-based approaches

Indicator	Initial	Developing	Developed	Proficient
1.1. Demonstrates identification of problem or issues	<ul style="list-style-type: none"> Does not correctly identify the problem or issue being considered Does not demonstrate understanding of the psychological factors that contribute to current patient state 	<ul style="list-style-type: none"> Identifies the problem or issue but does not demonstrate awareness of all the factors impacting decision making Demonstrates understanding of some possible psychological factors that contribute to current patient state 	<ul style="list-style-type: none"> Correctly identifies the problem or issue but does not demonstrate awareness of all factors impacting decision making Demonstrates understanding of most psychological factors that contribute to the current patient state 	<ul style="list-style-type: none"> Correctly identifies all of the primary factors associated with problem or issue impacting decision making Demonstrates thorough understanding of all possible psychological factors that contribute to the current patient state

1.2. Demonstrates identification of resources	<ul style="list-style-type: none"> Does not identify appropriate resources 	<ul style="list-style-type: none"> Identifies a few resources needed 	<ul style="list-style-type: none"> Identifies most of the resources needed 	<ul style="list-style-type: none"> Correctly identifies all appropriate resources
1.3. Finds and interprets data needed for critical thinking and decision making	<ul style="list-style-type: none"> Does not demonstrate understanding of the data needed for critical thinking and decision making 	<ul style="list-style-type: none"> Demonstrates ability to interpret some data but not all 	<ul style="list-style-type: none"> Demonstrates ability to interpret most data 	<ul style="list-style-type: none"> Demonstrates ability to correctly interpret data needed for decision making
1.4. Demonstrates knowledge of alternatives when evaluating for possible solutions	<ul style="list-style-type: none"> Does not evaluate possible alternatives for treatment or diagnosis 	<ul style="list-style-type: none"> Does not effectively evaluate alternative treatment or diagnostic solutions 	<ul style="list-style-type: none"> Evaluates possible treatment and diagnostic solutions leading to a logical decision 	<ul style="list-style-type: none"> Effectively and thoroughly considers and evaluates possible diagnostic and treatment solutions
1.5. Proposes and selects appropriate solutions	<ul style="list-style-type: none"> Does not propose solutions to the client's needs 	<ul style="list-style-type: none"> Proposes solutions without consideration of alternatives 	<ul style="list-style-type: none"> Solutions chosen demonstrate consideration of most of the strengths, weaknesses, and consequences of the decision 	<ul style="list-style-type: none"> Proposes solutions that are appropriate to the situation and demonstrate consideration of all relevant strengths, weaknesses, and consequences
1.6. Presents rationale for course of action	<ul style="list-style-type: none"> Does not adequately provide rationale for treatment decision 	<ul style="list-style-type: none"> Provides rationale for decision but does not integrate into mental health treatment plan 	<ul style="list-style-type: none"> Provides rationale for decision with solid supporting evidence from available psychological literature and/or case factors 	<ul style="list-style-type: none"> Provides rationale for decision and with appropriate and relevant supporting case evidence and integrates findings into treatment plan

ILO 2: Written communication. Demonstrate the ability to write coherent, supported, and logically structured prose

Indicators	Initial	Developing	Developed	Proficient
2.1. Demonstrates knowledge and awareness of intended audience	<ul style="list-style-type: none"> Does not demonstrate knowledge or awareness of audience for which the document is intended 	<ul style="list-style-type: none"> Demonstrates some ability to craft a document appropriate for its audience 	<ul style="list-style-type: none"> Demonstrates ability to craft a document appropriate for its audience 	<ul style="list-style-type: none"> Consistently demonstrates ability to craft documents appropriate for the audience

2.2. Demonstrates clear and logical thought	<ul style="list-style-type: none"> Does not demonstrate clear or logical thought in their documentation 	<ul style="list-style-type: none"> Writing does not sufficiently conceptualize case variables or analyze subject under discussion 	<ul style="list-style-type: none"> Demonstrates general clear or logical thought in their documentation 	<ul style="list-style-type: none"> Research and clinical documentation demonstrates clear and focused thinking
2.3. Demonstrates support for and development of ideas	<ul style="list-style-type: none"> Does not explain or develop ideas 	<ul style="list-style-type: none"> Demonstrates minimal support for ideas 	<ul style="list-style-type: none"> Writing contains examples that generally support ideas 	<ul style="list-style-type: none"> Supports ideas with relevant, clear, impactful examples
2.4. Demonstrates appropriate use of evidence to support arguments	<ul style="list-style-type: none"> Demonstrates an attempt to use proper citations to support ideas 	<ul style="list-style-type: none"> Uses credible and relevant sources to support ideas appropriate in the study of psychology 	<ul style="list-style-type: none"> Consistently uses credible and relevant sources to support ideas 	<ul style="list-style-type: none"> Demonstrates skillful use of credible and relevant sources to develop and support ideas
2.5. Demonstrates appropriate use of language, syntax, and mechanics	<ul style="list-style-type: none"> Has excessive or severe errors in language usage 	<ul style="list-style-type: none"> Generally conveys meaning to readers with clarity, though writing may include some errors 	<ul style="list-style-type: none"> Language conveys meaning to readers and writing contains very few errors 	<ul style="list-style-type: none"> Uses language effectively and skillfully to communicate meaning to readers

ILO 3: Oral communication: Demonstrates oral communication skills

Indicators	Initial	Developing	Developed	Proficient
3.1. Demonstrates knowledge and awareness of intended audience	<ul style="list-style-type: none"> Does not demonstrate knowledge or awareness of audience for which the communication is intended 	<ul style="list-style-type: none"> Demonstrates some ability to communicate in a manner appropriate to the audience 	<ul style="list-style-type: none"> Demonstrates ability to communicate appropriate to the audience 	<ul style="list-style-type: none"> Consistently demonstrates ability to communicate in a manner appropriate to the audience
3.2. Demonstrates clear and logical thought	<ul style="list-style-type: none"> Does not demonstrate clear or logical thought in their communication 	<ul style="list-style-type: none"> Communication does not sufficiently conceptualize case variables or analyze subject under discussion 	<ul style="list-style-type: none"> Demonstrates general clear or logical thought in their communication 	<ul style="list-style-type: none"> Communication demonstrates clear and focused thinking

3.3. Demonstrates effective use of language in their communication	<ul style="list-style-type: none"> • Does not know professional psychological language or uses jargon • Does not know the proper technical language regarding mental health treatment 	<ul style="list-style-type: none"> • Demonstrates inaccurate use of psychological language or uses jargon in professional communications • Utilizes scientific language that is incomprehensible to patients 	<ul style="list-style-type: none"> • Demonstrates appropriate use of professional language and minimal jargon • Utilizes generalized language to interact with patients 	<ul style="list-style-type: none"> • Demonstrates use of appropriate, professional language • Utilizes generalized language to interact with patients
3.4. Demonstrates appropriate active listening techniques when addressing questions	<ul style="list-style-type: none"> • Does not acknowledge other viewpoints • Has great difficulty answering questions 	<ul style="list-style-type: none"> • Demonstrates little attempt to recognize other viewpoints • Answers are simplistic and lack intellectual depth 	<ul style="list-style-type: none"> • Recognizes other viewpoints but has difficulty incorporating them into case conceptualization • Adequately answers patient questions 	<ul style="list-style-type: none"> • Listens to questions with a consideration of alternative viewpoints • Answers questions thoughtfully referencing evidence
3.5. Orally communicates meaning to audience	<ul style="list-style-type: none"> • Vocal delivery is too soft or too fast • Long, unintended silences and/or speech disruptions frequently distract audience • Speaker makes no attempt to engage audience 	<ul style="list-style-type: none"> • Vocal delivery is audible • Speech rate or volume disruptions occasionally distract from comprehension • Attempts to engage audience 	<ul style="list-style-type: none"> • Vocal delivery is varied and dynamic • Speech rate, volume, and tone enhance listener interest and facilitate understanding • Generally engages audience 	<ul style="list-style-type: none"> • Vocal delivery is varied and dynamic • Speech rate, volume, and tone enhance listener interest and facilitate understanding • Thoroughly engages audience
3.6. Utilizes non-verbal means to enhance message	<ul style="list-style-type: none"> • Eye contact, body language, and facial expressions are inappropriate 	<ul style="list-style-type: none"> • Eye contact, body language, and facial expressions neither enhance nor hinder oral effectiveness 	<ul style="list-style-type: none"> • Use of eye contact, body language, and facial expressions are mostly consistent with the verbal message 	<ul style="list-style-type: none"> • Use of eye contact, body language, and facial expressions that are consistent with the verbal message

ILO 4: Professionalism. Interact with respect, empathy, diplomacy, and cultural competence

Indicators	Initial	Developing	Developed	Proficient
4.1. Demonstrates professional attitudes and behaviors	<ul style="list-style-type: none"> • Does not generally demonstrate professional attitudes or behaviors expected from a dentist 	<ul style="list-style-type: none"> • Demonstrates some attitudes and behaviors that may be characteristic of a dentist 	<ul style="list-style-type: none"> • Generally demonstrates attitudes and behaviors expected from a dentist 	<ul style="list-style-type: none"> • Consistently demonstrates attitudes and behaviors expected from a dentist

4.2. Demonstrates personal responsibility and accountability	<ul style="list-style-type: none"> Does not demonstrate personal accountability or responsibility for work completed 	<ul style="list-style-type: none"> Demonstrates minimal personal accountability and responsibility for work completed 	<ul style="list-style-type: none"> Demonstrates personal accountability and responsibility for the work completed 	<ul style="list-style-type: none"> Consistently demonstrates personal accountability and responsibility for work completed
4.3. Demonstrates respectful and sensitive behaviors to the cultural and linguistic needs of diverse patients	<ul style="list-style-type: none"> Does not demonstrate an awareness of patients' customs, beliefs, or perspectives Does not demonstrate awareness of linguistic needs of patients 	<ul style="list-style-type: none"> Demonstrates a minimal level of awareness of customs, beliefs, or perspectives of patients Demonstrates minimal awareness of cultural and linguistic needs of patients 	<ul style="list-style-type: none"> Demonstrates awareness of customs and beliefs Demonstrates awareness of the cultural and linguistic needs of patients 	<ul style="list-style-type: none"> Demonstrates awareness of customs, beliefs, or perspectives in patients Demonstrates full awareness and responds to the cultural and linguistic needs of patients
4.4. Demonstrates professional demeanor	<ul style="list-style-type: none"> Appears inattentive and impatient Uses inappropriate body language Dresses in attire that is inappropriate 	<ul style="list-style-type: none"> Appears unfocused and distracted Uses acceptable body language Dresses in attire that is not offensive 	<ul style="list-style-type: none"> Appears composed and focused Uses appropriate body language Dresses in attire that is professional 	<ul style="list-style-type: none"> Uses articulate, tactful, and diplomatic speech Uses professional body language Dresses in attire that is professional, and well-suited for the environment

ILO 5: Quantitative reasoning: Demonstrate ability to use mathematics and statistics in problem solving

Indicators	Initial	Developing	Developed	Proficient
5.1. Demonstrates ability to perform calculations and apply mathematical principles to solve problems	<ul style="list-style-type: none"> Does not demonstrate ability to apply statistical or psychometric principles 	<ul style="list-style-type: none"> Demonstrates ability to perform basic statistical calculations but does not know how to apply psychometric principles to solve problems 	<ul style="list-style-type: none"> Demonstrates ability to perform most statistical calculations accurately and to apply psychometric principles to solve problems 	<ul style="list-style-type: none"> Consistently demonstrates ability to perform statistical calculations accurately and to appropriately apply psychometric principles to solve problems
5.2. Demonstrates understanding of experimental designs and methodology	<ul style="list-style-type: none"> Displays difficulty proposing a basic experiment or research project 	<ul style="list-style-type: none"> Comprehends basic experiments designed by others 	<ul style="list-style-type: none"> Evaluates research, method, and protocol to review valid and reliable research 	<ul style="list-style-type: none"> Proposes appropriate and innovative designs to address a new hypothesis and research question

5.3. Demonstrates logical and appropriate interpretation of data	<ul style="list-style-type: none"> • Demonstrates a limited ability to interpret scientific data 	<ul style="list-style-type: none"> • Attempts to interpret scientific data 	<ul style="list-style-type: none"> • Demonstrates the ability to interpret scientific data 	<ul style="list-style-type: none"> • Interprets data in the context of current scientific knowledge
5.4. Demonstrates logical thought patterns in generating conclusions	<ul style="list-style-type: none"> • Does not generate conclusions based on current scientific data and statistics 	<ul style="list-style-type: none"> • Generates conclusions that may be based on current scientific data and statistics 	<ul style="list-style-type: none"> • Generates conclusions using scientific and statistical data 	<ul style="list-style-type: none"> • Accurately generates conclusions using appropriate scientific and mathematical data

ILO 6: Information literacy: Identify and search relevant libraries of information and databases; synthesize information obtained from primary literature using properly referenced citations

Indicators	Initial	Developing	Developed	Proficient
6.1. Demonstrates appropriate ability search and acquire resources	<ul style="list-style-type: none"> • Does not identify or solicit help in obtaining external resources to support topic 	<ul style="list-style-type: none"> • Identified resources may not be sufficient in quality and infrequently solicits guidance from library personnel 	<ul style="list-style-type: none"> • Identifies resources appropriate for scientific inquiry and solicits guidance from library personnel 	<ul style="list-style-type: none"> • Identifies a variety of relevant sources and regularly seeks guidance from library personnel
6.2. Demonstrates appropriate incorporation of references	<ul style="list-style-type: none"> • Does not incorporate references 	<ul style="list-style-type: none"> • Incorporates references from psychological sources that do not clearly support ideas 	<ul style="list-style-type: none"> • Incorporates relevant references that generally supports ideas 	<ul style="list-style-type: none"> • Incorporates relevant references from respected psychological sources
6.3. Demonstrates appropriate citation of references	<ul style="list-style-type: none"> • Does not use citations 	<ul style="list-style-type: none"> • Uses citations but they are not formatted in APA style 	<ul style="list-style-type: none"> • Demonstrates use of appropriate citations in context 	<ul style="list-style-type: none"> • Uses properly cited references and includes all necessary information in reference list



**2018 – 2019 Academic Year
Stages of Life Course Syllabus
Course #: COM 591
Year: 2
Semester: Spring**

Course Dates: 3/25/19 to 5/3/19

Credits Hours: 5 credits

Course Director:

Dr. Louise Glaser, MD, Associate Clinical Professor
Louise.Glaser@cnsu.edu

Coordinator:

Ms. Samantha Xiong

Disclaimer about changes in Syllabus and Course Calendar

Every effort will be made to adhere to the contents of this syllabus. However, this document is subject to changes in the event of unforeseen, extenuating circumstances. Students will be notified as soon as possible if changes in the syllabus become necessary.

Course Teaching Faculty

Name/Degree	Rank/Title
Louise Glaser, MD	Associate Clinical Professor
Guy DiSibio, MD	Associate Professor of Pathology and Medical Genetics
Martin Rubin, MD	Associate Professor of Psychiatry
Susan Ely, PhD	Professor of Molecular Biology, Immunology and Microbiology
Valerie Gerriets, PhD	Assistant Professor of Pharmacology
Floyd Culler, MD	Professor of Pediatrics, Endocrinology and Clinical Skills
Nazila Hejazi, MD	Assistant Professor of Pathology
Rudolph Holguin, MD	Associate Professor of Emergency Medicine
Jason Wong	PharmD
Peter Yip, MD	Associate Professor of Internal Medicine & Occupational Medicine
Nehad El-Sawi, PhD	Professor of Molecular Biology, Immunology and Microbiology
Ishwarlal Jialal, MD, PhD	Professor of Physiology, Metabolism and Pathology
Claire Baranov, MD	Assistant Professor of Medical Skills
Thura AlKhayat, MD	Assistant Professor of OBGYN and Medical Skills
Ghaith Aleyd, MD, PhD	Associate Professor Pathology

Open Door Policy: Course faculty have an open door policy and encourage contact from students by e-mail and in person to share impressions, concerns and/or ideas at any time

Volunteer Community Faculty Name/Degree
Victoria Akins, MD PhD, Pediatrics
Schery Mitchell, MD, Pediatrics
John Belko, MD, Pediatric Infectious Disease
Billur Moghaddam, MD, Pediatric Genetics
Thomas Russell, MD, Emergency Medicine
Nichole Tyson, MD, Obstetrics and Gynecology, Adolescent
Michael Sim, MD, Nephology
Anne Hsii, MD, Pediatrics, Adolescent fellowship
Howard Slyter, MD, Neurology, Ethics and Medicolegal
Michael Gunther-Maher, MD, Geriatrics, Palliative Care
Jean Struthers, MD, Pediatric Developmental Specialist

Communication with volunteer community faculty must be channeled through the course director.

Course Description:

- This course spans the human life cycle beginning with birth and infancy and concluding with the dying patient and elders. We will discuss normal growth and development at each stage as well as common challenges.
- Course Content is intended to be high yield both for important basic science and medicine of the first two years of medical school as well for entering clerkships and caring for patients. Material will be presented via a variety of formats including but not limited to: Clinical presentations, Clinical cases, CCBLs, faculty – student interactive sessions, and small and large group activities.
- The Stages of Life contains clinical case sessions focused on the most frequently encountered clinical presentations for an emergency room or primary care physician.
 - **Clinical Presentations/Clinical Cases - weeks 2 and 4**
Students will be introduced to the age of the week in the **Clinical Presentation session**. **Clinical Case sessions** on Friday, from 8-10 am, are required. Students will meet in their colleges to go through and discuss the case for the week. Each small group will review the case following the standard format including pertinent history information, labs, differential diagnosis, and case management. Each student will write a Case Summary and several students will be asked to present their summary orally to the group. Each student will email a written summary to their college master. **We will convene together in Classroom 1 B at 920 to review possible differential diagnoses for the case.**
 - **Clinical Case Based Learning CCBLs – weeks 1, 3, and 5**
These cases feature a complex patient, consistent with the age for the week, and will include both clinical and basic science. Students work in small groups, with a facilitator, and go through the case together during the 3 sessions in the week. Students will also have an opportunity to practice their oral presentations of a patient on Wednesdays and Fridays. **All of these sessions are Mandatory.**
 - **Basic scientific concepts** are interwoven within each CCBL/CC and CP providing the necessary basis for understanding relationships and causal entities. Clinical relevance and appropriate application of basic scientific knowledge is reinforced with these case examples.
- **Medical Skills** runs concurrently and will be coordinated as much as possible with the course content. Sessions will be engaging and valuable to students.

Course Objectives: By the conclusion of this course, the student will demonstrate the ability to

#	Course Learning Objectives (CLOs)	Program Learning Objectives (PLOs)
1	Distinguish normal growth and development throughout the different stages of life, from birth to death, including common challenges, changes and concerns at the physical, emotional, and behavioral levels in each stage.	PLO-2 (MSK1, MSK2)
2	Explain how exogenous (e.g., infections and nutrition) and endogenous (e.g., hormonal and immunological) factors may affect growth as well as pediatric and geriatric diseases, and how early immunization and adequate nutrition may prevent some of these problems.	PLO-2 (MSK1, MSK2)
3	Explain how genetic and teratogenic mechanisms may alter normal growth and produce physical and chemical abnormalities including tumors, dysmorphic features, developmental delay, and neurochemical imbalances.	PLO-2 (MSK1, MSK2)
4	Integrate the etiopathogenesis in the diagnosis and management of growth and developmental diseases and those associated with aging to predict their risks and prognoses, and identify appropriate preventive strategies.	PLO-2 (MSK1, MSK2, MSK3, MSK4)
5	Apply knowledge of non-pharmacological and pharmacological principles to tailor safe and effective treatments for pediatric and geriatric diseases in addition to palliative care of the dying patient	PLO-1 (PC5, PC7, PC8); PLO-2 (MSK1, MSK2, MSK3)
6	Demonstrate level-appropriate skills in communication, professionalism and medical/procedural related abilities in dealing with patients, and includes environmental, cultural and societal factors in clinical decision making.	PLO-1 (PC1, PC2, PC3, PC4, PC5, PC6, PC7); PLO-3 (C1, C2, C3); PLO-4 (P1, P2, P3)

Please Note: All session objectives listed in the individual sessions (by date and time) are mapped to the course objectives.

Key: PLO = Program Learning Objective (#1=Patient Care; #2=Medical & Scientific Knowledge; #3=Communication and Interpersonal Skills; #4=Professionalism; #5=Health Care Systems; #6=Reflective Practice and Personal Development)

Session Locations:

One large lecture hall with a seating capacity of 100 students, will be used for the most sessions. CCBLs (MWF), Clinical Cases sessions (Fridays), and Group Summative Midterm sessions will be held in colleges rooms.

Lecture/Session Duration: All lectures on the calendar as one hour sessions will be 50 minutes long with 10 minutes break at the end for questions and preparation for the next session. Any session/lecture longer than one hour will have 10 minutes break between every two hours.

Course special assignments: Details to follow during the course.

Teaching/Learning Methodology:

- Case-Based instruction/Learning
- Discussion, Large group (>12)
- Discussion, Small Group (<12)
- Independent Learning
- Lecture
- Patient Presentation – Faculty
- Patient Presentation – Learner
- Peer Teaching
- Reflection
- Self-Directed Learning

Online Materials – Canvas: Canvas is California Northstate University's Learning Management System.). Use your CNU NETID and password.

Turning Point: Every Phase A student was given a Turning Point Clicker during Orientation. Please bring the Clicker to class at all times.

Library/Learning Resources

The CNUCOM Library and Learning Resource Center is available for students, faculty, and staff. This program includes an initial 4200 square feet of space and seating for 100 devoted to the following resources: Library Facility and Collection, Computer resources, CNUCOM Electronic Library, and Interlibrary Loan Program. CNUCOM Resource Center maintains an Electronic Learning Resources System to provide information resources to students, faculty, and staff, and serve as an entry point for all users to meet their academic and research needs.

Recommend Textbook(s), Material(s) and Equipment:

Subject	Author	Title
Geriatric Medicine	Jeffrey B. Halter, Joseph G Ouslander, et al	Hazzard's Geriatric Medicine and Gerontology
Geriatrics Medicine	Robert L. Kane, Joseph G. Ouslander, et al.	Essentials of Clinical Geriatrics
Pediatric Medicine	William W. Hay Jr., Myron J. Levin, Robin R Deterding, Mark J Abzug	Current Diagnosis and Treatment: Pediatrics
Microbiology	Engleberg	Schaechter's Mechanisms of Microbial Disease 5e
Pharmacology	Trevor, Anthony J., et al	Basic & Clinical Pharmacology, 12th Edition
Genetics	Lynn B. Jorde, John C. Carey, Michael J. Bamshad	Medical Genetics: 5th Edition

Lecture/Learning Activity Attendance:

Mandatory sessions include: Course Introduction, CCBL sessions, Clinical Case sessions, Medical Skills/Stat Lab, Masters Colloquium sessions, Exams, and CBSE

NOTE: **Week 1 Masters is split into 2 sessions** (half in week1 and half in week 2)

Week 5 Masters Colloquium Session is on Thursday

All Lectures/Sessions are recommended to attend. We have designed them intentionally to be high yield for your Step1 exam and or for your third year rotations and future practice.

Sign-in sheets will be provided at all mandatory activities. Students will be responsible for signing in themselves. The sign-in sheets will be collected 5 minutes after the activity begins. Only certain excused absences are allowed (please see Student Affairs Absence Policy).

The following procedure(s) will be employed for breeches of these course requirements.

1. Administrative/Support staff will notify the course director(s) and Assistant Dean of Academic Affairs
2. A note will be placed in the student's file
3. Lapses in attendance fall under the COM's Professionalism Policy and are subject to inclusion in the student's MSPE.

4. Persistent lapses in attendance will require the student to appear before the Student Promotions Committee.

Exams and Grading/Assessment:

The successful completion of the course is based on a total course score of 70% or higher including a final exam score of 70% or higher, successful completion of 2 Nutrition modules and an Elders assignment, full attendance and participation in CC and CCBL sessions as well as demonstrating a high standard of ethical and professional behavior.

Failure to reach the passing mark in the final exam will result in a retake examination on Friday of exam week.

▪ Total Course Score:

The total numeric score for the course will be measured as follows, which translates to recording a **passing grade of 70% or above**, and **an honors grade if 90% or above**.

#	Components	%	Notes/Explanation
1	Midterm Hybrid Summative Exam	30 (75% individual and 25% group)	50 NBME questions
2	Final Summative exam	65	100 NBME questions
3	Clinical-Case-Based Learning	n/a	Full attendance and participation required
4	Clinical Cases	n/a	Full attendance and participation required
5	Nutrition Modules (2)	n/a	Completion required to pass
6	Elder Interview (2)	5 (2.5% each)	Completion required to pass
7	Formative Weekly Quiz or online module	n/a	Formative

- **Hybrid Summative Midterm Exam (mandatory)**
 - One USMLE Step 1 format exam, comprised of 50 multiple-choice questions will be held on **Monday** morning of week 4, **April 15, 2019**.
 - The first two hours will be an individual test in classroom 1B.
 - The second two hours will be a group test in smaller rooms to be announced prior to the exam.
 - The Hybrid exam will comprise 30% of the course grade (75% individual and 25% group score)
- **Summative Final Exam (mandatory)**
 - One USMLE Step 1 format exam, 100 multiple-choice question final examination at the end of the course. This will be held Week 6 on **Monday April 29, 2019**.
 - The Final Exam grade will comprise 65% of the course grade.

- **Clinical Cases:** Week 2 and 4, with review and discussion of the week's Clinical Case. **Attendance, satisfactory individual work and contribution to group work at these Friday sessions is required/mandatory.**
- **Clinical Case Based Learning CCBLs – Weeks 1, 3, and 5**
Full attendance and participation is required/mandatory at all sessions.
- **Elders Interview** (Content related to Week 5 Masters Colloquium Session)
Graded Complete/Incomplete, 2.5% value each, **completion required to pass course**
- **Nutrition Online Modules:**
Students are expected to **successfully complete** 2 assigned Nutrition in Medicine modules in order **to pass the course**. Students must register for nutrition in medicine via "nutritioninmedicine.org".
 1. "Nutrition during infancy"
 2. "Nutrition and aging: chronic disease"
- **Weekly Modules/Quizzes (Formative):** Designed to support students in confirming/expanding knowledge from the week's content. These will be posted in Canvas by 5 pm Wednesday and due Friday at noon.
- **Student Evaluations of Course and Faculty**
I highly value your feedback and take it seriously. Students are required to complete these evaluations during their last Clinical Case Based Learning activity. Your CCBL small group faculty facilitator will monitor compliance. Please provide your thoughtful and constructive comments here. Thank you.

Remediation:

- Failure of the midterm summative exam will be addressed by offering optional individual and/or group review/tutoring sessions
- Failure of the final summative examination will result in a retest, on Friday of exam week.
- Students who miss mandatory sessions are required to make up the session. Make up options/assignments vary by type of session missed. Specifics to be determined by the course director.

Students will be expected to comply with all CNU and COM policies. Please refer to student handbook.

Weekly Course Calendars to follow

Stages of Life						
Week 1: Infant						
	Monday	Tuesday	Wednesday	Thursday	Friday	
	3/25/2019	3/26/2019	3/27/2019	3/28/2019	3/29/2019	
8:00 AM	SELF STUDY	SELF STUDY	SELF STUDY	CBSE MANDAT ORY	CCBL	
8:30 AM						
9:00 AM						
9:30 AM						
10:00 AM						
10:30 AM	Immunodeficiencies related to Lymphoid Organ Function Ely	Medical Skills	Self Study	CBSE MANDAT ORY	Genetic/Congenital Syndromes Moghaddam	
11:00 AM	Immunodeficiencies Affecting Peripheral Immune System Ely					
11:30 AM	ADA-SCID, SCID-X1 and Gene Therapy Ely					
12 noon	Lunch and activities	Lunch and activities	Lunch and activities			
12:30 PM	MANDATORY: Stages of Life Introduction Glaser	Medical Skills	Self Study	CBSE MANDAT ORY	SELF STUDY	
1:00 PM						
1:30 PM						
2:00 PM	Clinical Presentation: Normal Neonate Akins		Newborn Screening diSibio			
2:30 PM						
3:00 PM						
3:30 PM	CCBL	Medical Skills	CCBL	SELF STUDY		
4:00 PM						
4:30 PM						

Stages of Life										
Week 2: Child										
	Monday	Tuesday		Wednesday	Thursday	Friday				
	4/1/2019	4/2/2019		4/3/2019	4/4/2019	4/5/2019				
8:00 AM	SELF STUDY	SELF STUDY		SELF STUDY	SELF STUDY	Clinical Case and Differential Diagnosis				
8:30 AM										
9:00 AM										
9:30 AM										
10:00 AM		Medical Skills	Self Study	Masters Colloquium Palma		Masters Colloquium Part II Dr. R. Pan				
10:30 AM										
11:00 AM						SELF STUDY				
11:30 AM										
12 noon	Lunch and activities		Lunch and activities	Lunch and activities	Lunch and activities					
12:30 PM	Lunch and activities		Lunch and activities	Lunch and activities	Lunch and activities					
1:00 PM	Clinical Presentation Glaser	Medical Skills	Self Study	Neonatal Infectious Disease Belko	Common Childhood injuries Russell	Neuroscience review Lui				
1:30 PM	Inborns Error of Metabolism Gerriets			Childhood Infectious Disease Belko	Environmental Injuries Russell					
2:00 PM	Developmental Pediatrics Struthers									
2:30 PM	Development Birth - 6 years Glaser & Mitchell			Medical Skills	Self Study		GrowthCharts and Common Growth Concerns Culler	Immunizations Gerriets		
3:00 PM		SELF STUDY	SELF STUDY							
3:30 PM							Self Study			
4:00 PM										
4:30 PM										

Stages of Life					
Week 3: Adolescent					
	Monday	Tuesday	Wednesday	Thursday	Friday
	4/8/2019	4/9/2019	4/10/2019	4/11/2019	4/12/2019
8:00 AM	SELF STUDY	SELF STUDY	SELF STUDY	SELF STUDY	CCBL
8:30 AM					
9:00 AM					
9:30 AM					
10:00 AM					
10:30 AM	Clinical Presentation Teen Psycho-social Development	Medical Skills	Masters Colloquium Slyter	SELF STUDY	Grief and Loss Sim
11:00 AM					
11:30 AM	Lunch and activities	Lunch and activities	Lunch and activities	Lunch and activities	Lunch and activities
12 noon					
12:30 PM					
1:00 PM	LGBTQ+ Tyson	Medical Skills	Brain Death Slyter	Pharmacology Review HIV, parasitics, etc Gerriets	Neuroscience review Lui
1:30 PM					
2:00 PM					
2:30 PM					
3:00 PM					
3:30 PM					
4:00 PM	CCBL	Medical Skills	SELF STUDY	SELF STUDY	
4:30 PM		Self Study			

Stages of Life								
Week 4: Adult								
	Monday	Tuesday		Wednesday	Thursday	Friday		
	4/15/2019	4/16/2019		4/17/2019	4/18/2019	4/19/2019		
8:00 AM	Hybrid Summative Midterm Individual	SELF STUDY		SELF STUDY	SELF STUDY	Clinical Case and Differential Diagnosis		
8:30 AM								
9:00 AM								
9:30 AM								
10:00 AM	Hybrid Summative Midterm Group portion	Medical Skills IP SIM	Self Study	Masters Colloquium Glaser	SELF STUDY	High Yield Anatomy and Neuro review Ernst		
10:30 AM								
11:00 AM								
11:30 AM								
12 noon	Lunch and activities	Lunch and activities		Lunch and activities	Lunch and activities	LUNCH / High Yield Anatomy and Neuro review - Ernst		
12:30 PM								
1:00 PM	Clinical Presentation - Yip	Medical Skills IP SIM	Self Study	Geriatric Syndromes Jalal	Pain Management/Narcotics Yip	SELF STUDY		
1:30 PM	Physiologic Changes in Aging/Geriatrics Holguin			Multimorbidity / Polypharmacy J Wong	Infections of Immunocompromised Host El-Sawi			
2:00 PM							Movie - Stumped (pending)	
2:30 PM								
3:00 PM	SELF STUDY	Medical Skills IP SIM	Self Study	Clinical Symptoms and treatment of sexual dysfunction and BPH J Wong	SELF STUDY			
3:30 PM								
4:00 PM								
4:30 PM								

Stages of Life								
Week 5: Elder								
	Monday	Tuesday		Wednesday	Thursday	Friday		
	4/22/2019	4/23/2019		4/24/2019	4/25/2019	4/26/2019		
8:00 AM	SELF STUDY	SELF STUDY		Self Study or AMA Advocacy Day or Patient Advocacy Day	SELF STUDY	CCBL Course Survey with small group at end of this session		
8:30 AM								
9:00 AM					Geriatric Psychiatry Rubin			
9:30 AM								
10:00 AM		Medical Skills	Stat Lab Screening		Masters Colloquium **** Bell	End of Life Care Gunther Maher		
10:30 AM								
11:00 AM								
11:30 AM								
12 noon	Lunch and activities	Lunch and activities		Lunch and activities	Lunch and activities	Lunch and activities		
12:30 PM								
1:00 PM	Clinical Presentation	Medical Skills	Stat Lab Screening	Self Study or AMA Advocacy Day or Patient Advocacy Day	DNR, Death Certificates, Advanced Directives GuntherMaher	SELF STUDY		
1:30 PM								
2:00 PM	Caregiver Dynamics Gunther-Maher							
2:30 PM								
3:00 PM	TBD							
3:30 PM								
4:00 PM								
4:30 PM								
		Medical Skills	Stat Lab Screening		SELF STUDY			

Stages of Life					
Week 6: Exam					
	Monday	Tuesday	Wednesday	Thursday	Friday
	4/29/2019	4/30/2019	5/1/2019	5/2/2019	5/3/2019
8:00 AM	FINAL Summative Exam (NBME - CAS)	SELF STUDY	SELF STUDY	SELF STUDY	SOL Exam retake
8:30 AM					
9:00 AM		Medical Skills Exam			
9:30 AM					
10:00 AM					
10:30 AM		Nutrition Modules Due			
11:00 AM					
11:30 AM					
12 noon	Lunch and activities	Lunch and activities	Lunch and activities	Lunch and activities	
12:30 PM					
1:00 PM	Masters Colloquium Exam	Medical Skills Exam	SELF STUDY	SELF STUDY	SELF STUDY
1:30 PM					
2:00 PM					
2:30 PM					
3:00 PM	SELF STUDY				
3:30 PM					
4:00 PM					
4:30 PM					



Competency Assessment: Grading Rubric

General 2-24 Structure

California Northstate University

Note patient stage of life:

1. Birth
2. Infant
3. Childhood
4. Adolescence
5. Adulthood
6. Old age
7. Moribund

	1: Inadequate performance	2: Deficient performance	3: Minimal competency	4: Capable clinician knowledge, skills, values	5: Entrusted Professional Activity	Grade 1-5
Patient interaction	Non-communicative, poor listening skills	Gaps in patient/doctor interaction that created obstacles in care	Able to communicate and patient accepted care and had questions addressed	Able and personable communication with patient that addressed and allayed	Strong empathic and knowledgeable patient interaction, both verbal and nonverbal;	

				concerns; empathetic culturally aware	culturally competent	
Patient presentation	Unable to present patient findings in coherent fashion	Major gaps in presenting key findings	Able to demonstrate key findings but needs assistance prioritizing them	Demonstrates ability to present key findings and organize them in a fashion to make appropriate care decisions and referrals to other health professionals when appropriate	Can independently evaluate and prioritize all key findings to comprehensively and without error, carry out safe and effective care through integrated medical, surgical and oral health evaluation	
Application of biomedical knowledge	Unable to apply biomedical knowledge to the care of the patient	Applies some aspects of biomedical knowledge to the care of the patient but with notable deficiencies	Demonstrates that key findings are taken into account to direct care based upon biomedical findings	Utilizes all pertinent biomedical findings to influence and optimize the care of the patient	Applies in a comprehensive and interactive fashion, with follow-up information and questions, all biomedical aspects of care in real time and associated to the patient's immediate and long term needs.	

Critical thinking	No self-reflection or ability to apply knowledge critically	Demonstrates some ability to utilize empiricism and logic in patient care	Able to utilize all necessary tools of critical thinking in patient care but continues to synthesize their utilization	Applies knowledge critically developed in the care of patients across all pertinent multiple domains	Thoroughly able to synthesize, reflect and apply knowledge broadly with inquisitive spirit and capability	
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Clinical skills	No knowledge or capability of instrumentation, application of instruments towards the clinical task and is unable to perform	Understands instrumentation, fundamentals of dental anatomy, and has didactic knowledge of technique but is not consistently able to apply these elements	Demonstrates the proper use of instruments and achieve appropriate outcome, fundamentals of dental anatomy, and has didactic knowledge of technique and is consistently able to apply these elements	Demonstrates the ability to comfortably apply clinical skills to dental procedure in a fashion that promotes continued development of skills, patient confidence and consideration for applying more advanced skills when needed	Is fully capable to perform nonsurgical exodontia in a variety of clinical situations, with a diverse patient pool and complex clinical needs.	
Ethical behavior/ professionalism	Demonstrates unprofessional and/or unethical behavior in the clinical setting	Thorough lapses or lack of self-awareness, a noncritical lapse in professionalism or ethical behavior is noted	Carries out all treatment in an ethical and professional manner	Shows leadership, empathy, clinical behavioral understanding customized to the patient's needs to assure both perception and reality of demonstrating ethical behavior and professionalism	Is an exemplar in applying the tenets of ethical behavior and professionalism to the patient and all members of the care team and is emulated within the team for those qualities	

Practice management/systems based practice/ Legal regulatory	Does not understand or apply fundamentals of legal and regulatory aspects of patient care in the oral health setting	Demonstrates basic didactic knowledge but does not apply it appropriately in the clinical setting but is developing experience	Consistently but not universally applies appropriate compliance with HIPAA, documentation billing, informed consent and risk management aspects of practice	Integrates all aspects of the regulatory environment and consistently applies this knowledge as a skill in clinical practice	Is able to reflect on regulatory issues, teach them, apply them proactively and develop supporting policies to assure compliance and improve quality.	
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Comments: (Comments are required for all 1 or 2 grades components)



Mapping of all Competency Assessments

Each of these competency assessments is linked numerically to the appropriate CNUCDM competency statements as follows:

1. Demonstrate patient interaction that provides able and personable communication with the patient that addresses all clinical issues and addresses concerns in an empathetic and culturally aware fashion
2. Provide verbal and written patient presentation that demonstrates the ability to present key findings and organize them in a fashion to make appropriate care decisions.
3. Utilizes all pertinent biomedical knowledge to influence and optimize the care of the patient
4. Able to apply knowledge with critical thinking developed in the care of patients across all pertinent multiple domains.
5. Demonstrates the ability to comfortably apply clinical skills for dental procedures in a fashion that promotes the continued development of skills, patient confidence, and consideration for applying more advanced skills when needed.
6. Applies the tenets of ethical behavior and professionalism with exemplary leadership empathy, clinical behavioral understanding customized to the patient's needs.
7. Integrates all aspects of the practice management, systems-based practice, legal and regulatory requirements of practice and consistently applies this knowledge as a skill in clinical practice.

In addition, the following key is used to reflect on the utilization of the requested domains for Standard 2-5 response in the table below

- a. **Clinical Procedures, (CP)**
- b. **Problem Solving (PS)**
- c. **Clinical Reasoning (CR)**
- d. **Professionalism (P)**
- e. **Ethical Decision Making (EDM)**
- f. **Communication Skills (CS)**

Appendix 2-24 Mapping of all Competency Assessments

Human Studies Summative Competency Assessment (HSSCA)

Each of these competencies in HS will include the assessment of the medical condition noted, apply oral health treatment planning in an evidence-based way, applying clinical reasoning, and demonstrating ethics, professionalism and good communication skills.

HS SCA	Course number	Assessment Method Domains	Prerequisites	Comments And Competency Statement Numerical links
Bleeding disorder	HS 526	OSCE PS,CR,CS	Didactic material HS526	2,3,4,6,7
Leukemia	HS 526	OSCE PS,CR,CS	Didactic material HS526	2,3,4,6,7
Anemia	HS 526	OSCE PS,CR,CS	Didactic material HS526	2,3,4,6,7
Arthritis	HS511	OSCE PS,CR,CS	Didactic material HS526	2,3,4,6,7
Osteoporosis	HS511	OSCE PS,CR,CS	Didactic material HS526	2,3,4,6,7
Stroke	HS551	OSCE PS,CR,CS,EDM	Didactic material HS551	2,3,4,6,7
Parkinson's Disease	HS551	OSCE PS,CR,CS,EDM	Didactic material HS551	2,3,4,6,7
Renal failure	HS 641	OSCE PS,CR,CS	Didactic material HS641	2,3,4,6,7
Acid/base acute infection	HS 641	OSCE PS,CR,CS	Didactic material HS641	2,3,4,6,7
Chronic hepatitis	HS 621	OSCE PS,CR,CS	Didactic material HS 621	2,3,4,6,7

Appendix 2-24 Mapping of all Competency Assessments

Type 2 diabetes	HS 671	OSCE PS,CR,CS	Didactic material HS 671	2,3,4,6,7
Hyperthyroidism	HS 671	OSCE PS,CR,CS	Didactic material HS 671	2,3,4,6,7
Poly pharmacy	HS 632	OSCE PS,CR,CS, EDM	HS 632 and other HS courses	2,3,4,6,7
Complex medical case assessment: Cardiovascular/pulmonary	HS 721	Patient based PS,CR,CS, P, EDM	Concurrent medicine seminar	2,3,4,6,7 Patient selected from student's existing patients
Complex medical case assessment: Endocrine/oncology/OB/GI or transplant	HS 722	Patient based PS,CR,CS, P, EDM	Concurrent medicine seminar	2,3,4,6,7 Patient selected from student's existing patients
Complex medical case assessment: Interdisciplinary/ hospital based	HS 821	Patient based PS,CR,CS, P, EDM	Concurrent medicine seminar	2,3,4,6,7 Patient selected from hospital consults while on rotation
Complex medical case assessment: preanesthetic/presurgical consult	HS822	Patient based PS,CR,CS, P, EDM	Concurrent medicine seminar	2,3,4,6,7 Patient selected from preop pool evaluated by student
Complex medical case assessment: Special Needs Patient	HS 821 HS 822	Patient based PS,CR,CS, P, EDM	Concurrent medicine seminar	2,3,4,6,7 Patient selected from preop pool evaluated by student

Odontology Summative and Formative Competency Assessment (OSFCA)

Appendix 2-24 Mapping of all Competency Assessments

OSFCA	Course number	Assessment method	Prerequisites	Comments
Infection Control	Odont501	Operatory based CP, PS,CR,CS, P, EDM	Didactics and Lab on infection control	1,2,3,4,5,6,7 While comp assessment is in first year each clinical comp continues to assess
Caries risk assessment, app. CAMBRA	Odont 522	Case-based didactic exam PS,CR, P, EDM	didactics Odont 522	1,2,3,4,5,6,7
Operative Dentistry lab FORMATIVE assessment	Odont 621	Laboratory exercise X 4 (class 1,2,3,4) CP, PS, CR	Didactics and lab ODONT 621	2,3,4,5, FORMATIVE
Periodont. Lab SRP formative assessment	Odont 631	Laboratory exercise x 1 CP, PS, CR	Didactics and lab Odon 631	2,3,4,5 FORMATIVE
Periodont. Lab Surgery formative assessment	Odont632	Laboratory exercise x 1 CP, PS, CR	Didactics and lab Odon 632	2,3,4,5 FORMATIVE
Outcomes of periodontal therapy	Odont 752	Patient based CP, PS,CR,CS, P, EDM	Seminar participation	1,2,3,4,5,6,7 Patient selected from students existing patients
Integrated perio care (at least 3) perio/pros/endo/ortho/ oral medicine/ oral surgery assessment	Odont 852	Patient Based CP, PS,CR,CS, P, EDM	Seminar participation	1,2,3,4,5,6,7 Patient selected from students existing patients
Full denture laboratory	Odont 641	Laboratory exercise CP, PS,CR	Lecture and lab Odont 641	2,3,4,5 FORMATIVE
Partial denture laboratory	Odont 641	Laboratory exercise CP, PS,CR	Lecture and lab Odont 641	2,3,4,5 FORMATIVE

Appendix 2-24 Mapping of all Competency Assessments

Indirect fixed restoration and replacement of teeth)	Odont 741	Laboratory exercise X3 (crown, FPD, CAD/CAM CP, PS,CR	Lecture and lab Odont 741	2,3,4,5 FORMATIVE
Dental implant placement and restoration	Odont 841	Laboratory exercise CP, PS,CR	Lecture and lab Odont 841	2,3,4,5 FORMATIVE
Endodontic therapy	Odont 532	Laboratory exercise X3 (incisor, premolar, molar) CP, PS,CR	Lecture and lab Odont 532	2,3,4,5 FORMATIVE
Intake odontologic diagnosis and treatment planning	Odont 761	Patient based CP, PS,CR,CS, P, EDM	Daily participation	1,2,3,4,5,6,7
Comprehensive caries treatment	Odont 761	Patient based including comp evaluation of all restorations, application of CAMBRA and disease control CP, PS,CR,CS, P, EDM	Daily participation in clinic and case completion	1,2,3,4,5,6,7
Demonstration of phase 1 therapy	Odont 762	Patient based CP, PS,CR,CS, P, EDM	Phase 1 therapy completed in at least 3 cases	1,2,3,4,5,6,7
Leading the dental team	Odont 861	Team based CP, PS,CR,CS, P, EDM	Odont 861 for at least 8 weeks	1,2,3,4,5,6,7
Completion of phase 1 and 2 therapy	Odont 861 Or Odont 862	Patient Based CP, PS,CR,CS, P, EDM	Odont 862 for at least 8 weeks	1,2,3,4,5,6,7
Operative dentistry: class 2	Odont 861 Or	Patient Based	When ready per group	1,2,3,4,5,6,7

Appendix 2-24 Mapping of all Competency Assessments

	Odont 862	CP, PS,CR,CS, P, EDM	leader assessment	
Operative dentistry: crown	Odont 861 or Odont 862	Patient Based CP, PS,CR,CS, P, EDM	When ready per group leader assessment	1,2,3,4,5,6,7
Endodontic therapy	Odont 861 or Odont 862	Patient Based CP, PS,CR,CS, P, EDM	When ready per group leader assessment	1,2,3,4,5,6,7
Scaling and root planing	Odont 861 or Odont 862	Patient Based CP, PS,CR,CS, P, EDM	When ready per group leader assessment	1,2,3,4,5,6,7
Full denture	Odont 861 or Odont 862	Patient Based CP, PS,CR,CS, P, EDM	When ready per group leader assessment	1,2,3,4,5,6,7
Partial Denture	Odont 861 or Odont 862	Patient Based CP, PS,CR,CS, P, EDM	When ready per group leader assessment	1,2,3,4,5,6,7
Fixed partial denture (either implant or tooth supported)	Odont 861 or Odont 862	Patient Based CP, PS,CR,CS, P, EDM	When ready per group leader assessment	1,2,3,4,5,6,7
Dental implant restoration	Odont 861 or Odont 862	Patient Based CP, PS,CR,CS, P, EDM	When ready per group leader assessment	1,2,3,4,5,6,7
Dental emergencies	Odont 861 or Odont 862	Patient Based CP, PS,CR,CS, P, EDM	When ready per group leader assessment	1,2,3,4,5,6,7

**Oral and Maxillofacial Studies Summative and Formative Competency Assessment
(OMFSFSCA)**

OMFSFSCA	Course number	Assessment method	Prerequisites	Comments
Patient doctor communication	OMFS 511	OSCE CP, PS,CR,CS, P, EDM	Small group OMFS 511	1,2,3,4,5,6,7 FORMATIVE

Appendix 2-24 Mapping of all Competency Assessments

Anatomy case presentation with clinical correlation	OMFS 532	Laboratory presentation PS, CR, CS	Anatomy lab	2,3,4,5 FORMATIVE
Local anesthesia technique	OMFS 631	Clinical demonstration on subject X 4	OMFS 631 lab	1,2,3,4,5,6,7 FORMATIVE
Nitrous oxide administration	OMFS 632	Patient based CP, PS,CR,CS, P, EDM	OMFS 632 lab	1,2,3,4,5,6,7
Radiologic examination, exposure and interpretation	OMFS 651	Patient based periapical CP, PS,CR,CS, P, EDM	OMFS 651 lab and lecture	1,2,3,4,5,6,7
Radiographic examination exposure and interpretation	OMFS 751	Patient based Panoramic and Cone Beam CT CP, PS,CR,CS, P, EDM	OMFS 751 lab and lecture	1,2,3,4,5,6,7
Oral medicine/oral pathology case presentation	OMFS 862	Patient based CP, PS,CR,CS, P, EDM	OMFS 662,762 and in OMFS 862 seminar	1,2,3,4,5,6,7 Case selected preferably from student patient of record
Exodontia	OMFS 771	Laboratory CP, PS,CR	OMFS 771 lecture and lab	1,2,3,4,5,6,7 FORMATIVE
Pediatric operative dentistry	OMFS 791	Laboratory CP, PS,CR	OMFS 791 lecture and lab	,2,3,4,5, FORMATIVE
Space maintenance	OMFS 581	Laboratory CP, PS,CR	OMFS 581 AND OMFS 791 concurrent	2,3,4,5 FORMATIVE
Exodontia simple extraction	OMFS 761	Patient based CP, PS,CR,CS, P, EDM	In OMS clerkship or Comp care clinic	1,2,3,4,5,6,7
Exodontia surgical extraction	OMFS 761	Patient based CP, PS,CR,CS, P, EDM	In OMS clerkship or Comp care clinic	1,2,3,4,5,6,7

Appendix 2-24 Mapping of all Competency Assessments

Preprosthetic surgery	OMFS 761	Patient based CP, PS,CR,CS, P, EDM	In OMS clerkship or Comp care clinic	1,2,3,4,5,6,7
Implant placement	OMFS 761 or Odont 862	Patient based CP, PS,CR,CS, P, EDM	In OMS clerkship or Comp care clinic	1,2,3,4,5,6,7
Medical assessment for surgery	OMFS 761	Patient based CP, PS,CR,CS, P, EDM	In OMS clerkship or Comp care clinic	1,2,3,4,5,6,7
Pain and anxiety control	OMFS 761	Patient based CP, PS,CR,CS, P, EDM	In OMS clerkship or Comp care clinic	1,2,3,4,5,6,7
Head and neck exam, screening and risk assessment for head and neck cancer	OMFS 772	Patient based CP, PS, CR, CS, P, EDM	In OMS clerkship or comp care clinic	
Dental care of the child preschool	OMFS 762	Patient based CP, PS,CR,CS, P, EDM	In peds clerkship or in comp care clinic	1,2,3,4,5,6,7
Dental care of the child K-12	OMFS 762	Patient based CP, PS,CR,CS, P, EDM	In peds clerkship or in comp care clinic	1,2,3,4,5,6,7
Orthodontic Growth and development assessment	OMFS 861	Patient Based CP, PS,CR,CS, P, EDM	In orthodontic clerkship or comp care clinic	1,2,3,4,5,6,7

**Behavioral and Social Sciences Summative and Formative Competency Assessments
(BSSSFCA)**

BSSSFCA	Course number	Assessment method	Prerequisites	Comments
Student wellbeing	BSS 501	Case-based PS,CR,CS, P, EDM	none	2,3,4,5,6,7 FORMATIVE

Appendix 2-24 Mapping of all Competency Assessments

Ethics in dental practice	BSS 521	OSCE PS,CR,CS, P, EDM	BSS 521 small group	1,2,3,4,5,6,7 FORMATIVE
Psychiatric illnesses	BSS 661	Patient based CS, PS,CR,CS, P, EDM	INBSS 661	1,2,3,4,5,6,7 Patients of record from D3, D4 teams
Practice management	BSS 821	Practice simulation PS,CR,CS, P, EDM	BSS 721 and enrolled in BSS 821	2,3,4,5,6,7
Community assessment	BSS 862	Reflective essay PS,CR,CS, P, EDM	Enrolled in BSS 862 and in senior seminar in public health	2,3,4,6,7



California Northstate College of Dental Medicine

Foundations of Dental Medicine Course Syllabus

Course #	Course Title	Credits	Year	Term
OMFS 511	Foundations of Dental Medicine <i>LAL</i>	3	DS 1	Fall

Credit Hour Policy

For each 15-week semester, one (1) hour of credit is assigned per hour each week of classroom or direct faculty didactic instruction (that is, per hour of lecture or student in-class time) and a minimum of two (2) hours of out-of-class student work (homework). For practicum and internship time, one (1) hour of credit is assigned per three (3) hours each week of student time spent in this activity.

Maximum Enrollment: 80

Calendar of Important Dates:

This course begins in the summer term and is the major educational component of the first year Summer term.

Date	
August 6, 2020	First day of term for all DMD 1 students
October 10, 2020	Group project selection: one for each college of 20 students
December 1, 2020	Group project groups 1 and 2
December 8, 2020	Group project groups 3 and 4
December 15, 2020	Final Exam

Course Coordinator, Instructors and Contact Information

Michael Cadra DDS MD (course co-director)

Room:

E mail

Office hours

Leon Assael DMD (Course co-director)

Room:

E-mail: leon.assael@cnsu.edu

Office hours: Wednesdays 12:00pm-1:00pm, and 3:00pm-4:00pm (or by appointment)

Holly Jacobson BA (course administrator)

Room: xxx

E mail: holly.jacobson@cnsu.edu

Classroom LAL and Meeting Times

Room: Classroom xxxx

Time: xxxx 3 hours per week

Course description

This course will focus on introduction to the patient/doctor relationship, the role of dental medicine in health care, the scientific basis of the molecular basis, pathophysiology, diagnostic methods, and treatment modalities of major oral diseases. These are reviewed to provide the basis for case based learning in Human Studies. Examples will include congenital diseases such as cleft lip and palate, degenerative diseases such as rheumatoid arthritis, neoplastic disease such as oral squamous cancer, traumatic diseases such as facial fracture, and infectious disease such as HPV.

This course includes a review of biochemistry relevant to the medical school first and second year HS courses to match the coursework provided to the MD students in foundations of medicine. It will review the critical thinking, evidence based medicine, research modalities and analysis of scientific literature to apply in clinical education and practice

Prerequisite Courses

None

Prerequisite Knowledge

None

Required Textbook(s) and Material(s)

1. *Medical Biochemistry*, Baynes and Dominiczak, 4th Ed, Elsevier 2014
2. *The CONSORT Statement*, www.consort-statement.org
3. *The PRISMA Statement*, www.prisma-statement.org
4. *The STROBE statement*, www.strobe-statement.org

Technology

1. Computer-assisted instruction (Clickers) and SCANTRON Sheets
2. Web-based course management (Canvas) and Examsoft
3. Audio/Video recordings where applicable
4. PowerPoint
5. Epic electronic health record
6. PACS, DICOM compatible imaging software
7. Dental operatory

Evaluation Components

In keeping with the Team Based Learning (TBL) approach, grades will be determined as follows:

Individual Components	50%
Final Exam	50%

Group Components	50%
CCBL Participation and Project	20%
Biochemistry Boot Camp	10%
Dental Medical Skills	10%
Final Exam	50%

GRADING

All students must demonstrate minimal individual competency. Therefore, students earning less than 75% on the total Individual component score will not have team component scores added to calculate their final course grade. During the course, students who score less than 75% on individual components may be subject to periodic course content review and may receive an Academic Alert.

In order to progress from one semester to the next, students must pass all courses with a letter a grade of C or higher and maintain a minimum cumulative grade point average (GPA) of 2.0. The breakdown for assignment of letter grades and grade points for each letter grade are as follows:

Percent	Letter Grade/Action
90.0 – 100%	A
80.0 – 89.9%	B
75.0 – 79.9%	C - Pass
60.0 – 74.9%	D – Requiring remediation (successful remediation recorded as C, unsuccessful remediation recorded as F)
Below 60.0%	F – Fail (course must be repeated)
Incomplete	I

Incomplete

During a semester, a student may not complete all required assignments and/or examinations due to extenuating circumstances, such as, but not limited to, an illness or a family emergency. In such a case, the course director may give a grade of Incomplete for the course. The course with the incomplete grade has to be completed successfully within the time frame as being defined by the student's academic plan, normally in the same academic year, otherwise a leave of absence would be required.

Core-Course Policies

All students are required to adhere to the Academic Policies that impact on student progression and conduct while attending the DMD program, including the following: Academic Progression Policy, Excused Absence Policy, Exam Policy, Course Grade Appeal Policy, Course Add/Drop Policy and Attendance Policy. Refer to the current Student Handbook for the detailed policies.

Course Specific Policies

1. Group Projects cases are to be submitted via CANVAS by 11:59pm PST on the deadline indicated. Only one group member should submit the assignment on behalf of the group. The course coordinator reserves the right to deduct points for late submission (20% of assignment grade for every 24 hours the assignment is turned in late).
Presentation of group cases requires the active participation of each team member, preferably presenting the component of the case the student was responsible for developing. The teams will each have 30 minutes for presentation which is ample time for participation of each member
2. Grade appeal for any individual assignments (including exams) should be submitted to the course coordinator in writing within 5 business days of grade release.
3. There will be no rounding of the final grade for this course.

Topics and Schedule

(Subject to change. Updates will be posted to CANVAS and announced by email)

All readings are in Vital Source, or as assigned and posted to CANVAS

Foundations of Dental Medicine DS1 - CDM 511 – Summer Fall 2020-21				
8/6/2018 - 9/21/2018				
Weeks	Date	Time	Title	Faculty
Week 1				
	Monday, 8/6/18	8:00 - 9:00 am	Introduction to Foundations	Assael
	Monday, 8/6/18	9:00 - 10:00 am	Body & Fluid Compartments	Yarbrough
	Monday, 8/6/18	10:00 - 12:00 pm	MANDATORY: CCBL Group 1	Cadra
	Monday, 8/6/18	12:00 - 1:00 pm	LUNCH	
	Monday, 8/6/18	1:00 - 3:00 pm	MANDATORY: CCBL Group 2	CADRA
	Monday, 8/6/18	3:00 - 5:00 pm	SELF STUDY	
	Tuesday, 8/7/18	8:00 - 10:00 am	Microbiota & Infectious; Agents: Biology & Ways of Life	El-Sawi
	Tuesday, 8/7/18	10:00 - 12:00 pm	Enzyme Function & Kinetics	Krig
	Tuesday, 8/7/18	12:00 - 1:00 pm	LUNCH	
	Tuesday, 8/7/18	1:00 - 2:00 pm	Introduction to Histology	Ramsamooj
	Tuesday, 8/7/18	2:00 - 4:00 pm	BIOCHEM BOOTCAMP	
	Tuesday, 8/7/18	4:00 - 5:00 pm	SELF STUDY	
	Wednesday, 8/8/18	8:00 - 10:00 am	Masters Colloquium	
	Wednesday, 8/8/18	10:00 - 12:00 pm	MANDATORY: CCBL Group 1	Ely
	Wednesday, 8/8/18	12:00 - 1:00 pm	LUNCH	
	Wednesday, 8/8/18	1:00 - 3:00 pm	MANDATORY: CCBL Group 2	Ely
	Wednesday, 8/8/18	3:00 - 5:00 pm	SELF STUDY	

	Thursday, 8/9/18	8:00 - 10:00 am	Cell Growth & Communication	Krig
	Thursday, 8/9/18	10:00 - 12:00 pm	Dental/Medical Skills Group A / Self Study	
	Thursday, 8/9/18	12:00 - 1:00 pm	LUNCH	
	Thursday, 8/9/18	1:00 - 3:00 pm	Dental/Medical Skills Group B / Self Study	
	Thursday, 8/9/18	3:00 - 5:00 pm	Dental/Medical Skills Group C / Self Study	
	Friday, 8/10/18	8:00 - 10:00 am	Introduction to Pharmacokinetics	Gerriets
	Friday, 8/10/18	10:00 - 12:00 pm	MANDATORY: CCBL Group 1	Ely
	Friday, 8/10/18	12:00 - 1:00 pm	LUNCH	
	Friday, 8/10/18	1:00 - 3:00 pm	MANDATORY: CCBL Group 2	Ely
	Friday, 8/10/18	3:00 - 4:00 pm	SELF STUDY	
	Friday, 8/10/18	4:00 - 5:00 pm	Release of CCBL Genetics Learning Objectives & Bradbury slides set(s)	
Week 2				
	Monday, 8/13/18	8:00 - 10:00 am	Introduction to Pharmacodynamics	Gerriets
	Monday, 8/13/18	10:00 - 12:00 pm	MANDATORY: CCBL Group 3	Ely
	Monday, 8/13/18	12:00 - 1:00 pm	LUNCH	
	Monday, 8/13/18	1:00 - 3:00 pm	MANDATORY: CCBL Group 4	Ely
	Monday, 8/13/18	3:00 - 5:00 pm	SELF STUDY	
	Tuesday, 8/14/18	8:00 - 10:00 am	MANDATORY FORMATIVE EXAM	Ely
	Tuesday, 8/14/18	10:00 - 11:00 am	Drug-Patient Factors	Gerriets
	Tuesday, 8/14/18	11:00 - 12:00 pm	Human Immune Response Overview	Ely
	Tuesday, 8/14/18	12:00 - 1:00 pm	LUNCH	
	Tuesday, 8/14/18	1:00 - 2:00 pm	Cellular Adaptation & Inflammation	Ramsamooj
	Tuesday, 8/14/18	2:00 - 4:00 pm	BIOCHEM BOOTCAMP	
	Tuesday, 8/14/18	4:00 - 5:00 pm	SELF STUDY	
	Wednesday, 8/15/18	8:00 - 10:00 am	Masters Colloquium	
	Wednesday, 8/15/18	10:00 - 12:00 pm	MANDATORY: CCBL Group 3	Ely
	Wednesday, 8/15/18	12:00 - 1:00 pm	LUNCH	
	Wednesday, 8/15/18	1:00 - 3:00 pm	MANDATORY: CCBL Group 4	Ely
	Wednesday, 8/15/18	3:00 - 5:00 pm	SELF STUDY	

	Thursday, 8/16/18	8:00 - 9:00 am	Pharmacogenomics	Gerriets
	Thursday, 8/16/18	9:00 - 10:00 am	Innate Immune Response	Ely
	Thursday, 8/16/18	10:00 - 12:00 pm	Dental/Medical Skills - Group C / <u>MANDATORY</u>: Biostatistics LAB Group A	MS / Puglisi & Jialal - IDL Lab
	Thursday, 8/16/18	12:00 - 1:00 pm	LUNCH	
	Thursday, 8/16/18	1:00 - 3:00 pm	Dental/Medical Skills - Group A / <u>MANDATORY</u>: Biostatistics LAB Group B	MS / Puglisi & Jialal - IDL Lab
	Thursday, 8/16/18	3:00 - 5:00 pm	Dental/Medical Skills - Group B / <u>MANDATORY</u>: Biostatistics LAB Group C	MS / Puglisi & Jialal - IDL Lab
	Friday, 8/17/18	8:00 - 10:00 am	<u>MANDATORY</u>: Complement Workshop	Ely
	Friday, 8/17/18	10:00 - 12:00 pm	<u>MANDATORY</u>: CCBL Group 3	Ely
	Friday, 8/17/18	12:00 - 1:00 pm	LUNCH	
	Friday, 8/17/18	1:00 - 3:00 pm	<u>MANDATORY</u>: CCBL Group 4	Ely
	Friday, 8/17/18	3:00 - 4:00 pm	SELF STUDY	
	Friday, 8/17/18	4:00 - 5:00 pm	Release of CCBL Genetics Learning Objectives & Bradbury slides set(s)	

Week 3				
	Monday, 8/20/18	8:00 - 10:00 am	Carbohydrate Metabolism	Gerriets
	Monday, 8/20/18	10:00 - 12:00 pm	<u>MANDATORY</u>: CCBL Group 5	
	Monday, 8/20/18	12:00 - 1:00 pm	LUNCH	
	Monday, 8/20/18	1:00 - 3:00 pm	<u>MANDATORY</u>: CCBL Group 6	
	Monday, 8/20/18	3:00 - 5:00 pm	SELF STUDY	
	Tuesday, 8/21/18	8:00 - 10:00 am	<u>MANDATORY</u>: Mid Exam Part A	
	Tuesday, 8/21/18	10:00 - 12:00 pm	<u>MANDATORY</u>: Team Test Groups 6-10	
	Tuesday, 8/21/18	12:00 - 1:00 pm	LUNCH	
	Tuesday, 8/21/18	1:00 - 3:00 pm	BIOCHEM BOOTCAMP	
	Tuesday, 8/21/18	3:00 - 5:00 pm	SELF STUDY	
	Wednesday, 8/22/18	8:00 - 9:00 am	TCA Cycle & Oxidative Phosphorylation	Gerriets
	Wednesday, 8/22/18	9:00 - 10:00 am	Protein Targeting & Trafficking	Krig
	Wednesday, 8/22/18	10:00 - 12:00 pm	<u>MANDATORY</u>: CCBL Group 5	Ely
	Wednesday, 8/22/18	12:00 - 1:00 pm	LUNCH	

	Wednesday, 8/22/18	1:00 - 3:00 pm	MANDATORY: CCBL Group 6	Ely
	Wednesday, 8/22/18	3:00 - 5:00 pm	SELF STUDY	
	Thursday, 8/23/18	8:00 - 9:00 am	Lipid Metabolism Overview	Krig
	Thursday, 8/23/18	9:00 - 10:00 am	Antigen Presentation	Ely
	Thursday, 8/23/18	10:00 - 12:00 pm	Dental/Medical Skills - Group B / Self Study	
	Thursday, 8/23/18	12:00 - 1:00 pm	LUNCH	
	Thursday, 8/23/18	1:00 - 3:00 pm	Medical Skills - Group C / Self Study	
	Thursday, 8/23/18	3:00 - 5:00 pm	Medical Skills - Group A / Self Study	
	Friday, 8/24/18	8:00 - 9:00 am	Cholesterol Metabolism & Transport	Krig
	Friday, 8/24/18	9:00 - 10:00 am	Antigen Receptors & V(D)J Recombination	Ely
	Friday, 8/24/18	10:00 - 12:00 pm	MANDATORY: CCBL Group 5	Ely
	Friday, 8/24/18	12:00 - 1:00 pm	LUNCH	
	Friday, 8/24/18	1:00 - 3:00 pm	MANDATORY: CCBL Group 6	Ely
	Friday, 8/24/18	3:00 - 4:00 pm	SELF STUDY	
	Friday, 8/24/18	4:00 - 5:00 pm	Release of CCBL Genetics Learning Objectives & Bradbury slides set(s)	
Week 4				
	Monday, 8/27/18	8:00 - 9:00 am	Introduction to Embryology & Gametogenesis	Vanguri
	Monday, 8/27/18	9:00 - 10:00 am	Introduction to Bacteriology, Part 1	El-Sawi
	Monday, 8/27/18	10:00 - 12:00 pm	MANDATORY: CCBL Group 7	Ely
	Monday, 8/27/18	12:00 - 1:00 pm	LUNCH	
	Monday, 8/27/18	1:00 - 3:00 pm	MANDATORY: CCBL Group 8	Ely
	Monday, 8/27/18	3:00 - 5:00 pm	SELF STUDY	
	Tuesday, 8/28/18	8:00 - 9:00 am	Embryology: Fertilization, Cleavage, Early Implantation	Vanguri
	Tuesday, 8/28/18	9:00 - 10:00 am	Introduction to Bacteriology, Part 2	El-sawi
	Tuesday, 8/28/18	10:00 - 12:00 pm	T-Cell Development & Function	Ely
	Tuesday, 8/28/18	12:00 - 1:00 pm	LUNCH	
	Tuesday, 8/28/18	1:00 - 2:00 pm	Reversible/Irreversible Cell Injury, Apoptosis & Necrosis	Al-eyd

	Tuesday, 8/28/18	2:00 - 4:00 pm	BIOCHEM BOOTCAMP	
	Tuesday, 8/28/18	4:00 - 5:00 pm	SELF STUDY	
	Wednesday, 8/29/18	8:00 - 10:00 am	Masters Colloquium	
	Wednesday, 8/29/18	10:00 - 12:00 pm	MANDATORY: CCBL Group 7	Ely
	Wednesday, 8/29/18	12:00 - 1:00 pm	LUNCH	
	Wednesday, 8/29/18	1:00 - 3:00 pm	MANDATORY: CCBL Group 8	Ely
	Wednesday, 8/29/18	3:00 - 5:00 pm	SELF STUDY	
	Thursday, 8/30/18	8:00 - 10:00 am	B-cells: Development & Function	Ely
	Thursday, 8/30/18	10:00 - 12:00 pm	Medical Skills - Group A / Self Study	
	Thursday, 8/30/18	12:00 - 1:00 pm	LUNCH	
	Thursday, 8/30/18	1:00 - 3:00 pm	Medical Skills - Group B / Self Study	
	Thursday, 8/30/18	3:00 - 5:00 pm	Medical Skills - Group C / Self Study	
	Friday, 8/31/18	8:00 - 9:00 am	Introduction to Antibiotics	Gerriets
	Friday, 8/31/18	9:00 - 10:00 am	Embryology: Germ Layer Formation	Vanguri
	Friday, 8/31/18	10:00 - 12:00 pm	MANDATORY: CCBL Group 7	Ely
	Friday, 8/31/18	12:00 - 1:00 pm	LUNCH	
	Friday, 8/31/18	1:00 - 3:00 pm	MANDATORY: CCBL Group 8	Ely
	Friday, 8/31/18	3:00 - 4:00 pm	SELF STUDY	
	Friday, 8/31/18	4:00 - 5:00 pm	Release of CCBL Genetics Learning Objectives & Bradbury slides set(s)	

Week 5				
	Monday, 9/3/17	HOLIDAY - Labor Day		
	Tuesday, 9/4/18	8:00 - 10:00 am	MANDATORY: Mid Exam Part B	
	Tuesday, 9/4/18	10:00 - 12:00 pm	MANDATORY: Team Test Groups 1-5	
	Tuesday, 9/4/18	12:00 - 1:00 pm	LUNCH	
	Tuesday, 9/4/18	1:00 - 3:00 pm	BIOCHEM BOOTCAMP	
	Tuesday, 9/4/18	3:00 - 5:00 pm	SELF STUDY	

	Wednesday, 9/5/18	8:00 - 9:00 am	Clinical Presentation: Well Visits	Glaser
	Wednesday, 9/5/18	9:00 - 12:00 pm	MANDATORY WORKSHOP: Introduction to the Autonomic Nervous System & Autonomic Pharmacology	Yarbrough & Gerriets
	Wednesday, 9/5/18	12:00 - 1:00 pm	LUNCH	
	Wednesday, 9/5/18	1:00 - 2:00 pm	Neoplasia	Hejazi
	Wednesday, 9/5/18	2:00 - 5:00 pm	SELF STUDY	
	Thursday, 9/6/18	8:00 - 9:00 am	Introduction to Vaccines	Ely
	Thursday, 9/6/18	9:00 - 10:00 am	Physiological Control of Temperature	Yarbrough
	Thursday, 9/6/18	10:00 - 12:00 pm	Dental/Medical Skills - Group C / MANDATORY: Biostatistics LAB Group B	Puglisi & Jialal / IDL Lab
	Thursday, 9/6/18	12:00 - 1:00 pm	LUNCH	
	Thursday, 9/6/18	1:00 - 3:00 pm	Dental/Medical Skills - Group A / MANDATORY: Biostatistics LAB Group C	Puglisi & Jialal / IDL Lab
	Thursday, 9/6/18	3:00 - 5:00 pm	Dental/Medical Skills - Group B / MANDATORY: Biostatistics LAB Group A	Puglisi & Jialal / IDL Lab
	Friday, 9/7/18	8:00 - 10:00 am	Introduction to Virology	El-Sawi
	Friday, 9/7/18	10:00 - 12:00 pm	MANDATORY: Clinical Cases	Glaser
	Friday, 9/7/18	12:00 - 1:00 pm	LUNCH	
	Friday, 9/7/18	1:00 - 5:00 pm	SELF STUDY	
Week 6				
	Monday, 9/10/18	8:00 - 10:00 am	Introduction to Mycology & Parasitology	El-Sawi
	Monday, 9/10/18	10:00 - 12:00 pm	MANDATORY: CCBL Group 9	Ely
	Monday, 9/10/18	12:00 - 1:00 pm	LUNCH	
	Monday, 9/10/18	1:00 - 3:00 pm	MANDATORY: CCBL Group 10	Ely
	Monday, 9/10/18	3:00 - 5:00 pm	SELF STUDY	
	Tuesday, 9/11/18	8:00 - 10:00 am	Pharmacokinetics & Pharmacodynamics - Wrap-up & Review	Gerriets
	Tuesday, 9/11/18	10:00 - 11:00 am	Clinical Presentation: Allergy - Hypersensitivity Reactions & Allergy	Ely
	Tuesday, 9/11/18	11:00 - 12:00 pm	Pharmacological Management of Allergic Reactions	Gerriets
	Tuesday, 9/11/18	12:00 - 1:00 pm	LUNCH	
	Tuesday, 9/11/18	1:00 - 3:00 pm	BIOCHEM BOOTCAMP	
	Tuesday, 9/11/18	3:00 - 5:00 pm	SELF STUDY	

	Wednesday, 9/12/18	8:00 - 10:00 am	MANDATORY: Masters Colloquium	
	Wednesday, 9/12/18	10:00 - 12:00 pm	MANDATORY: CCBL Group 9	Ely
	Wednesday, 9/12/18	12:00 - 1:00 pm	LUNCH	
	Wednesday, 9/12/18	1:00 - 3:00 pm	MANDATORY: CCBL Group 10	Ely
	Wednesday, 9/12/18	3:00 - 5:00 pm	SELF STUDY	
	Thursday, 9/13/18	8:00 - 10:00 am	MANDATORY - CCBL WORKSHOP: GROUPS 1-10 Presentations	
	Thursday, 9/13/18	10:00 - 12:00 pm	Dental/Medical Skills - Group B / Self Study	
	Thursday, 9/13/18	12:00 - 1:00 pm	LUNCH	
	Thursday, 9/13/18	1:00 - 3:00 pm	Dental/Medical Skills - Group C / Ask The Expert! Pathology Slam	
	Thursday, 9/13/18	3:00 - 5:00 pm	Dental/Medical Skills - Group A / Ask The Expert! Pathology Slam	
	Friday, 9/14/18	8:00 - 9:30 am	FACULTY-LED COURSE CONTENT REVIEW (excludes Pharm) GUIDANCE ON TEST COMPOSITION	
	Friday, 9/14/18	9:30 - 10:00 am	MANDATORY: COURSE EVALUATION	
	Friday, 9/14/18	10:00 - 12:00 pm	MANDATORY: CCBL Group 9	Ely
	Friday, 9/14/18	12:00 - 1:00 pm	LUNCH	
	Friday, 9/14/18	1:00 - 3:00 pm	MANDATORY: CCBL Group 10	Ely
	Friday, 9/14/18	3:00 - 4:00 pm	SELF STUDY	
	Friday, 9/14/18	4:00 - 5:00 pm	Release of CCBL Genetics Learning Objectives & Bradbury slides set(s)	
Week 7	Monday, 9/17/18	8:00 - 12:00 pm	Comprehensive Summative Exam	
EXAM				
	Tuesday, 9/18/18	1:00 - 5:00 pm	N/A	
	Wednesday, 9/19/18	8:00 - 5:00 pm	N/A	
	Thursday, 9/20/18	8:00 - 5:00 pm	Dental/ MEDICAL SKILLS SUMMATIVE EXAM	
	Friday, 9/21/18	8:00 - 12:00 pm	Biochem review exam	

Biochemistry Bootcamp Sessions

1. Amino Acids/proteins/carbohydrates/lipids
2. Blood plasma/oxygen transport/hemostasis
3. Energy/ membranes/oxidative metabolism
4. DNA/RNA/protein synthesis
5. Absorption/transport and utilization of nutrients
6. Gene expression/proteomics

Clinical Case Based Learning: CCBL sessions (divided into 3 sessions each for 3 groups)

Development of understanding of etiopathogenesis, treatment and outcomes in case-based format in small group learning with clinician educator

- Session 1: Embryology of cleft lip and palate and other craniofacial disorders
- Session 2: Bacterial and Viral diseases of the oral cavity
- Session 3: Tumors of the head and neck

Dental/Medical Skills Lab

1. Vital signs, head and neck exam
2. Specimen collection and parenteral administration: saliva, venipuncture, IM, SC and SM injections
3. Oroscopic mucosal, endoscopic, laryngoscopy, otoscopy, ophthalmoscopy,
4. Clinical photography and digital surface scanning
5. Auscultation of the carotid, trachea heart and lungs
6. Ultrasound of the oral and maxillofacial region

Course Learning Outcomes

1. Review fundamentals of biochemistry
2. Introduce basic science underpinnings of clinical practice in preparation for systems based basic medical science HS curriculum
3. Develop initial clinical skills in oral and maxillofacial studies
4. Apply basic science knowledge in CCBL sessions to clinical cases

Course Learning Outcomes and links to Program Learning Outcomes (Appendix A) and Institutional Learning Outcomes (Appendix B)

No.	Course Learning Outcome	DMD PLO	DMD ILO	Learning Hierarchy ^b	Assessment Method
1	Review fundamentals of biochemistry	2,3,4,7,8	1,3,4,6	1,2, 3	Biochem Exam
2	Introduce basic science underpinnings of clinical practice in preparation for systems based basic medical science HS curriculum	1,2,3,5,6,7,8	1,4,	1,2, 3	Final exam
3	Develop initial clinical skills in oral and maxillofacial studies	1,2,3,5,6,7,	1,4	1,2	Skills formative assessment in lab
4	Apply basic science knowledge in CCBL sessions to clinical cases	1,2,3,5,6,7,	1,4	2,3	Group and peer assessment

^a plo's appendix A

^b Learning Hierarchy based on Bloom's Taxonomy with 1=Memorization and/or Comprehension; 2=Application and/or Analysis; 3=Synthesis and/or Evaluation.

Teaching/ Learning Methodology

1. LAL: Lecture and active learning **CLO Rubrics**

CLO 1: Review fundamentals of biochemistry

Indicators	Initial	Developing	Developed	Proficient
Demonstrates an understanding of the elements of biochemistry to apply in HS courses	Does not understand the elements of biochemistry to apply in HS courses.	Demonstrates rudimentary understanding of these elements	Has detailed understanding the component of biochemistry applied to human systems	Consistently demonstrates the ability to apply knowledge and skill as a dental student and can assist other students in these domains

CLO 2: Introduce basic science underpinnings of clinical practice in preparation for systems-based basic medical science HS curriculum

Indicators	Initial	Developing	Developed	Proficient
Develop an understanding of the underpinnings of basic science applied to clinical practice	Has no or limited knowledge of the basic science underpinnings of clinical practice	Begins to exhibit knowledge of these underpinnings	Is capable of applying basic science to clinical examples effectively	Consistently applies biomedical science to clinical situations utilizing innovation and analysis

CLO 3: Develop initial clinical skills in oral and maxillofacial studies

Indicators	Initial	Developing	Developed	Proficient
Develop initial clinical skills in oral and maxillofacial studies	Has no or limited knowledge or experience with these skills	Begins to exhibit capability of applying clinical skills in practice	Is capable of applying fundamental skills in oral and maxillofacial studies to clinical diagnostic procedures	Is utilizing these skills in a integrated fashion to begin to address clinical problems

CLO 4: Apply basic science knowledge in CCBL sessions to clinical cases

Indicators	Initial	Developing	Developed	Proficient
Apply basic science knowledge to clinical cases in the CCBL format	Has no or limited ability	Begins to exhibit ability to apply basic science knowledge to a clinical question	Is capable of applying basic science to clinical examples effectively	Consistently applies biomedical science to clinical situations utilizing innovation and analysis

Appendix A

Program Learning Outcomes (PLOs) CNU College of Dental Medicine

1. Patient-Centered Care: Demonstrate understanding of healthcare disparities and cultural awareness in patient counseling and patient advocacy
2. Evidence-Based Care: Apply current, evidence-based oral healthcare within the scope of general dentistry
3. Culturally competent, empathic communication: Demonstrate patient centered, empathic, and culturally competent communication and interpersonal skills
4. Oral and Written Communication: Demonstrate sound oral and written communications in patient care
5. Critical Thinking: Utilize critical thinking, problem solving skills and systemic thinking in assessing and making reasoned, evidence-based decisions in patient care
6. Ethics and Professionalism: Demonstrate professionalism and ethical decision making
7. Biomedical Sciences Knowledge: Demonstrate an understanding of the fundamentals of biomedical sciences and apply them appropriately in oral healthcare
8. Practice Management: Apply legal, regulatory and business management concepts related to provision of oral healthcare services

DMD Program Learning Outcomes (PLOs) Proficiency Rubric

PLO 1: Patient-Centered Care

Demonstrate understanding of healthcare disparities and cultural awareness and capability in patient counseling and providing appropriate patient advocacy

Indicators	Initial	Developing	Developed	Proficient
1.1. Education. Demonstrates ability to educate all audiences through effectively communicating information and assessing learning	<ul style="list-style-type: none"> Does not appropriately counsel patients Does not check for understanding, ask questions, and/or asks inappropriate questions. Does not demonstrate the ability to find and utilize appropriate resources and 	<ul style="list-style-type: none"> Counsels patients but leaves out pertinent information needed by patient Communicates with basic level of clarity but does not always check for understanding or rephrase when confusion occurs. 	<ul style="list-style-type: none"> Generally demonstrates empathy, communicates accurate information clearly, checks for understanding Seeks to ensure understanding and generally asks questions. 	<ul style="list-style-type: none"> Consistently demonstrates empathy, communicates accurate information clearly, checks for understanding Ensures understanding and asks appropriate questions.

	references necessary for providing accurate counseling, consultation and education	<ul style="list-style-type: none"> • Demonstrates the ability to find a one or two resources, yet the resources are not the best or most appropriate for providing accurate counseling, consultation and education 	<ul style="list-style-type: none"> • Frequently demonstrates the ability to find and utilize appropriate resources and references necessary for providing accurate counseling, consultation and education 	<ul style="list-style-type: none"> • Consistently demonstrates the ability to find and utilize appropriate resources and references for providing accurate patient counseling, consultation and education
1.2. Patient advocacy. Represents the patient's best interests	<ul style="list-style-type: none"> • Does not demonstrate the ability represent a patient's best interest 	<ul style="list-style-type: none"> • Demonstrates awareness of issues that impact a patient • Demonstrates minimal ability to articulate these issues but does not demonstrate ability to sufficiently advocate on a patient's behalf 	<ul style="list-style-type: none"> • Demonstrates sufficient awareness of issues that impact a patient • Demonstrates ability to articulate these issues • Demonstrates ability to sufficiently advocate on a patient's behalf 	<ul style="list-style-type: none"> • Demonstrates full awareness of the most important issues that impact a patient • Demonstrates ability to clearly and effectively articulate these issues • Demonstrates ability to effectively advocate on a patient's behalf

PLO 2: Evidence-Based Care.

Apply sound, current, and evidence-based oral healthcare within the scope of general dentistry

Indicators	Initial	Developing	Developed	Proficient
2.1. Patient-centered care. Demonstrates ability to provide patient-centered care as the medication expert (collect and interpret evidence, prioritize, formulate assessments and recommendations, implement, monitor)	<ul style="list-style-type: none"> • Does not demonstrate ability to provide patient-centered care at the medication expert level; e.g., demonstrates ability to collect but not sufficiently interpret evidence, does not prioritize, formulates basic assessments and 	<ul style="list-style-type: none"> • Demonstrates ability to provide patient-centered care as the medication expert in some, but not all, areas as follows: collect and interpret evidence, prioritize, formulate assessments and recommendations, implement, monitor 	<ul style="list-style-type: none"> • Demonstrates ability to provide patient-centered care as the medication expert (generally demonstrates ability to collect and interpret evidence, prioritize, formulate assessments and recommendations, implement, monitor) 	<ul style="list-style-type: none"> • Demonstrates ability to provide sufficient patient-centered care as the expert (collects and interprets evidence, prioritizes, formulates assessments and recommendations, implements, monitors and adjusts plans, and

and adjust plans, and document activities)	recommendations, does not sufficiently monitor and adjust plans nor document activities.	and adjust plans, and document activities	and adjust plans, and document activities)	documents activities)
2.2. Systems management. Demonstrates ability to manage patient healthcare needs using human, financial, technological, and physical resources to optimize the safety and efficacy of medication use systems	<ul style="list-style-type: none"> • Does not demonstrate understanding of oral healthcare delivery systems parts • Does not demonstrate understanding of the forces that influence components of the oral healthcare delivery system, including their connection to patient care • Does not demonstrate understanding of any challenges to systems that affect oral healthcare delivery Does not demonstrate understanding of how to work with different subsystems to deliver oral healthcare 	<ul style="list-style-type: none"> • Demonstrates understanding of some parts of oral healthcare delivery systems but does not identify how they are related to each other • Demonstrates understanding of some forces that influence the parts of healthcare delivery systems, but demonstrate minimal understanding of their connection to patient care • Demonstrates understanding of some challenges that can affect delivery of oral healthcare • Demonstrates some understanding of how to work with different subsystems and how they function to deliver oral healthcare, but demonstrate minimal awareness or understanding of one's own role within the oral healthcare delivery system 	<ul style="list-style-type: none"> • Demonstrates understanding of most major components of oral healthcare systems and their respective relationships • Demonstrates understanding of the forces that influence the components of healthcare delivery systems, and demonstrate some understanding of their influence on the quality of patient care • Demonstrates understanding of most challenges that can affect delivery of oral healthcare, but does not demonstrate complete comprehension of the effects Demonstrates basic understanding of how to work with different subsystems and how they function to deliver oral healthcare and demonstrate some understanding of one's role within the oral healthcare 	<ul style="list-style-type: none"> • Demonstrates understanding of the major components of oral healthcare systems, their respective relationships, and their functions related to patient care • Demonstrates thorough understanding of the forces that influence components of healthcare delivery systems and demonstrate full understanding of their influence and implications on the quality of patient care • Demonstrates understanding of pertinent challenges to specific aspects of healthcare delivery by demonstrating abilities to thoroughly discuss the implications for the appropriate parts of oral health care delivery systems Demonstrates excellent understanding of how to work with

			delivery system, but does not necessarily demonstrate application of knowledge in a manner that maximizes the quality of oral healthcare	different subsystems involved while also demonstrating understanding of one's role within the subsystems, and demonstrate appropriate application of knowledge in a manner that maximizes the quality of oral healthcare
2.3. Health and wellness. Designs prevention, intervention, and educational strategies for individuals and communities to manage chronic disease and improve oral health and wellness	<ul style="list-style-type: none"> • Does not demonstrate understanding of how the arts can be utilized to optimize patients' well-being 	<ul style="list-style-type: none"> • Demonstrates knowledge of some of the ways that the arts can be utilized to optimize patients' well-being 	<ul style="list-style-type: none"> • Demonstrates sufficient knowledge of multiple ways that the arts can be utilized to optimize patients' well-being 	<ul style="list-style-type: none"> • Demonstrates thorough knowledge of the ways that the arts can be utilized to optimize patients' well-being and creatively applies this knowledge to improve well-being and the practice and delivery of oral healthcare
2.4. Population-based care. Demonstrates understanding of how population-based care influences patient-centered care and the development of practice guidelines and evidence-based best practices	<ul style="list-style-type: none"> • Does not demonstrate awareness of population-based care. 	<ul style="list-style-type: none"> • Demonstrates minimal understanding of population-based care and how it influences patient-centered care • Does not demonstrate awareness of how these notions influence the development of practice guidelines 	<ul style="list-style-type: none"> • Demonstrates sufficient understanding of population-based care and how it influences patient-centered care • Demonstrates sufficient understanding of how population-based care influences the development of practice guidelines 	<ul style="list-style-type: none"> • Demonstrates superb understanding of population-based care and how it influences patient-centered care • Demonstrates superb understanding of how population-based care influences the development of practice guidelines

			and best practices for patient care	and demonstrates knowledge of best practices for patient care
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PLO 3: Culturally Competent, Empathic Communication.

Demonstrate patient centered, empathic and culturally competent communication and interpersonal skills

Indicators	Initial	Developing	Developed	Proficient
3.1. Empathy. Demonstrates the ability to communicate with the patient empathically.	<ul style="list-style-type: none"> Does not demonstrate the ability to communicate with the patient empathically. 	<ul style="list-style-type: none"> Demonstrates some ability, but experiences lapses in the ability to communicate empathically 	<ul style="list-style-type: none"> Demonstrates the ability to communicate empathically, with few lapses. 	<ul style="list-style-type: none"> Demonstrates an advanced ability, and never experiences lapses in communicating empathically.
3.2. Cultural competence. Demonstrates the ability to engage in communication with the patient that is culturally aware and accepting.	<ul style="list-style-type: none"> Does not demonstrate communication and interactions that convey respect or concern for patients and the community. Does not demonstrate an awareness of customs, beliefs, or perspectives in diverse patients Does not demonstrate awareness of cultural and linguistic needs of patients in order to communicate health information 	<ul style="list-style-type: none"> Demonstrates communication and interactions characteristic of a minimal level of respect, and little concern for patients and the community is apparent through use of some appropriate communication, but student does not employ follow-up questions for clarification, when necessary, and student provides inappropriate detail in responses Demonstrates a minimal level of awareness of customs, beliefs, or perspectives in diverse patients Demonstrates minimal awareness of cultural and linguistic needs of patients; either does not or only attempt 	<ul style="list-style-type: none"> Demonstrates appropriate communication and interactions that are characteristic of a basic level of respect, and concern for patients and the community is apparent through use of appropriate communication, where student uses some clear, but not necessarily relevant or detailed, follow-up questions and responses Demonstrates awareness of customs and beliefs, but may not clarify with patients about personal perspectives Demonstrates awareness of the cultural and 	<ul style="list-style-type: none"> Demonstrates professional communication and interactions by showing empathy, respect, and concern for patients and the community through use of appropriate communication where follow-up questions (as needed) and responses are clear, relevant, and detailed Demonstrates awareness of customs, beliefs, or perspectives in diverse patients; ask appropriate questions to clarify perspectives and perceptions in diverse patients Demonstrates full awareness of and responsiveness to cultural and linguistic needs of

		to adapt behaviors, but does so ineffectively, to communicate health information	linguistic needs of diverse patients, and adapt behaviors to communicate health information, but communication may not be effective	diverse patients by adapting behaviors appropriately in order to effectively communicate health information
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PLO 4: Oral and Written Communication.

Demonstrate sound oral and written communications in patient care

Indicators	Initial	Developing	Developed	Proficient
4.1. Oral communication. Demonstrate sound oral communication in patient care.	<ul style="list-style-type: none"> Does not demonstrate logical reasoning in oral communications in patient care. Does not demonstrate the ability to cite sound evidence that support ideas within presentations or discussions. 	<ul style="list-style-type: none"> Demonstrates some logical reasoning in oral communications in patient care but demonstrates some lapses. Demonstrates some ability to cite sound evidence that support ideas within presentations or discussions, but demonstrates some lapses. 	<ul style="list-style-type: none"> Generally demonstrates logical reasoning in oral communications in patient care. Generally demonstrates the ability to cite sound evidence that support ideas within presentations or discussions. 	<ul style="list-style-type: none"> Consistently demonstrates logical reasoning in oral communications in patient care. Consistently demonstrates the ability to cite sound evidence that support ideas within presentations or discussions.
4.2. Written communication. Demonstrate sound written communication in patient care.	<ul style="list-style-type: none"> Does not demonstrate logical reasoning in written communications in patient care. Does not demonstrate the written ability to cite sound evidence that support ideas. 	<ul style="list-style-type: none"> Demonstrates some logical reasoning in written communications in patient care but demonstrates some lapses. Demonstrates some written ability to cite sound evidence that support ideas, but demonstrates some lapses. 	<ul style="list-style-type: none"> Generally logical reasoning in written communications in patient care. Generally demonstrates the written ability to cite sound evidence that support ideas. 	<ul style="list-style-type: none"> Consistently demonstrates logical reasoning in written communications in patient care. Consistently demonstrates the written ability to cite sound evidence that support ideas.

PLO 5: Critical Thinking.

Utilize critical thinking, problem solving skills and systemic thinking in assessing and making reasoned, evidence-based decisions in patient care

Indicators	Initial	Developing	Developed	Proficient
5.1. Problem solving. Identifies problems; explore and prioritize potential strategies; and designs, implements, and evaluates viable solutions	<ul style="list-style-type: none"> Is not able to correctly identify the problem or issue being considered. Does not identify appropriate resources. Includes extraneous information or inappropriate or insufficient resources. Does not demonstrate understanding of the content of materials reviewed. Makes inappropriate inferences. Does not evaluate possible alternatives or generates ideas that are illogical or extraneous to issue at hand. Does not propose a solution or does not articulate decision. Does not adequately provide rationale for selected alternative or decision 	<ul style="list-style-type: none"> Identifies the problem or issue but does not demonstrate awareness of all the factors associated with the problem or issues that impact decision making. Identifies a few, but not all, resources needed for decision making. Demonstrates ability to interpret some information and data but not all. Does not fully or effectively evaluate alternative solutions. Proposes a decision with many apparent weaknesses (i.e., not feasible, lack of regard for consequences, lack of supporting evidence, illogical, irrelevant to issue at hand, etc.). Provides rationale for selected alternative or decision but does not build a solid position with 	<ul style="list-style-type: none"> Correctly identifies problem or issue being considered and demonstrates adequate awareness of the factors associated with this problem or issue that impact decision making. Identifies most of the resources needed. Demonstrates ability to interpret most information and data. Considers and evaluates possible solutions in a way that generally leads to a logical decision or course of action. Proposes a solution that does not contain apparent weaknesses that may or may not be the obvious clear choice. Solutions chosen demonstrate consideration of most of the strengths, weaknesses, feasibility, effects, consequences, relevance, etc.). 	<ul style="list-style-type: none"> Consistently correctly identifies the problem or issue being considered and all of the primary factors associated with this problem or issue that impact decision making. Articulates the importance of these factors. Identifies all appropriate resources. Demonstrates ability to correctly interpret information and data needed for appropriate decision making. Demonstrates awareness of importance of these data in decision-making process. Considers and evaluates possible solutions effectively and thoroughly. Evaluation leads to sound, logical, and “best” decision or course of action. Proposes a solution that is entirely

		supporting evidence. Is unable to defend decision or course of action.	Provides rationale for selected alternative or decision which includes some solid supporting evidence. Is able to defend decision or course of action at a basic level.	appropriate to the situation at hand. Solutions chosen demonstrate consideration of all of the important and relevant strengths, weaknesses, feasibility, effects, consequences, etc.). Provides rationale for selected alternative or decision and builds a solid position with appropriate and relevant supporting evidence. Effectively defends decision or course of action.
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PLO 6: Ethics and Professionalism.

Demonstrating professionalism and ethical decision making

Indicators	Initial	Developing	Developed	Proficient
6.1. Professionalism. Demonstrates behaviors and values that are consistent with the trust given to the profession by patients, other healthcare providers, and society	<ul style="list-style-type: none"> Does not consistently demonstrate professional attitudes and behaviors (altruism, excellence, duty, accountability, honesty, and integrity) Demonstrates frequent lapses in accountability or quality of work 	<ul style="list-style-type: none"> Demonstrates some professional attitudes and behaviors yet there is inconsistency that may impede on the quality of work or treatment of patients and other healthcare team members (altruism, excellence, duty, accountability, honesty, and integrity) 	<ul style="list-style-type: none"> Generally demonstrates most of the professional attitudes and behaviors (altruism, excellence, duty, accountability, honesty, and integrity) that are required in the profession Demonstrates ability to use these behaviors and values to improve healthcare 	<ul style="list-style-type: none"> Consistently demonstrates the professional attitudes and behaviors that uphold the integrity and competence of the work and the treatment of patients and other healthcare team professionals (altruism, excellence, duty, accountability, honesty, and integrity) Consistently uses these behaviors and values to improve healthcare
6.2. Ethics. Demonstrates the ability to make decisions consistent with the values of practitioners and scholars of oral healthcare.	<ul style="list-style-type: none"> Does not make ethical decisions consistent with the values of practitioners and scholars of oral healthcare. 	<ul style="list-style-type: none"> Demonstrates the ability to exercise ethical decision making, and a rudimentary knowledge of ethics within oral healthcare. 	<ul style="list-style-type: none"> Demonstrates the ability to exercise clear and ethical decision making, and a sufficient knowledge of ethics within oral healthcare. 	Demonstrates the ability to exercise clear and ethical decision making, and an advanced knowledge of ethics within oral healthcare.

PLO 7: Biomedical Sciences Knowledge.

Demonstrate an understanding of the fundamentals of biomedical sciences and apply them appropriately in oral healthcare

Indicators	Initial	Developing	Developed	Proficient
7.1. Diagnostic and pharmacologic. Demonstrates the ability to describe how to deliver patient assessments, knowledge of medicines, and delivering diagnoses.	<ul style="list-style-type: none"> Does not demonstrate the ability to describe diagnostic and pharmacologic knowledge related to oral health. 	<ul style="list-style-type: none"> Demonstrates a rudimentary ability to describe diagnostic and pharmacologic knowledge related to oral health. 	<ul style="list-style-type: none"> Demonstrates a sufficient ability to describe diagnostic and pharmacologic knowledge related to oral health. 	<ul style="list-style-type: none"> Demonstrates an advanced ability to describe diagnostic and pharmacologic knowledge related to oral health.
7.2. Orofacial pain/temporomandibular/ Sleep disorder. Demonstrates the ability to describe the anatomical, physiological, and neurological basis; classification, epidemiology, and etiology; and assessments and treatments of orofacial pain, temporomandibular joint disease, and sleep disorders.	<ul style="list-style-type: none"> Does not demonstrate the ability to describe scientific or assessment knowledge related to OFP/TMJ disease and sleep disorders. 	<ul style="list-style-type: none"> Demonstrates a rudimentary ability to describe scientific or assessment knowledge related to OFP/TMJ disease and sleep disorders. 	<ul style="list-style-type: none"> Demonstrates a sufficient ability to describe scientific or assessment knowledge related to OFP/TMJ disease and sleep disorders. 	<ul style="list-style-type: none"> Demonstrates an advanced ability to describe scientific or assessment knowledge related to OFP/TMJ disease and sleep disorders.
7.3. Maxillofacial pathology Demonstrates the ability to describe the scientific aspects of head and neck diseases, as well as knowledge of assessment and diagnosis.	<ul style="list-style-type: none"> Does not demonstrate the ability to describe the scientific or assessment knowledge related to head and neck diseases. 	<ul style="list-style-type: none"> Demonstrates a rudimentary ability to describe the scientific or assessment knowledge related to head and neck diseases. 	<ul style="list-style-type: none"> Demonstrates a sufficient ability to describe the scientific or assessment knowledge related to head and neck diseases. 	<ul style="list-style-type: none"> Demonstrates an advanced ability to describe the scientific or assessment knowledge related to head and neck diseases.

PLO 8: Practice Management.

Apply legal, regulatory, and business management concepts related to the provision of oral healthcare services

Indicators	Initial	Developing	Developed	Proficient
8.1. Legal aspects Applies legal and regulatory concepts related to the provision of oral healthcare services.	<ul style="list-style-type: none"> Does not demonstrate an understanding or the ability to apply legal and regulatory concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates a rudimentary understanding and ability to apply legal and regulatory concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates a sound understanding and ability to apply legal and regulatory concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates an advanced understanding and ability to apply legal and regulatory concepts related to the provision of oral healthcare sciences.
8.2. Business management Applies business management concepts to the provision of oral healthcare services.	<ul style="list-style-type: none"> Does not demonstrate an understanding or the ability to apply business management concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates a rudimentary understanding and ability to apply business management concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates a sound understanding and ability to apply business management concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates an advanced understanding and ability to apply business management concepts related to the provision of oral healthcare sciences.

Appendix B

California Northstate University Institutional Learning Objectives

ILO 1: Critical thinking: Exercise reasoned judgment to assess technical information and make well-informed decisions using evidence-based approaches

ILO 2: Written communication. Demonstrate the ability to write coherent, supported, and logically structured prose

ILO 3: Oral communication: Demonstrates oral communication skills

ILO 4: Professionalism. Interact with respect, empathy, diplomacy, and cultural competence

ILO 5: Quantitative reasoning: Demonstrate ability to use mathematics and statistics in problem solving

ILO 6: Information literacy: Identify and search relevant libraries of information and databases; synthesize information obtained from primary literature using properly referenced citations

DMD Institutional Learning Outcomes (ILOs) Proficiency Rubric

ILO 1: Critical thinking: Exercise reasoned judgment to assess technical information and make well-informed decisions using evidence-based approaches

Indicator	Initial	Developing	Developed	Proficient
1.1. Demonstrates identification of problem or issues	<ul style="list-style-type: none"> Does not correctly identify the problem or issue being considered Does not demonstrate understanding of the psychological factors that contribute to current patient state 	<ul style="list-style-type: none"> Identifies the problem or issue but does not demonstrate awareness of all the factors impacting decision making Demonstrates understanding of some possible psychological factors that contribute to current patient state 	<ul style="list-style-type: none"> Correctly identifies the problem or issue but does not demonstrate awareness of all factors impacting decision making Demonstrates understanding of most psychological factors that contribute to the current patient state 	<ul style="list-style-type: none"> Correctly identifies all of the primary factors associated with problem or issue impacting decision making Demonstrates thorough understanding of all possible psychological factors that contribute to the current patient state

1.2. Demonstrates identification of resources	• Does not identify appropriate resources	• Identifies a few resources needed	• Identifies most of the resources needed	• Correctly identifies all appropriate resources
1.3. Finds and interprets data needed for critical thinking and decision making	• Does not demonstrate understanding of the data needed for critical thinking and decision making	• Demonstrates ability to interpret some data but not all	• Demonstrates ability to interpret most data	• Demonstrates ability to correctly interpret data needed for decision making
1.4. Demonstrates knowledge of alternatives when evaluating for possible solutions	• Does not evaluate possible alternatives for treatment or diagnosis	• Does not effectively evaluate alternative treatment or diagnostic solutions	• Evaluates possible treatment and diagnostic solutions leading to a logical decision	• Effectively and thoroughly considers and evaluates possible diagnostic and treatment solutions
1.5. Proposes and selects appropriate solutions	• Does not propose solutions to the client's needs	• Proposes solutions without consideration of alternatives	• Solutions chosen demonstrate consideration of most of the strengths, weaknesses, and consequences of the decision	• Proposes solutions that are appropriate to the situation and demonstrate consideration of all relevant strengths, weaknesses, and consequences
1.6. Presents rationale for course of action	• Does not adequately provide rationale for treatment decision	• Provides rationale for decision but does not integrate into mental health treatment plan	• Provides rationale for decision with solid supporting evidence from available psychological literature and/or case factors	• Provides rationale for decision and with appropriate and relevant supporting case evidence and integrates findings into treatment plan

ILO 2: Written communication. Demonstrate the ability to write coherent, supported, and logically structured prose

Indicators	Initial	Developing	Developed	Proficient
2.1. Demonstrates knowledge and awareness of intended audience	• Does not demonstrate knowledge or awareness of audience for which the document is intended	• Demonstrates some ability to craft a document appropriate for its audience	• Demonstrates ability to craft a document appropriate for its audience	• Consistently demonstrates ability to craft documents appropriate for the audience
2.2. Demonstrates clear and logical thought	• Does not demonstrate clear or logical thought	• Writing does not sufficiently conceptualize case	• Demonstrates general clear or logical thought in	• Research and clinical documentation

	in their documentation	variables or analyze subject under discussion	their documentation	demonstrates clear and focused thinking
2.3. Demonstrates support for and development of ideas	• Does not explain or develop ideas	• Demonstrates minimal support for ideas	• Writing contains examples that generally support ideas	• Supports ideas with relevant, clear, impactful examples
2.4. Demonstrates appropriate use of evidence to support arguments	• Demonstrates an attempt to use proper citations to support ideas	• Uses credible and relevant sources to support ideas appropriate in the study of psychology	• Consistently uses credible and relevant sources to support ideas	• Demonstrates skillful use of credible and relevant sources to develop and support ideas
2.5. Demonstrates appropriate use of language, syntax, and mechanics	• Has excessive or severe errors in language usage	• Generally conveys meaning to readers with clarity, though writing may include some errors	• Language conveys meaning to readers and writing contains very few errors	• Uses language effectively and skillfully to communicate meaning to readers

ILO 3: Oral communication: Demonstrates oral communication skills

Indicators	Initial	Developing	Developed	Proficient
3.1. Demonstrates knowledge and awareness of intended audience	• Does not demonstrate knowledge or awareness of audience for which the communication is intended	• Demonstrates some ability to communicate in a manner appropriate to the audience	• Demonstrates ability to communicate appropriate to the audience	• Consistently demonstrates ability to communicate in a manner appropriate to the audience
3.2. Demonstrates clear and logical thought	• Does not demonstrate clear or logical thought in their communication	• Communication does not sufficiently conceptualize case variables or analyze subject under discussion	• Demonstrates general clear or logical thought in their communication	• Communication demonstrates clear and focused thinking
3.3. Demonstrates effective use of language in their communication	<ul style="list-style-type: none"> • Does not know professional psychological language or uses jargon • Does not know the proper technical language regarding 	<ul style="list-style-type: none"> • Demonstrates inaccurate use of psychological language or uses jargon in professional communications • Utilizes scientific language that is 	<ul style="list-style-type: none"> • Demonstrates appropriate use of professional language and minimal jargon • Utilizes generalized language to 	<ul style="list-style-type: none"> • Demonstrates use of appropriate, professional language • Utilizes generalized language to interact with patients

	mental health treatment	incomprehensible to patients	interact with patients	
3.4. Demonstrates appropriate active listening techniques when addressing questions	<ul style="list-style-type: none"> Does not acknowledge other viewpoints Has great difficulty answering questions 	<ul style="list-style-type: none"> Demonstrates little attempt to recognize other viewpoints Answers are simplistic and lack intellectual depth 	<ul style="list-style-type: none"> Recognizes other viewpoints but has difficulty incorporating them into case conceptualization Adequately answers patient questions 	<ul style="list-style-type: none"> Listens to questions with a consideration of alternative viewpoints Answers questions thoughtfully referencing evidence
3.5. Orally communicates meaning to audience	<ul style="list-style-type: none"> Vocal delivery is too soft or too fast Long, unintended silences and/or speech disruptions frequently distract audience Speaker makes no attempt to engage audience 	<ul style="list-style-type: none"> Vocal delivery is audible Speech rate or volume disruptions occasionally distract from comprehension Attempts to engage audience 	<ul style="list-style-type: none"> Vocal delivery is varied and dynamic Speech rate, volume, and tone enhance listener interest and facilitate understanding Generally engages audience 	<ul style="list-style-type: none"> Vocal delivery is varied and dynamic Speech rate, volume, and tone enhance listener interest and facilitate understanding Thoroughly engages audience
3.6. Utilizes non-verbal means to enhance message	<ul style="list-style-type: none"> Eye contact, body language, and facial expressions are inappropriate 	<ul style="list-style-type: none"> Eye contact, body language, and facial expressions neither enhance nor hinder oral effectiveness 	<ul style="list-style-type: none"> Use of eye contact, body language, and facial expressions are mostly consistent with the verbal message 	<ul style="list-style-type: none"> Use of eye contact, body language, and facial expressions that are consistent with the verbal message

ILO 4: Professionalism. Interact with respect, empathy, diplomacy, and cultural competence

Indicators	Initial	Developing	Developed	Proficient
4.1. Demonstrates professional attitudes and behaviors	<ul style="list-style-type: none"> Does not generally demonstrate professional attitudes or behaviors expected from a dentist 	<ul style="list-style-type: none"> Demonstrates some attitudes and behaviors that may be characteristic of a dentist 	<ul style="list-style-type: none"> Generally demonstrates attitudes and behaviors expected from a dentist 	<ul style="list-style-type: none"> Consistently demonstrates attitudes and behaviors expected from a dentist
4.2. Demonstrates personal responsibility and accountability	<ul style="list-style-type: none"> Does not demonstrate personal accountability or responsibility for work completed 	<ul style="list-style-type: none"> Demonstrates minimal personal accountability and responsibility for work completed 	<ul style="list-style-type: none"> Demonstrates personal accountability and responsibility for the work completed 	<ul style="list-style-type: none"> Consistently demonstrates personal accountability and responsibility for work completed

4.3. Demonstrates respectful and sensitive behaviors to the cultural and linguistic needs of diverse patients	<ul style="list-style-type: none"> • Does not demonstrate an awareness of patients' customs, beliefs, or perspectives • Does not demonstrate awareness of linguistic needs of patients 	<ul style="list-style-type: none"> • Demonstrates a minimal level of awareness of customs, beliefs, or perspectives of patients • Demonstrates minimal awareness of cultural and linguistic needs of patients 	<ul style="list-style-type: none"> • Demonstrates awareness of customs and beliefs • Demonstrates awareness of the cultural and linguistic needs of patients 	<ul style="list-style-type: none"> • Demonstrates awareness of customs, beliefs, or perspectives in patients • Demonstrates full awareness and responds to the cultural and linguistic needs of patients
4.4. Demonstrates professional demeanor	<ul style="list-style-type: none"> • Appears inattentive and impatient • Uses inappropriate body language • Dresses in attire that is inappropriate 	<ul style="list-style-type: none"> • Appears unfocused and distracted • Uses acceptable body language • Dresses in attire that is not offensive 	<ul style="list-style-type: none"> • Appears composed and focused • Uses appropriate body language • Dresses in attire that is professional 	<ul style="list-style-type: none"> • Uses articulate, tactful, and diplomatic speech • Uses professional body language • Dresses in attire that is professional, and well-suited for the environment

ILO 5: Quantitative reasoning: Demonstrate ability to use mathematics and statistics in problem solving

Indicators	Initial	Developing	Developed	Proficient
5.1. Demonstrates ability to perform calculations and apply mathematical principles to solve problems	<ul style="list-style-type: none"> • Does not demonstrate ability to apply statistical or psychometric principles 	<ul style="list-style-type: none"> • Demonstrates ability to perform basic statistical calculations but does not know how to apply psychometric principles to solve problems 	<ul style="list-style-type: none"> • Demonstrates ability to perform most statistical calculations accurately and to apply psychometric principles to solve problems 	<ul style="list-style-type: none"> • Consistently demonstrates ability to perform statistical calculations accurately and to appropriately apply psychometric principles to solve problems
5.2. Demonstrates understanding of experimental designs and methodology	<ul style="list-style-type: none"> • Displays difficulty proposing a basic experiment or research project 	<ul style="list-style-type: none"> • Comprehends basic experiments designed by others 	<ul style="list-style-type: none"> • Evaluates research, method, and protocol to review valid and reliable research 	<ul style="list-style-type: none"> • Proposes appropriate and innovative designs to address a new hypothesis and research question
5.3. Demonstrates logical and appropriate interpretation of data	<ul style="list-style-type: none"> • Demonstrates a limited ability to interpret scientific data 	<ul style="list-style-type: none"> • Attempts to interpret scientific data 	<ul style="list-style-type: none"> • Demonstrates the ability to interpret scientific data 	<ul style="list-style-type: none"> • Interprets data in the context of current scientific knowledge
5.4. Demonstrates logical thought	<ul style="list-style-type: none"> • Does not generate conclusions based 	<ul style="list-style-type: none"> • Generates conclusions that 	<ul style="list-style-type: none"> • Generates conclusions using 	<ul style="list-style-type: none"> • Accurately generates

patterns in generating conclusions	on current scientific data and statistics	may be based on current scientific data and statistics	scientific and statistical data	conclusions using appropriate scientific and mathematical data
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ILO 6: Information literacy: Identify and search relevant libraries of information and databases; synthesize information obtained from primary literature using properly referenced citations

Indicators	Initial	Developing	Developed	Proficient
6.1. Demonstrates appropriate ability search and acquire resources	<ul style="list-style-type: none"> Does not identify or solicit help in obtaining external resources to support topic 	<ul style="list-style-type: none"> Identified resources may not be sufficient in quality and infrequently solicits guidance from library personnel 	<ul style="list-style-type: none"> Identifies resources appropriate for scientific inquiry and solicits guidance from library personnel 	<ul style="list-style-type: none"> Identifies a variety of relevant sources and regularly seeks guidance from library personnel
6.2. Demonstrates appropriate incorporation of references	<ul style="list-style-type: none"> Does not incorporate references 	<ul style="list-style-type: none"> Incorporates references from psychological sources that do not clearly support ideas 	<ul style="list-style-type: none"> Incorporates relevant references that generally supports ideas 	<ul style="list-style-type: none"> Incorporates relevant references from respected psychological sources
6.3. Demonstrates appropriate citation of references	<ul style="list-style-type: none"> Does not use citations 	<ul style="list-style-type: none"> Uses citations but they are not formatted in APA style 	<ul style="list-style-type: none"> Demonstrates use of appropriate citations in context 	<ul style="list-style-type: none"> Uses properly cited references and includes all necessary information in reference list



Clinical Clerkship: Oral and Maxillofacial Surgery

Summative Competency Evaluation in Medically Affected Patient (ASA 2 or 3)

Exodontia for Medically Affected Patient

Course #	Course Title	Credits	Year	Term
OMFS 772	Clinical Clerkship: Oral and Maxillofacial Surgery <i>4 weeks, 30 hours per week plus call</i>	8	DS 3	Spring

Narrative: In this competency evaluation the DMD student will provide a full intake evaluation of a patient requiring exodontia with a medically affecting condition to ASA level 2 or 3. The student will provide a coherent assessment that takes into account basic medical science issues regarding the affecting systemic disease including relevant pathology, pathophysiology, pharmacology, biochemistry, behavioral and social sciences. The student will as well recommend a treatment protocol that takes into account the compromises and interventions required to produce safe care. The student will present the case unaided to the faculty member who will present additional questions relevant to the care of the patient. The student will present the plan to the patient using PARQ (explanation of procedure, alternatives, once a safe plan is presented and accepted by faculty and patient, the student will perform exodontia. Provide postoperative instructions customized to the biomedical conditions and surgical intervention. Ethics and professionalism for all activities is assessed as well.

Competent: Gains competency for the evaluated procedure

Exceptional: Earns EPR (exceptional performance review) for the CE if in 2 or more domains

Scoring Rubric

ASSESSMENT DOMAIN	Not proficient	Developing	Competent	Exceptional
Biomedical Knowledge	Unable to correlate	Understands basics of	Understands and applies	Uses thorough knowledge and

Appendix 2-24 OMFS 772 Summative Competency Assessment

	biomedical sciences into treatment decisions	biomedical sciences pertinent but does not apply knowledge completely to case	biomedical knowledge appropriately to this case to guide treatment decisions	reflection to determine all necessary aspects of concurrent care decisions and incorporates biomedical knowledge into customizing current and future care to patient needs
Patient intake information	Does not contribute necessary information to guide care decisions	Partially appropriately applies intake information to guide care	appropriately applies intake information to guide care	Utilizes information from intake including biomedical aspects, cultural behavioral and social issues to customize care to patient needs
Patient presentation and informed consent	Unable to provide PARQ consent to patient or to present treatment plan and its biomedical basis to faculty	Partially able to provide PARQ consent to patient or to present treatment plan and its biomedical basis to faculty	Able to provide appropriate PARQ consent to patient or to present treatment plan and its biomedical basis to faculty	Provides exceptional humanistic and biomedically knowledgeable presentation. Provides PARQ consent in caring and complete fashion
Procedural management Local anes/ surgical performance	Unable to provide local anesthesia or to perform surgery	Incomplete local anesthesia or surgical performance requiring assistance	Able to provide local anesthesia and perform surgery in caring and competent fashion	Shows facility in psychomotor aspects of anesthesia and surgical care with high level of patient comfort and acceptance
Patient comfort Ethics and professionalism	Exhibits overt lapses in professionalism or ethics	Lack of self-awareness or communication skills give impression of deficit in professionalism or ethics	Able to provide care in a fully ethical and professional manner that achieves patient comfort and acceptance	Manages difficult clinical situation of exceptional nature with humanism and highest level of professionalism
Postoperative instructions and plan	Does not provide coherent POI and plan	Has a critical error in POI and postoperative plan	Provides all POI and plan appropriately for	Provides all POI and plan appropriately for

Appendix 2-24 OMFS 772 Summative Competency Assessment

			the patient's condition	the patient's condition incorporating biomedical knowledge, customized to the nature of the surgical intervention and cultural/behavioral issues
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Parameters and Scope of General Dentistry at CNUCDM

The parameters of the practice of dental medicine

The parameters of the general practice of dental medicine include the ability to prevent, diagnose and develop treatment plans for the control and cure of diseases of the oral cavity and associated structures within the scope of the Dental Practice Act of California. The parameters include the performance of procedures of the oral soft and hard tissues to competently restore diseased teeth, replace missing teeth, address diseases of the periodontium, and assess diseases of the oral mucosa, maxillofacial region and jaws. Parameters for prevention include population-based oral health measures, homecare, and medical management of caries and periodontal diseases. The scope of practice of dentistry as defined by CNUCDM respects the eclectic and broad nature of dental practice in California as well as the general access to dental specialists. Competency at the time of graduation is meant to demonstrate a safe initial practitioner of dental medicine for whom additional training and experience in areas of need and interest will be promulgated through formal and informal graduate and continuing education, and lifelong learning.

Definition of the scope of general dentistry

The scope of the practice of general dentistry at CNUCDM is for the general dentist to be the key resource for patients to gain the benefits of good oral health. The state of oral health is defined as the optimal contribution of the oral and maxillofacial complex to the wellbeing of the patient. The general dentist applies a scope of practice to achieve the goal of oral health with the necessary, knowledge, skill and values to make complete and holistic diagnoses of conditions, to administer/deliver care within appropriate skill sets as credentialed in practice, to refer to dental and medical/surgical specialists appropriately for care beyond the capacity and credentialing of the general dentist, and to effectively lead/participate in interprofessional/intraprofessional teams to achieve the best oral health outcomes, at the lowest cost and with the best patient/clinical team experience.

California Northstate University
College of Dental Medicine

Volume 6
Appendices for Standards 3, 4, and 5



CNU IA Application – Predoctoral Dental Education Program
Submitted to the Commission on Dental Accreditation
May 2019

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Appendix 3-1 Faculty and Staff Retention Policies and Procedures

Faculty and Staff Retention Initiatives Policy and Procedure

I. Policy Statement

California Northstate University ("CNU" or "University") is committed to retaining highly successful employees whose values, interests, and priorities are in alignment with those of the University in fulfilling the mission of education.

II. Purpose

To define the options that may be applied to encourage personnel retention and to describe the process of approval and the administration of the retention initiatives.

III. Scope/Coverage

This policy applies to all current employees (faculty, staff, and administrators) who have sustained a record of job performance that meets or exceeds the established criteria of highly successful rating in the employee's annual performance evaluation.

IV. Procedure

A. Retention initiative and eligibility requirements:

- i. **Tuition subsidy for full-time employees** who wish to attain an advanced degree in seeking position of greater responsibility or different skill set within CNU:
 - a. Tuition subsidy is not an employee benefit. It is selectively awarded.
 - b. The amount of subsidy is subject to availability of funds, academic performance while receiving the tuition subsidy, and a ten-year limit of no more than \$60,000 total subsidy in the aggregate per employee.
 - c. The subsidy application must be completed with course grade report for fund disbursement of no more than \$24,000 per year.
 - d. Only employees working full-time for at least 2 years are eligible to apply for tuition subsidy. An employee may request to take on a 32-hour position while receiving tuition subsidy for course work study; such request will be considered at the discretion of the employee's supervisor and the Human Resources Office, with no assurance or implication that the request will be granted.
 - e. At the time of applying for tuition subsidy, the employee must be in good standing at CNU with no adverse or pending adverse personnel action.
 - f. A course grade with a letter grade of "B" or above will be given consideration for approval of subsidy. For certain courses that offer "Pass" or "Fail" grading policy, a "Pass" grade is required for consideration of approval of subsidy.



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- f. The second-look review will be conducted under confidentiality per FERPA policy. The result of the review will be purged.

B. The Process To Apply:

- i. For Tuition Subsidy: Employee must submit to the Human Resources Office a completed Employee Tuition Subsidy Application form with a grade report, tuition invoice, and payment receipt for tuition subsidy consideration.
- ii. For Tuition Discount: Employee must submit to the Human Resources Office a completed Tuition Discount Application form for tuition discount consideration. The employee will be notified in time for the discount to take effect in the current semester when all requirements for discount are met.
- iii. For Second-look Admission Review: Employee must send an email request for second-look to the University Office of Admissions. Once the form is sent, no further action is needed on the part of the employee.

C. The Approval Procedure:

- i. Tuition Subsidy and Tuition Discount Evaluation: The Human Resources Office will review the employee's personnel file and annotate the recommendation. The recommendation will be sent to the Dean's Office for endorsement and additional remark. The final decision is rendered by the Human Resources Office in consultation with the CFO.
- ii. Second-look Admission Review: A specially constituted Admission Subcommittee appointed by the Associate Dean of Admissions for the respective college will perform the review and render a recommendation.

D. The Discount or Reimbursement Process:

- i. Tuition Subsidy Reimbursement: Once the application is approved, employee may submit the following for reimbursement not to exceed guidelines in section IV(A)(i):
 - a. a grade report;
 - b. tuition invoice; and
 - c. payment receipt for tuition
- ii. Tuition Discount: The tuition discount rate of 10% may be awarded towards the current semester immediately provided that all criteria in section IV(A)(ii)(c) are met.

Associated forms:

Approval record:

Issued: 5/31/17

Revised:

APPROVED: 4/25/17

REVIEW: Every three years (or more often if required)



Full-Time Employee Tuition Subsidy Application Form

Terms and Conditions:

Tuition Subsidy is for a full-time employee who wishes to attain an advanced degree in seeking position of greater responsibility or different skill set within CNU.

- A. Tuition subsidy is not an employee benefit. It is selectively applied as an award.
- B. The amount of subsidy is subject to availability of funds, academic performance, and a ten-year limit of no more than \$60,000 total, and annual limit of no more than \$24,000 per year.
- C. Only employees working in full-time positions are eligible to apply for tuition subsidy.
- D. The employee must be in good standing at CNU (i.e. has a sustained record of exceptional or highly successful performance rating and is under no adverse or pending adverse personnel action).
- E. A course grade with a letter grade of "B" or above will be given considerations for approval of subsidy. For certain courses that offer "Pass" or "Fail" grading policy, a "Pass" grade is required for consideration of subsidy.

Name of Employee: _____

Name of institution of enrollment: _____

Intended degree and field of study: _____

Duration of program: _____

Cost of program (Please specify: per degree, per unit, or per semester): _____

Amount of subsidy request: _____

Grade report attached: Yes [☐] No [☐]

I understand that if I resign voluntarily at any time within two years after receiving the last tuition subsidy payment, I am required and obligated to reimburse CNU the amount of tuition subsidy paid to and received by me in the two years preceding such resignation.

Employee signature: _____ Date: _____

Human Resource Use only:



CNU Tuition Discount Application Form for Current Full-time Employee's Child or Dependent

Terms and Conditions:

Tuition discount for CNU enrolled children of current full-time employees:

- A. Tuition discount is not an employee benefit and is selectively awarded.
- B. A tuition discount rate of 10% may be awarded towards the semester that immediately begins after the completion of three years of continuous service at CNU by a current full-time employee. An additional 10% tuition discount may be awarded for each year of service at CNU by the employee. The total discount is limited to a maximum discount of 50% of the tuition only. All fees and other expenses are excluded from discount. (e.g., an employee with nine years of continuous successful service and performance will receive a 50% discount of the tuition for the child enrolled in CNU.)
- C. Tuition discount is a voluntary program by CNU and the continuation of this program is subject to availability of funds.
- D. The tuition discount program is subject to discontinuation without any advance notice.
- E. Decision is final and is not subject to appeal or grievance.
- F. An incomplete form will not be considered for approval.

Name _____ of _____ Employee:

Date _____ of _____ hire:

Length _____ of _____ service:

Name of child for tuition discount application: _____

CNU College of attendance: _____

Employee signature: _____ Date: _____

Human Resource use only:

Faculty Handbook

California Northstate University



August 2016

9700 West Taron Drive, Elk Grove, California 95757
2910 Prospect Park Drive, Rancho Cordova, California 95670

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1. INTRODUCTION TO FACULTY HANDBOOK

1.1 Mission, Vision, Values

- A. **Mission:** *To advance the art and science of healthcare.*
- B. **Vision:** *To provide innovative education and healthcare delivery systems.*
- C. **Core Values (WECARE)**

Working as a team

Embracing diversity and workplace excellence

Caring about our students, our staff, our faculty and our profession

Advancing our university, our goals, and our discipline

Responding to challenges that may impede our Mission

Enhancing communication and partnership

1.2 Core Principles

Education is our business.

Education is about teaching and learning.

Education is effective when students can solve problems, pass the board exam, and have gainful careers.

Educational affordability is about the least time and cost to obtain the degree.

Education is delivered by faculty who are committed to high-yield teaching, low-stress/stress-free learning, and outcome-based SLOs (CLOs, PLOs, ILOs, and CoCLOs) assessment.

Education is delivered with a relevant curriculum characterized by integration of basic and clinical sciences, supported by technology, and taught by responsible and qualified faculty and staff who are loyal to the CNU's values, interests, and priorities.

Education should encompass not only cognitive and intellectual growth, but also social and emotional growth, moral development and character building.

Educational quality is maintained through governance oversight, program review, judicious use of resources, accountability, and administrative leadership.

1.3 Faculty Handbook and Integration with Other University Handbooks and Policies

Your California Northstate University Faculty Handbook ("Handbook") summarizes policies and practices in effect for University faculty at the time of publication. This Handbook supersedes all previously issued faculty handbooks. Various University policies and procedures are appended to this Handbook and should be treated as fully incorporated into this Handbook.

Each College within California Northstate University ("University") may also have its own College Appendix to summarize faculty policies and practices with specific application to the unique circumstances of that particular College. The College Appendices are intended to augment and

supplement rather than supersede the provisions of this Handbook. Where an apparent conflict exists, this Handbook shall supersede the Appendices of the Colleges.

The University Employee Handbook explains the terms and conditions of employment of all University employees, including faculty. Some employment conditions specific to faculty described in the University Faculty Handbook may be different than as described in the Employee Handbook. Since this Faculty Handbook is specific to faculty, its provisions supersede those of the Employee Handbook in apparent conflict; otherwise the Employee Handbook governs all other terms of employment.

Written employment contracts between some faculty members and the University may supersede some of the provisions of this Faculty Handbook. Where there is conflict between the faculty member's employee contract and this Faculty Handbook, the terms of the employee contract, properly entered into in accordance with University policy, shall prevail. Nothing in this Faculty Handbook shall supersede or otherwise limit At-Will Employment Status sections and other at-will provisions of the Employee Handbook.

1.4 Academic Freedom

California Northstate University assures academic freedom to all members of the faculty. The Statement of Principles on Academic Freedom and Tenure formulated in 1940 by the Association of American Colleges and the American Association of University Professors states, in part:

"Institutions of higher education are conducted for the common good...." [The Common good of the institution is grounded upon the primacy of student success, upon which the mission, vision, and values of the institution are based.]

"Academic freedom is essential to these purposes and applies to both teaching and research. Freedom in research is fundamental to the advancement of truth. Academic freedom in its teaching aspect is fundamental for the protection of the rights of the teacher in teaching and of the student to freedom in learning. It carries with it duties correlative with rights.

"(a) Teachers are entitled to full freedom in research and the publication of the results, subject to the adequate performance of their other academic duties; but research for pecuniary return should be based upon an understanding with the authorities of the institution.

"(b) Teachers are entitled to freedom in the classroom in discussing their subject, but they should be careful not to introduce into their teaching controversial matter which has no relation to their subject. Limitations of academic freedom because of religious or other aims of the institution should be clearly stated in writing at the time of the appointment.

"(c) College and university teachers are citizens, members of a learned profession, and [faculty members] of an educational institution. When they speak or write as citizens, they should be free from institutional censorship or discipline [when acting lawfully and in accordance with accepted professional standards,] but their special position in the community imposes special obligations. As scholars and [members of their learned professions], they should remember that the public may judge their profession and their institution by their utterances. Hence, they should at all times be accurate, should

exercise appropriate restraint, should show respect for the opinions of others, [should be sensitive to their audience and timing,] and should make every effort to indicate that they are not speaking for the institution."

California Northstate University is firmly committed to the tradition of academic freedom in American colleges and universities and seeks to maintain conditions which are conducive to open inquiry and free search for truth. In teaching, research, and scholarly activity, faculty have not only the right but the obligation to share their thought processes and resulting opinions and conclusions in analysis of educational material without fear that in doing so they are placing their job in jeopardy and without fear of retribution. Faculty shall at all times make it clear when they are expressing such an opinion or conclusion and that they are not representing the views of the institution. It is the right of students to express their opinions without concern for their grades and to express their opinions without fear of retribution. With academic freedom comes a responsibility to respect others' opinions. Academic honesty is demanded of faculty and students alike.

(Reference: CNU Administrative Policy 2101)

2. Appointment, Rank, and Promotion

2.1 Introduction

Promotion of faculty at California Northstate University is based largely on the achievements of the candidate while a n employee of the University and not on those achievements attained while employed by previous private or public institutions or other organizations. Criteria for evaluation for promotion for all faculty are as follows: the period of employment by California Northstate University; an understanding and acceptance of and commitment to the purpose and objectives of the College; *quality* of performance; *quality* and *quantity* of assignments; evidence of cooperation, positive outlook, and maturity; proficiency as an educator; a record of scholarly accomplishments; evidence of ongoing professional development; availability to individual students for advisement and willingness to share in their concerns; involvement and participation in campus, professional, and community activities; and demonstrated competency in the professional discipline of the faculty member. In addition, a faculty member worthy of promotion demonstrates intellectual competence, integrity, independence, enthusiasm, and a spirit of scholarly inquiry. The Rank and Promotion Committee recognizes that faculty in the clinical areas have additional responsibilities in terms of service to a clinical practice site(s).

The Rank and Promotion Committee of each College will examine the dossier/portfolio of the candidate for examples of accomplishments in the areas of teaching, scholarly activity, and professional service. Assessment of *quality* of the material and examples of the accomplishments provided by the candidate in their dossier/portfolio will be at the discretion of the Rank and Promotion Committee. However, the Rank and Promotion Committee will use the criteria for promotion given in Appendix A as a *guide* in assessing the accomplishments of candidates applying for consideration for promotion. These criteria should be used by faculty and Chairs when evaluating the preparedness of a faculty member for consideration for promotion.

2.2 Instructor

1. Definition: faculty who possess the Doctoral degree in his/her field but has limited

postgraduate experience. The requirement for possession of a Doctoral degree may be waived for a faculty member with documented professional accomplishments in the three academic areas of teaching, scholarship/research activities, and professional service.

2. Time in previous rank: no minimum.
3. Since this is an entry level rank there can be no promotion to this rank.

2.3 Assistant Professor

1. Definition: faculty who possess the Doctoral degree in his/her discipline and shows promise in the three academic areas of teaching, scholarship/research activities, and professional service. The requirement for possession of a Doctoral degree may be waived for a faculty member with documented professional accomplishments in the three academic areas.
2. Time in previous rank (this would apply only to faculty previously appointed at the level of Instructor): promotion of an Instructor who has a Doctoral degree: a minimum of one (1) year.
3. Academic areas considered for promotion to this rank: demonstrates promise in the areas of teaching, scholarship/research activities, and professional service.

2.4 Associate Professor

1. Definition: faculty who possess a Doctoral degree in his/her discipline, meets the criteria for rank of Assistant Professor, and demonstrates a sustained and significant record of accomplishments in teaching, scholarship/research activities, and professional service.
2. Time in previous rank: a minimum of five (5) years must be spent at the rank of Assistant Professor at CNU before consideration can be given to promotion to the rank of Associate Professor; however, the candidate may have the opportunity to apply early for consideration for promotion based on previous time and service credit recommended by the Rank and Promotion Committee, endorsed by the Dean, and awarded by the President under the authority granted by the Board of Trustees.
3. Academic areas considered for promotion to this rank: *excels* in two of the three areas of teaching, scholarship/research activities, and professional service, while *demonstrating satisfactory* activity in the third area.

2.5 Professor

1. Definition: faculty who possess a Doctoral degree in his/her discipline, meets the criteria for rank of Associate Professor and demonstrates continued sustained and significant record of accomplishments in teaching, scholarship/research, and professional service. The rank of Professor is among the highest honors that the college can bestow upon a faculty member. Therefore, this rank is granted only to faculty members who have distinguished themselves in their discipline at national and/or international levels. The faculty member must demonstrate a sustained record of outstanding achievements in teaching, scholarship/research activities, and professional service. The faculty member must *excel* in two of the three academic areas, and demonstrate *significant activity* and *accomplishment* in the third area. Although other factors will be considered, consultantships, publications in peer-reviewed journals, invited "editorialships" and lectureships, and the holding of a professional societal office will be important factors considered in assessing a faculty candidate's accomplishments.
2. Time in previous rank: a minimum of five (5) years must be spent at the rank of Associate Professor at CNU before consideration can be given to promotion to the rank of

Professor; however, the candidate may have the opportunity to apply early for consideration for promotion based on previous time and service credit recommended by the Rank and Promotion Committee, endorsed by the Dean, and awarded by the President under the authority granted by the Board of Trustees.

3. Academic areas considered for promotion to this rank: sustained record of *outstanding achievements* in two of the academic areas of teaching, scholarship/research activities, and professional service, while *maintaining excellence* in the third area.

2.6 Criteria for Positive Recommendation for Promotion of a Faculty Member at the Rank of Instructor to the Rank of Assistant Professor

The advancement of a candidate from the rank of Instructor to Assistant Professor will be based on the potential the candidate has shown to be a productive and contributing member of the faculty. The candidate will need to demonstrate his or her potential in the dossier/portfolio provided to the chair of their department prior to submission of the request for promotion to the Rank and Promotion Committee. If the Department Chair agrees that the candidate is ready for promotion to the rank of Assistant Professor, the Chair will forward the petition for promotion, the dossier/portfolio, and a letter supporting the candidate's application for promotion to the Associate Dean for Faculty Affairs and Experiential Education. The Associate Dean for Faculty Affairs will forward the petition for promotion to the chair of the Rank and Promotion Committee along with a letter indicating approval or disapproval of the promotion. A candidate at the rank of Instructor is eligible to apply for promotion no earlier than one (1) year following appointment at the rank of Instructor.

2.7 Criteria for Positive Recommendation for Promotion of a Faculty Member to the Rank of Associate Professor

A faculty member at the rank of Assistant Professor will be eligible to apply for promotion to the rank of Associate Professor no earlier than five (5) years following the time of appointment to the rank of Assistant Professor at CNU, or no earlier than indicated in the letter of appointment. A candidate applying for promotion from the rank of Assistant Professor to the rank of Associate Professor must *excel* in two of the three areas of: 1) teaching, 2) scholarship/research, and 3) professional service, while demonstrating *satisfactory activity* in the third area.

2.8 Criteria for Positive Recommendation for Promotion of a Faculty Member to the Rank of Professor

A faculty member at the rank of Associate Professor will be eligible to apply for promotion to the rank of Professor no earlier than five (5) years following the time of appointment or promotion to the rank of Associate Professor at CNU, or no earlier than indicated in the initial letter of appointment at the rank of Associate Professor. A candidate applying for promotion from the rank of Associate Professor to Professor must demonstrate a sustained record of *outstanding achievements* in two of the three areas of: 1) teaching, 2) scholarship/research, and 3) professional service, while demonstrating *sustained excellence* in the third area.

A. Teaching

A productive faculty member should possess the following attributes: an ability to express himself/herself clearly and concisely; an ability to make each learning activity an exciting experience; an ability to inspire interest and to secure from students a high degree of individual effort; an appreciation and a respect for students; an appreciation of student viewpoints; and a sympathetic understanding of student problems. It is expected that the teaching record of the candidate will reflect a continuous increase in knowledge of the subject taught, an ability to effectively transmit knowledge to students, and an ability to arouse curiosity and stimulate creative thinking in beginning as well as advanced students. A list of indicators of accomplishments in teaching that the Rank and Promotion Committee will use as a *guide* in determining the level of success of the faculty applicant is shown in Appendix B.

B. Scholarly/Research Activity

A productive faculty member is expected to be engaged in scholarly activities. A key component of the definition of scholarly activity is that it results in publications or other products or services that can be readily evaluated. The nature of the scholarship is not critical and can take several forms including discovery (creation of new knowledge), integration (comprehensive and analytical review of current literature), application (applying new knowledge to improved health), and teaching (development of critically reviewed innovative teaching methods). Publication of the results of these types of scholarly activity demonstrates mastery in the field of inquiry, and documents the process and outcomes of the work so that peers have the opportunity to evaluate these efforts and incorporate the findings into their own activities. As a result, the Rank and Promotion Committee will examine the dossier/portfolio for examples of sustained accomplishment in scholarship. The dossier/portfolio provides faculty members a venue through which they can demonstrate their ability to be a leader in peer-reviewed publications, as well as demonstrating sustained *contributions* to the academic community with work that reflects their roles and responsibilities as faculty. A list of indicators of success in scholarly/research activity that the Rank and Promotion Committee will use as a *guide* in determining the level of success of the faculty applicant is shown in Appendix B. The evaluation by the Rank and Promotion Committee of the scholarly activity demonstrated by the candidate will focus on the *quality* of the work presented in the dossier/portfolio rather than simply on the quantity of work presented.

C. Professional Service

Recognition will be given to faculty who make significant service contributions to the following: 1) student welfare through service to the college and their department; 2) student organizations; 3) scientific organizations; and 4) community, state and national organizations in their special capacities or discipline. For faculty in the Clinical and Administrative Sciences, the Rank and Promotion Committee will give consideration, when appropriate, to clinical service. For faculty in all departments, a strong record of professional service at the national or international level will strengthen the recommendation for promotion, particularly to the rank of Professor. Activity at the levels of Assistant and Associate Professor should represent a distribution of service to the College, Department, and Professional organizations. Faculty are expected to do the following: 1) work energetically as a member of their department; 2)

participate in faculty and campus activities; 3) provide effective academic counseling and guidance to students; and 4) participate in the activities of professional, scientific, or community organizations. Clinical and Administrative Sciences faculty should also demonstrate successful participation in clinical service. A list of indicators of success in professional service that the Rank and Promotion Committee will use as a *guide* in determining the level of success of the faculty applicant is shown in Appendix B.

2.9 Multi-Year Reappointment

Multi-year reappointments may be considered for eligible and qualified faculty. See the multi-year appointment policy (Appendix C).

2.10 Resignation of Appointment by the Faculty Member or Termination of Appointment

Faculty members are expected to give due notice of their intentions if they wish to terminate their appointment with the college. A faculty member may terminate his/her appointment within an appropriate time period, and not during the ongoing academic year, so as not to jeopardize course assignments, student learning, negatively impact their colleagues work or the mission and goals of the College; failure to meet this requirement will be treated as a material breach of the appointment agreement. Faculty initiated termination, should be at the end of an academic year and within 1 month after receipt of notification of the terms of his/her reappointment for the coming year, or if this is not possible, at the earliest possible date thereafter. At the earliest possible opportunity the faculty member must give written notice to the Dean and his/her Department Chair.

Termination of an appointment before the end of the appointment term (as opposed to nonrenewal of appointment) may be effected by the institution only for adequate cause. See Faculty Termination Policy in Appendix D.

3. Faculty Requirements and Development

3.1. Faculty Office Hours

Individual office hours for advising and student consultations should be listed in the course syllabus and posted on the learning management system. Faculty have the option of listing specific hours and/or to state “by appointment”. All faculty teaching within a course must have a minimum of one hour per course unit hour each week dedicated to office hours. When not teaching in a course, all faculty should have a minimum of three hours each week reserved for office hours. Office hours should not conflict with course schedules, and should be within normal business hours.

3.2 Faculty Development

Faculty development is an ongoing process designed to enhance the teaching and research

skills of academics throughout the careers of University faculty. The goal is to increase both teaching effectiveness and scholarly productivity. The success of the program is highly dependent on the sustained commitment of the administration to provide the appropriate space and resources and the faculty's commitment to continuous development of their skills. The purpose is to provide an academic environment that stimulates innovation in teaching, research, and scholarly activity, and encourages University faculty to develop and grow intellectually and professionally and maximize their academic productivity.

Basic resources needed for a successful faculty development program include:

- Encouragement and support from administration for developmental activities
- Release time away from certain faculty and patient care responsibilities when necessary and appropriate subject to the discretion of the Dean
- Funds for travel, research expenses, and equipment consistent with the University's policies and budget
- Appropriate space and routine equipment to conduct research

Programmatic responsibility for the Faculty Development Program is shared between the Department Chairs and the individual faculty. It is the responsibility of the Department Chair to provide the guidance and counseling necessary to assist the faculty member in focusing on specific needs and facilitating activities to address those needs. Ultimate success of a Faculty Development Program rests with the individual faculty member. Each faculty member should address his or her own needs, and through discussions with the Department Chair, focus on and address those needs through the Faculty Development Program.

3.3 Faculty Travel

California Northstate University will refund all reasonable travel expenses for any invited presentations, papers, or posters accepted, if the professional organization or other sponsor does not reimburse expenses, up to a total annual reimbursement of \$2500. The faculty or staff member seeking reimbursements must receive written approval and authorization in advance of travel. The papers and posters presented are an important component of scholarly activity that represent and provide recognition for the College as well as the individual members of the faculty and staff.

Faculty serving as official representatives of the college (e.g., AAMC, AMSA, AMA, ACP, AHA, ACC, ACG, etc.) will have reasonable expenses reimbursed once approved by his/her supervisor.

Faculty serving on professional committees will have reasonable expenses paid when approved in advance by their supervisor. Attendance at selected professional meetings that will enhance the faculty member's teaching and/or research will be considered as Faculty Development and reimbursed as approved by the Department Chair or Dean.

Travel expenses will not be reimbursed for practice faculty traveling between their primary service site and the University.

The process of receiving approval for travel is to complete a Travel Authorization Request Form, which is available from the department Administrative Assistant. The form should be completed with dates of travel, explanation of travel (attach notice for invited presentation, presenting paper or poster, etc.), and an estimate of expenses. The faculty member will resolve any conflicts with teaching or service responsibilities during the leave and prior to submitting the request for leave. The Department Chair must approve the travel. A copy of the approved and signed request form will be forwarded to the faculty member. Faculty should make every effort to minimize expenses (e.g., on-time registration, early booking of airfare). Rental cars will be approved only if necessary to attend a meeting and if equivalent or less than commercial travel (e.g., taxi, etc.). The University does not reimburse for alcoholic beverages or pay-for-TV movies out of its operational budget. Expenses reimbursed by an outside agency must be deducted from the amount billed to the University.

Faculty may be required to submit documentation from the outside agency outlining expenses and/or honoraria received. The approved amount should be considered an expense cap.

Funds from grants for travel can only be spent on behalf of the faculty member.

All reimbursements for travel from University funds must be submitted and detailed on a Travel Expense Voucher. Receipts must be attached to the expense voucher. This form is reviewed and approved for reimbursement by the Department Chair and Dean before being forwarded to the Business Office for processing.

3.4 Faculty Evaluation

Each faculty member will discuss and document achievement of goals for the previous academic year, as well as projected goals for the current academic year, in an evaluation conference with the Department Chair during their annual review.

3.5 Peer Review of Teaching

a. Purpose

The purpose for peer review of teaching is to assist individual faculty members in identifying strengths and weaknesses in their teaching. Peer review of teaching, along with student evaluations of teaching, provides a documented record of performance and contributions to teaching.

b. Procedure

Each full-time teaching faculty member is reviewed by a peer designated by the Department Chair. Department Chairs will be excluded from peer review. For review of Department Chairs, the Associate Dean for Academic Affairs will select the peer reviewer.

- i. The peer reviewer will personally attend one class of the faculty being reviewed.
- ii. In the case of classroom teaching, the peer reviewer will inform the

1. "Training the trainers": planning and designing an on-going staff-training and professional

Following a review, the faculty member should submit to the reviewer any applicable materials the reviewer may not have received during the class period including objectives, test questions, and handouts.

- iii. In the case of clinical /experiential teaching, the peer reviewer will visit the clinical site for review. The individual faculty member being reviewed will be informed of the date of the review (site visit) one week in advance.
- iv. After the peer reviewer has completed the evaluation, the reviewer will prepare a report summarizing the findings and offering suggestions for development. The report will then be submitted to the Department Chair.
- v. The report will be discussed with the individual during the next regularly scheduled evaluation meeting or earlier if necessary. Plans for development will be made accordingly.

3.6 Mentoring Program

Purpose

The mentoring program of each college at CNU provides a structured relationship between a faculty member with experience (mentor) and a faculty member with less experience (e.g., new faculty or mentee). The purpose of a mentoring program is for the mentee to capitalize on the mentor's experience and enhance the probability of success. The Mentoring Program is part of the faculty member's overall academic development in the areas of teaching, research, and service.

Goals of the Mentoring Program

1. Assist new faculty (mentee) to adjust to their new environment while learning about, balancing and executing their academic responsibilities.
2. Assist faculty (new or interested established faculty) to meet high standards of rigor, depth and innovation in scholarship and to realize their full potential as scholars, teachers, and members of the academic community.
3. Provide role models of scholarly excellence in the areas of teaching, research, and service.
4. Provide the mentee with regular feedback regarding his/her development.
5. Assist the mentee in planning their careers and in attaining their academic goals.

Desired Outcomes

The success of a mentoring program is evaluated by measuring the level of success the mentee reaches in achieving professional and personal goals, such as:

1. Reaching an effective/efficient balance between academic, service and personal responsibilities.
2. Showing excellence in the areas of teaching, scholarship/research, and service.
3. Attaining explicit professional goals such as promotion and/or continuous long-term contracts and national/international recognition.
4. Capability of obtaining funding for grants and contracts.
5. Demonstrating effective participation in the governance and obligations of a citizen in the profession, College and University, including service as a mentor to those that follow or who are in need of mentorship.

Responsibilities of the Mentoring Advisory Committee

A "Mentoring Advisory Committee" has the following responsibilities:

1. "Training the trainers": planning and designing an on-going staff-training and professional

- development process on mentoring.
2. Establishing policies and procedures that reflect program decisions and practices.
 3. Maintaining all records of mentor-mentee encounters and acting as liaisons between them.
 4. Coordinating mentoring activities and documenting ongoing development of the mentoring program.
 5. Checking-in regularly with mentors and offering ongoing support.
 6. Developing and enforcing guidelines documenting the responsibilities of the Mentor and the Mentee.
 7. Evaluating the efficacy of the program on an annual basis (primarily through questionnaire surveys of mentors and mentees) and tracking program statistics on short-term and long-term results.
 8. For mentoring relationships to grow and last, the staff responsible for the Mentoring Program ("Mentoring Advisory Committee") will need to be in touch with mentors and mentees on a regular basis in order to assess how well each relationship is progressing and offer guidance and advice along the way.
 9. Regular contacts between (selected) staff of the "Mentoring Advisory Committee" and mentors and mentees can help avoid conflicts, get relationships back on track, and help the program accomplish its goals.

The Mentoring Advisory Committee, with the active support of the Dean and Department Chair, should provide the environment and resources for effective mentoring to occur. Administrators' responsibilities include time allocations that allow for proper faculty development. Additional time and resources in the form of additional training may also be required.

Criteria for Selection as a Mentor

1. Experienced faculty members will be selected by the Mentoring Advisory Committee to mentor new faculty. The mentor must have demonstrated an ability to be an effective faculty and professional role model.
2. The mentor must be willing to meet with the mentee at regularly scheduled intervals and provide feedback regarding the mentee's progress.
3. The mentor must be willing to serve for a minimum of one academic year.
4. The mentor must be willing to collaborate with the mentee to write a professional development plan with measurable and obtainable endpoints. This should be done in consultation with the mentee's Department Chair.

Appointment of Mentors

1. A temporary Mentor will be assigned to each new faculty member. The assignment will take into consideration the best possible match based on scholarly and professional interests as well as common personal characteristics.
2. Following completion of the first year, the mentee may remain with the originally assigned mentor or may change (without the need to state a reason) by selecting a mentor (from a list of available mentors) that match his/her interests in teaching, research, or service.
3. A mentee may choose more than one mentor in order to enrich his/her exposure to different opinions and experiences (mentees should contact the Mentoring Advisory Committee to ensure that the chosen mentor is willing/able to work with the mentee)

Responsibilities of the Mentor

Serving as a mentor is voluntary and must be entered into willingly and with commitment. The

responsibilities of the mentor include, but are not limited, to the following:

1. They must be willing and have the resources to make a commitment to the mentee.
2. They should serve as an advisor, teacher, role model, advocate, counselor, and sponsor of a mentee.
3. They should be able to provide direct assistance or identify others who can provide the mentee with:
 - a. Clinical and didactic teaching and learning strategies, including preparation of materials such as handouts, objectives, slides, and test questions.
 - b. Identification and successful development of clinical practice site, if appropriate.
 - c. Identification of grant sources for research; discuss ideas for research; review research proposals; review the written results of research; discuss and assist with poster presentation/oral communication of research; and assist with review for publication of research.
 - d. Understand their service responsibilities to the College, the department, and the profession.

Responsibilities of the Mentee

The mentee must be willing to spend the necessary time and energy to develop as a faculty member. This program is mandatory for faculty in their first academic position and it is recommended for other faculty in their first year of appointment at CNU. It should be emphasized that nothing prevents any faculty from requesting a mentor at any time.

Determining the Meeting Content/Parameters

1. The mentee is expected to contact the mentor to set up the first meeting in the course of which the following topics should be discussed:
 - a. Both parties should reach a clear understanding of what they expect from each other.
 - b. Frequency, duration, time and place of future meetings.
 - c. Decision as to whether the mentor will have an “open door” policy making himself/herself available at any time.
 - d. Establish how issues of confidentiality will be handled.
 - e. The mentor/mentee relationship should agree to a “no-fault” conclusion of the relationship if either party feels that the intended goal is not being achieved, without reciprocal blaming of one another.
2. Mentees should be encouraged to formulate their career goals clearly, define any problems they perceive and bring specific problems to meetings for discussion.
3. Official contacts should take place at least once/month even if no specific problems exist.
4. If the mentor-mentee relationship proves to be unsatisfactory the mentor or mentee may alert the “Mentoring Advisory Committee” and request a new mentor.

Evaluation of the Mentoring Program

1. The Mentoring Advisory Committee has the responsibility to evaluate the efficacy of the program on an annual basis (primarily through questionnaire surveys of mentors and mentees) and tracking program statistics on short-term and long-term results.
2. The outcome of the mentoring process between mentor and mentee should be discussed, and final reports written individually by the mentor and mentee should be consigned to the Mentoring Advisory Committee.
3. The Mentoring Advisory Committee’s annual evaluation of the mentoring program should be communicated in writing to the Department Chair.

3.7 Faculty Recruitment

Procedures for Selecting New Faculty

Following the Dean's request and the President's approval to hire a faculty replacement or additional faculty members, the Dean in consultation with the appropriate Department Chair will structure an ad hoc Search Committee that will conduct a faculty search and make recommendations to the Dean for appointment. The Dean will appoint the Chair of the Committee. The Search Committee will consist of at least three faculty from the respective Department.

The Committee will conduct a national search for candidates, screen all applications and select appropriate candidates for interviews, the names and credentials of which will be sent to the Dean for comment. An interview will be arranged which will provide an opportunity for all faculty especially those of the respective department to meet the candidate and attend the candidate's presentation. After and during the interview the Search Committee members will seek opinions of the faculty in developing a recommendation to the Dean concerning each candidate interviewed. The Dean shall include the advice of the Search Committee concerning the offering of a position to a candidate.

Search Committee records shall be confidentially maintained in Human Resources Department for a minimum of five years.

Interview and Itinerary Procedure for Faculty

It is recommended that the candidate have either breakfast, lunch, or dinner with two members of the Search Committee on the first day of the interview. This will impart a comfortable, non-threatening, social atmosphere where the committee representatives and the candidate can converse. During this time the candidate should be made aware of the mission, vision and goals of the College and the expected competencies of its graduates. The conversation must remain focused on the University, the College, and the job role.

It is recommended that formal interviews of approximately 30 minutes in length be scheduled with at least the following (others included when necessary):

Dean

Associate Dean for Academic Affairs

Department Chair

Search Committee

Collective Faculty of the candidates department

New Candidate Presentation

It is recommended that the prospective faculty member provide a presentation on his/her scholarly endeavors. While the candidates' personal and professional teaching philosophies are very important, these are to be evaluated during individual faculty and Search Committee interviews.

3.8 Part-Time Faculty

Part-time faculty are used for specific courses and lectures when full-time faculty are unavailable. They are selected based on their expertise in the subject area. The Department Chair in the Department that is responsible for the course evaluates the credentials of the faculty member. A recommendation to appoint the faculty member part-time is then presented to the Dean. The requirements for teaching the course/lecture are discussed with the Department Chair or course coordinator. The teaching effectiveness of the part-time faculty is evaluated in the same manner as full-time faculty.

Part-time faculty that perform a service on a regular basis should be added to the payroll. The Chairs will furnish the part-time faculty with an appointment letter that provides salary information and teaching responsibilities. If they provide a service occasionally (class, practice experience, etc.) they should be paid using a Request for Payment (RFP).

4. Academic Policies and Procedures

4.1 Student Advising Program

The Student Advising Program is under the direction of your College's Assistant Dean for Student Affairs and Admissions. This program provides information for successful matriculation and professional development of our students and key faculty members are utilized as resource personnel.

All students will be assigned a faculty advisor during orientation who will serve as their advisor through the entire academic program.

This program requires a coordinated effort between the following:

A. Assistant Dean for Student Affairs and Admissions - The responsibilities of this office are to:

1. Provide faculty-training programs
2. Assign students to individual faculty advisors
3. Monitor the advising process

B. Faculty Members - The responsibilities of faculty advisors are to:

1. Participate in training programs provided by the Assistant Dean for Student Affairs and Admissions
2. Approve student registration forms
3. Advise and/or refer students as appropriate
4. Meet with advisees at least twice per semester
5. Monitor student academic progress and assist the student in seeking appropriate help
6. Provide status reports on each advisee to the Assistant Dean for Student Affairs and Admissions at the end of each semester
7. Monitor the advisee's academic portfolio

C. Student Advisees - It is the student's responsibility to be aware of all College degree

requirements as published in the academic catalog, and to insure that such requirements have been met or that appropriate waivers have been secured and filed in the Office of the Registrar. The specific responsibilities of the advisees under this program are to:

1. Obtain registration approval from their faculty advisor
2. Meet with advisor at least twice per semester
3. Evaluate the faculty advisor annually

4.2 Responsibilities of Course Coordinators

A. Develop Course Policies and Procedures in Cooperation with Course Faculty

It is the responsibility of the course coordinator to ensure the faculty in the course are in agreement on course procedures. All faculty should have a sense of commitment to the entire course, not limited to the areas in which they teach. To build this commitment the coordinator should do the following:

1. Prior to the course, meet with the course faculty to reach consensus on the course structure including: teaching and exam schedule, use of active learning components, number of exams, exam construction (format of questions, plan for the cumulative component of all exams, deadline for submission of exam questions and answers), content of course pack (if applicable), deadline/timelines for any other materials or activities required of course faculty, point distribution for exams and other activities, and changes to any policies or procedures on the syllabus (if applicable).
2. In the event consensus cannot be reached regarding the above elements of the course, the final decision should be based upon the majority opinion of the course faculty.
3. Review exam questions for consistency with determined format, grammatical errors and appropriate length. Contact individual faculty regarding any edits to their questions other than grammatical and reach agreement.
4. Provide the item analysis of the entire exam to all faculty members who wrote questions for the exam. If the item analysis indicates a question should be dropped from an exam, the course coordinator should contact the faculty member who wrote the question and reach agreement.
5. Contact individual course faculty regarding any issues from the focus group or other enrollees in the course that pertain directly to that faculty member to achieve joint resolution.
6. Following each examination, provide a copy of the grade roster from the exam to those course faculty members who desire a copy. Furthermore, make the complete grade book available to all course faculty members at their request.
7. Calculate final grades in the course according to the grading scale on the syllabus. Provide these grades to the course faculty who desire a copy. Enter the grades on the official grade roster and submit to the registrar.
8. At the conclusion of the course, meet with the course faculty to discuss successes and changes for future offerings of the course.

B. Maintain the Course Syllabus

It is the responsibility of the course coordinator to maintain the course syllabus and ensure the

syllabus used reflects what was approved by the curriculum committee. The course coordinator should adhere to the following policies established by the curriculum committee:

1. All syllabi should contain the information on the curriculum committee's "Checklist for Syllabus Content."
2. Minor changes in course content are permissible and the syllabus should reflect these changes.
3. Major changes in the course content must be approved by the Curriculum Committee (e.g. removal of a disease state topic). The syllabus should reflect these changes.

C. Implement Course and School Policies and Procedures

1. Provide the examination dates to the Associate Dean for Academic Affairs or other designated Associate/Assistant Dean prior to the start of the semester.
2. Provide a copy (paper or electronic) of the final course schedule (including teaching and exam dates) and syllabus to the course faculty, Curriculum Committee Chair, Department Chairs, and Associate Dean for Academic Affairs and Research prior to the first day of class.
3. Post the final course schedule and syllabus to ASAP before the first day of class.
4. Arrange for course shells in CAMS (if applicable) in coordination with the College's Instructional Technology Center adhering to deadlines.
5. Remind course faculty they are responsible for following copyright law including proper referencing of sources, posting copyright notices and obtaining copyright permissions as needed.
6. Get approval from course coordinator's Department Chair to pay honoraria for outside lecturers.
7. Monitor the final course schedule for adherence by course faculty. In the event faculty do not need all allotted time, seek, if possible, utilization of the time for other course activities aimed at enhancing learning in lieu of canceling class.
8. Schedule periodic meetings with the focus group and address concerns.
9. Ensure there are cumulative components to all examinations within and at the end of the course.
10. Administer examinations (or arrange for the administration of examinations by other course faculty) including makeup examinations (if applicable).
11. Return results of examinations to the students in a timely manner. The examination return policy should reflect the policy of the course coordinator's academic department.
12. Maintain ultimate responsibility for the grade book, the student's final grade, or changing a student's grade.
13. Meet deadline for submission of the student's final grade to the Registrar's Office.
14. Respond to formal grade appeals and honor code violations in a timely manner according to the College's Policy.
15. Review of the Course within four weeks of its completion and submit a report to the Curriculum Committee, Department Chair, and/or Associate Dean for Academic Affairs or other designated Associate/Assistant Dean.

4.3 Responsibilities of Course Faculty

1. Meet the deadlines for submission of handouts, exam questions and answers, and other course materials.

2. Follow copyright law including proper referencing of sources, posting copyright notices and obtaining copyright permissions as needed.
3. Based on consensus reached regarding administration of examinations, be prepared to administer an examination in which the faculty member has a significant number of questions.
4. Adhere to the course schedule. Obtain approval from the course coordinator for scheduling of any outside activities beyond those indicated in the final schedule. Obtain approval from the course coordinator for any desired changes to the final teaching schedule. Inform the course coordinator if allotted time will not be used in its entirety, so that the time can be used for other course related activities to enhance learning.

4.4 Submission of New Courses/Course Changes

All submissions of new courses or changes in existing courses must be initiated at the departmental level before being submitted to the College Curriculum Committee. The Curriculum Committee will submit its recommendation to the entire College faculty for discussion and faculty vote. The remainder of this process will be in accordance with University and College policy and procedure.

4.5 Honor Code

California Northstate University operates under an Honor Code that is intended to serve as a guideline for ethical behavior. Students and faculty alike are bound by this Code and are expected to uphold the articles of the Code. Faculty members are urged to report all violations of the Code to the College's Honor Council. The Council, observing strict confidentiality, decides on the guilt or innocence of an accused individual and suggests an appropriate punishment for each infraction. The faculty member in whose class an infraction occurs will be consulted if the punishment includes lowering of a grade or failure in a course.

The Bylaws of the College's Honor Council are published in the Student Handbook. Faculty members are advised to become familiar with Honor Council procedures, either by reading the Articles or by consulting with the faculty advisor.

4.6 Academic Integrity

Mutual trust is a basic component of any community. California Northstate University expects students, as members of the academic community, to take seriously their position in that community. Students are expected to ensure the continuing responsibility for their own work. The University and its Colleges consider breaches of this trust and responsibility to be serious offenses.

Academic offenses that constitute violations of the Honor Code include, but are not limited to, plagiarism, cheating, lying, and, academic theft.

Plagiarism is the copying of words, facts, or ideas, belonging to another individual, without proper acknowledgment. Failure to reference any such material used is both ethically and legally improper.

Cheating includes the deliberate submitting of work that is not one's own and that violates the professor's instructions for the work; the use of testing materials from past testing periods as a study guide, unless authorized by a professor; possession of written materials, not expressly authorized by the professor during an examination or test, that contain matter relevant to the course in which the examination is being taken; discussion of examination contents with any other student while taking an examination or test; and divulging or receiving any information on the content or form of any examination that either student has not yet taken. A student who knowingly aids another student to plagiarize or cheat will be considered as responsible as the plagiarizing or cheating student.

Lying is defined as making a statement that one knows is false or is intended to deceive. Academic theft is the removal of academic materials, depriving or preventing others from having equal learning opportunities.

4.7 Research and Publication

Faculty are encouraged to pursue scholarly activities including research publications. Please refer to the Intellectual Property Policy labeled as Appendix E.

5. Confirmation of Receipt

I confirm my receipt of my copy of the California Northstate University's Faculty Handbook. I understand that it is my responsibility to read, familiarize myself with, and follow the policies and procedures contained in the Faculty Handbook.

Faculty	Member's	Signature
Faculty	Member's	Printed
Date _____		Name

6. Appendices to Faculty Handbook

6.1 Appendix A: President's Office Review of Request of Promotion

The Office of the President shall review the recommendation by the Dean and the Chair of the Rank and Promotion Committee and the dossier/portfolio of the faculty candidate.

The President's Office will render a decision based on the following criteria:

1. The promotion policy is followed.
2. There exists a described quantifiable process to access the candidate's dossier/portfolio.
3. The strength of the evidence supporting the request for promotion is described.
4. The integrity of the review process is maintained throughout review process from the Human Resource perspective.

The Office of the President may render the following action:

1. Grant approval for promotion
2. Denial request for promotion
3. Request further information or clarification before rendering a decision

Criteria	Met/ Not Met	Comment
1. Years of employment met		
2. An understanding and acceptance of, and commitment to, the purpose and objectives of the College		
3. Quality of performance		
4. Quality and quantity of assignments		
5. Evidence of cooperation, positive outlook, and maturity		
6. Proficiency as an educator		
7. A record of scholarly accomplishments		
8. Evidence of ongoing professional development		
9. Evidence of availability to individual students for advisement and willingness to share in their concerns		
10. Evidence of involvement and participation in campus, professional, and community activities		
11. Demonstrated competency in the professional discipline of the faculty member		
12. Demonstrates intellectual competence, integrity, independence, enthusiasm, and a spirit of scholarly inquiry		
13. Faculty in the clinical areas have additional responsibilities in terms of service to a clinical practice site		
14. Appendix A-A: Teaching indicators are reviewed		
15. Appendix A-B: Scholarly/Research Activity are reviewed		

16. Appendix A-C: Professional Service are reviewed		
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The Office of the President has reviewed the recommendation based on the Policy:

ASSOCIATE PROFESSOR

1. Definition: faculty who possess a Doctoral degree in his/her discipline, meets the criteria for rank of Assistant Professor, and demonstrates a sustained and significant record of accomplishments in teaching, scholarship/research activities, and professional service.
2. Time in previous rank: a minimum of five (5) years must be spent at the rank of Assistant Professor at CNU before consideration can be given to promotion to the rank of Associate Professor; however, the candidate may have the opportunity to apply early for consideration for promotion based on previous time and service credit recommended by the Rank and Promotion Committee, endorsed by the Dean, and awarded by the President under the authority granted by the Board of Trustees.
3. Academic areas considered for promotion to this rank: *excels* in two of the three areas of teaching, scholarship/research activities, and professional service, while *demonstrating satisfactory* activity in the third area.

PROFESSOR

1. Definition: faculty who possess a Doctoral degree in his/her discipline, meets the criteria for rank of Associate Professor and demonstrates continued sustained and significant record of accomplishments in teaching, scholarship/research, and professional service. The rank of Professor is among the highest honors that the college can bestow upon a faculty member. Therefore, this rank is granted only to faculty members who have distinguished themselves in their discipline at national and/or international levels. The faculty member must demonstrate a sustained record of outstanding achievements in teaching, scholarship/research activities, and professional service. The faculty member must *excel* in two of the three academic areas, and demonstrate *significant activity and accomplishment* in the third area. Although other factors will be considered, consultantships, publications in peer-reviewed journals, invited "editorialships" and lectureships, and the holding of a professional societal office will be important factors considered in assessing a faculty candidate's accomplishments.
2. Time in previous rank: a minimum of five (5) years must be spent at the rank of Associate Professor at CNU before consideration can be given to promotion to the rank of Professor; however, the candidate may have the opportunity to apply early for consideration for promotion based on previous time and service credit recommended by the Rank and Promotion Committee, endorsed by the Dean, and awarded by the President under the authority granted by the Board of Trustees.
3. Academic areas considered for promotion to this rank: sustained record of *outstanding achievements* in two of the academic areas of teaching, scholarship/research activities, and professional service, while *maintaining excellence* in the third area.

Narrative decision: _____

Date: _____

Signature: _____

President of the University

6.2 Appendix B: Indicator/Criteria of Accomplishments for Promotion

Indicators that the Rank and Promotion Committee will take into consideration when deliberating on the merits of a faculty member who has applied for promotion are, but not limited to, the following:

A. Teaching

Examples of indicators for accomplishments in the area of teaching are, but not limited to, the following:

1. Demonstration of yearly update of educational materials and teaching activities consistent with new knowledge and the application of that knowledge to practice.
2. The creation, development, and implementation of a new course, such as, but not limited to, an elective course
3. The creation, development, and implementation of a new teaching laboratory or practice exercise.
4. The creation, development, and implementation of an innovative teaching approach, or unique and new teaching aids.
5. The creation, development, and implementation of innovative grading or testing procedures.
6. Teaching competence as determined by teaching evaluation performed by peers and/or formal commendations received from faculty of higher rank in team-taught courses.
7. Receiving formal recognition for *quality* of classroom teaching activities.
8. Serving as an effective mentor for students in directed study courses or projects such as, but not limited to, laboratory work (research) or an elective course that involves self study.
9. Collaborating with other faculty to achieve effective integration of instruction.
10. Overall teaching ability as perceived by students and documented by their responses on periodic student course evaluation surveys.
11. Serving as course coordinator for a core course.
12. Attending professional workshops or conferences that advance the development of the candidate as an instructor.
13. Demonstration of proficiency in teaching in the experiential program.

B. Scholarly/Research Activity

Examples of indicators for accomplishments in the area of scholarship/research are, but not limited to:

Quality and number of publications, as defined by a published paper that meets the following criteria:

1. Book, primary author;
2. Book, secondary author;
3. Book, editor;
4. Primary author of a refereed Review article;
5. Primary author, patent – work is not otherwise published;
6. Publication of results of research in peer-reviewed journals or other professional publications;
7. Publication of other scholarly work in peer-reviewed journals and other professional publications;

8. Writes and submits as principal investigator research proposal or grant application to appropriate extramural or intramural funding agency that *receives funding*;
9. Primary author of original, peer-reviewed work not included in the above nine (9) items.
10. Book chapter, primary author;
11. Invited poster or platform presentation as primary author or principal investigator;
12. Publication of a peer-reviewed abstract as primary, secondary or senior author in which results of research or other scholarly work presented as a poster or platform presentation at a professional meeting;
13. Primary author of a refereed Case report;
14. Secondary author of a Book chapter;
15. Peer-reviewed review article as secondary or senior author;
16. Primary, secondary or senior author of a Continuing Education article;
17. Primary author of a peer-reviewed letter to the editor;
18. Secondary author of a peer-reviewed original work.

Additional Scholarly Activities that can be included in the dossier/portfolio include, but are not limited to:

1. Writes on average one (1) high quality research proposal or grant application that does not receive funding every two years and submits the proposal or grant application to an appropriate intramural, extramural, private or public agency or board;
2. Publication as primary, secondary or senior author of a non-peer-reviewed abstract in which results of research or other scholarly work is presented as a poster or platform presentation at a professional or scientific meeting;
3. Receiving an award and/or a commendation recognizing scholarly accomplishments;
4. Numbers of citations of papers published (impact factor) while a faculty member of CNUCOP.
5. Scholarly/research activities also includes the development, demonstration, documentation and evaluation of innovative methods that increase effective teaching as long as such work results in the publication of the results of the innovation.

C. Professional Service

Specific professional service that the Rank and Promotion Committee will consider includes, but is not limited to, the following:

1. To College and/or Department:

- a. Serves on committees of the Department or College;
- b. Effectively carries out committee assignments and related responsibilities;
- c. Serves on committees of the department or College as chairperson;
- d. Serves as faculty advisor to student groups/organizations;
- e. Represents the college at regional or national levels as an elected delegate or other officially recognized representative;
- f. Received an award or commendation for these areas of service;
- g. Performs administrative or service duties for the department or College (e.g., prepared special projects and performed special assignments made by the Department Chair, Assistant or Associate Dean, or Dean);
- h. Performs activities to benefit the College not described elsewhere in this section.

i. Development of a postgraduate program.

2. To Professional and/or Community Organizations:

- a. Serves or has served on a committee for a professional, scientific or community organization, association or society;
- b. Serves or has served as an officer of a professional, scientific or community organization, association or society;
- c. Serves or has served as a consultant in their area of expertise to non-college agencies, professional, scientific or community organizations, associations or societies, or industry;
- d. Has received awards or commendations for any of the above three (3) items (2a, 2b or 2c);
- e. Reviews or has reviewed manuscripts for scholarly publications, organizations, associations or societies;
- f. Reviews or has reviewed grant proposals and/or written applications for extramural granting agencies;
- g. Reviews or has reviewed, as an external reviewer, the dossier/portfolio submitted as an application for promotion and/or tenure by a candidate from another institution;
- h. Serves or has served as an external reviewer for the program review of another institution.
- i. Serves or has served as an editor, associate editor or on the editorial board of a journal.

3. To Clinical Practice Sites

The Rank and Promotion Committee will also take into consideration for faculty in the Clinical and Administrative Sciences Department, when appropriate, service to clinical practice sites in the areas of, but not limited to:

- 1. Clinical service through use of scientific principles in the detection, assessment, and resolution of drug therapy problems.
- 2. Provision of quality, patient-centered programs and services with responsibility for outcomes.
- 3. Practice competence as reflected in practice site evaluations.
- 4. Presenting on subjects relating to pharmacy practice.
- 5. Receiving a practice development grant.
- 6. Directing an experiential practice program.
- 7. Participating as an invited contributor in a national symposium or workshop on pharmacy practice.
- 8. Receiving a widely recognized or national practice award.
- 9. Receiving board certification or a specialty certification in the area of expertise (i.e., BCPS, Geriatrics, etc.).
- 10. Presents or provides written continuing education programs to practitioners.
- 11. Plans, creates develops and presents continuing education programs to practitioners.
- 12. Plans, creates develops and provides written continuing education programs to practitioners.
- 13. Develops and presents certification programs to practitioners.
- 14. Other documentary evidence of achievement of a professional nature as provided by the candidate.
- 15. Working with the Director of Residency Program to develop a new residency program.

6.3 Appendix C: Multi-Year Appointment Policy and Procedures

Multi-Year Re-Appointment Policy and Procedures

I. Policy Statement

The purpose of this procedure is to establish a process for the multi-year reappointment of eligible and qualified full-time faculty of California Northstate University College of Pharmacy (“CNUCOP”). Multi-year reappointment shall be determined and made on the bases outlined below. The term of the reappointments shall not exceed five (5) years and faculty must be given an appropriate notification of non-renewal of appointment prior to the appointment expiring, consistent with the policy and procedures for non-renewal of faculty members

II. Purpose

The purpose of this procedure is to establish a process for the multi-year reappointment of eligible and qualified full-time faculty of California Northstate University College of Pharmacy (“CNUCOP”).

III. Scope/Coverage

This procedure applies to all full-time faculty members of CNUCOP and California Northstate University’s other Colleges and Programs beginning when opened for the first class of students.

IV. Procedure

- a. Eligibility for consideration for a multi-year reappointment is established by a faculty member’s annual performance evaluations. Once eligible, the respective faculty member will be reviewed and recommended for reappointment or non-reappointment by the respective department Chair and the Dean, based on approved qualitative and quantitative standards and factors, with final institutional approval by the President.
- b. New faculty members are hired on a one-year appointment. All full-time faculty members have the opportunity to receive consideration for a multi-year renewal appointment after the successful completion of the first year appointment. If successful, the initial reappointment will be for a two-year term of renewal. After the successful completion of the first three years with CNUCOP, faculty members can be considered to receive an additional two-year term of renewal. Upon the successful completion of the first five years with the college, faculty members may be considered for up to a five-year renewal appointment.
- c. All faculty members must undergo an annual performance evaluation regardless of the duration of their appointment. To be eligible for reappointment, a faculty member must receive certain minimum ratings on his or her annual performance evaluations, as described below. Specifically, a minimum overall performance rating of “successful” must be achieved at each annual evaluation for a faculty member to be eligible to receive consideration for a two-year renewal appointment. To receive a five-year renewal

appointment, a faculty member must achieve at least an overall rating of “successful” annually and at least one “exceptional” in one of the three areas: teaching effectiveness, scholarly activity and services during the previous five years. To maintain and be eligible to receive consideration for an additional five-year renewal appointment, a faculty member must maintain a minimum overall performance rating of “successful” annually, with at least one “exceptional” rating over the previous five years. Faculty members who are not eligible for a five-year reappointment may be considered for successive two-year appointments if eligible for the latter. Faculty members who are not eligible for reappointment because they do not meet the eligibility standards for a two-year reappointment shall be notified at least 3.5 months prior to the expiration of their respective appointments. Faculty members who are on a five-year appointment shall be notified at least 5.5 months prior to the expiration of their respective appointments.

- d. The respective Chair will make recommendations for reappointment and non-reappointment to the Dean. These recommendations will include recommendations regarding any appropriate salary adjustments. The Dean will then submit recommendations regarding reappointment and non-reappointment, including any appropriate salary adjustments as well as the Dean’s modifications to the Chair’s recommendations, to the President of the University. The President shall review the recommendations and provide the final institutional approval or disapproval, including salary. The President’s final approval or disapproval will be based on institutional needs such as budgetary, University policy, and legal considerations, and other extenuating circumstances.
- e. The final decision on reappointment shall be communicated to each faculty member by the respective department Chairs, in consultation with Human Resources. All notices of non-renewal shall be delivered in writing to each faculty member prior to the expiration of their respective appointments. For those serving a two-year appointment, at least 3.5 months’ notice is required. For those serving a five year appointment, at least 5.5 months’ notice is required. Notices of renewal shall state the length of the renewal period, the salary and other conditions of the reappointment.
- f. All faculty members must adhere to the Faculty Code of Conduct, and are subject to discipline up to and including dismissal, at any time, notwithstanding a term appointment. Faculty terminations are subject to the procedures outlined in the Faculty Termination Policy.

Associated forms:

Faculty Termination Policy

Approval record:

APPROVED: BOT: 10/23/14

REVIEW: every two years (or more often if required)

6.4 Appendix D: Faculty Termination Policy

Faculty Termination Policy

I. POLICY AND GENERAL STATEMENT

Adherence to the faculty Code of Professional Ethics and to the Conduct Regulations set forth by the California Northstate University (the “**University**”) is the responsibility of the individual faculty member. The principles implicit in these procedures are for the benefit of all faculty who are involved with or are affected by the rules and regulations of the University.

II. PURPOSE

The purpose of this document is to provide a process for addressing and ensuring that a faculty member’s rights, during the termination process, are adequately protected.

III. SCOPE/COVERAGE

This policy applies to all University faculty who are dismissed during the period of his/her appointment. It is the overall goal of the University to resolve any concerns, issues or problems which may result in termination at the lowest possible administrative level prior to such occurrence.

IV. PROCEDURE

The procedures contained herein adhere to the requirements of the California Administrative Procedure Act, as well as to ensure that each faculty member’s constitutional due process rights are protected. Accordingly, a faculty member will not be subjected to termination, absent his or her agreement, unless s/he has been provided:

- written notice for basis of termination against him/her;
- the opportunity to be heard by an initial committee of peers randomly selected;
- the opportunity to appeal the decision to an appeal committee, which will be comprised of a minimum of three (3) members randomly selected;
- the right to be accompanied to all termination hearings by an advisor of his/her choice; and
- the opportunity for a recording of the hearings.

The procedures set forth herein identify checks and balances to protect the rights of each faculty member during the termination process. For example, no termination action may be imposed absent a review by the President of such a recommendation, absent a review by a committee of the faculty member’s peers, nor absent notification of the Board of Trustees by the President as to all stages of a termination process.

The Faculty Termination Procedures enumerate timelines that shall be followed at each stage of the termination process to ensure that any concerns pertaining to the termination are resolved in as timely a manner as possible. Timely resolution of the termination process protects the rights of all participants to the process.

6.5 Appendix E: Intellectual Property Policy

CALIFORNIA NORTHSTATE UNIVERSITY INTELLECTUAL PROPERTY POLICY

Purpose

The purpose of this Intellectual Property Policy (“Policy”) is to set forth the general policies that define the rights and obligations of California Northstate University (“University”); all persons employed by the University including its faculty, staff, students; and, all persons and entities using the University’s funds, space, facilities, materials, personnel, or other resources.

Definitions

For the purposes of the Policy, the following terms are defined as follows:

University: California Northstate University, LLC, its colleges, its departments and offices, and any related foundation or other related entity formally associated with the University.

Copyrightable Work: An original work of authorship which has been fixed in any tangible medium of expression from which it can be perceived, reproduced, or otherwise communicated, either directly or with the aid of a machine or device, such as a book, magazine, journal, software, computer program, pictorial or graphic work, video, sound recording, multimedia product, dramatic work, musical work, etc. A Copyrightable Work may be the product of a single author or a group of collaborating authors.

Creator: Any faculty, staff, and other persons employed by the University, whether full time or part time, visiting faculty and researchers, students, and any other persons who create or discover Intellectual Property at the direction of the University or using University resources. A Creator may be a single person or entity, or a group of collaborating persons and entities. A Creator of an Invention, however, must be an inventor of the Invention as defined by the United States patent laws or, if protection is sought outside of the United States, by the legal standards of the country in which rights are sought.

Institutional Works: Works created at the instigation of the University, under the specific direction of the University, for the University’s use, by persons, entities, or both acting within the scope of their employment or otherwise subject to a written contract with the University.

Intellectual Property: All forms of intellectual property, including but not limited to Copyrightable Works, Inventions, Tangible Research Property, Trademarks, and Trade Secrets.

Invention: The legal construct of an Invention is defined by the United States patent laws or, if protection is sought outside of the United States, by the laws of the country in which patent rights are sought. In the United States, an Invention can be any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof. Intellectual Property can be considered an Invention, for example, if it reasonably appears to qualify for protection under the law of the country in which protection is sought, whether or not the Intellectual Property is determined to be actually patentable. An Invention may be the product of a single inventor or a group of collaborating inventors.

Patent: A set of exclusive rights granted by a government to an inventor or assignee for a limited period of time in exchange for a public disclosure of an Invention.

Policy: This Intellectual Property Policy of California Northstate University as set forth herein.

Software: Written programs or procedures or rules and associated documentation pertaining to the operation of a computer system and that are stored in read/write memory. Software includes computer programs, computer databases, documentation, source code, source code listings, design details, algorithms, processes, flow charts, formulae, and any related materials that would enable software to be produced, reproduced, recreated, or recompiled.

Tangible Research Property: Tangible items include any items produced in or derived from the course of research such as, for example, chemicals, materials, small molecules, large molecules, biological materials, amino acids, peptides, proteins, nucleic acids, oligonucleotides, polynucleotides, DNA, probes, vectors, cells, transfected cells, antibodies, pharmaceuticals, drug delivery systems, medical devices, therapeutic apparatus, therapeutic interventions, in vitro assays, in vivo assays, data, databases, computer databases, algorithms, computer software, engineering drawings, prototypes, equipment, charts, graphs, tables, research methods, business methods, other records or information, etc. Individual items of Tangible Research Property may be associated with one or more items of Intellectual Property, such as Copyrightable Works, Inventions, Trademarks, and Trade Secrets.

Trademark: A distinctive word, design, or graphic symbol, or a combination of any word, design, or graphic symbol, that identifies and distinguishes the goods and services of a particular person or entity.

Trade Secret: Information that is not generally known to the public and confers some sort of economic benefit on its holder and derived specifically from its not being generally known rather than just from the value of the information itself. Trade Secrets must be subject to reasonable efforts to maintain secrecy.

Objectives

The mission of the University is to advance the art and science of healthcare. In accord with this mission, the objectives of the Policy are: (1) to encourage the development of Intellectual Property for the best interest of the University, the public, and the Creator of the Intellectual Property; (2) to provide timely disclosure and protection of Intellectual Property; (3) to allow faculty, staff, and students of California Northstate University maximum academic, scientific, and professional freedom in developing Intellectual Property, consistent with any obligations of employment and sponsored research; and (4) to protect California Northstate University's interest in Intellectual Property.

Applicability

This Policy applies to (1) all persons employed by the University; and (2) all persons and entities using the University's funds, space, facilities, materials, personnel, or other resources, including but not limited to adjunct faculty, visiting faculty and researchers, and students, except to the extent the University and such persons or entities enter into a separate written agreement relating to specific Intellectual Property and related work by such persons and entities. University employees shall not enter into intellectual property agreements related to outside employment, such as consulting or summer employment agreements, and shall not collaborate with others on the conception, research, development, production, or other creation or reduction to practice of Intellectual Property, without first providing written notice to all prospective employers and collaborators that the Intellectual Property rights of the University cannot be subordinated to a third party employment, consulting, or collaboration agreement, and without first disclosing such employment, consulting agreement, or collaboration to the University and providing copies of any related written agreements to the University.

Copyrightable Works

5.1 General: Except for Institutional Works and Works Developed with Significant Use of University Resources as described in Sections 5.4 and 5.5 below, and notwithstanding the work for hire doctrine, the ownership of textbooks, manuscripts for publication in books, articles for publication in academic journals, trade publications, popular magazines or newspapers, or other mediums of expression, scholarly monographs, charts, maps, works of nonfiction, novels, artistic works, supporting materials, and like works shall be held by the Creator.

5.2 University's Royalty-Free Use of Works: Except for textbooks, the University shall have royalty-free use of the scholarly and artistic works described in Section 5.1 above within the University, unless agreed otherwise in writing. If the work is to be published, the Creator shall diligently request that the University be provided with a

royalty-free right to use the manuscript within the University in its teaching, research, and service programs, but not for external distribution, and, if successful, the Creator shall grant such right to the University.

5.3 Student Academic Creations: The ownership of student works submitted in fulfillment of academic requirements shall be with the Creator. The student by enrolling in the University gives the University a nonexclusive royalty-free license to use, mark on, modify, and/or retain the work as may be required by the process of instruction, or otherwise handle the work as described in the course syllabus. The University shall not have the right to use the work in any other manner without the written consent of the Creator. Where the creation is part of any ongoing research or development project, the involved faculty or staff shall have the right to use and to modify the creation for use within that project and related research projects without additional consent of the Creator. Students working on a project governed by a written agreement to which the University is a party shall be bound by the terms of that written agreement. Students who are hired to perform specific tasks that contribute to a Copyrightable Work will ordinarily have no rights to ownership of that work, regardless of the source of funds from which they are paid; in such cases, the party who owns the copyright of the rest of the work will ordinarily retain copyright ownership of the portion contributed by the student. Students working collaboratively with academic employees on projects that result in a Copyrightable Work may be granted the same rights and obligations of copyright ownership as would academic employees working collaboratively on the project; students and academic employees should establish these rights at the outset of their collaboration through written authorization from the academic dean or his delegated associate dean, assistant dean, department chair, or director.

5.4 Institutional Works: The University shall retain sole ownership of Institutional Works. Institutional Works are defined in Section 2 above and include, by way of example and not by way of limitation, (1) manuals, brochures, CDs, videos, and training programs prepared by hired staff members or by persons hired for that purpose, (2) software developed for the University, and (3) work assigned to programmers. The University owns all rights, title, and interests in such Institutional Works and the Intellectual Property related thereto, except as provided in prior written agreements between the University and Creator of such works.

5.5 Works Developed with Significant Use of University Resources: Copyrightable Works that are not Institutional Works but are works that are developed with significant and integral use of funds, space, facilities, materials, personnel, or other resources administered by the University, where such use was substantial and essential rather than incidental, shall be owned by the University. In addition, Copyrightable Works that are not Institutional Works but are works that are developed in the course of or

resulting from research supported by a grant or contract with the federal government (or an agency thereof) or a nonprofit or for-profit nongovernmental entity, or by a private gift or grant to the University, shall be determined in accordance with the terms of the sponsored grant or contract, or in the absence of such terms and to the extent consistent with copyright law, shall be owned by University. The University recognizes and affirms the traditional academic freedom of its faculty and staff to publish scholarly, pedagogical, and artistic works without restriction. In keeping with this philosophy, the University will not construe the provision of offices or library facilities as constituting significant use of University resources, except for those instances where the resources were furnished with the specific purpose of supporting the development of such Copyrightable Works.

5.6 Disclosure, Assignment, and Protection: Creators of Copyrightable Works that are not owned by the University under this Policy own the copyrights in their works and are free to publish them, register the copyright, and to receive any revenues which may result therefrom. Notwithstanding the immediately preceding sentence, Creators of Copyrightable Works must nevertheless promptly disclose to the University any work of their authorship, any part of which was created during their time of employment by the University, including but not limited to any Copyrightable Works made under sponsored research or cooperative arrangements. Disclosure shall be made on a disclosure form prescribed by and available from the University. Such persons shall cooperate with the University to the best of their ability in protecting Intellectual Property rights in their works of authorship. Furthermore, upon request by the University to perfect Intellectual Property rights, such persons shall (1) warrant that, to the best of their knowledge, the work does not infringe upon any existing copyright or other legal rights, that work not identified as quotation is the expression or creation of the author, and that necessary permission for quotation and the use of third party works has been obtained; and (2) execute such documents and perform such other things as the University may reasonably require to perfect the University's rights in such works. Notwithstanding the foregoing, the University will process federal registration for University owned Copyrightable Works when the University concludes that such University owned Copyrightable Works should be licensed for commercial exploitation or when registration is required under terms of a sponsored agreement.

5.7 Software: All software is copyrighted, may be federally registered as such, and may also be patentable. Rights to Software developed by a Creator shall vest in the University, when there was any support of the Creator's efforts through use of funds, space, facilities, materials, personnel, trade secret information, or other resources administered by the University. A grant or contract between a sponsor and the University usually contains specific provisions with respect to the disposition of rights to Software, and such prior contractual obligations may define the disposition of Software developed during the project; in the absence of any such provisions, rights to Software developed by a

Creator shall vest in the University. In those cases in which Software ownership rights are vested in the University, or in cases in which income is shared between the sponsor and the University, the Creator will share in income earned by the University as set forth in Section 8. In recent years, the United States Patent and Trademark Office has determined that software which meets certain technical and legal criteria may be patentable. In the case that Software originally disclosed as a Copyrightable Work subsequently is determined to be patentable subject matter, and the University chooses to seek patent protection for the Software, then such Software shall thereafter be managed under this Policy as an Invention.

Inventions and Patents

6.1 General: All Inventions conceived, researched, developed, produced, or otherwise created or reduced to practice, that result from an individual's employment responsibilities or that result from support from funds, space, facilities, materials, personnel, trade secrets, or other resources administered by the University shall belong to the University and the inventor shall assign all rights in the Invention to the University. For purposes of this Policy, researching an Invention includes all scholarly research conducted in the course of the Creator's University employment, including but not limited to performance of research sponsored by the University or by an external agency/corporation or with University funds, space, facilities, materials, personnel, trade secrets, or resources. The University shall have the sole right to determine the disposition of such Inventions. In making such a determination, the University will act in a manner, which in the sole judgment and discretion of the University, is in the best interests of the University, the Creator, the Invention's research sponsors, and the public.

6.2 Sponsor Supported Efforts: Ownership of an Invention developed in the course of or resulting from research supported by a grant or contract with the federal government (or an agency thereof) or a nonprofit or for-profit nongovernmental entity, shall be determined in accordance with the terms of the sponsored grant or contract, or in the absence of such terms, shall be owned by the University. In the case of government supported research, the Bayh-Dole Act and subsequent amendments and federal regulations provide the basis for current University technology transfer practices. Accordingly, while the University is assigned the rights to Intellectual Property generated during the course of federally-sponsored research activities, the government retains the option to claim ownership under certain circumstances. In the event that the government does not exercise its option (the usual circumstance) and regardless of ownership, the government retains a non-exclusive, non-transferable, irrevocable, royalty-free, worldwide license to the Intellectual Property produced under government sponsorship. In those cases in which all patent rights are vested in the University, or in cases in which income is shared

between the sponsor and the University, the Creator will share in income according to the allocation formula set forth herein in Section 8.

6.3 Institutional Works: The Creator of Institutional Works shall exercise no rights in such works and shall receive no proceeds from the licensing, sale, assignment, or use of such works, except as provided by prior written agreement between the Creator and University.

6.4 Tangible Research Property: To the extent allowed by law, where any Tangible Research Property is not within the scope of the claims of a patent, patent application, or copyright, ownership of such Tangible Research Property shall be determined as set forth herein, and the Creator of such Tangible Research Property will share in income according to the allocation schedule set forth in Section 8.

6.5 Individual Efforts: An Invention unrelated to an individual's employment responsibilities that is developed on his or her own time without University support or use of funds, space, facilities, materials, personnel, or other resources administered by the University is not owned by the University. In such cases the University will make no claim for royalties or income from the Invention.

6.6 Disclosure and Assignment: All persons subject to this Policy shall promptly disclose to the University any Invention conceived by them, as well as any part of which that was conceived, researched, developed, produced, or otherwise created or reduced to practice during their time of employment by the University. The only disclosure of any invention shall be made on a disclosure form prescribed by and available from the University, unless otherwise authorized by the University in writing in order to preserve worldwide rights to any such invention. All persons subject to this policy recognize that unauthorized disclosures can create an irreversible loss of rights and revenue and, thus, shall use their best efforts to cooperate with the University to protect all Intellectual Property rights in the Invention, as well as any rights otherwise associated with the invention. All Creators shall execute appropriate assignments and/or other documents as necessary to legalize and enable the proper distribution of ownership and rights to any Invention as set forth herein throughout this Policy.

6.7 University Decisions on Disclosed Inventions: A Patent Committee, appointed by the President and whose membership will represent both faculty and administration, will make recommendations on whether to seek intellectual property protection on disclosed Inventions. This Committee will use commercially reasonable efforts for prompt decisions, consistent with faculty publication and other obligations. The Committee will establish procedures which allow the University to meet time contingencies through the use of provisional applications and other appropriate measures. This Policy recognizes, however, that invention evaluation procedures can be complicated

by a wide variety of factors. The Committee will keep the Creator reasonably informed of the status of the disclosure and shall make recommendations to the University's Board of Directors regarding the appropriate measures to take in regard to protecting the Invention. The Board of Directors' decision will be the final decision on this matter and shall be completed within 9 months after the disclosure is submitted to the University. Should the Board of Directors decide not to pursue patent protection, upon request the University will assign to the Creator the rights to the Invention, subject only to sponsor restrictions. In all cases in which the Invention is assigned to the Creator, the University will retain the rights to a non-exclusive, non-transferable, irrevocable, royalty-free, worldwide license to the Invention for its teaching, research, and service programs.

Trademarks

Trademarks associate a good or a service with the source of the good or service. In most situations, a Trademark identifies an item of Intellectual Property, such as a computer program or a plant variety. In other situations, a Trademark may identify an educational, training, research, service, or public relations program of the University. Regardless, the University owns all rights, title and interests in Trademarks related to an item of Intellectual Property owned by the University such as, for example, a program of education, training, research, service, or public relations of the University. All income from the licensing of a Trademark shall belong to the University.

Distribution of Revenue

8.1 Schedule of Distribution: Except as otherwise provided in this Policy, any revenue received by the University generated through University owned Intellectual Property will be distributed in a manner that recognizes the efforts and contributions of the Creator and as set forth by this Policy. The University will maintain a detailed accounting for all expenditures and receipts associated with the Intellectual Property and will manage the distribution of the revenue ("the annual gross income") as follows:

- (a) 100% of the annual gross income shall go to the University until the University's Costs of Development have been recovered. The "Costs of Development" include costs associated with legal services, and other expenses that include the costs of materials, equipment (an allocated percentage of total cost based on total expected use), and staffing that were incurred during the development of the Intellectual Property.
- (b) after Costs of Development have been recovered, 20% of the annual gross income shall go to the University to ensure a sufficient reserve to pay for ongoing "Costs of Commercialization," such as legal services, government maintenance fees for the Intellectual Property, and other

commercialization efforts that include marketing expenses and insurance and exclude internal technology transfer staff time;

(c) the remaining 80% of the annual gross income shall be defined as annual Net Revenue and distributed annually, paid in its entirety in a single annual payment or structured over the annual period, according to the following tiered distribution system based on total Net Revenue accumulated from year to year by adding all of the annual Net Revenue amounts together:

<u>Total Net Revenue Accumulated From Year To Year</u>	<u>Proportion Of Distribution</u>
First Tier: First \$0 - \$100,000.00	50% to Creator 50% to University
Second Tier: After first \$100,000.00 is distributed in First Tier, next \$150,000.00	25% to Creator 75% to University
Third Tier: After first \$250,000.00 is distributed in First and Second Tiers, next \$250,000.00	15% to Creator 85% to University
Fourth Tier: After first \$500,000.00 is distributed in First, Second, and Third Tiers, the remaining amount	10% to Creator 90% to University;

(d) in the event the University takes equity in a company that is not founded by the Creator, the distribution of the equity will be 25% to the Creator and 75% to the University, and the distribution of shares to the Creator will occur at the same time and at the same share price of the initial distribution of equity to the University; and,

(e) in the event the University elects not to commercialize an Intellectual Property and allows the Creator to commercialize the Intellectual Property, the distribution of revenue will be 75% to the Creator and 25% to the University where the Creator assumes the costs of procuring Intellectual Property and Costs of Commercialization.

8.2 Distribution for Multiple Creators: Multiple Creators may enter into an agreement that reflects an agreed-upon percent contribution of each of the individual Creators to the as-filed application for rights to the Intellectual Property. The lead Creator shall (i) obtain an agreement signed by each Creator and identifying the percent contribution of each Creator to the as-filed application, and (ii) submit the agreement to the University. The agreed-upon percent contribution of each Creator will be used as the revenue distribution formula. If such an agreement is not submitted to the University

within ninety (90) days of the filing date of the Intellectual Property application, the University will determine the revenue distribution formula.

8.3 Right to Change Distribution: The University reserves the right to change the distribution of revenue annually and agrees to provide timely notice of any such change to all persons employed by the University including its faculty, staff, students; and, all persons and entities using the University's funds, space, facilities, materials, personnel, or other resources.

Dispute Resolution

If there is a dispute relating to any matter addressed by this Policy, those persons to whom the Policy applies as described in Section 4 above shall present the dispute to the University's Board of Directors for the Board of Directors' consideration before taking any legal action through the courts or any governmental administrative body.

California Law

This Policy shall be interpreted according to California Law, including but not limited to the provisions of the Labor Code (including, but not by way of limitation, Sections 2860, 2870, 2871, and 2872 thereof) relating to ownership of Inventions, except as otherwise provided in this Policy. Any and all Inventions that relate to the employer's business, research, or development shall be governed by the provisions of this Policy.

Not Assignable

Those persons to whom this Policy applies as described in Section 4 above may not assign or delegate any of their rights, duties, or obligations as set forth in this Policy without the prior written consent of the University's Board of Directors.

Severability

If a court or arbitrator of competent jurisdiction holds any provision of this Policy to be illegal, invalid, or unenforceable, in whole or in part for any reason, the validity and enforceability of the remaining provisions will not be affected, unless an essential purpose of this Policy would be defeated by the loss of the illegal, invalid, or unenforceable provision.

Agreement of the Parties

This Policy is binding on the (1) all persons employed by the University; and (2) all persons and entities using the University's funds, space, facilities, materials, personnel, or other resources. Such persons include, but are not limited to, adjunct faculty, visiting faculty and researchers, and students as a condition for their association with the

University. Such association can include, but is not limited to, teaching, research, and service programs, as well as use of University resources. Furthermore, to avoid any potential for a conflict of interest, members of the University may not enter into an employment, consulting, or collaborative agreement that is in conflict with the policies described herein. Affirmative written notice must be provided to any outside prospective employer or collaborator that the Intellectual Property rights of the University cannot be subordinated to any third party employment, consulting, or collaborative agreement. All persons bound by this Policy must first disclose such employment, consulting agreement, or collaboration to the University and provide copies of any related written agreements to the University before accepting the terms of any such agreement.

STATEMENT OF AGREEMENT:

1. I agree to abide by the terms, conditions, and procedures set forth in this Policy.
2. I will not enter into any agreement creating Intellectual Property, patent, copyright, trademark, or trade secret interests or obligations that is in conflict with this Policy.

Signature

Department

Name (please print)

Date

Appendix 3-1 Faculty Hiring Plan



California Northstate University College of Dental Medicine

Administration and Faculty Hiring Plan

The College of Dental Medicine at CNU will provide didactic, laboratory and simulation education and experiential patient care education with a team of full and part time faculty. While the part time faculty will include the administrative team and content experts across the spectrum of dental medicine, its disciplines and its specialties, part time clinical educators from the Northstate region will provide clinical preceptorship/education, mentorship, lecture and small group learning seminars at the primary campus and in community based education sites.

A planning group of 47 future faculty associated to the Sacramento District Dental Society has met several times to develop curriculum. The 12 original members of the planning group for the College of Dental Medicine will also serve in part time faculty capacity. The hiring plan for 42.5 full time faculty provides a comprehensive mix to accommodate instructional, clinical, service and scholarly needs of the college.

Note that FTE from initial BMS and preclinical and clinical educators will be divided among more than one hire each of whom will consume .1 to .2 FTE

Administration

Position	FTE Salary	Initial FTE	FTE w/ full enrollment
Dean	295,000	1.0	1.0
Associate Dean, Academic Affairs and Faculty Development	175,000	1.0	1.0
Associate Dean, Curriculum and Clinical Education	165,000	1.0	1.0
Assistant Dean, Clinical Affairs	150,000	1.0	1.0
Assistant Dean, Student Affairs	150,000	0.5	1.0

Appendix 3-1 Faculty Hiring Plan

Assistant Dean, Research	150,000	0.67	0.67
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Faculty

Basic Medical Sciences Faculty*	130,000	6	6
Preclinical Education Faculty	130,000	0.5	6.0
Clinical Education (general) Faculty	130,000	1.0	12.0
Clinical Education (specialty) Faculty	145,000	1.0	12.0
Part-time Clinical	90,000	0	6.0
Volunteer Clinical (general and specialty) Faculty	0	6.5	18.0
TOTALS		15	60

*These are primarily College of Medicine faculty teaching in Common Pathway courses

**California Northstate College of Dental
Medicine**

**Senior Leadership
Team**

Dean, College of Dental Medicine

Associate Dean of Academic Affairs and Faculty Development

Assistant Dean of Curriculum and Clinical Education

Assistant Dean of Clinical Affairs

Assistant Dean of Student Affairs and Admissions

Assistant Dean of Research

Appendix 3-1 Faculty Hiring Plan

Faculty**Basic Medical Sciences educators (in addition to COM common pathway educators = 6 FTE)**

These faculty will be DMD, DDS, MD, D. Psych, DPharm, or PhD terminal degrees with engagement for case based education in the common pathway curriculum, and in the teaching of head and neck anatomy, dental anatomy, and behavioral sciences

Preclinical educators = 6 FTE

These faculty will hold DMD, BDS or DDS and have appropriate postdoctoral certificate or degree education in operative dentistry, prosthodontics, periodontology, pediatric dentistry or oral and maxillofacial surgery.

Clinical educators general dentistry = 12 FTE

These are general dentists holding the DMD or DDS or BDS who will serve as student preceptors, team leaders, in comprehensive care. Some will serve in discipline based faculty in special needs, emergency care, and oral diagnosis among others

Clinical educators dental specialties = 12 FTE

These are full time positions in dental specialties for board certified specialists holding the DMD, MD, or DDS including specialists in prosthodontics, periodontology, endodontology, pediatric dentistry, orthodontics, oral and maxillofacial pathology, oral and maxillofacial radiology, and oral and maxillofacial surgery

Part time clinical educators = 12 FTE

These are ½ to 1 day a week positions for general dentists and specialists holding the DMD or BDS or DDS degree for clinical or preclinical assignments as educators.

Volunteer Clinical Adjunct Faculty (no cost)

Faculty salaried by health entities with whom CNU has affiliation agreements for clinical education will be given faculty appointments to provide clinical education. These faculty will hold a terminal degree such as DMD, DDS, MD, PhD, DPharm



CALIFORNIA NORTHSTATE UNIVERSITY FACULTY RETENTION REPORT, 2019





CALIFORNIA
NORTHSTATE
UNIVERSITY

CALIFORNIA NORTHSTATE UNIVERSITY FACULTY RETENTION REPORT, 2019

Foreward

The following is the California Northstate University Faculty Retention Report 2019 year. The purpose of this report is to provide data relating to faculty retention, and to further examine how to retain faculty.

This report was prepared by California Northstate University Institutional Research Analyst, Justin Martin, and the Vice President for Institutional Research, Quality, and Assessment, Dr. Karen McClendon.

If you have any questions pertaining to the information presented within the report, please feel free to contact Justin at justin.martin@cnsu.edu, or at (916) 686-7879.

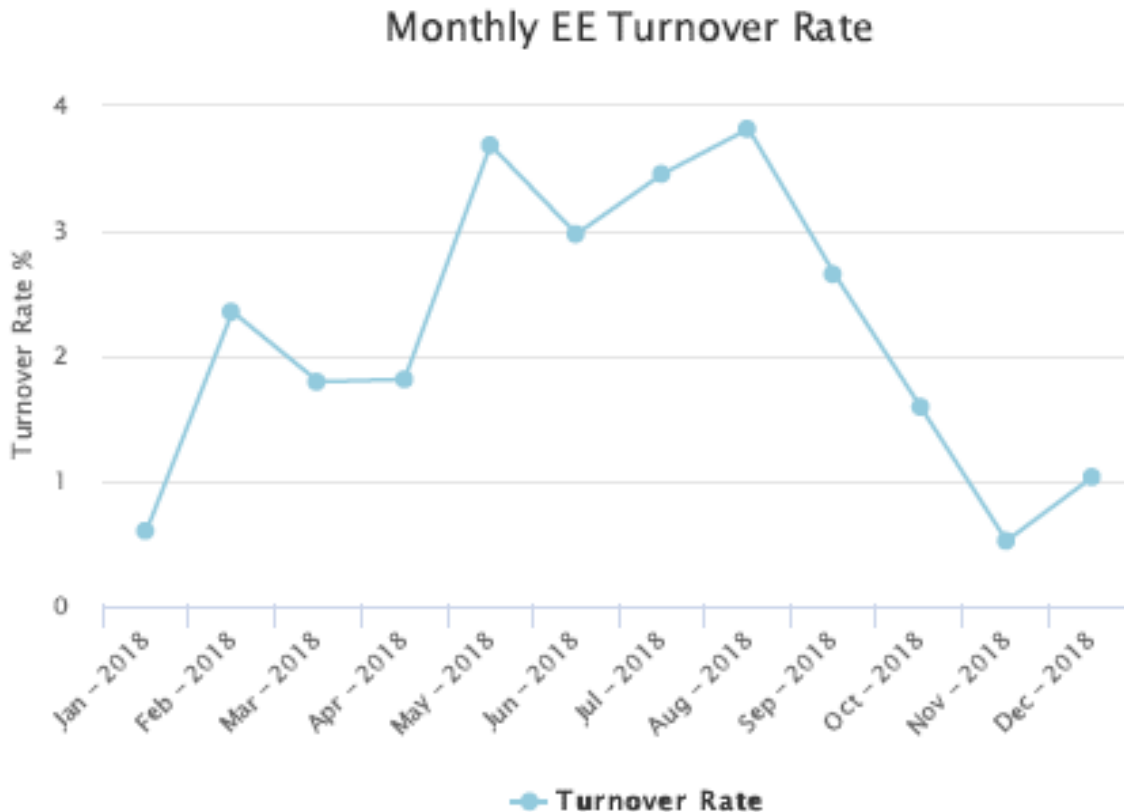




ITEM RESULT GRAPHS



- The following graph indicates that hiring increased at the beginning of the year of 2018, slowed until picking back up again in July and August. The trajectory is within the normal hiring trends for CNU employees.



- The turnover rate at CNU peaked at around August in the 2018 year, with a dramatic decrease that continued for the rest of the year. Over the past year, the university has implemented the following retention initiative programs in an effort to allow our employees to maximize their full potential while employed at CNU:
 - Tuition discount for CNU enrolled children of full-time employees
 - Tuition subsidy for full-time employees who wish to attain an advanced degree in seeking position of greater responsibility or different skill set within CNU.
 - Innovation proposal program allowing employees to submit project proposal with reasonable potential for innovation award (contributing to CNU mission fulfillment)
 - Rewarding employees for their great work and contribution to CNU mission by providing three additional days off for all employees during the holiday in December paid by CNU.
 - An advanced recruitment training for search committees and hiring managers
 - Increased numbers of faculty to ensure greater balance of research and teaching duties
 - A systematic annual review of staff benefits
 - The creation and use of a task force focus group for employee satisfaction
 - An increase in research support
 - A new faculty development seminar series



Historical Head Count



- CNU has sharply increased the amount of employees at the university, indicating a low ending turnover rate in the latter half of 2018. The upward trajectory is expected to continue into the 2019 year.

Appendix 3-1 Hiring Plan for Faculty Years 1 and 2

**Hiring Plan for Course Directors CDM Faculty: 2020-21 and 2021-22**

Academic Year	Position	Course director	Name	Hire Date
2020-21	*Assistant Professor of Pathology	Hematology	Nazila Hejazi	5-1-2020
	*Associate Professor of Anatomy	Integumentary and Musculoskeletal	Nripendra Dhillon	5-1-2020
	Professor	Foundations of Odontology	Kevin Keating	9-1-2020
	Professor	Dental Anatomy	Wai Chen	5-1-2020
	Professor	Foundations of Dental Medicine, Surgical Anatomy of the Head and Neck	Leon Assael	12-1-2018
	Professor	Managing Student Life Ethics in Dental Medicine and Health Care	Richard Simonsen	2-14-2019
	*Professor of Clinical Neurology	Neuroscience	Forshing Lui	5-1-2020
	*Associate Professor of Emergency Medicine	Cardiovascular and Pulmonary Systems	Darilyn Falck	10-1-2020
	*Associate Professor of Physiology	Cardiovascular and Pulmonary Systems	Tracy Yarbrough	10-1-2020
	Professor	Cariology	Kevin Keating	3-1-2019
	Assistant Professor	Oral Microbiology/Immunology	Pending	10-1-2020

Appendix 3-1 Hiring Plan for Faculty Years 1 and 2

Academic Year	Position	Course	Name	Hire Date
2021-22	*Associate Professor of Physiology	Renal System	Tracy Yarbrough	5-1-2021
	*Professor of Molecular Biology, Immunology and Microbiology	Gastroenterology	Nehad El-Sawi	5-1-2021
	*Associate Professor of Physiology, Endocrinology and Clinical Skills	Endocrine System	Mark Sheffield	5-1-2021
	Assistant Professor	Clinical Pharmacology 1	Hieu Tran	5-1-2021
	Assistant Professor	Operative Dentistry	Wai Chan	5-1-2020
	Assistant Professor	Periodontology	Rosemary Wu	5-1-2021
	Assistant Professor	Dental Anesthesiology 1: Local Anesthesia Dental Anesthesiology 2: Pain and Anxiety Control, Analgesia, Medical Management of Local Anesthesia	Michael Cadra	5-1-2021
	Assistant Professor	Oral Radiology 1	Shikha Rathi	5-1-2021
	Assistant Professor	Clinical Pharmacology 2/Oral Pharmacology	Jagdev Heir	5-1-2021
	Associate/Assistant Professor	Prosthodontics and Implant Dentistry: Removable Prosthodontics	Jeff Nordlander	10-1-2021
	Professor	Comprehensive Care Family Dentistry Endodontology, Diseases of the Pulp and Pathways of Odontogenic Infection	Kevin Keating	3-1-2019
	Associate/Assistant	Oral Pathology/Oral	Pending	10-1-2021

Appendix 3-1 Hiring Plan for Faculty Years 1 and 2

	Professor	Medicine 1		
	Associate/Assistant Professor	Orthodontics and Craniofacial Growth and Development	Pending	10-1-2021
	Associate/Assistant Professor	Behavioral Medicine	Bret McLaughlin	10-1-2021
	Associate/Assistant Professor	Dental Medicine at all Stages of Life	Pending	10-1-2021

* Faculty shared with College of Medicine

Appendix 3-1 Secretarial and Clerical Support for CDM

**Secretarial and Clerical Support for CDM**

As reprised in Standard 3.1, the hiring plan includes secretarial and clerical staffing in administration, clinical affairs and technical/buildings and grounds as follows. This does not include the other 39 staff positions which are for administration, clinical activities, technical, building and grounds.

Academic secretarial	Operative	
	prosthodontics	
	Public health/community based education	
	Pediatric dentistry	
	Oral medicine/oral path/oral radiology	
	orthodontics	
	Periodontology/endodontics	
	Oral surgery	
	Human studies behavioral social sciences	9 total
Clinic secretarial	Registration and billing	4 total
Clinic clerical	Coordinators	8 total
TOTAL clerical		21



Faculty Mentoring Program

The goal of the Mentoring Program is to assist faculty in becoming accomplished, productive, and successful in their chosen endeavors of teaching, research, patient care, or administration. Mentoring relationships have proven to be an excellent way to enhance professional growth and the University strongly supports such activities. When you meet with your supervisor throughout the year, we encourage you to use these activities as a resource to assess your mentoring needs as they relate to your professional development.

CNU departments support the mentorship process. When faculty are first hired they will be assigned a mentor. This relationship may remain, but after three months the mentee has attended University functions and interacted with other faculty enough to make their own selection. During these initial three months of mentoring, all new faculty should meet with their mentor monthly and document their interaction at each meeting. It is the mentee's responsibility to keep and maintain the Mentoring Form as it may be reviewed during their annual evaluation.

The Associate Dean of Faculty Affairs for the PsyD program will be reviewing the mentor/mentee pairings using two forms for the evaluation: the assessment form for mentees and the assessment form for mentors. They will also periodically provide faculty with the "Could I Benefit or be a Mentor?" form to monitor need and demand of the program.

The mentoring program helps faculty to:

- Determine if they are in a position to be a mentor
- Describe the rewards associated with mentoring
- Offer direction on how and why to seek a mentor
- Provide a checklist of qualities to look for when seeking a mentor or a mentee
- Offer alternatives to traditional mentoring
- Offer suggestions for colleges, departments, and divisions in devising mentoring programs
- Point out potential obstacles to mentoring
- Provide template forms to assess need and monitor mentoring relationships
- Offer additional resources for more detailed information on mentoring

Importance of Mentoring

The following are possible relationships between a junior and a senior professional in an academic setting:

- Advisor, tutor, or preceptor (assigned by the institution)
- Role model or mentor (chosen by the learner)

Institutionally assigned roles are professional: the senior ensures that the junior completes institutional requirements, is progressing appropriately in his or her field of study, and has the knowledge necessary to achieve career success. Relationships chosen by the learner often involve a personal element in addition to professional guidance: a role model or a practicing professional who may not be at a senior level but can provide a perspective of professional employment. A role model can be a professional

equal, but mentors are senior representatives in their fields. They are chosen specifically for their positions and experience in developing early careers.

Benefits to Mentors:

Mentoring is a developmental stage in one's professional life and by becoming a mentor you have the opportunity to affect the future. Mentors often gain:

- A sense of self-worth
- An opportunity to shape careers
- A deeper connection with colleagues
- A further contribution to the school
- An increase in future Productivity
- Career satisfaction and rejuvenation
- Organizational recognition

Although there are a number of benefits to be gained from the role of a mentor, there are also quite a few responsibilities. Before entering such a relationship it is important that faculty consider the following expectations.

Mentors Will:

- Encourage and demonstrate confidence in mentee
- Recognize mentee as an individual with a private life
- Value them as a person
- Recognize own limitations
- Provide feedback
- Encourage independent behavior
- Provide accessibility and exposure to mentee
- Stress importance to mentee of networking
- Allow mentee to assist in projects
- Give appropriate credit to mentee
- Make sure the mentee has your contact information
- Tell mentee about your expectations
- Ask mentee what they expect from you
- Develop a checklist concerning mentee career goals
- Set up a regular time to meet
- Write out one and three year goals
- Facilitate mentee's membership in committees
- Offer assistance in publications
- Never see the mentee as a threat

Characteristics That Should be Sought in a Mentee

When trying to determine if a mentee is ready to begin the mentoring relationship, consider the following traits and interests:

- Eagerness to learn
- Understanding of the seriousness required in a mentoring relationship
- Flexibility and an understanding
- Acceptance in giving and receiving feedback

- Interest in the process
- Mutual respect
- Ability to maintain confidentiality
- Ability to seek out additional mentors as needed
- Willingness to explore new areas of interest

As a mentor, you need to ensure that your mentee maintains productivity; has protected research time; understands the requirements for promotion; and receives exposure via local, national, and international organizations. You also need to be aware and sensitive to obstacles that may be present in the mentee's life and have the potential to interfere with his/her professional demands.

When Mentees are Seeking a Mentor

When Mentees are deciding whom to approach as a potential mentor, they should keep the following questions in mind:

- Of those in my department junior to me, who is pursuing work or has strengths similar to my own?
- Who appears to be struggling in an area that is my strength?
- To whom do I gravitate before and after staff meetings or at social functions?
- The most effective mentoring experience occurs where the seeker and the sought mutually agree to the relationship
- Familiarize yourself with the department's senior faculty, their publications, their practice, and research areas
- Closely observe the senior staff during department meetings
- Match the professional expertise you admire with the personal qualities that would make for a collegial relationship
- Personal "fit" should be considered
- The mentor – mentee relationship is always a dynamic one

Evaluate the Relationship

Both the mentor and mentee should monitor and evaluate the relationship to ensure that it is mutually beneficial to both parties.

- Has your mentor continued to be academically successful?
- Are you still interested in their areas of research or teaching?
- Is the mentor easy to approach and have a conversation?
- Does your mentor advise and encourage your independent goals?
- Do you meet regularly?
- Do you receive feedback and constructive criticism?
- Does the mentor facilitate professional opportunities?
- Does the mentor facilitate opportunities within the university?

The following three forms can assist in the evaluation process and should be used both as a record of the relationship's progress and as a tool to facilitate further conversation.

Assessment Form for Mentees

Must be completed after first year of mentoring relationship or as needed.

Complete as follows:

1 – Strongly Agree, 2 – Agree, 3 – Neutral, 4. –Disagree, 5– Strongly Disagree

- | | |
|---|-----------|
| • I believe that mentoring is a good idea. | 1 2 3 4 5 |
| • I have benefitted from the mentoring relationship. | 1 2 3 4 5 |
| • My mentor is readily available. | 1 2 3 4 5 |
| • My mentor and I meet on a regular basis. | 1 2 3 4 5 |
| • My mentor and I are congruent on our goals. | 1 2 3 4 5 |
| • My mentor and I have similar values. | 1 2 3 4 5 |
| • My mentor respects me as a person. | 1 2 3 4 5 |
| • My mentor believes in work/life balance. | 1 2 3 4 5 |
| • My mentor always gives appropriate credit. | 1 2 3 4 5 |
| • My mentor has involved me in University committees. | 1 2 3 4 5 |

The most rewarding elements of the mentoring relationship are:

I would suggest the following improvements:

Assessment Form for Mentors

Must be completed after first year of mentoring relationship or as needed

Complete as follows:

1 – Strongly Agree, 2 – Agree, 3 – Neutral, 4. –Disagree, 5– Strongly Disagree

- I think mentoring is a good idea. 1 2 3 4 5
- I believe that my mentee has benefited from the relationship. 1 2 3 4 5
- My mentee and I have similar values. 1 2 3 4 5
- My mentee respects me as a person. 1 2 3 4 5
- The relationship requires too much of my time. 1 2 3 4 5
- I have the support of the University for my mentoring activities. 1 2 3 4 5
- I have referred my mentee to other faculty for help. 1 2 3 4 5
- My mentee does not need a mentor. 1 2 3 4 5

1. The best thing about mentoring is:

2. I would suggest the following changes/modifications:

Could I Benefit or be a Mentor?

Circle your level of expertise for the position duties listed:

1 – I feel competent in this area and am willing to be a mentor

2 – I feel somewhat competent in this area, but am not willing to be a mentor

3 – I need mentoring in this area.

- | | |
|---|-------|
| • Developing a promotion package | 1 2 3 |
| • Developing a teaching portfolio | 1 2 3 |
| • Creating a budget | 1 2 3 |
| • Developing a curriculum | 1 2 3 |
| • Evaluating a curriculum | 1 2 3 |
| • Graduate student teaching | 1 2 3 |
| • Peer Evaluation | 1 2 3 |
| • Time Management | 1 2 3 |
| • Integration of clinical and research duties | 1 2 3 |
| • Grant writing | 1 2 3 |
| • Grant review | 1 2 3 |
| • Research design | 1 2 3 |
| • Presentations | 1 2 3 |
| • Manuscript preparation | 1 2 3 |
| • Communication skills | 1 2 3 |
| • Computer skills | 1 2 3 |

Name: _____

Rank: _____ How long at present rank: _____

Appendix 3-2 Seminar Attendance

**College of Dental Medicine****Professional Development 2019**

Name	Dates	Title	Course Objectives
Leon Assael	February 21-22	Sacramento District Dental Society Midwinter Convention	An array of sessions to assist dentists in improving skills and clinical practices.
Leon Assael	March 16-19	American Dental Education Association Annual Session	An array of sessions developed to assistant dental educators and administrators in improving their individual skills to ensure the success of students and dental colleges.
Kevin Keating	March 17-22	Harvard Macy Institute: A Systems Approach to Assessment in Health Professions Education	Apply systems thinking in designing assessment programs to support the continuous quality improvement of students/trainees, faculty, and curricula at their academic health science institutions.



College of Dental Medicine Bylaws

PREAMBLE

UNIVERSITY MISSION, VISION, AND CORE VALUES

Mission: To advance the art and science of healthcare

Vision: To provide innovative education and healthcare delivery systems

Core Values (WE CARE):

- Working as a team
- Embracing diversity and workplace excellence
- Caring about our students, our staff, our faculty and our profession
- Advancing our university, our goals, and our discipline
- Responding to challenges that may impede our Mission
- Enhancing communication and partnership

CNU COLLEGE OF DENTAL MEDICINE MISSION STATEMENT

MISSION

The Mission of the College of Dental Medicine is to advance the art and science of health care through excellence in oral health education, practice, research, service, and social accountability.

Education: Create caring, skilled and knowledgeable clinicians who will constantly advance their capabilities throughout life

Practice: Produce clinical leaders in oral health who will serve in private practice, health systems practice, in interprofessional settings, academia and industry

Research: Promulgate scientific inquiry throughout the curriculum and support student and faculty research that creates an environment of scientific curiosity and an evidence-based foundation for clinical practice.

Appendix 3-3 CNUCDM Bylaws

Service: Provide individual patient care services at all clinical sites under the auspices of CNUCDM that produces the very best oral health outcomes and clinical value.

Social Accountability: Advocate for and help build stronger communities in California and globally through improved oral health care, disease prevention, health promotion and protection from oral diseases through community-based approaches.

VISION

The Vision of the College of Dental Medicine is to provide constructive innovation in its education programs, and leadership in integrating oral health care into human health care systems.

College of Dental Medicine Values:

- Patient-centered didactic and clinical education that always puts improved health outcomes first
- Foster a humanistic and character-developing environment for dental students
- Making better communities and a better world through improved oral health
- Understanding the professional responsibility of the dentist as the head of the oral health care team
- Practicing health promotion and disease prevention and protection
- Advancing California Northstate University through excellence in all we do

ARTICLE I

FUNCTIONS

The faculty of California Northstate University College of Dental Medicine (CNUCDM), herein after referred to as the College, shall have the responsibility to:

1. Recommend the requirements for student admission into the Doctor of Dental Medicine (DMD) program offered by the College
2. Recommend and implement the necessary evaluative tools to determine the readiness of the candidates to be awarded the respective degree
3. Recommend to the Dean student candidates for graduation who have completed the requirements for the degree
4. Supervise all courses and curricula for DMD students and the postgraduate training of residents and fellows
5. Organize and develop the programs and resources necessary for the professional development of faculty and staff
6. Advise the Dean on the resources necessary to implement the curricula, develop programs, and develop/train faculty

ARTICLE II

MEMBERSHIP OF FACULTY

The Faculty shall consist of the Dean, the Assistant/Associate Deans, the Department Chairs, Directors, and all those members (preceptors included) who hold academic appointments with the College of Dental Medicine.

ARTICLE III

OFFICERS OF THE FACULTY

1. The Officer of the faculty is the Dean's Administrative Assistant who is responsible for tallying all votes and recording the faculty meeting minutes.

2. The Officer shall enforce Robert's Rules of Order and ensure a quorum exists in order to conduct faculty business.

ARTICLE IV

MEETINGS OF THE FACULTY

1. Meetings of the faculty will be held at least once each month as time permits, and when the circumstances deem appropriate, or upon the request of the Dean.
2. All faculty members shall be invited to attend all meetings of the faculty and allowed to participate in discussion.
3. The Dean or a designated member shall preside at all faculty meetings.
4. The Dean's office shall provide notice to the faculty at least five business days in advance of any routine meeting.
5. The Dean's office shall set the agenda. Any faculty member may recommend items for addition to the agenda.
6. The number equal to or greater than 51% of the eligible voting faculty shall constitute a quorum.
7. The Officer of the faculty shall have no voting privileges and shall be responsible for recording and distributing the minutes to faculty and any other administrative functions that may be required.

ARTICLE V

VOTING

Voting within all meetings within the College shall be carried out in the following manner unless otherwise specified within the committee or departmental structure:

Voting rights:

- I. Voting privileges will be granted to faculty members holding at least a 50% full-time employment contract at the College.
- II. All-faculty meeting voting:

- a. The faculty, by a simple majority (51%) vote of voting members in attendance (in person or by phone), may vote on any documents presented for voting.

III. Committee and departmental meeting voting:

- a. Voting shall be carried out as above.

Voting types:

I. Voting shall follow one of these methods:

- a. Voice vote, a show of hands, electronic voting or written secret ballot.
- b. The Dean or committee chairperson shall select a method of voting, but the membership can propose to call for a secret ballot on any motion.

Recording:

- I. Voting shall be recorded.

ARTICLE VI

COLLEGE ORGANIZATION

The College shall be organized into at least three academic departments:

1. The Department of Pharmaceutical and Biomedical Sciences: The Department of Pharmaceutical and Biomedical Sciences will include faculty holding an academic appointment in a field related to pharmaceutical and biomedical sciences.
2. The Department of Clinical and Administrative Sciences: The Department of Clinical and Administrative Sciences will include faculty holding an academic appointment in a clinical discipline in fields related to clinical and administrative sciences.
3. Department of Experiential Education: The Department of Experiential Education will include faculty holding an academic appointment in a clinical discipline in fields related to their experiential education responsibilities.

Each department shall establish a departmental mission statement and formulate and comply with goals supporting that mission, as well as the mission and goals of the College.

Each department shall operate independently under the guidance of a chairperson appointed by the Dean, with the recommendation and support of the departmental faculty.

The Department Chair will serve at the discretion of the Dean and carry out the responsibilities of the academic department including, but not limited to:

1. Provide leadership and governance to all faculty and staff appointed to the Department.
2. Recommend academic appointment and recruitment of departmental faculty as indicated by the departmental faculty search committee.
3. Assign teaching responsibilities to optimally deliver the professional curriculum.
4. Provide opportunities for and assisting each member of the faculty to achieve his/her professional development goals related to teaching, scholarly activity, and professional service.
5. Conduct annual and special evaluations of departmental faculty and staff as required by CNUCOP policy, and make recommendations pertaining to salary adjustments and personnel actions to the Dean.
6. Review the departmental pool of applicants for promotion and formulate recommendations for academic promotion to the Promotion Review Committee in the College.
7. Manage the departmental budget as directed by the Dean in accordance with CNUCOP policies.

The Department Chair may be assisted in his/her responsibilities by other faculty members appointed to serve as vice chair, program directors, or coordinators with other specific administrative functions. Such appointments are through approval by and action of the Dean and will be limited as described in the Bylaws.

ARTICLE VII

EXECUTIVE COMMITTEE

Duties:

1. Advise the Dean about matters related to the College and delivery of the curriculum.
2. Promote College success.

3. Provide input on financial decisions.
4. Develop and review policies.
5. Establish short and long-term goals that align with the strategic plan of the College and University.
6. Monitor and assess the College's level of performance in meeting its goals.

The Executive Committee shall consist of:

1. The Dean, who serves as chairperson.
2. Assistant or Associate Deans.
3. The Chair from each academic department.
4. Directors, who are invited on an 'as needed' basis.
5. One elected COP member of the Faculty Senate.
6. Additional members as assigned.

Minutes of each meeting shall be recorded and distributed to the faculty.

ARTICLE VIII

STANDING COMMITTEES

All standing committee appointments shall be effective at the beginning of each academic year.

The Dean, Assistant/Associate Deans, as well as Department Chairs, shall serve as non-voting ex-officio members on relevant committees, and the Dean shall nominate all chairs and vice chairs for standing committees.

Department chairs will solicit the interest of each faculty member within their department prior to committee assignments; faculty interest in serving on committees will then be taken into account when committee appointments are made. The appointments shall be reviewed by the Dean's Executive Committee and presented to the Dean for approval.

Standing committees shall report meeting minutes to the Dean's Executive Committee. A summary of committee activities will be reported to faculty on a monthly basis.

Appointments to each committee shall be for two years, and members shall not serve for more than two consecutive terms. However, if a current member expresses a desire to continue service on a committee, he/she may be reappointed from the pool of candidates.

Each standing committee shall consist of:

- a. Up to three members of the faculty from each academic department.
- b. A committee chair as appointed by the Dean from members of the committee. The Chair may not be the Dean, Assistant/Associate Deans, Department Chairs, or chair any other standing College committees. Appointment as chair shall be for one year.
- c. A committee vice chair, as appointed by the Dean, from members of the committee. The vice chair may not be the Dean, Assistant/Associate Deans, Department Chairs, or a vice chair for any other standing College committees. Appointment as vice chair shall be for one year. The vice chair may be appointed as chair of the same committee at the end of the one year term.

1. Admissions Committee

I. Duties:

- a. Screen, interview, and select qualified applicants for admission to the College.
- b. The Dean of the College of Dental Medicine will review the recommendations for acceptance, along with related materials from the Admissions Committee, to ensure the Code of Federal Regulations (Title 34 – Education), the State of California Code of Regulations, Commission on Dental Accreditation and WSCUC accreditation standards, as well as College admission policies, have been followed before approving applicants for acceptance to the College.

II. The Admissions Committee shall consist of the following additional members:

- a. A member from the University Admissions Office or other University representative.

Assessment Committee

I. Duties

- a. Develop and apply assessment methods to evaluate curricular outcomes.

- b. Propose recommendations to the Dean's Executive Committee concerning methods by which the quality of the program and its graduates may continually be evaluated.
- c. Review assessment methods currently employed and evaluate data obtained from both the didactic curriculum and experiential rotations.
- d. Evaluate student progress in achieving the educational outcomes of the College.

II. The Assessment Committee shall consist of the following additional members:

- a. A member from the Curriculum Committee.
- b. A second and third-year DMD student (D2 and D3). The committee chair will solicit for second and third-year DMD student members, and subsequently appoint student members to the committee.
- c. A member from the University's Office of Institutional Research, Quality, and Assessment.

Curriculum Committee

I. Duties

- a. Provide ongoing evaluations of the current curriculum in compliance with regulatory agencies (i.e., CODA).
- b. Continually appraise and evaluate the current dental medicine curriculum and outcome statements to identify opportunities for curricular revisions, additions, and/or other alterations to ensure optimal student learning and the achievement of learning outcomes.
- c. The Dean of the College of Dental Medicine will review the recommendations from the Committee to assure that the content of the curriculum and its delivery meet CODA and WSCUC accreditation standards and are consistent with program learning outcomes, and NABP competency expectations.

II. The Curriculum Committee shall consists of the following additional members:

- a. A member from the Assessment Committee.
- b. A member from Interprofessional Education (IPE) Committee.

- c. One non-faculty preceptor.
- d. A second and third-year DMD student (D2 and D3). The committee chair will solicit for second and third-year DMD student members, and subsequently appoint student members to the committee.

Faculty Development, Orientation, and Mentoring Committee

I. Duties:

- a. Make recommendations to the Dean regarding faculty development needs.
- b. Develop and implement special programs intended to promote faculty development.
- c. Develop a Faculty Development Program in accordance with the strategic goals of the College.
- d. Arrange a series of faculty development seminars and workshops at least four times annually.
- e. Create a list of faculty mentors and encourage junior faculty members to select a mentor from the College's faculty.
- f. Identify external mentoring programs or courses offered outside the college or university.

Professional and Academic Standards Committee

I. Duties:

- a. Monitor the academic progress, performance, and professional behavior of students to ensure student compliance with the Honor Code in the Doctor Dental Medicine degree program.
- b. Make recommendations to the Dean regarding any of the following courses of action relating to the student's standing in the program:
 - i. Remediation
 - ii. Academic Progression
 - iii. Academic Probation
 - iv. Leave of absence
 - v. Dismissal from the College

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6. Promotion Review Committee

I. Duties:

- a. Review the criteria, standards and guidelines that are considered when determining if a faculty member is eligible for promotion.
- b. Provide an annual workshop on promotion guidelines and procedures for the faculty.
- c. The Promotion Review Committee decision process will conform to the Promotion and Tenure Policy and the Faculty Handbook.

7. Research Committee

I. Duties

- a. Develop policies for:
 1. Research initiatives
 2. Use of shared laboratories and equipment
 3. Allocation of equipment
- b. Make recommendations to the Dean for the purchase of laboratory equipment, space allocation, and design of laboratories.
- c. Help organize annual CNU Research Day
- d. Contribute to the review and the selection of Summer Research Fellows

8. Scholarship and Award Committee

I. Duties:

- a. Develop criteria for all student, faculty, preceptor, and staff awards.
- b. Solicit for and receive nominations for various student scholarships and awards.
- c. Make annual recommendations to the faculty on student credentials in satisfying the requirements for sponsored awards.
- d. Review nominations and select the scholarship and/or award recipients

- e. Make recommendations to the Dean on additional scholarship funding and awards.

ARTICLE IX

BYLAWS AMENDMENTS

Review of the College Bylaws shall occur at least every three years.

Ratification or Approval

- I. Amendments of Bylaws shall require two-thirds majority vote of the voting faculty.

Other College-level committees:

- I. Faculty Search Committee
- II. Seed Grant Committee

Other CNU committees:

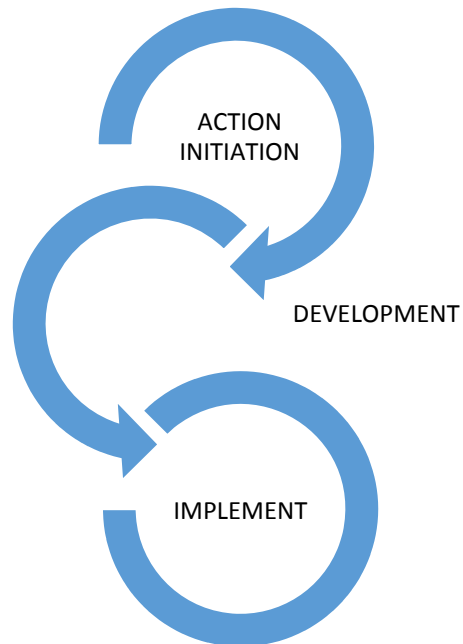
- I. Please refer to individual bylaws of CNU committees.

Appendix 3-3 Diagram Outlining CDM Decision Making

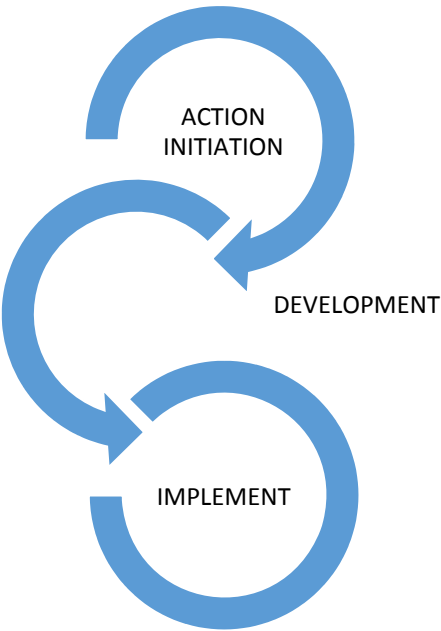
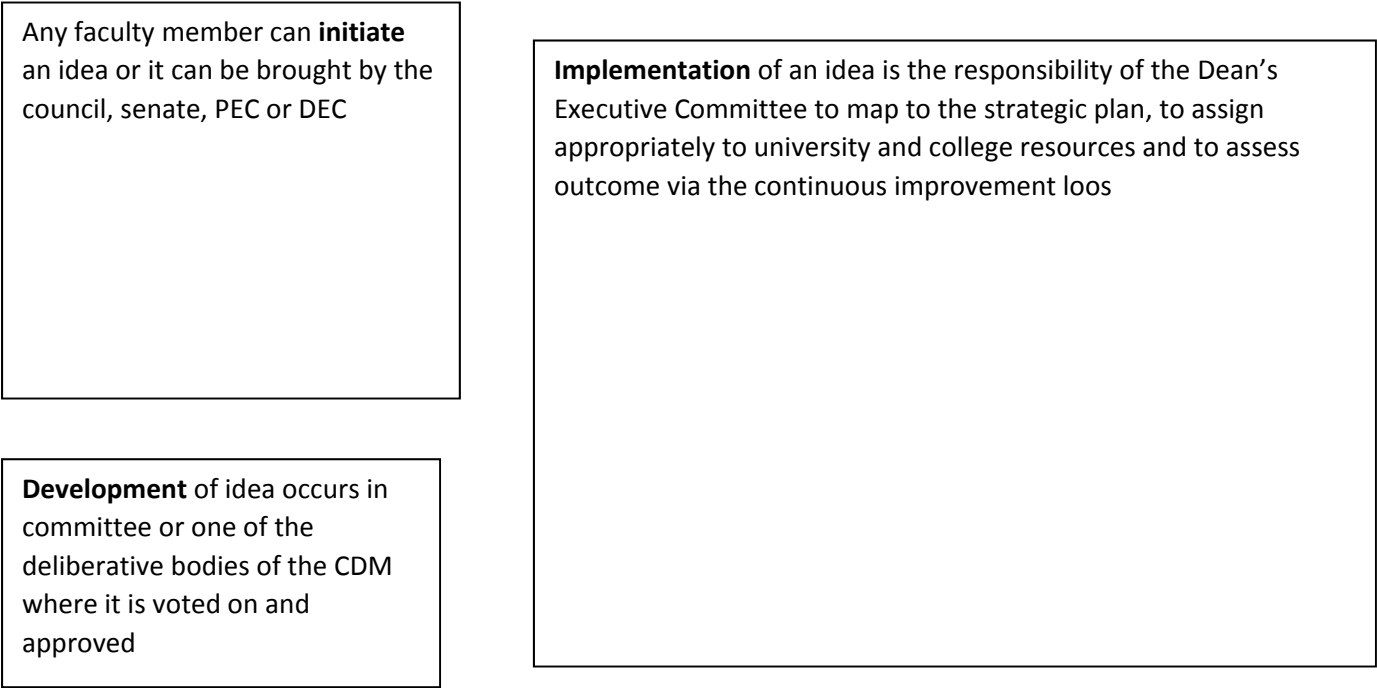
**Decision Making Diagram for College of Dental Medicine**

Action consists of:

1. Initiation
2. Development
3. Implementation



Below represents how this flowchart is implemented to produce faculty governance





CALIFORNIA NORTHSTATE UNIVERSITY

FACULTY SENATE BYLAWS

ARTICLE 1 - NAME OF ORGANIZATION

Section 1.1 Name.

The name of the organization shall be California Northstate University Faculty Senate ("Faculty Senate").

ARTICLE 2 - PURPOSE

Section 2.1 Purpose.

The Faculty Senate will participate in shared governance in matters that affect the institution's academic operations of teaching, scholarship, and service. The Faculty Senate will also have an advisory role in other matters concerning the mission, vision, welfare, and performance of the institution. The Faculty Senate serves as a representative voice for the Faculty.

"Shared governance" as applied to the University community in general is defined as the process of the council, committee, or person responsible for making a decision obtaining input and feedback when appropriate from various other constituencies of the University community, so that an informed decision can be made; shared governance does not necessarily mean that a particular constituency is part of the actual final decision making process.

The Faculty Senate's role in shared governance will be to review academic and faculty policies, procedures, and regulations, and seek consensus, provide input, or recommend actions regarding these issues as they affect the Faculty in the following areas:

- Educational standards
- Academic standards and student achievement
- Faculty qualifications

- Faculty recruitment, rank and promotion, and retention
- Faculty development and career progression
- Academic resources and staffing
- Scholarly activities including research
- Policies relating to standing committees, *ad hoc* committees, task forces, and faculty search committees
- Long range strategic planning and development regarding the University

ARTICLE 3 - MEMBERSHIP AND ELECTION

Section 3.1 Membership.

The Faculty Senate shall consist of a maximum of three (3) Members from each College of California Northstate University. Due to differences in the size of the Colleges, a guideline for membership number for Senate based on full-time employment (FTE) totals in a given College is provided below (the maximum number of members from any College will be three (3)):

- i) At least one (1) member for Senate if the College has 1 to 10 FTE.
- ii) At least two (2) members for Senate if the College has 11 to 20 FTE.
- iii) Three (3) members for senate if the College has 21 or more FTE.

Section 3.2 Qualifications.

To be eligible to be a member of the Faculty Senate, an individual:

- a. Shall hold a faculty appointment in one of the Colleges of California Northstate University; and
- b. May not hold the position of President, Vice-President, Senior Vice-President, Executive Vice-President, Assistant Vice-President, Dean, Vice-Dean, Associate Dean, Assistant Dean, Department Chair, or Trustee, or a position equivalent to or higher than any of these positions.

Section 3.3 Selection for Membership.

Members of the Faculty Senate must be selected by their respective College and meet the eligibility requirements set forth in Section 3.2 of these Bylaws. Selection can be done by a majority vote of the faculty body of the respective College or can be done by the appointment by the Dean of the respective College. The selection process should occur between June 1 and June 30 so members can start their term July 1.

Section 3.4 Term of Office.

Members of the Faculty Senate shall serve terms of two (2) years. A member's term shall begin on July 1 following the member's election, and shall continue until June 30 of the calendar year two (2) years after the member's election. A member shall hold office until the member's successor is elected, or until the member's earlier resignation, removal, or other inability to continue to serve.

Section 3.5 Staggered Terms.

The terms of the members of the Faculty Senate shall be staggered such that one or two members shall be elected by each College in June of each year. Notwithstanding the provisions of this Section 3.5, the initial members of the Faculty Senate shall modify their initial terms by agreement, shortening the terms of one member from each College in order to accomplish the staggering of terms required by this Section.

Section 3.6 Term Limits.

A member of the Faculty Senate may serve for no more than two (2) consecutive terms.

Section 3.7 Resignation, Removal, and Filling, Vacancies.

A position on the Faculty Senate shall be declared vacant upon the member's resignation, removal, incapacity, disability, or death. A member may resign at any given time by giving written notice to the Chair of the Faculty Senate, except the Chair's resignation shall be given to the Faculty Senate as a whole. A member of the Faculty Senate may be removed by a two-thirds (2/3) majority of a quorum of a meeting of the faculty body of the College that elected such member. Any vacancy occurring on the Faculty Senate shall be filled by nomination and election by the faculty body of the departing member's College as set forth under Section 3.3 of these Bylaws, without regard to the timing thereunder. The newly elected member shall complete the unexpired term of the predecessor. A member elected to complete the term of a departing member shall be considered to have served a complete term if the remaining term of office at time of election is one and a half years or more in length.

ARTICLE 4 - OFFICERS

Section 4.1 Designation.

The officers of the Faculty Senate shall be the Chair and Vice-Chair.

Section 4.2 Election and Selection.

The Chair and Vice-Chair shall be elected by the members of the Faculty Senate from among the members of the Faculty Senate at the first Faculty Senate meeting of each academic year, with the academic year beginning on each July 1. The offices of Chair and Vice-Chair shall rotate each year among the Colleges of California Northstate University. The Vice-Chair in any given year shall be from a different College than the Chair.

Section 4.3 Term of Office.

The term of office for the Chair and Vice-Chair is one (1) year. The Chair and Vice-Chair shall hold office until their respective successors are elected, or until the Chair or Vice-Chair's earlier resignation, removal, incapacity, disability, or death.

Section 4.4 Resignation, Removal, and Vacancies.

The offices of Chair or Vice-Chair shall be declared vacant upon their respective resignation, removal, incapacity, disability, or death. The Chair or Vice-Chair's resignation shall be given to the Faculty Senate as a whole. The Chair or Vice-Chair may be removed by a two-thirds (2/3) majority of a quorum of the Faculty Senate. A vacancy of the Chair shall be filled by the Vice-Chair. A vacancy of the Vice-Chair shall be filled by election as set forth under Section 4.2 of these Bylaws, without regard to the timing thereunder. The newly elected Chair or Vice-Chair shall complete the unexpired term of the predecessor.

Section 4.5 Duties of Chair.

The Chair shall:

- a. Preside over meetings of the Faculty Senate;
- b. Set the agenda for meetings of the Faculty Senate;
- c. Cause the minutes of the Faculty Senate to be taken and published to all Faculty of the University;
- d. Cause members of the Faculty Senate to be notified of meetings; and
- e. Serve as the principal representative of the Faculty to the Administration and other bodies.

Section 4.6 Duties of Vice-Chair.

The Vice-Chair shall:

- a. Preside over meetings of the Faculty Senate at which the Chair is absent;
- b. Perform the other duties of the Chair in the Chair's absence or other inability to do so;
- c. Perform additional duties as requested by the Chair; and
- d. Complete the term of the Chair in the event of a vacancy as set forth in Section 4.4 of these Bylaws.

It is anticipated that the Vice-Chair perform these duties in a manner that would allow the Vice-Chair to be a qualified candidate to succeed the Chair in the following academic year.

ARTICLE 5 - FACULTY SENATE MEETINGS

Section 5.1 Regular and Additional Meetings.

The Faculty Senate shall meet at least four times per year. Additional meetings may be called by the Chair of the Faculty Senate or by a majority of the members of the Faculty Senate.

Section 5.2 Notice of Meeting.

Written notice of each meeting of the Faculty Senate stating the date, time, and place of the meeting, and in the case of an additional meeting, the purpose(s) for which the meeting is called, shall be given to members of the Faculty Senate at least 10 business days before the meeting. Notice may be delivered either personally, by email or other electronic transmission, by facsimile, by United States mail, or by private carrier. Such notice shall be deemed completed when given, or in the case of delivery by United States mail or private carrier, on the business day after it is deposited for delivery.

If a particular matter of immediate urgency requires the calling of an additional meeting before the end of the 10 business day notice period described in the preceding paragraph, then the additional meeting shall be set promptly and in a manner that affords the most notice possible, and such notice must be given promptly and no later than 24 hours after the setting of the additional meeting.

A member may in writing waive notice of any meeting before, at, or after such meeting. The attendance of a Member at a meeting shall constitute a waiver of notice of such meeting, except where a Member attends a meeting for the express purpose of objecting to the meeting as not lawfully called or convened.

Section 5.3 Quorum.

A meeting of the Faculty Senate, in order to transact business, requires a quorum of attendance by: (1) a simple majority of the Members; and (2) at least one Member from each College. If a particular College has only one member on the Faculty Senate, the requirements of this Section may be satisfied by a proxy.

Section 5.4 Leadership of Meetings of the Faculty Senate.

The Chair of the Faculty Senate shall preside at meetings of the Faculty Senate. In the event that the Chair is absent from a meeting, the Vice-Chair shall serve as acting Chair.

Section 5.5 Agenda.

The Chair of the Faculty Senate shall set the agenda for meetings of the Faculty Senate. Any member of the Faculty Senate shall be permitted to request items for inclusion on the agenda of meetings of the Faculty Senate.

Section 5.6 Action at Meeting.

Meetings shall be conducted pursuant to *Robert's Rules of Order* or such other procedural rules as may be determined by the Chair. Any member at a meeting may request that an action be taken by vote of the members. Resolutions and motions for action shall be passed by a majority of those present, except when a higher percentage is required for such passage by these Bylaws.

Section 5.7 Action Outside of or Without Meeting.

Any vote required or permitted to be taken at a meeting of the Faculty Senate may be taken outside of or without a meeting if such vote is in writing delivered by the member to the Chair in accordance with the methods of delivery set forth in Section 5.2 of these Bylaws.

ARTICLE 6 - COMMITTEES

Section 6.1 Designation.

The Faculty Senate may nominate members to standing committees and other institutional committees of California Northstate University as specified in the governing documents of the University and the Bylaws of the various institutional committees.

Section 6.2 University Committee Membership.

Membership on committees of California Northstate University as set forth in the governing documents of the University is made upon appointment by the President of the University, the Board of Trustees of the University, the Deans of the Colleges of the University, or the Faculty Senate of the University, as set forth in the governing documents of the University and the Bylaws of the various institutional committees.

ARTICLE 7 - RECORDS

Section 7.1 Minutes.

The Faculty Senate shall keep as permanent records minutes of all meetings. A record of all actions taken with or without meetings shall also be included. The Chair of the Faculty Senate shall be responsible for designating a member of the Faculty Senate to take the minutes at each meeting. Final approved minutes shall be provided to an

individual designated by California Northstate University as the records keeper.

The Faculty Senate shall inform the faculty of important actions taken. The agenda, minutes, and supporting documentation of the Faculty Senate shall be considered open to inspection by all members of the University Faculty and shall be maintained in a place convenient for their inspection.

ARTICLE 8 - FIDUCIARY MATTERS

Section 8.1 Discharge of Duties.

Each member of the Faculty Senate shall discharge his or her duties: (i) in good faith, (ii) with the care a reasonably prudent person in a comparable position would exercise under similar circumstances, and (iii) in a manner that the individual reasonably believes to be in the best interests of California Northstate University and its faculty.

ARTICLE 9 - MISCELLANEOUS PROVISIONS

Section 9.1 Savings Clause.

Failure of literal or complete compliance with any provision of these Bylaws with respect to dates and times of notice, or the sending or receipt of the same, or errors in phraseology of notice of proposals, do not invalidate the actions or proceedings of the members at any meeting, as long as the members judge by majority vote that no substantial injury to the rights of members has occurred.

Section 9.2 Severability.

The invalidity of any provision of these Bylaws shall not affect the other provisions of these Bylaws, and in such event these Bylaws shall be construed in all respects as if such invalid provision were omitted.

Section 9.3 Interpretation with Law and Other Bylaws.

All Bylaws, policies, and actions of the Faculty Senate are intended to be, are believed to be, and shall be conducted in a manner that is in accordance with applicable federal, state, and local law; the Bylaws of the University, the Board of Trustees of the University, and the President's Executive Council; and the Bylaws of any other applicable governing organizations within the University.

Section 9.4 Authority.

The authority of the Faculty Senate is delegated from the University, and actions of the Faculty Senate reflect actions or recommendations to the University, in accordance with Section 2.1 herein.

ARTICLE 10 - AMENDMENTS OF BYLAWS

Section 10.1 Amendments.

The Bylaws of the Faculty Senate may be amended, repealed, or otherwise modified, in whole or in part, and new Bylaws may be adopted, by a vote of two-thirds (2/3) of all then current members of the Faculty Senate. The Faculty Senate approved amendment to the Bylaws shall then be approved by a collective two-thirds (2/3) of the faculty bodies (by a simple majority vote of all members within each respective faculty body) of the Colleges of California Northstate University.

Section 10.2 Approval of Amendments.

Any and all amendments, repeals, other modifications, and new Bylaws pursuant to Section 10.1 of these Bylaws require the approval of the President and the Board of Trustees of the University in order to take effect.

Appendix 3-4 Faculty Evaluation Form



THIS FORM IS TO BE USED ANNUALLY FOR ALL FACULTY FULL AND PART TIME AND FOR ALL ADMINISTRATORS.

Annual review of faculty will be based upon the following rubric using a Likert scale and the rubric below for assessment.

REVIEWER

Name:

Date:

Role for this review: (highlight one)

Self-evaluation

Student evaluation

Peer evaluation

Supervisor evaluation

Assessment of work product by knowledgeable colleagues

Course evaluation for course directors

Scoring Rubric

CATEGORY	POOR	DEVELOPING	ADEQUATE	SUPERIOR	EXCEPTIONAL
TEACHING DIDACTIC	Poor communication or outcomes of teaching	Students with deficits in didactic education	Students consistently perform as expected	Inspires extra effort in students	A didactic leader who creates a learning community

Appendix 3-4 Faculty Evaluation Form

TEACHING ACTIVE LEARNING	Unable to engage students in active learning	Developing skill to have students engage one another and be inquisitive	Has a successful learning community of active learners	Develops synthesis and discovery among active learners	Has a self sustaining community of learners that will be sustained
TEACHING LABORATORY	Unable to demonstrate or assess skills	Can show and assess some aspects of laboratory exercise	Can consistently apply objective measures toward assessment and is an understandable demonstrator and teacher in the laboratory	Is a sought after resource in the teaching laboratory for expertise and nuance of skills	Supports a team of students in the laboratory to further develop their skills and can be relied upon as an expert resource
CLINICAL EDUCATION	Cannot demonstrate or assess clinical care	Is developing ability to demonstrate and assess clinical care and understand calibration requirements	Has the ability to demonstrate and assess clinical care and understand calibration requirements and the integration of knowledge and values with skills in the clinic	Is a sought after resource who can bring students to the level of initial competency and further develop their skills	Is a mentor an role model for students in the clinic as an exceptional clinical educator
CLINICAL PRACTICE	Unable to diagnose, treat, apply evidence based care or perform care needed	Developing clinical skills but with cognitive or psychomotor gaps in development	Capable of proper diagnosis, treatment, applying evidence based care and necessary care	High level of knowledge and skills to provide superior patient care	A sought after clinician who is a resource to peers and leaders in their discipline. A clinical thought leader
FACULTY DEVELOPMENT	Not carrying out faculty development activities	Does inadequate amount of faculty development	Participating in internal and external faculty development opportunities	Has a FD plan and is adhering to it to advance their capacity as	Is a leader in faculty development recognized as both a participant and a presenter of faculty

Appendix 3-4 Faculty Evaluation Form

				an academic	development programs
MENTORING	Not providing mentoring	Learning about mentoring program	Actively providing mentoring utilizing CNU criteria	Demonstrates exceptional outcome of mentorship for CNU faculty students or staff.	Is a recognized leading mentor both at CNU and nationally in their area of expertise.
UNIVERSITY SERVICE	Not providing university service	Beginning service on committees and taskforces	Is an active participant in CNU committees , council, senate or taskforce	Is chairing or providing other necessary leadership in CNU service	Is a sought after leader in providing service at multiple levels at CNU
COMMUNITY SERVICE	Not providing community service	Has participated in community service	Is actively engaged in community service	Provides leadership in community service	Provides inspirational leadership in community service that has been recognized
RESEARCH	Not performing research	Is developing ideas for research	Is successfully performing research	Has gained external funding or other equivalent peer recognition for performance of research	Is a known research content expert and has gained national recognition for their excellence in research
PROFESSIONAL ACTIVITIES	Not participating in professional activities	Is beginning to participate in organized professional activities	Is an active participant in professional activities	Demonstrates leadership in organized professional activities	Demonstrates local, national and international leadership in professional activities that have advanced their field.

Scoring SHEET

PERCENT TIME	CATEGORY	POOR	DEVELOPING	ADEQUATE	SUPERIOR	EXCEPTIONAL
	TEACHING DIDACTIC					
	TEACHING ACTIVE LEARNING					
	TEACHING LABORATORY					
	CLINICAL EDUCATION					
	CLINICAL PRACTICE					
	FACULTY DEVELOPMENT					
	MENTORING					
	UNIVERSITY SERVICE					
	COMMUNITY SERVICE					
	RESEARCH					
	PROFESSIONAL ACTIVITIES					
	TOTALS					

Written Comments by reviewer

Summative comments by head reviewer (for final review only which is summation of individual reviews to be completed by head reviewer)

Faculty comments:

Development plan (for final review only)

(For final review only) Signature of faculty member and date: _____

(For final review only) Signature of head reviewer and date:



ADEA/AADSAS APPLICATION FORM

<https://www.adea.org/aadsas/>

CNUCDM is a member of the American Association of Dental School Application Service (AADSAS), the centralized application service for all dental schools. Applicants are able to apply electronically through the web. The application is processed, verified and forwarded to each college designated by the applicant. Once all the required elements of the application are received by the office of admissions the application is reviewed for a possible interview invitation based on the scores from the weighted Simplified Applicant Ranking for Interview Selection form. The invited applicants are then able to schedule an interview.

Interviews typically begin in August/September and continue through April/May of each application year. Many factors are considered in the CDM interview selection process. The best predictor of success in dental school is academic success in basic science courses. Therefore, the science GPA is the highest weighted factor in applicant evaluation. The Science GPA is linked with Cumulative GPA, DAT score and an evaluation of academic program score to create a total academic score for each applicant. Determining interview invitations requires the evaluation of all aspects of the application including; patient contact experience, community involvement, extra-curricular activities, personal statements, letters of recommendation, the student essay, and motivation.

The minimum requirement for admission to the CDM must be no less than 75% of the credits needed for a baccalaureate degree from a college or university accredited by an agency recognized by the United States Department of Education.


The CDM Catalog indicates the minimum academic requirement for admission.

Recruitment and selection of students for admission to CDM will not discriminate on the basis of race, color, gender, sexual orientation, religion, creed, national origin, age or handicap.

California Northstate University provides equality of opportunity in its educational programs for all persons, maintains nondiscriminatory admission policies, and considers for admission all qualified students regardless of race, color, gender, sexual orientation, religion, national or ethnic origin, citizenship status, disability, status as a veteran, age, or marital status.

Credits may be transferred only from dental schools and colleges accredited by CODA.

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For applicants to traditional D.D.S. or D.M.D. programs.

Application Cycle: May 14, 2019 – Feb. 3, 2020

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[Important Dates](#)

[ADEA AFASA](#)

ADEA AADSAS

The ADEA Associated American Dental Schools Application Service (ADEA AADSAS) is the centralized application service for all U.S. dental schools.* Dental school applicants benefit by being able to complete one standardized application. Dental schools benefit by receiving uniform information on all applicants.

ADEA AADSAS




May 14, 2019 – Feb. 3, 2020

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*All U.S. dental schools participate in ADEA AADSAS and require it as the primary application. Texas residents applying to Texas dental schools, though, must apply through the Texas Medical & Dental Schools Application Service (TMDSAS).



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Appendix 4-1 DMD Admission Requirements



California Northstate University College of Dental Medicine Admissions Requirements

Minimum Requirements:

California Northstate University College of Dental Medicine prefers a baccalaureate degree from a regionally accredited, four-year institution within the United States; or a non-U.S. equivalent institution. Required minimum coursework:

- ☐ 2 semesters, 3 quarters, or 1 year of college level English (*IB or AP credits may be considered if they are accepted by the undergraduate program*)

*IB or AP credits not accepted for the
following:*

- ☐ 2 semesters, or 3 quarters, or 1 year of Biology with Laboratory
- ☐ 2 semesters, or 3 quarters, or 1 year of Inorganic (General) Chemistry with Laboratory
- ☐ 2 semesters, or 3 quarters, or 1 year of Organic Chemistry with Laboratory
- ☐ 2 semesters, or 3 quarters, or 1 year of Physics
- ☐ 2 semesters, or 3 quarters, or 1 year of college level Math (*Statistics and/or Calculus preferred*)
- ☐ 1 semester, 1 quarter, or 3 units of Biochemistry

Recommended Coursework, but not required:

- | | |
|---|--|
| <ul style="list-style-type: none"> <input type="checkbox"/> Social sciences <input type="checkbox"/> Anatomy <input type="checkbox"/> Microbiology <input type="checkbox"/> Behavior Sciences | <ul style="list-style-type: none"> <input type="checkbox"/> Physiology <input type="checkbox"/> Immunology <input type="checkbox"/> Foreign languages |
|---|--|

	GPA	DAT
Preferred, Competitive Candidate	3.2	19
Minimum Accepted Requirements	2.8	17

Technical Standards:

The Technical Standards describe the essential abilities required of all candidates. Reasonable accommodation in achievement of the standards is defined under U.S. federal statutes applied to individuals with disabilities. Such accommodations are intended to support the successful completion of all components of the DMD degree.

Standards in five areas must be met by all candidates: Observation, Communication, Motor Function, Cognitive, and Professional.

1. Observation. Candidates are reasonably expected to:
 - ☐ Observe demonstrations and participate in experiments in the basic sciences.
 - ☐ Observe patients at a distance and close at hand.
 - ☐ Demonstrate sufficient use of the senses of vision, hearing, and smell and the somatic sensation necessary to perform a physical examination.
 - ☐ Integrate findings based on these observations and to develop an appropriate diagnostic and treatment plan.
2. Communication. Candidates are reasonably expected to:
 - ☐ Communicate in verbal and written form with health care professionals and patients, including eliciting a complete medical history and recording information regarding patients' conditions.
 - ☐ Perceive relevant non-verbal communication such as changes in mood, activity, and posture as part of a physical examination of a patient.
 - ☐ Establish therapeutic relationships with patients.
 - ☐ Demonstrate reading skills at a level sufficient to individually accomplish curricular requirements and provide clinical care for patients using written information.
3. Motor Function. Candidates are reasonably expected to:
 - ☐ Perform physical examinations and diagnostic procedures, using such techniques as inspection, perfusion, palpation and auscultation.
 - ☐ Complete routine invasive procedures as part of training, under supervision, using universal precautions without substantial risk of infection to patients.
 - ☐ Perform basic laboratory tests and evaluate routine diagnostic tool such as x-rays.
 - ☐ Respond in emergency situations to provide the level of care reasonably required of dentists.
 - ☐ Participate effectively in physically taxing duties over long hours and complete timed demonstrations of skills.
4. Cognitive. Candidates are reasonably expected to:
 - ☐ Measure, calculate, analyze, synthesize, extrapolate, and reach diagnostic and therapeutic judgments.
 - ☐ Recognize and draw conclusions about three-dimensional spatial relationships and logical sequential relationships among events.

Appendix 4-1 DMD Admission Requirements

- ☐ Formulate and test hypotheses that enable effective and timely problem-solving in diagnosis and treatment of patients in a variety of clinical modalities.
 - ☐ Understand the legal and ethical aspects of the practice of medicine.
 - ☐ Remain fully alert and attentive at all times in the clinical settings.
5. **Professionalism.** Candidates are reasonably expected to:
- ☐ Demonstrate the judgement and emotional stability required for full use of their intellectual abilities.
 - ☐ Possess the perseverance, diligence, and consistency to complete the College of Dental Medicine Curriculum and prepare to enter the independent practice of dentistry.
 - ☐ Exercise good judgement in the diagnosis and treatment of patients.
 - ☐ Complete all responsibilities attendant to the diagnosis and care of patients within established timelines.
 - ☐ Function within both the law and ethical standards of the dental profession.
 - ☐ Work effectively and professionally as part of the health care team.
 - ☐ Relate to patients, their families, and health care personnel in a sensitive and professional manner.
 - ☐ Participate effectively in physically taxing duties over long work hours, function effectively under stress, and display flexibility and adaptability to changing and uncertain environments.
 - ☐ Maintain regular, reliable, and punctual attendance for classes and clinical responsibilities.
 - ☐ Contribute to collaborative, constructive learning environments, accept constructive feedback from others, and respond with appropriate modification.

Letters of Recommendation

CNUCDM requires three letters of recommendation, including one (1) from a professor in the sciences (i.e., Biology, Chemistry, Physics), one (1) from a professor not in the sciences, and one (1) from someone who has known the applicant for a substantial amount of time (e.g., research principal investigator, shadowed dentist, volunteer coordinator, organization leader, work supervisor, etc.).



Simplified Applicant Ranking for Interview Selection

Applicant's Name: _____ ID: _____

	<i>Score</i>	<i>Value</i>	<i>x</i>	<i>Multiplier</i>	<i>=</i>	<i>Points</i>
TGPA	_____	_____	x	4	=	_____
ScGPA	_____	_____	x	5	=	_____
AA	_____	_____	x	4	=	_____
RC	_____	_____	x	4	=	_____
TDAT	_____	_____	x	5	=	_____

School Ranking

School Name: _____

Most Competitive	3			
Very Competitive	2			
Competitive	1	_____ x 2	=	_____
Not Listed	0			

Dental Experience

Hygienist or Lab Tech	4	_____ x 3	=	_____
Dental Assistant > 6 months	3			

Total = _____

Personal Statement (maximum 3 points)

_____ x 2 = _____

Letters of Recommendation: (maximum 3 points)

_____ x 2 = _____

Combined Total = _____

Invite for Interview:

1st Comm. Member ☐ Yes ☐ No _____

Multipliers

TGPA	4	5
ScGPA		
AA	4	
RC	4	
TDAT	5	
School	2	
Experience	3	
Personal Statement	2	
Letters of Recommendation	2	



Admissions Committee Membership Criteria/Qualifications

Potential Admissions Committee members are presented to the Dean's Executive Council for their consideration and recommendation to the Dean. All admissions committee members are appointed by the Dean to an annual term that is renewable. Any person may be qualified to serve on the admissions committee including full and part time faculty, staff, students, and community members.

The committee makeup can vary, but will include

Assistant Dean of Student Affairs and Admissions (faculty) Chair

Admissions Officer (staff)

Full time faculty: 3 members

Part time faculty: 3 members

Community dentist/non faculty: 1 member

Student: 2 members

Staff/non-designated: 1 member

Community lay persons: 1 member

All appointees will attest to the following to determine their qualifications:

1. Commitment to confidentiality in all matters pertaining to admissions and with regard to all applicants.
2. Commitment to the recruitment of a diverse class of DMD students according to all policies and goals of CNU
3. Disclosing all general and specific conflicts of interest in the admissions process and the admission of individual students.

Appendix 4-4 Admissions Committee Membership Criteria

4. Recusal from any decision regarding an applicant for which there is a conflict of interest
5. Agreement to read all application materials completely
6. Agreement to not retain any notes or materials outside of the meetings of the committee
7. Ability and desire to attend all scheduled meetings of the admissions committee in person or via electronic means
8. Will not accept any item of value, gift, meals or other that could be construed as potentially associated to admissions to the CDM

Appendix 4-4 List of planned outreach



Outreach to Underserved Minority High School and College Students

Developing a continuous pipeline of qualified and diverse candidates for dental school and the health professions that begins with exposure in elementary school, and continues to foster and support interested participants through high school and college has always been one of the top priorities of CNUCDM Pipeline programs on which we will model the CNUCDM program. We are committed to build and expend the pipeline programs across racial, economic, ethnic, socio-demographic, and geographic lines that show potential upon graduation to improve delivery of health care services to under-served and minority populations. Based on its mission to serve the needs of the community in which it resides, CNUCDM has focused its diversity efforts, as will CNUCDM, on populations including:

- Latino/Chicano/Hispanic
- African-American/Black
- Samoan/Cambodian/Hmong/Laotian
- Students with U.S. military service experience
- Students with disadvantage socio-economic background

CNUCDM will develop extensive pipeline programs, including elementary schools, middle schools, high schools, community colleges, undergraduate programs, Prehealth clubs, community pipeline programs, reaching out to all diversity populations. CNUCDM believes that implementation of the pipeline programs will ultimately lead to enrollment of a diverse student population in the future that will provide a benefit to society of greater representation of minorities, not only among practicing dentists, but also among health professions educators, scientists, public health officials, health services researchers, health insurance executives, and health care policy makers.

Goals of CNUCDM Pipeline Programs:

- To provide early exposure and awareness of health care professions in underserved communities;
- To provide supportive educational and mentoring programs to promote diversity, inclusion;
- To foster interest and motivation to pursue Health Care Profession;
- To create learning environment and education pathways that foster cultural competency and opportunities for individuals of all backgrounds.

Appendix 4-4 List of planned outreach

To achieve the pipeline program goals, CNUCDM faculty, staff and student volunteers will model themselves on the successful CNUCOM program.



Mission Statement and Goals of the CNUCDM Admissions Committee

Mission Statement:

The mission of the CNUCDM Admissions Committee is to provide a diverse and highly qualified group (class) of students each year for matriculation into the student body of the CNUCDM, who will become competent, compassionate, and caring clinical dentists of strong character and high ethical standards who will serve the public and improve the health and well-being of society.

The CDM will have effective policies and practices in place, and will engage in ongoing, systematic, and focused recruitment and retention activities, to achieve mission-appropriate diversity outcomes among its students, faculty, senior administrative staff, and other relevant members of its academic community. These activities include the use of programs and/or partnerships aimed at achieving diversity among qualified applicants for medical school admission and the evaluation of program and partnership outcomes.

California Northstate University does not discriminate on the basis of race, color, national and ethnic origin, gender, sexual preference, or handicap in the administration of educational policies, admissions policies, financial aid, employment, or any other University program or activity.

California Northstate University admits qualified students with all the rights, privileges, programs and activities generally accorded or made available to students. All applicants must meet the criteria stated in the Student Handbook in order to be considered for admission. The Office of Admissions will implement a nationwide recruitment plan to attract and maintain a qualified and diverse applicant pool. Recruitment events include predoctoral career fairs, graduate fairs, and presentations to predental students and visiting health care advisors. During each academic year, the Office of Admissions plans to host Open Houses in the fall and spring. Recruitment is a vital component of the admissions process.

Ongoing efforts will be made to recruit applicants from minority groups by visiting schools and programs with a high percentage of students from minority groups.

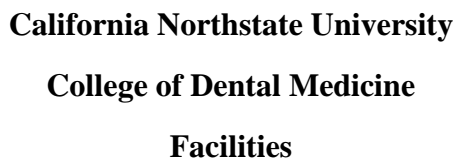
Goals:

The goal of the CNUCDM Admissions committee is to recruit a highly-qualified and

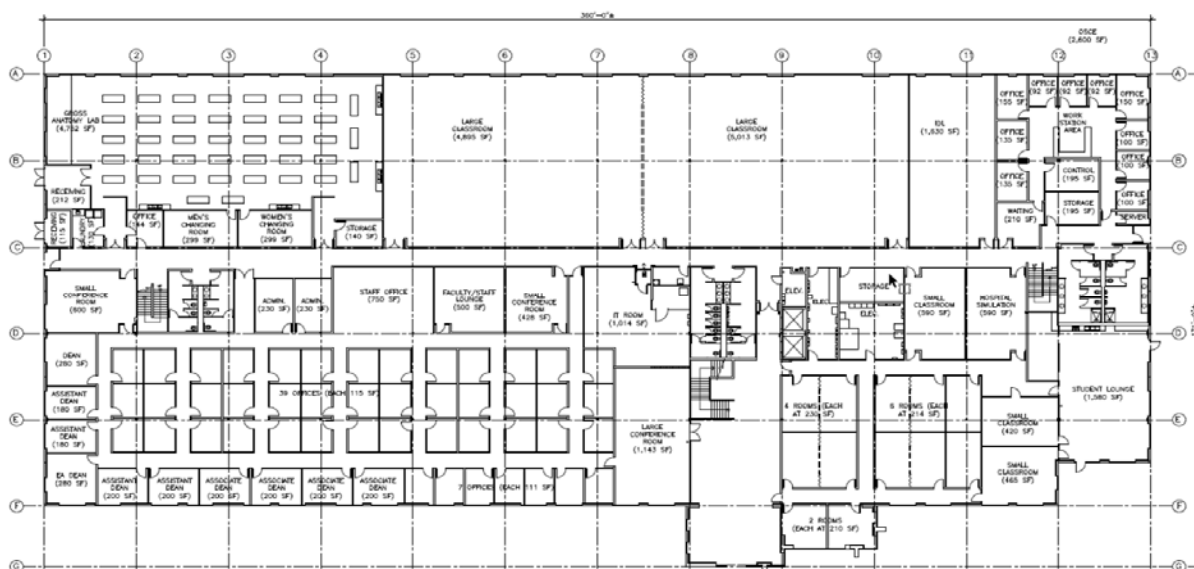
Appendix 4-4 Mission Statement Admissions

diverse group of students who reflect the ethnic background of the state of California, particularly Northern California, and who possess integrity with the necessary empathy and caring attitudes for the provision of optimal dental healthcare.

Diversity must start by inclusion in our schools and universities. It is clear that people of different life experiences can enhance the life-learning opportunities of fellow students with different backgrounds. It is of extreme importance that diversity is a recognized benefit for our College of Dental Medicine. Diversity on a university campus benefits all students and research has shown that the overall academic and social effects of increased racial diversity on a university campus are likely to be positive, ranging from higher levels of academic achievement to the improvement of near- and long-term intergroup relations. Multiculturalism helps our students prepare for the real world. Students exposed to classmates, professors and mentors from different backgrounds are exposed to new viewpoints and perspectives, resulting in them becoming global thinkers and more open-minded.



College of Medicine Common Pathways Courses (Didactic, Laboratory)



PRELIMINARY FLOOR PLAN

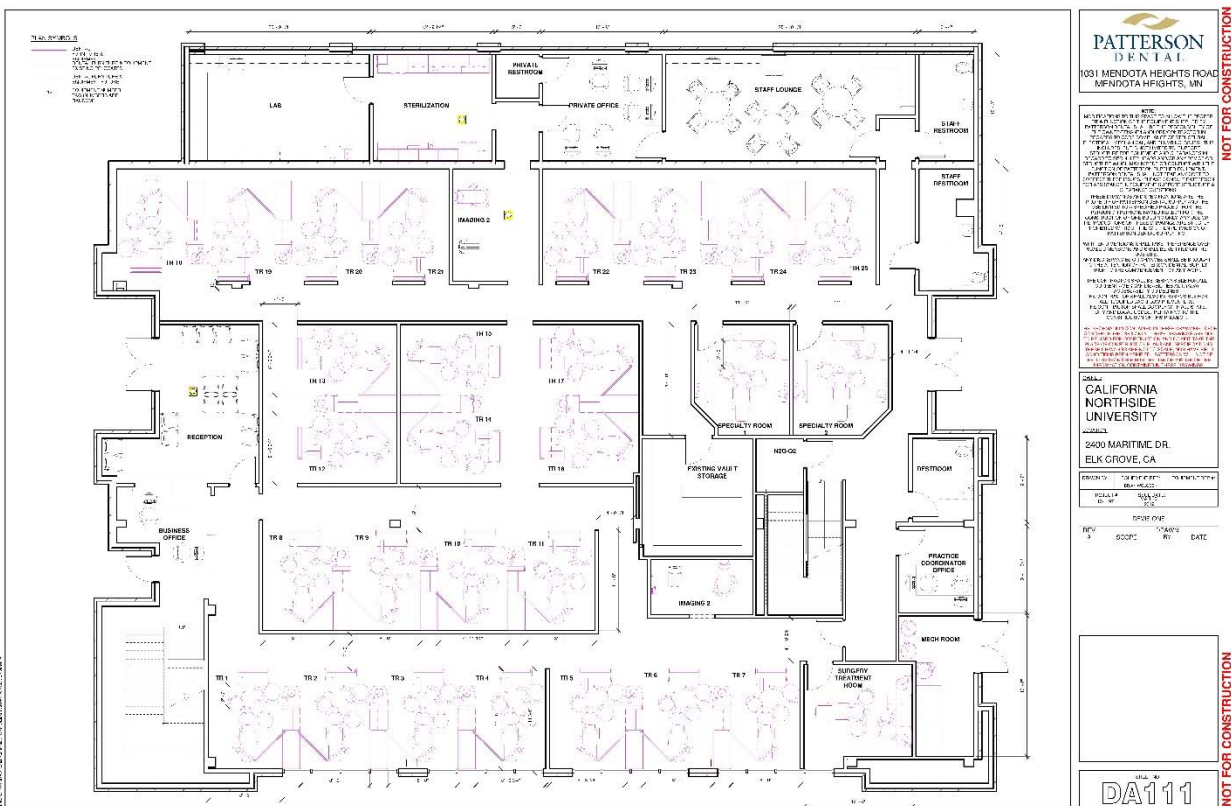
**PRELIMINARY LAYOUT FOR
CNSU Simulation Lab**

DATE: 2-24-18
DRAWN BY: MC
CHECKED: MC

**SHEET NO.
1 of 1**

Appendix 4-5 CNUCDM Facilities Schematic

2400 Maritime, First Floor (Clinical)



Appendix 4-6 Educational Sites

**California Northstate University****College of Dental Medicine****Planned Sites of Educational Activity**

Location	CNU Owned	Educational Use
9700 W. Taron Drive Elk Grove, CA	Yes	Didactic, Laboratory
2400 Maritime Drive Second Floor Elk Grove, CA	Yes	Didactic, Laboratory, Pre-clinical
2400 Maritime Drive First Floor Elk Grove, CA	Yes	Clinical
CNU Clinic – pending Elk Grove, CA	Yes	Clinical
Asian Health Services 101 8 th Street Oakland, CA	No	Clinical
Sacramento Community Clinic 5524 Assembly Court Sacramento, CA	No	Clinical
Sacramento Community Clinic 7275 E. Southgate Dr. Sacramento, CA	No	Clinical
Sacramento Community Clinic 2138 Del Paso Blvd. Sacramento, CA	No	Clinical
Shingle Springs Health and Wellness Center 5168 Honpie Road Placerville, CA	No	Clinical
Sacramento Native American Health Center 2020 J Street Sacramento, CA	No	Clinical

Appendix 4-6 Educational Sites

Wellspace Amador Community Health Center 11333 Prospect Drive Jackson, CA	No	Clinical
Wellspace Galt Children's Dental Center 216 N. Lincoln Way Galt, CA	No	Clinical
Wellspace Hiram Johnson Community Health Center 3535 65 th Street Bldg C Sacramento, CA	No	Clinical
Wellsapce North Highlands Community Health Center 6015 Watt Ave #2&3 North Highlands, CA	No	Clinical
Wellspace Oak Park Children's Dental Center 3415 Martin Luther King, Jr. Drive Sacramento, CA	No	Clinical
Wesllspace Rancho Cordova Community Health Center 10423 Old Placerville Rd Sacramento, CA	No	Clinical
Wellpace South Valley Children's Dental Center 8231 E. Stockton Blvd., Suite C Sacramento, CA	No	Clinical
Colusa Indian Health Clinic 3710 CA-45 Colusa, Ca	No	Clinical
Marin Community Clinic 6100 Redwood Blvd Novato, CA	No	Clinical
Marin Community Clinic 3100 Kerner Blvd San Rafael, CA	No	Clinical

Marin Community Clinic 5 Bon Air Rd, Bldg D #117 Larkspur, CA	No	Clinical
Yolo County Health Services CommuniCare Health Centers Esparto Dental Clinic 16827 Fremont Street Esparto, CA	No	Clinical
Yolo County Health Services CommuniCare Health Centers Salud Clinic 500 B Jefferson Blvd. West Sacramento, CA	No	Clinical

Complaint/Grievance Policy Non-Academic

While at CNU, students may encounter situations that adversely affect relationships with others within CNU community. General complaints or concerns should be directed to the Associate/Assistant Dean of the Office of Student Affairs and Admissions (OSAA) who will advise students about the appropriate procedures to follow in resolving a general complaint or concern. An informal process of resolution will be sought unless the incidence is severe enough to warrant a formal hearing. This policy shall also apply to all discrimination, harassment, and sexual harassment reports and complaints that may arise in matters involving rights protected under legislation relating to equal opportunity in Employment and Education or any policy of CNU relating to sexual harassment. General grievances may also be made anonymously by sending a letter to the Associate/Assistant Dean of the OSAA, or by dropping a letter or note in the Suggestion/Complaint Box located in the classrooms and in the library resource center.

Informal Procedure

Students are encouraged to discuss and resolve nonacademic conflicts, including complaints of harassment, and/ or discrimination, with the individual involved before filing a formal complaint. The suggested time frame to discuss and resolve informal complaints is 10 days from the date of the incident. If the student is not satisfied with the outcome a formal complaint may be filed with the Associate/Assistant Dean of the OSAA.

Formal Procedure

The complaint must be in writing and should describe: the specific action(s) necessitating the complaint, a statement of facts supporting the complaint, actions sought in an informal resolution, and information about why the action did not lead to a satisfactory resolution prior to filing a formal complaint, if an informal process was utilized. The complainant must be willing to be identified as the accuser. The complaint must be signed and dated by the complainant and filed with the Associate/Assistant Dean for the OSAA within fourteen (14) days of the occurrence. A completed Complaint/Grievance form should be included with the letter. The form can be found on the school's website. All complaints will be investigated by a committee appointed by the Associate/Assistant Dean and handled in a confidential manner. Investigations will usually be completed within fifteen (15) business days from the receipt of the complaint. At the conclusion of the investigation, a report shall be provided to the individuals in the situation stating the findings and recommendations. The report will typically be provided within seven (7) business days from the conclusion of the investigation. In unforeseen circumstances, or due to the complexity of the investigation, time limits may need to be modified. If the outcome was not satisfactory, the complainant may appeal the decision of the committee to the Dean of the College. The written appeal request must be received in the Office of the Dean within five (5) business days from the written recommendation provided by the Associate/Assistant Dean for OSAA. The Dean shall provide a written final decision to the complainant within fifteen (15) business days from the receipt of the request. The decision of the Dean will be final. A confidential record or log of all complaints filed is kept by the Associate/Assistant Dean for the Office of Student Affairs and Admissions (OSAA). Anyone wishing to file a report may do so anonymously through the CNU website, <https://californianorthstateuniversity.formstack.com/forms/anonymousreportcnu>. If you are witnessing an emergency or crime, you should make the report to the proper authorities. This form should not be used to report an emergency or crime. Complaints related to accreditation or licensing standards, please see the Accreditation Information section of this catalog on page 9. Computer/Technical Sup



Student Affairs Staff Assignments

Personal Counseling

Katelyn Shields, MA
Licensed Marriage and Family Therapist

Academic Counseling

Richard Simonsen, DDS MS PhD
Assistant Dean of Student Affairs and Admissions

Career Counseling

Richard Simonsen, DDS MS PhD
Assistant Dean of Student Affairs and Admissions

Financial Aid

JoAnne Hasana
Financial Aid Manager

Health Services

N/A – all university students are required to have their own health insurance

Due Process and Protection of Student Rights

Richard Simonsen, DDS MS PhD
Assistant Dean of Student Affairs and Admissions

Student Advocacy

Richard Simonsen, DDS MS PhD
Assistant Dean of Student Affairs and Admissions

Integrity of Student Performance and Evaluation Records

Janine Dagna
Registrar

Personal Debt Management and Financial Planning

JoAnne Hasana
Financial Aid Manager



Financial Aid Information

2019-2020

College of Dental Medicine



2019-2020 Estimated Student Financial Aid Budget – Dental program*

	First year
Cost Estimate	DM1
Tuition	\$76,000.00
Student Association/ Support Fee	\$500.00
Student Disability/Liability Coverage Fee	\$54.00
Technology Fee	\$700.00
Books and Supplies	\$1,000.00
Orientation Fee	\$75.00
ADA/ASDA/ADHA Membership	\$143.00
Dental Lab Fee (Anatomy, Medical Skills, and Research)	\$500.00
CPR Fee	\$40.00
Instrument Management Fee	\$3,200.00
Optical Loupes	\$1,195.00
Tuition and Fees Only	\$83,407.00
Estimated other/optional Educational Related Costs	
Health Insurance	\$3,200.00
Laptop	\$1,100.00
Room and Board	\$20,230.00
Transportation	\$4,410.00
Cost of Attendance	\$112,347.00

The cost of attendance is the cornerstone of establishing a student's financial need, as it sets a limit on the total aid a student may receive for a given period of enrollment. The cost estimates provided above are subject to change and are not binding.

COSTS COVERED BY FINANCIAL AID

- Tuition and Fees
- Books and Supplies
- Health Insurance
- Room and board
- Transportation

COSTS NOT COVERED BY FINANCIAL AID

- Car purchase/payments
- Credit card payments
- Non-educationally related expenses
- Travel for job interviews/residency

- All students should live within a reasonable budget and eliminate unnecessary/spontaneous spending.
- Be mindful of the impact consumer debt while attending school may have on your ability to qualify for private financial aid.
- Pay bills on time and maintain a clean and clear credit report.
- Be conservative in borrowing for expenses beyond tuition and fees and borrow only what you really need

Financial Aid 101

What is Financial Aid?

Financial Aid is defined as assistance provided for the purpose of paying educational expenses. These expenses are described on page 1 of this packet. Assistance may come from various sources, and be of varying types:

- * *Grants*: generally, monies from a government program that do NOT require repayment.
- * *Scholarships*: generally, monies from an institution, private organization, or government programs that do NOT require repayment.
- * *Loans*: generally, monies from private lenders or government programs that MUST BE repaid.

What Financial Aid is available to me?

Types of assistance offered through CNU College of Dental Medicine are described in detail on the CNU Dental program website under the section entitled “Student Financial Aid Office” and then “Types of Assistance”. You may also access this site at <http://www.cnsu.edu/student-financial-aid-office/types-of-assistance/types-of-assistancem>

How is Financial Aid eligibility determined?

Eligibility for financial aid is determined by three important factors:

1. *Enrollment status*: an eligible financial aid recipient is one that is enrolled and attending at a minimum of 6 credits per semester, or otherwise considered to be enrolled at least half-time. This is subject to verification with the Office of the Registrar.
2. *Satisfactory Academic Progress*: an eligible financial aid recipient is one that continues to meet the academic progression requirements of the Dental program. This is subject to verification with the Office of the Registrar.
 - a. Verification of adherence to progression requirements is completed as the end of each academic year, or more frequently on a case-by-case basis.
3. *Cost of Attendance*: an eligible financial aid recipient is one who’s total financial aid award package does not exceed his/her applicable cost of attendance for the period of enrollment.

How do I apply for Financial Aid at CNU College of Dental Medicine?

Ensure all required forms and applications are received by the appropriate departments.

1. *Financial Options Statement*: the Financial Aid department requires this form from all enrolled students each semester to identify his/her preferred financing method for payment of tuition and fees.
2. *Student Financial Aid Application*: the Financial Aid department requires this form from all enrolled students each academic year who are financing tuition and fees with a private educational loan.
3. *Private educational loan promissory note*: the Financial Aid department requires completion of this application for all enrolled students who desire to use a private educational loan to assist with financing of educational expenses, **OR**
Installment payment plan contract: the Business Office requires completion of a contract for all enrolled students who desire to use an installment payment plan to pay tuition and fees

CNU Contact Information

Student Financial Aid Office

9700 West Taron Drive, Elk Grove, CA 95757

Phone: (916) 686-8784

Fax: (916) 686-8145

E-mail: jhansana@cnsu.edu

judy.her@cnsu.edu

via.vang@cnsu.edu



CALIFORNIA
NORTHSTATE
UNIVERSITY

9700 West Taron Drive

Elk Grove, CA 95757

W: www.cnsu.edu

P: 916-686-7400



Financial Aid Resources at a Glance

Financial Aid Resources

Financial Aid 101

What is Financial Aid?

Financial Aid is defined as assistance provided for the purpose of paying educational expenses. These expenses can be found on our website at: <http://www.cnsu.edu/student-financial-aid-office/student-financial-aid-officem>. Assistance may come from various sources such as the following:

- Sources that DO NOT require repayment:
 - * *Scholarships*: generally, monies from an institution, private organization, or government.
 - * *Grants*: generally, monies from a government program.
- Sources that DO require repayment:
 - * *Loans*: generally, monies from private lenders or government programs.

What Financial Aid is available to me?

Types of assistance offered through CNU College of Dental Medicine are described in detail on the CNU Dental program website under the section entitled “Student Financial Aid Office” and then “Types of Assistance”. You may directly access this site at <http://www.cnsu.edu/student-financial-aid-office/types-of-assistance/types-of-assistancem>

How is Financial Aid eligibility determined?

Eligibility for financial aid is determined by three important factors:

1. *Enrollment status*: an eligible financial aid recipient is one that is enrolled and attending at a minimum of 6 credits per semester, or otherwise considered to be enrolled at least half- time. This is subject to verification with the Office of the Registrar.
2. *Satisfactory Academic Progress*: an eligible financial aid recipient is one that continues to meet the academic progression requirements of the Dental program. This is subject to verification with the Office of the Registrar.

Contact Information

Student Financial Aid Office

JoAnne Hansana, Financial Aid Manager

P: 916-686-8784

Email: JoAnne.Hansana@cnsu.edu

F: 916-686-0450

Judy Her, Financial Aid Administrator

P: 916-686-8732

Email: Judy.Her@cnsu.edu

F: 916-686-0450

Yia Vang, Financial Aid Administrator

P: 916-686-7993

Email: yia.vang@cnsu.edu



Financial Aid Options by College

What Financial Aid is available for students who attend CNU College of Dental Medicine?

- College of Dental Medicine (CDM): *Scholarships, iHELP Select IV, SallieMae-Smart Option, Parent Private Loan, Payment Plan*

***CNU DOES NOT participate in any federal direct student loan (Title IV) program.**

All students are strongly encouraged to review all financing options available on our website prior to applying for any particular program. Any questions regarding a particular financing program offered through the University should be directed to the Student Financial Aid Office.

You may apply for a private educational loan by visiting the following school website:

<http://www.cnsu.edu/>

- a. Verification of adherence to progression requirements is conducted at the end of each academic year or more frequently on a case-by-case basis.
3. *Cost of Attendance*: an eligible financial aid recipient is one whose total financial aid award package does not exceed their applicable cost of attendance for the period of enrollment. (belongs to section **how is financial aid eligibility determined**)

How do I apply for Financial Aid at CNU College of Dental Medicine?

Ensure all required forms and applications are received by the appropriate departments. You may directly access the forms at

<http://www.cnsu.edu/student-financial-aid-office/applications-forms-procedures/student-financial-aid-formsm>

1. *Financial Options Statement*: the Financial Aid department requires this form from all enrolled students each semester to identify their preferred financing method for payment of tuition and fees.
2. *Student Financial Aid Application*: the Financial Aid department requires this form from all enrolled students each academic year who are financing tuition and fees with a private educational loan.



Financial Aid & Debt Management Resources

California Northstate University offers a unique educational experience aimed at accomplishing our mission of advancing the art and science of healthcare through education, service, scholarship and social accountability. We are here to provide you with efficient and effective services, advice, and support during your academic studies at CNU. While CNU does not accept federal loans, a number of competitive educational financing options are available for those who qualify.

Private Educational Loan and Financing Options:

Sallie Mae:

www.salliemae.com

888-272-5543

Student Loan Finance Corporation:

www.slfc.com

800-345-1270

Features of Private Loans

- Low rates (variable and fixed based on credit scores).
- Most lenders have no fees.
- Many lenders offer additional options to reduce total loan costs.
- Repayment period: The loan repayment period varies by lender. A six-month grace period is available after graduation, enrollment drops below half time, or upon withdrawal from school.
- Loan repayment periods can range from 5 to 20 years.

Financial Aid Tools and Helpful Links

Below are a few comprehensive financial aid tools and helpful links.

<http://www.cnsu.edu/student-financial-aid-office/student-financial-aid-tools/paying-for-collegem>

- Paying for College
- Financial Literacy-life Skills
- Higher Education Tax Benefits
- Life Cycle of a Loan
- Glossary of Financial Terms
- CODA-Commission on Dental Accreditation
- Studentloans
- Mymoney
- 360 financialliteracy

Helpful Links

National Student Loan Data System: central database for student aid
https://www.nslds.ed.gov/nslds_SA/

Pathways on USA Jobs: job board containing internship and job opportunities within federal agencies and organizations for student and recent graduates.

<https://www.usajobs.gov/StudentsAndGrads>

Federal Trade Commission - Scholarship and Financial Aid Scams: assistance with identifying possible scams related to searching and applying for scholarships.

<https://www.consumer.ftc.gov/articles/0082-scholarship-and-financial-aid-scams>

U.S. Department of Education: primary federal entity for promoting student achievement and preparation for global competitiveness by fostering educational excellence and ensuring equal access.

<http://www.ed.gov/>

<http://www2.ed.gov/about/contacts/gen/index.html>

Scholarships and Grants:

Scholarships search:

- Fastweb!
www.fastweb.com
- Scholarship Search by Sallie Mae
www.salliemae.com
- Scholarship Search by Best Colleges
www.bestcolleges.com
- AAMC
<https://services.aamc.org>
- Peterson's
www.petersons.com

External Scholarships:

Northern California Education Foundation

<http://northerncaliforniaeducationfoundation.com/>

U.S Army: www.healthcare.goarmy.com

Person of Contact: David T. O'Hea, 1st Lieutenant,

E: David.t.ohea.mil@mail.mil

Air Force: www.Airforce.com

Person of Contact: Adam G. Poissant, Tech Sgt.

E: Adam.poissant@us.af.mil

Navy: www.navy.com

Person of Contact: Melissa Bond, NCC

E: Melissa.m.bond@navy.mil



Appendix 4-8 Student Accumulated Debt Report

California Northstate University College of Dental Medicine

Student Name _____

Month and year of matriculation _____

Month and Year of Graduation _____

Predental Universities attended and associated student loans at time of matriculation AND AS increased at the time of graduation

UNIVERSITY	LENDER	PRINCIPLE AT MATRICULATION	INTEREST RATE	PRINCIPLE AT GRADUATION

California Northstate College of Dental Medicine Planned and executed loans

Year	Lender	Amount	Interest Rate	Principle at Graduation
1				
2				
3				
4				

Accumulated debt at Graduation

1. Predental total _____

2. CNUCDM total _____

Total Debt at Graduation: _____



CALIFORNIA NORTHSTATE UNIVERSITY

Letter of Recommendation Request

Office of the Registrar
9700 West Taron Drive | Elk Grove, CA 95757
916-686-7400 | CNRegistrar@cnsu.edu

INSTRUCTIONS Save this PDF to your computer, open using Adobe Reader, complete, print, sign & submit to the recommender.

Family Educational Rights and Privacy Act (FERPA) requires the University to collect the student's written consent to release non-directory information (e.g. grades, rank, GPA, academic performance, etc.) from a student's education record. This form may be used to authorize the release of information for the purposes of a letter of recommendation, application to an educational institution, scholarship application, employment, etc. Students may also waive their

right to review the letter of recommendation. The waiver is permanent and may not be withdrawn.

To the student: This form should be completed and presented to the individual from whom you are requesting the recommendation.

To the recommender: This form must be fully completed and include the student's signature. It is recommended that you keep this form on file for at least one (1) year.

STUDENT INFORMATION

Student Name: _____
First Middle Last

Student ID #: _____ Class of: _____ College (*check one*): ☐ COP ☐ COM ☐ CHS

AUTHORIZATION INFORMATION

I authorize _____
(Specify name of Professor or University Official)

To: ☐ Write letter of recommendation ☐ Complete Attached Evaluation form
☐ Other (*specify*): _____

Include: ☐ Grades for course ☐ Grade Point Average (*GPA will be verified with Office of the Registrar.*)
☐ Class Rank ☐ Courses Attended ☐ Academic Performance
☐ Other (*specify*): _____

Send To: Name, Employer, Institute, or agency: _____

Address: _____ City, State ZIP: _____

Email: _____ Phone: _____

For the purpose of:

☐ Admission to a university/college/professional institute ☐ Employment
☐ For an application for a scholarship or honorary award
☐ Other (*specify*): _____

Specify date (month/day/year) Letter of Recommendation is needed by: _____

CONSENT & WAIVER OPTION

In signing below, I consent to the release of the information as listed by the person listed above.

Check one: ☐ I waive ☐ I do not waive my right to review a copy of the letter at any time in the future.

Student's Signature _____ Date _____

FACULTY: Please keep in your records for at least (1) one year.



Appendix 4-9 Student Records (FERPA) Policy

Student Records (FERPA) Policy

I. Policy Statement

The Family Education Rights and Privacy Act of 1974 (FERPA), is a federal law which allow students access to their educational records while maintaining a certain degree of confidentiality. The purpose of FERPA is to keep students' records confidential, allow limited access of student records by third parties, and allow the student to challenge the accuracy of those records that are misleading or inaccurate.

In accordance with the Family Education Rights and Privacy Act 1974 (FERPA), students who are currently enrolled or who have been previously enrolled at California Northstate University are permitted to inspect certain aspects of their educational records, and/or withhold from release certain personally identifiable information.

The policy regarding student access to educational records does not include employment, medical or police records, confidential letters of recommendation if the student has waived the right to review them, professor's or administrator's personal records for their own use about students, parent's financial records, and other FERPA excluded records.

II. Purpose

California Northstate University, in accordance with the Family Education Rights and Privacy Act 1974 (FERPA), have established procedures for students to access their education records and for maintaining confidentiality of student records.

III. Scope/Coverage

This policy is applicable to all students, staff, and school officials as defined by this policy and FERPA.

IV. Procedure

- 1) To inspect and review the student's personal education records within 45 days after the day California Northstate University receives a request for access.
 - A student should submit to the registrar, dean, head of the academic department, or other appropriate official, a written request that identifies the record(s) the student wishes to inspect. The use of the Request to Inspect Educational Records is preferred. If the records are not maintained by the school official to whom the request was submitted, that official shall advise the student of the correct official to whom the request should be addressed.
 - The school official will make arrangements for access and notify the student of the time and place where the records may be inspected. A student is guaranteed a copy of the requested documents and arrangements will be made at a location within 50 miles of the student if the student is not within a reasonable distance to view the records at the University.



- 2) To request the amendment to the student's educational records that the student believes is inaccurate, or otherwise in violation of the student's privacy rights under FERPA
 - The student must submit a written statement clearly identifying the sections of the record that are being disputed and why it should be amended to the school official responsible for the record
 - If the school does not amend the record, the student will be notified in writing of the outcomes and the right of the student to a formal hearing regarding the proposed amendments.
 - If the outcome is still not resolved the student may place a personal statement within the record outlining the contested information.
- 3) To provide written consent to, before disclosure of, personally identifiable information (PII) from the student's record, except to the extent that FERPA authorizes disclosure without consent.
 - The school discloses education records without a student's prior written consent under the FERPA exception for disclosure to school officials with legitimate educational interests or upon request from another school in which the student is seeking enrollment. A school official is a person employed by California Northstate University in an administrative, supervisory, academic, research, or support staff position (including law enforcement unit personnel and health staff); a person serving on the Board of Trustees; or a student serving on an official committee, such as a disciplinary or grievance committee. A school official also may include a volunteer or contractor outside of California Northstate University who performs an institutional service or function for which the school would otherwise use its own employees and who is under the direct control of the school with respect to the use and maintenance of PII from education records, such as an attorney, auditor, or collection agent or a student volunteering to assist another school official in performing his or her tasks. A school official has a legitimate educational interest if the official needs to review an education record in order to fulfill his or her professional responsibilities for California Northstate University.

A complete listing, section 99.31 can be found at:

<https://ed.gov/policy/gen/guid/fpco/ferpa/index.html>.

- 4) To file a complaint with U.S. Department of Education concerning alleged non-compliance of the College to abide by FERPA requirements at the following address:

Family Policy Compliance Office
U.S. Department of Education
400 Maryland Avenue, SW
Washington, DC 20200-5901



Associated forms:

- Directory Opt-Out Request form
- Request to Inspect & Review Education Records form

Approval record:

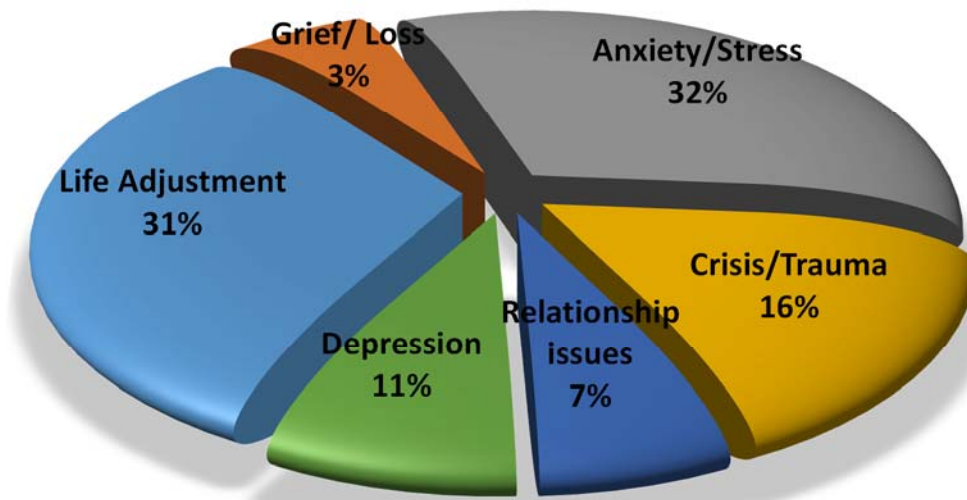
APPROVED: PEC: 3/2/17

REVIEW: every two years (or more often if required)

Fall 2020 Pre-Enrollment Verification:		Name	Address
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Admissions Advisory
CDMAdmissions@cnsu.edu

Fall 2018 CNU Counseling Usage





Policy of Mandatory Student Health Insurance

I. Policy Statement

California Northstate University (CNU) requires all students to have health insurance coverage meeting certain standards. An active health insurance is required due to the nature of the health care educational programs at CNU, in addition to the wellbeing of the students.

II. Purpose

To state the requirements of student health insurance coverage as a condition of enrollment for CNU.

III. Scope/Coverage

This policy is applicable to all enrolled CNU students.

IV. Procedure

- A. The health insurance coverage must include:
 1. Inpatient Care and Outpatient Care
 2. Urgent Care and Emergency Care
 3. Mental Health Care
- B. International students are required to subscribe to and maintain their enrollment with the school designated health insurance plan.
- C. New enrolled students are required to provide proof of health insurance coverages to the Student Affairs Office no later than **5 calendar days** before the start of orientation. Failure to provide proof of health insurance coverages by the deadline, students will not be allowed to attend orientation, the White Coat Ceremony, and may lose their seats if requirement is not met.
- D. Continuing enrolled students are required to provide proof of health insurance coverages to the Student Affairs Offices no later than **14 calendar days** before the first day of classroom instruction each semester. Failure to provide proof of health insurance coverages by the deadline, students will be subject to the following consequences:
 1. Students will be emailed with information of insurance carriers.
 2. Failure to enroll and pay the cost of the insurance premium in full will result in transcript hold, progression hold, registration hold, and library hold (student will not be able to check any materials out from the library).
- E. Students are expected to maintain health insurance coverages at all times as a student of CNU. If a student's health insurance coverage is lapsed, the student is required to contact the Student Affairs Office within 72 hours and must provide proof of insurance.



- F. Students will be randomly selected throughout the academic year to provide proof of health insurance coverage verification.
- G. When student is selected for health insurance coverage verification, student(s) will have 5 days to provide proof of insurance.

Associated forms:

Example form

Example form

Example form

Approval record:

APPROVED: PEC: 8/28/2017

REVIEW: every two years (or more often if required)



Immunization Policy

The CNUCDM immunization policy was developed based on current CDC vaccination guidelines. The following requirements, related to conditions and/or immunizations, must be satisfied for matriculation.

To achieve academic success and be an active advocate for health, students should strive to achieve good physical and mental health themselves. It is expected that all routine medical, dental, and surgical care will be completed prior to matriculation. Students will be required to present proof of vaccinations before matriculation.

Documentation of required immunizations must be completed by a licensed health care provider. A health care provider is defined as a physician licensed to practice (MD or DO), a Licensed Nurse, or a Public Health Official.

Forms for documenting immunization requirements will be provided in the acceptance packet sent to the student. All immunization forms and copies of laboratory reports must be submitted in English.

Translations of documents must be certified. It will be acceptable to have an English translation of the documents certified as accurate by a member of the University community who is fluent in the document's original language.

Measles Mumps Rubella (MMR)

If you were born in 1957 or later and have not had the MMR vaccine, or if you don't have an up-to-date blood test that shows you are immune to measles or mumps (i.e., no serologic evidence of immunity or prior vaccination), get 2 doses of MMR (1 dose now and the 2nd dose at least 28 days later).

Varicella

If you have not had chickenpox (varicella), if you haven't had varicella vaccine, or if you don't have an up-to-date blood test that shows you are immune to varicella (i.e., no serologic evidence of immunity or prior vaccination) get 2 doses of varicella vaccine, 4 weeks apart.

Hepatitis B

Appendix 4-12 Immunization Policy

If you don't have documented evidence of a complete hepB vaccine series, or if you don't have an up-to-date blood test that shows you are immune to hepatitis B (i.e., no serologic evidence of immunity or prior vaccination) then you should

- Get the 3-dose series (dose #1 now, #2 in 1 month, #3 approximately 5 months after #2).
- Get anti-HBs serologic tested 1–2 months after dose #3.

Polio

Adults who are healthcare providers, who have never been vaccinated against polio, should get 3 doses of IPV:

- The first dose at any time,
- The second dose 1 to 2 months later,
- The third dose 6 to 12 months after the second.

Adults who are healthcare providers who have had 1 or 2 doses of polio vaccine in the past should get the remaining 1 or 2 doses. It doesn't matter how long it has been since the earlier dose(s).

Adults who are healthcare providers and are at increased risk of exposure to poliovirus and who have previously completed a routine series of polio vaccine (IPV or OPV) can receive one lifetime booster dose of IPV.

Influenza

Get 1 dose of influenza vaccine annually.

Tdap (Tetanus, Diptheria and Pertussis)

Get a one-time dose of Tdap as soon as possible if you have not received Tdap previously (regardless of when previous dose of Td was received).

Get Td boosters every 10 years thereafter.

Pregnant HCWs need to get a dose of Tdap during each pregnancy.

Meningococcal

Those who are routinely exposed to isolates of *N. meningitidis* should get one dose.

Additional Vaccines/Testing

Appendix 4-12 Immunization Policy

Clinical sites where students will be rotating may require additional vaccines. Students will be expected to comply with the clinical site's policy if it is in addition to what the College of Dental Medicine requires. Immunization status will be monitored by an outside agency that will maintain the student's medical record and inform the College of Dental Medicine's registrar if the student enters a non-compliant status.

Students allergic to some vaccines will need to provide medical evidence of that condition. They will then be required to adhere to a very strict protection regimen as required by the clerkship.

The immunization status of students will be maintained and monitored by an outside clinic with which the College of Dental Medicine will have contracted services. Students will be immediately notified of any upcoming dates when their immunizations expire and will be expected to be in full compliance in order to participate in the curriculum.



Patient Rights Policy

CNU College of Dental Medicine

CNU College of Dental Medicine’s Strategic Plan addresses clinical care outcomes with the following goals for patients:

Patients experience:

1. Patient-centered highest quality diagnostic, preventive and treatment services at the most reasonable cost with the best patient experience and treatment outcomes
2. Comprehensive oral health care in a dental medicine model integrated with overall health
3. Minimally invasive care utilizing the latest technology

To operationalize these Strategic Plan goals, the Patient Rights Policy ensures any patient of the CNU College of Dental Medicine can expect to have the right to the following hallmarks of quality care:

Considerate, respectful and confidential treatment: The relationship between patients, students, faculty, and staff is the first hallmark of quality care. Considerate, respectful care and confidential treatment are an inherent right associated with treatment at CNU College of Dental Medicine.

Patients have access to complete and current information about their condition: In order to make informed decisions regarding care and the progression of treatment, patients are entitled access to any and all information about their condition and their care. Patients who wish to have a copy of their treatment record and dental radiographs can request so in writing by completing an “*Authorization of Release of Protected Health information*” form.

Advance knowledge of the cost of treatment: There may be multiple treatment options to solve a specific dental need. Each option has a cost based on the complexity of care associated with that option. Patients have the right to know the cost of their preferred treatment option prior to initiation of treatment.

Explanation of recommended treatment, alternate treatment, the option to refuse treatment and the risk of no treatment: For an informed decision for one's treatment to be made, it is necessary to understand the various options of treatment available, including no treatment, and the risks associated with each option.

Informed consent: In order to begin treatment, a clear understanding of the patient's condition, the various treatment options available, the cost of each treatment option, and the risks associated with the options must be clear in order for an informed consent to be given prior to the start of treatment. It is a right of the patient to expect to have enough information provided in order to make an informed decision to give an Informed Consent for treatment.

Continuity and completion of treatment: Patients can expect every effort will be made to work to complete treatment in accordance with the treatment plan.

Emergency, incremental and total patient care: A patient can expect to receive care based on their needs and expectations whether it be only emergency care, incremental care to solve only a specific limited dental need, or total comprehensive oral health care.

Treatment that meets the standard of care in the profession: A patient has the right to receive care that meets the standards of care of the profession.

Access to a patient advocate: In the event there is some misunderstanding or challenge encountered during treatment, a patient can expect to have access to a patient advocate to help facilitate a resolution to that misunderstanding or challenge.

Each patient will be given a copy of their rights which will also be posted in the clinics as follows:

AS OUR PATIENT AT CALIFORNIA NORTHSTATE UNIVERSITY, YOU HAVE THE RIGHT TO:

Considerate, respectful and confidential treatment: Considerate, respectful care and confidential treatment are your inherent right associated with treatment at CNU College of Dental Medicine.

Access to complete and current information about your condition: In order to make informed decisions regarding care and the progression of treatment, you are entitled access to any and all information about your condition and your care. If you wish to have a copy of your patient record and dental radiographs you can request so in writing by completing an "Authorization of Release of Protected Health information" form.

Advance knowledge of the cost of treatment: There may be multiple treatment options to solve a specific dental need. Each option has a cost based on the complexity of care associated with that option. You have the right to know the cost of your preferred treatment option prior to initiation of treatment.

Explanation of recommended treatment, alternate treatment, the option to refuse treatment and the risk of no treatment: For you to make an informed decision regarding your health, you have a right to learn the options of treatment available, including no treatment, and the risks associated with each option.

Informed consent: Before any treatment, a clear understanding of your condition, the various treatment options available, the cost of each treatment option, and the risks associated with the options must be clear in order for an informed consent to be given prior to the start of treatment. You have a right to have your questions answered regarding treatment. It is your right as the patient to expect to have enough information provided in order to make an informed decision to give an Informed Consent for treatment.

Continuity and completion of treatment: You can expect every effort will be made to work to complete treatment in accordance with the treatment plan.

Emergency, incremental and total patient care: You can expect to receive care based on your needs and expectations whether it be only emergency care, incremental care to solve only a specific limited dental need, or total comprehensive oral health care. You have a right to be seen if you have a dental emergency.

Treatment that meets the standard of care in the profession: You have the right to receive care that meets the standards of care of the profession.

Access to a patient advocate: *In the event there is some misunderstanding or challenge encountered during treatment, you can expect to have access to a patient advocate to help facilitate a resolution to that misunderstanding or challenge.*



CNU College of Dental Medicine

Patient-Centered Care Policy

CNU College of Dental Medicine Clinical Care Outcome Goals:

Patients experience:

- Patient-centered highest quality diagnostic, preventive and treatment services at the most reasonable cost with the best patient experience and treatment outcomes
- Comprehensive oral health care in a dental medicine model integrated with overall health
- Minimally invasive care utilizing the latest technology

Clinic Mission Statement

To provide patient-centered, evidence-based, oral healthcare in a humanistic educational environment.

The purpose of the Clinic Mission Statement is to ensure the focus of faculty, staff and students is on the delivery of excellent patient care. It is the College's goal to strive to provide excellent care to patients and an exceptional education experience for students. The focus on excellent patient care provides the foundation of an excellent clinical learning opportunity for our students. At any time when faced with the a difficult decision regarding care and teaching effectiveness, the guiding principle will be that whatever is best for that patient facing the difficult decision will take precedence.

The foundations of the Clinic Mission Statement are built on the following principals of patient care and quality education:

Patient-centered care requires that the interaction between the patient, student, faculty and staff be conducted in a considerate and respectful fashion while maintaining appropriate confidentiality. Patient-centered care also requires continuity of care and completion of treatment. In order for the patient to make a well informed decision, we will strive to provide current and complete information about his/her condition and their

treatment needs. Treatment decisions will be based in large part on the patient's values and expectations for their care.

Evidence-based care involves the use of scientific evidence to help make treatment decisions. It is used in conjunction with the patient's values to determine the best course of action for each patient.

Quality oral healthcare involves providing treatment for our patients that meets the standards of care for all procedures provided. It also means providing care to patients who have different wants, needs, and expectations. To help inform those wants, needs and expectations involves providing a clearly presented and full discussion of the treatment options, the risks and benefits of the various options including the option of no treatment, and expected outcomes of the different options.

Humanistic education is a health care educational model based on positive interactions and honest communication between faculty, staff, and students that sets clear expectations and rewards diligent effort. The educational environment will be structured to be intellectually challenging, evidenced-based, and progressive in content. There is the expectation that faculty and staff will provide positive support for diligent efforts made by each student. Humanistic education involves treating all people with dignity and respect. Faculty and staff are expected to model the highest professional standards for both patients and students. Students are expected to set equally high standards for their behavior and efforts as well.

Policy

The actions and decisions made by students, faculty, and university employees will be the result of the interactions between the patient, and the students, and university employees (faculty, managers, and staff). The actions and decisions relative to each patient will focus on the provisions of patient-centered care as described in the Clinic Mission Statement.

Appendix 5-2 Quality Assessment Committee

The Quality Assessment Committee will be comprised of the following members of the faculty and staff:

Charge:

The Quality Assessment Committee will be charged with developing the assessment directly or through subcommittees for

1. Infection and biohazard control assessment,
2. Patient record quality and safety assessment,
3. Development of and compliance with standards of care
- 4 Concurrent case review
5. Appointment and credentialing of faculty dentists
6. Systematic review of quality measures
7. Other assessment duties it deems necessary
8. Make recommendations to the Institutional Effectiveness Committee regarding the needed areas for annual assessment
9. Make recommendations to the Dean's Executive Committee regarding policies and resources to improve quality patient care.

Chair: Associate Dean of Clinical Affairs

Committee members:

Ex officio

Associate Dean of Curriculum and Clinical Education,
Clinic manager,
Dental Director of Clinic Operations,
Dental Director of Quality Assurance and Infection Control,

Additional members

Discipline Representatives for Radiology, Restorative Dentistry, Endodontics, Periodontics, Oral and Maxillofacial Surgery, Pediatric dentistry, Orthodontics, and other committee members as needed.

Two clinical staff representatives

Appointment and Terms:

Ex officio membership is continuous. All other members are for 3 year terms with unlimited renewal.

Meetings: Monthly as directed by the Dean of Clinical Affairs

Appendix 5-3 Standards of Care

The Clinical Quality Assessment Committee will be charged with the development of the schools standards of care and the implementation of those standards. The Clinical Quality Assessment Committee's composition of members was described earlier in Standard 5. This committee will be working under the leadership of the Assistant Dean of Clinical Affairs to fully define the college's standards of care. Standards of Care are established based on the standards of the general professional community in which one practices. The committee will utilize many sources to develop its criteria for assessing quality of care relative to the standards of care in the community. One resource for the committee will be the Guidelines for Assessment of Clinical Quality and Professional Performance of California Dental Association's Peer Review Council. The CNU Clinical Quality Assessment Committee will also rely on the expertise of the committee members and local community experts to help develop the CNU College of Dental Medicine standards of care guidelines and assessment criteria.

The Standards of Care guidelines will be implemented into its preclinical and clinical educational planning. The utilization of the standards of care in course planning ensures the educational outcomes lead to a patient-centered quality clinical care outcomes. The standards of care guidelines set clear goals and expectations for faculty, staff and most importantly our CNU students. As clinical care is being delivered, the standards of care define the expectations for clinical faculty in their assessment of the care delivered to patients on an ongoing basis. In addition, a clear understanding of the standards of care provides the basis for regular assessment of the quality of patient care as the College develops its program of Periodic Review of Care relative to the standards of care.

To summarize, there are several layers to the implementation and use of the CNU College of Dental Medicine's Standards of Care Guidelines once they are developed. The standards of Care guidelines will include the following:

- a. Development of preclinical and clinical educational course work
- b. Development and implementation of clinical outcome assessment and grading by clinical faculty in an ongoing and contemporaneous fashion on a daily basis during patient care.
- c. Development and implementation of periodic review and assessment of clinical outcomes in both episodic or regular focused reviews by staff or the Clinical Quality Assurance Committee

A Standard of Care for dental care, including dental surgical interventions, disease management must include the following elements:

Diagnosis	Planned Therapeutic Intervention	Risks	Factors effecting risk	Anticipated outcome	Quality measures

Documentation of findings associated with each Standard of Care will be presented to the Clinical Quality Assessment Committee to assure compliance with the standard and make recommendations regarding its utilization and improvement.

Herein is an example of application of a Standard of Care

Diagnosis	Planned Therapeutic Intervention	Risks	Factors effecting risk	Anticipated outcome	Quality measures
Impacted mandibular third molars	Odontectomy	Neurosensory deficit Osteomyelitis Osteitis Periodontal defect Fracture mandible Pain Edema Bleeding	Age Winter classification of impaction Smoking Substance abuse Antiosteoclastic drugs	Safe removal of third molar	Rate of adverse outcomes below reported standards including NS deficit < 1%

Appendix 5-6 BLS policies

Basic Life Support: It is required that all faculty involved in patient care at the CNU College of Dental Medicine must possess a current license to practice in the state of California. The Dental Practice Act of California mandates biannual certification of Basic Life Support as a requirement of licensure. It is required that all faculty maintain licensure including BLS certification.

It is required that all clinic staff directly involved in patient care maintain BLS certification.

Records of certification in BLS are maintained in the dental staff office.

Students will be required to be BLS certified in Year 1 as a component of the curriculum. All matriculating students and students completing the second year will be offered the BLS course at CNSU, first in Foundations of Odontology (Odont 511) and at the end of the second year in Local Anesthesia (OMFS 632). It is the student's responsibility to provide the signed BLS certification card to *myrecordtracker*.

CNUCDM will sponsor a BLS certification course each semester at CNU available to students faculty and staff at no cost.



CNU College of Dental Medicine

Dental Radiographic Imaging

Policy and Procedures

Proposed Feb. 2019

Not yet presented, reviewed, and adopted by Clinical Quality Assurance Committee

Recognizing that the College plays a significant role in maintaining radiation exposure of patients and staff, it is paramount to ensure training of dental students, staff and faculty and to have clear guidelines to keep radiation exposures As Low As Reasonably Achievable (ALARA). The College is committed to ensuring the health and safety of patients, students, staff, and faculty who may be subject to radiation exposure. This training ensures that exposures taken will meet the following criteria:

- a. Any exposures are justified in relationship to their potential benefits,
- b. Necessary exposures are kept as low as reasonably possible (ALARA).
- c. Doses received by patients, students, or staff are kept below the allowable limits
- d. Those trained will policy will demonstrate an understanding of the criteria for patient selection for radiographic exposure, the recommended frequency of exposing radiographs on patients, and the guidelines for retaking of radiographs utilizing the current accepted dental practice.

PATIENT PROTECTION

- A. Dental personnel are responsible for requiring that all individuals unnecessary to the dental radiographic examination leave the X-ray room prior to making an exposure.
- B. Anyone who is in the X-ray room at the time of exposure must be behind a protective barrier. If someone must also be in the room to assist or maintain patient safety, then this individual must wear a protective apron. The apron should be preferably 0.5 mm of lead or lead-equivalent but not less than 0.25 mm of lead or lead-equivalent thickness. Mobile protective barriers or shields should be available for dental personnel protection and should be used as indicated.
- C. A specially designed lead-impregnated thyroid collar can be used to protect the thyroid gland from excessive and/or unnecessary radiation during intraoral X-ray exposures. It is also highly recommended for panoramic, skull and CBCT exposures if the Velcro straps can be secured and kept out of the way of the primary beam or it does not cover an area of primary interest (e.g., if cervical vertebrae need to be included in an extra-oral image.)

Appendix 5-7 Ionizing Dental Radiation Safety Proposed Policy

- D. Lead Protective Aprons must be used to cover the reproductive organs of all patients, including pregnant patients, who undergo dental X-ray examinations. The American College of Obstetricians and Gynecologists recommends (August 2013) that those obtaining dental radiographs reassure patients that prevention, diagnosis, and treatment of oral conditions, including dental X-rays (with shielding of the abdomen and thyroid) and local anesthesia (lidocaine with or without epinephrine), are safe during pregnancy.
- E. Protective Aprons should be evaluated periodically (at least yearly) for tears and cracks. Seriously compromised aprons may have lead sheeting that is bunched up. This can be detected by feeling the lower portion of the apron.
- G. Proper storage of protective aprons prolongs their life and effectiveness. Aprons should be properly hung because creases eventually become cracks which allow radiation to penetrate.
- H. Protective aprons are primarily designed to protect the wearer from scatter radiation. They do not totally protect against the primary X-ray beam to provide enough protection. This is the reason why small beam (rectangular) collimation is preferred. The reduction in exposure resulting from placing 0.25 mm lead-equivalent apron material in a primary X-ray beam of 100 kVp would only be 60% as compared to 0.50 mm lead-equivalent apron that will attenuate the beam by 85%.

Responsibilities of Dental Personnel Operating X-ray Equipment

- A. Protect Patient from Unnecessary Radiation Exposure
 - a. Use appropriate radiation protective devices
 - b. For CCD and CMOS receptors (digital x-ray sensors) prepare the computer and imaging software prior to placement of the sensor to minimize errors and risk of unnecessary exposure
 - c. Retakes of images should be approved by a faculty supervisor and should be taken only for a valid clinical reason, not for the purpose of improving the esthetics of the radiograph
- B. Ensure proper infection control safety barriers, disinfection and sterilization protocols have been utilized prior to and during each patient's imaging session
- C. Recording of Radiographic Procedures
 - a. An entry which would include the date and type of exposure will be made in the patients dental record.
- D. Use Fast Image Receptors
- E. Pre-plan Dental Radiographic Procedures Carefully to avoid unnecessary Retakes
 - 1. The five of the most important factors relating to the production of quality radiographs are:
 - a. Patient positioning and instruction prior to taking the image
 - b. Alignment of the x-ray beam, film or sensor, and the area to be radiographed
 - c. Use of a collimating device
 - d. Selection of appropriate exposure factors (mA, kV, distance and time)
 - e. Proper and appropriate image processing (film or digital)
 - 2. As much as practical, the long axis of the body part being radiographed should be perpendicular to the main X-ray beam (called central ray or CR) and parallel to the image receptor (paralleling technique).

Appendix 5-7 Ionizing Dental Radiation Safety Proposed Policy

3. Use proper immobilization methods to assure that the patient does not move during exposure. Receptor holding instruments with beam alignment devices should be used instead of the patient retaining the image receptor with fingers.
4. Use an exposure time that is as short as possible to minimize the radiation dose and motion artifact during exposure.
6. All patient exposures procedures must be documented in the patient's record and the images should be properly labeled and the diagnostic information obtained from the radiographic images also should be recorded in the patient's record.

F. Protection of the Operator from Unnecessary Radiation Exposure

1. Operators of the imaging equipment are not permitted to hold patients or image receptors during exposure.
2. Operators should stand behind a protective barrier if less than 6 feet away from the patient and x-ray tube or must stand at least 6 feet away from the patient and x-ray tube not in the path of the primary beam.
3. Hand-held radiographic machines must have a backscatter shield provided by the manufacturer installed and in place (not broken, loose or missing) to be safe. While not required, the operator may choose to wear a lead apron for the purpose of added protection.

G. Upon completion of imaging session and prior to initiation of subsequent imaging session, perform the appropriate disposal of infection control barriers, apply the recommended disinfection procedures of the imaging equipment, and prepare any items to be sent for processing by Central Sterilization Department.

Selection of Patients for Dental Radiographic Examinations

American Dental Association and U.S. Food and Drug Administration

Revised 2012

These recommendations are subject to clinical judgment and may not apply to every patient. They are to be used by dentists only after reviewing the patient's health history and completing a clinical examination. Even though radiation exposure from dental radiographs is low, once a decision to obtain radiographs is made it is the dentist's responsibility to follow the ALARA Principle (As Low as Reasonably Achievable) to minimize the patient's exposure.

TYPE OF ENCOUNTER	PATIENT AGE AND DENTAL DEVELOPMENTAL STAGE				
	Child with Primary Dentition (prior to eruption of first permanent tooth)	Child with Transitional Dentition (after eruption of first permanent tooth)	Adolescent with Permanent Dentition (prior to eruption of third molars)	Adult, Dentate or Partially Edentulous	Adult, Edentulous
New Patient* being evaluated for oral diseases	Individualized radiographic exam consisting of selected periapical/occlusal views and/or posterior bitewings if proximal surfaces cannot be visualized or probed. Patients without evidence of disease and with open proximal contacts may not require a radiographic exam at this time.	Individualized radiographic exam consisting of posterior bitewings with panoramic exam or posterior bitewings and selected periapical images.	Individualized radiographic exam consisting of posterior bitewings with panoramic exam or posterior bitewings and selected periapical images. A full mouth intraoral radiographic exam is preferred when the patient has clinical evidence of generalized oral disease or a history of extensive dental treatment.		Individualized radiographic exam, based on clinical signs and symptoms.
Recall Patient* with clinical caries or at increased risk of caries**	Posterior bitewing exam at 6-12 month intervals if proximal surfaces cannot be examined visually or with a probe.			Posterior bitewing exam at 6-18 month intervals	Not applicable
Recall Patient* with no clinical caries and not at increased risk of caries**	Posterior bitewing exam at 12-24 month intervals if proximal surfaces cannot be examined visually or with a probe.		Posterior bitewing exam at 18-36 month intervals	Posterior bitewing exam at 24-36 month intervals	Not applicable
Recall patient* with periodontal disease	Clinical judgment as to the need for and type of radiographic images for the evaluation of periodontal disease. Imaging may consist of, but is not limited to, selected bitewing and/or periapical images of areas where periodontal disease (other than nonspecific gingivitis) can be demonstrated clinically.				Not applicable

Appendix 5-7 Ionizing Dental Radiation Safety Proposed Policy

TYPE OF ENCOUNTER	PATIENT AGE AND DENTAL DEVELOPMENTAL STAGE				
	Child with Primary Dentition (prior to eruption of first permanent tooth)	Child with Transitional Dentition (after eruption of first permanent tooth)	Adolescent with Permanent Dentition (prior to eruption of third molars)	Adult, Dentate or Partially Edentulous	Adult, Edentulous
Patient (New and Recall) for monitoring of dentofacial growth and development, and/or assessment of dental/skeletal relationships	Clinical judgment as to need for and type of radiographic images for evaluation and/or monitoring of dentofacial growth and development or assessment of dental and skeletal relationships.		Clinical judgment as to need for and type of radiographic images for evaluation and/or monitoring of dentofacial growth and development, or assessment of dental and skeletal relationships. Panoramic or periapical exam to assess developing third molars	Usually not indicated for monitoring of growth and development. Clinical judgment as to the need for and type of radiographic image for skeletal relationships.	
Patient with other circumstances including, but not limited to, proposed or existing implants, other dental and craniofacial pathoses, restorative/endodontic needs, treated periodontal disease and caries remineralization	Clinical judgment as to need for and type of radiographic images for evaluation and/or monitoring of these conditions.				

***Clinical situations for which radiographs may be indicated include, but are not limited to:**

A. Positive Historical Findings

1. Previous periodontal or endodontic treatment
2. History of pain or trauma
3. Familial history of dental anomalies
4. Postoperative evaluation of healing
5. Remineralization monitoring

Appendix 5-7 Ionizing Dental Radiation Safety Proposed Policy

6. Presence of implants, previous implant-related pathosis or evaluation for implant placement
- B. Positive Clinical Signs/Symptoms**
1. Clinical evidence of periodontal disease
 2. Large or deep restorations
 3. Deep carious lesions
 4. Malposed or clinically impacted teeth
 5. Swelling
 6. Evidence of dental/facial trauma
 7. Mobility of teeth
 8. Sinus tract (“fistula”)
 9. Clinically suspected sinus pathosis
 10. Growth abnormalities
 11. Oral involvement in known or suspected systemic disease
 12. Positive neurologic findings in the head and neck
 13. Evidence of foreign objects
 14. Pain and/or dysfunction of the temporomandibular joint
 15. Facial asymmetry
 16. Abutment teeth for fixed or removable partial prosthesis
 17. Unexplained bleeding
 18. Unexplained sensitivity of teeth
 19. Unusual eruption, spacing or migration of teeth
 20. Unusual tooth morphology, calcification or color
 22. Unexplained absence of teeth
 23. Peri-implantitis

****Factors increasing risk for caries may be assessed using the ADA Caries Risk Assessment forms (0-6 years of age and over 6 years of age).**

Guidelines for Prescribing Cone Beam CT imaging:

Cone beam CT imaging should be considered for cases in which intraoral or panoramic imaging are inadequate for proper diagnosis and/or treatment. The following position statements serve as guidelines for CBCT use in dentistry:

1. The use of cone-beam computed tomography in dentistry: An advisory statement; American Dental Association, JADA August 2012: [jada.ada.org/issue/S0002-8177\(14\)X6067-8](http://jada.ada.org/issue/S0002-8177(14)X6067-8)
2. Use of cone beam computed tomography in endodontics 2015 update; A joint position statement of the American Association of Endodontists and the American Academy of Oral and Maxillofacial Radiology: aae.org/specialty/wp-content/uploads/sites/2/2017/06/conebeamstatement.pdf
3. Position statement of the American Academy of Oral and Maxillofacial Radiology on selection criteria for the use of radiology in dental implantology with emphasis on cone beam computed tomography, June 2012: ncbi.nlm.nih.gov/pubmed/22668710
4. Clinical recommendations regarding use of cone beam computed tomography in orthodontics. Position statement by the American Academy of Oral and Maxillofacial Radiology In Oral Surg Oral Med Oral Pathol Oral Radiol 2013; 116:238-257: oooojournal.net/article/S2212-4403%2813%2900280-0/.



Bio-Hazard Exposure Incident Report

California Northstate University College of Dental Medicine

This report is to be completed by the clerkship faculty or supervising healthcare professional.

Name of Student _____

Name of Healthcare Facility _____

Location of Healthcare Facility _____

Date of Incident _____ Name of Clerkship/Preceptorship _____

Describe the incident:

Describe the protocol followed:

Describe the recommended follow-up:

Name of Clerkship Faculty/Preceptor (Please Print): _____

Faculty Signature _____

Student Signature _____



CNU College of Dental Medicine

Exposure to Infectious or Environmental Hazards Policy

Mandatory educational sessions of standard and precautions for blood and airborne pathogens are provided during Orientation within the first week of the first year. Students will receive additional training in proper techniques and patient policies for procedures that involve potential exposure to blood prior to the clinical aspects of the program. The appropriate use of personal protective equipment such as gloves, face shields, gowns, masks, and hand washing will also be presented at these times. Additionally, all students will be expected to adhere to California Northstate University College of Dental Medicine's vaccination policy available in the student handbook.

Students must immediately report any occupational exposure incident to their supervising faculty member, Treatment Group Supervisor, or Dean of Clinical Affairs who will assist them in contacting the appropriate entities to follow the established protocol of that facility regarding occupational exposure incidents. In some circumstances, the costs incurred in dealing with occupational exposure incidents (such as testing) will be covered by the healthcare facility at which the exposure occurred. In some circumstances, the healthcare facility may refuse to bear financial responsibility for the exposure. For these cases, the College of Dental Medicine's supplemental policy that covers blood and bodily fluid exposure/needle-still will take effect.

Students should also be aware that if, in the course of the testing required by occupational exposure incident protocols, they test positive for potentially infectious agents such as AIDS, HIV, or TB, the Occupational Safety and Health Officer is required by law to report this information to the County Health Department.

In the event of an infectious and/or environmental disease or disability, the Director of Student Affairs, Admissions and Outreach will work with the student, on a case-by-case basis, to ensure student wellness and minimize time lost in educational activities.



Policy 4001
February 22, 2019

INFECTION AND ENVIRONMENTAL HAZARDS EXPOSURE CONTROL POLICY

I. Policy Statement

This policy is designed to prevent or minimize occupational exposure to blood and other potentially infectious materials as required by the blood borne pathogens regulation in California Code of Regulations, Title 8 (8 CCR), Section 5193.

II. Purpose

The purpose of this policy is to:

- A. Establish, implement, and maintain an effective exposure control plan for infectious and environmental hazards.
- B. Provide a safe and healthy learning and training environment for dental students, faculty, staff and volunteers.
- C. Minimize or prevent potential exposure, or transmission to infectious and environmental hazards.

III. Scope/Coverage

This policy applies to all students, faculty, staff and volunteers.

IV. Procedure

- A. All individuals who have potential occupational exposure to infectious bodily fluids and other potential infectious materials receive training on the epidemiology, symptoms, and transmission of blood borne pathogen diseases. The training program will also cover:
 - i. A copy and explanation of the Cal/OSHA blood borne pathogen standard.
 - ii. An explanation of methods to recognize tasks and other activities that may involve exposure to blood and other potentially infectious materials (OPIM), including what constitutes an exposure incident.
 - iii. An explanation of the use and limitations of engineering controls, work practices, and Personal Protective Equipment (PPE).
 - iv. An explanation of the types, uses, location, removal, handling, decontamination, and disposal of PPE.

- v. Information on the hepatitis B vaccine, including information on its efficacy, safety, method of administration, the benefits of being vaccinated, and that the vaccine will be offered free of charge.
- vi. Information on the appropriate actions to take and persons to contact in an emergency involving blood or OPIM.
- vii. An explanation of the procedure to follow if an exposure incident occurs, including the method of reporting the incident and the medical follow-up that will be made available.
- viii. Information on the post-exposure evaluation and follow-up that the employer is required to provide for the employee following an exposure incident.



Needle Stick or Blood-Borne Exposure Policy

In the event of a needle-stick incident or blood-borne exposure, the incident will be reported on an incident report form and to the supervising dentist. The student, faculty member or staff member exposed will immediately clean the skin and wound sites with soap and water, then report to the Emergency Department of a designated hospital associated to the clinical rotation. The Director of Student Affairs and Admissions must be informed by the student within 24 hours about the incident.

The Emergency Department staff will evaluate the type and severity of exposure and counsel the student on the risk of transmission to HIV, HBV and HCV. Post-exposure prophylaxis to HIV and HBV will be recommended in accordance with CDC guidelines.

The follow-up for the exposure will be provide by an appropriate health care Provider. The student will then follow up with the Director of Student Affairs, Admissions and Outreach.

Exposed individuals will be educated on these protocols as described as noted below. Visiting students will need to complete a required test based on CNUCDM's preventative techniques and post-exposure protocols before the clinical clerkship begins.

Visiting persons who are exposed will be informed about and will follow the same procedures and precautions as CNUCDM personnel.

Preventing exposure to infectious diseases and contaminated body fluids, and procedures to be followed in the event of exposure (e.g., universal precautions), will be a part of the Year 1 Orientation. It will then be covered in more detail in the Foundations of Dental Medicine course. As applicable, students will receive comprehensive training in laboratory safe practices including exposure to contaminated body fluids and tissues. Procedures to be followed and appropriate contact numbers in case of accidental exposure will be clearly posted in the research laboratory. Additionally, these topics will be reviewed with a special emphasis on standard precautions and the exposure protocols during the Comprehensive Care Family Dentistry courses. Finally, these topics will be reinforced in all clinical clerkships and clinical site orientation activities.

Staff and faculty will be informed during orientation regarding the parenteral exposure policies and their implementation.

The clinical affairs committee will monitor all parenteral exposures to contaminated fluids and perform a structured assessment of each case to determine the continuous use of appropriate policies and their modifications as needed to mitigate risk of further exposure.

Hazardous and Universal Waste Management and Disposal Plan

California Northstate University College of Dental Medicine 9700 West Taron Drive, Elk Grove, CA

This document describes the hazardous waste management and disposal procedures of this dental practice and all its locations. This dental practice is a small quantity generator, that is, it generates less than 1000 kg/month of non-acute/non-extremely hazardous waste.

Notes: (1) A local enforcement agency may provide forms which require the same information as contained in this plan. (2) Medical waste management is described in a separate plan.

☐ This dental facility has a Hazardous Waste ID Number: _____

Go to the state Department of Toxic Substances Control Web site for an application form, <http://dtsc.ca.gov/IDManifest/index.cfm>. In general, a dental practice will apply for a permanent state ID number because the practice does not generate greater than 100 kg of RCRA hazardous waste and/or one kg of acutely hazardous waste per calendar month. State ID numbers are owner and site-specific. A state ID number is not required if all hazardous waste is managed as universal waste.

The local enforcement agency: _____

Use this website, <http://cersapps.calepa.ca.gov/Public/Directory>, to identify your local enforcement agency.

This plan is reviewed at least annually and updated as needed. The local enforcement agency will be notified within 30 days of when this dental practice moves to another location or closes. The individual in this dental practice who is responsible for hazardous waste management is:

(Print name and title):

Dates plan reviewed:

_____	_____	_____
_____	_____	_____
_____	_____	_____

I. Hazardous Waste in a Dental Practice

A dental practice may generate the items/solutions listed below which can be categorized as hazardous waste.

- Solutions containing chromium
- Solutions containing greater than 2.9% formaldehyde
- Solutions containing glutaraldehyde or ortho-phthaldehyde (OPA) as main active ingredient
- Items/solutions containing mercury (for example, dental amalgam, fluorescent lamps, batteries, gauges)
- Items/solutions containing silver (spent fixer, patient x-ray films ready for disposal)
- Universal wastes such as electronic devices and non-empty aerosol cans

The law requires all businesses to determine whether the wastes that they generate are hazardous wastes. If you are uncertain, look to the item's safety data sheet and to these regulatory resources:

- Dental, Medical and Veterinary Offices: Managing Your Hazardous Waste, DTSC Fact Sheet, 2009, <http://bit.ly/2u2Xijq>
- Department of Toxic Substances Control – Generators web site, <http://bit.ly/2u3w8Jy>

II. Types and Management of Hazardous and Universal Waste

To the extent possible, a dental practice should manage hazardous waste as universal waste and recycle it. Universal waste is a category of hazardous waste that is commonly generated by households and businesses and has more relaxed regulatory requirements. Many of the hazardous waste generated by dental practices may be recycled and managed as universal waste. Refer to the following web site for a list of universal waste.

- Universal Waste, DTSC Fact Sheet, 2010, <http://bit.ly/2u39O2x>

Check appropriate boxes and fill in the blanks in sections A – G.

A. Solutions containing chromium

This dental practice ☐ does ☐ does not generate this waste.

The estimated average quantity of this waste generated monthly is _____ .

This waste stream cannot be managed as a universal waste. It must be disposed using a licensed hazardous waste hauler or a local household hazardous waste program.

B. Solutions containing greater than 2.9% formaldehyde

This dental practice ☐ does ☐ does not generate this waste.

The estimated average quantity of this waste generated monthly is _____ .

This waste stream cannot be managed as a universal waste. It must be disposed using a licensed hazardous waste hauler or a local household hazardous waste program.

C. Solutions containing glutaraldehyde or ortho-phthalaldehyde (OPA) as main active ingredient

This waste stream may be treated. State law (Health and Safety Code section 25123.5(c)) allows healthcare facilities to use glycine to neutralize waste glutaraldehyde and OPA disinfectant solutions onsite, without a permit or other authorization prior to disposal to the sanitary sewer.

If the dental practice wants to dispose of the solution as non-hazardous, it should have on file tests or other documentation that indicates it is not a hazardous waste in California.

This dental practice (*check the applicable boxes*):

- ☒ does not generate this waste.
- ☐ does generate this waste and:
 - ☐ treats it with glycine and disposes it to the sewer.
 - ☐ has documentation that the solution is not hazardous waste.
 - ☐ disposes it using a licensed hazardous waste hauler or a local household hazardous waste program.

The estimated average quantity of this waste generated monthly is _____ .

D. Items/solutions containing mercury

This dental practice (*check the applicable boxes*):

- ☐ does not generate this waste.
- ☒ does generate this waste and:
 - ☒ disposes it using a recycler or universal waste transporter.
 - ☐ disposes it using a household hazardous waste program.
 - ☐ disposes it using a licensed hazardous waste hauler.

Types of items/solutions containing mercury generated in this practice include:

- ☒ scrap amalgam, amalgam spills (capsules)
- ☒ chair traps and vacuum filters
- ☒ fluorescent lamps
- ☒ batteries
- ☐ other (*list*): _____

The estimated average quantity of this waste generated monthly is _____ .

E. Items/solutions containing silver

This dental practice (*check the applicable boxes*):

- ☐ does not generate this waste.
- ☒ does generate this waste and:
 - ☒ disposes it using a recycler or universal waste transporter.

- ☐ disposes it using a household hazardous waste program.
- ☐ treats spent fixer with silver recovery unit; ensures solution meets local POTW limit for silver before discharge to sewer; and disposes cartridge using a recycler or universal waste transporter.
- ☐ uses an xray film recycler to recover the silver.
- ☐ disposes it through a licensed hazardous waste hauler.

The estimated average quantity of this waste generated monthly is _____ .

F. Universal Waste

Types of universal waste not containing mercury generated in this practice: *(list mercury-containing universal wastes, such as lamps and batteries, in section D)*

- ☒ batteries
- ☒ computer hardware
- ☐ television, video or dvd player
- ☒ telephone equipment and cell phones
- ☐ non-empty aerosol cans
- ☐ other *(list)*: _____

Dental practices that are small quantity hazardous waste generators and manage all such waste as universal waste are not subject to rules for employee training, accumulation time, recordkeeping, or labeling.

G. Other Hazardous Waste

List other types of hazardous waste and estimate amount generated by this dental practice. Refer to the DTSC document, *Defining Hazardous Waste*, at <http://bit.ly/2vbOpTi>

III. Storage

A. Containers

Each type of waste has its own container and the containers are:

- Leak-resistant
- Rigid
- Non-reactive with the waste
- Closeable with tight-fitting lids
- If managed as hazardous waste, labeled with the following information:
 - the words “Hazardous Waste” and type of waste;
 - name and address of this dental practice; and
 - date waste accumulation in the container started
- If managed as universal waste, labeled with the following information:
 - the words “Universal Waste” and type of waste and
 - name and address of this dental practice
- Kept clean and in good repair
- Inspected weekly
- Stored in a secure area away from the public and potentially hazardous areas

Containers holding liquids are placed in secondary containers.

If using a hazardous waste hauler, this office follows additional instruction provided by the hauler.

Universal waste that is large in size, for example computer equipment or televisions, do not have to be placed in containers.

B. Accumulation and Storage Time

- California Hazardous Waste Generator Summary Chart, <http://bit.ly/2u3i02Q>

This dental practice generates non-acute, non-extremely hazardous waste in an amount less than 100 kg (220.5 lb) per month.

Once 100 kg of non-acute, non-extremely hazardous waste is accumulated, this dental practice disposes of the waste within 180 days. Whether or not 100 kg of non-acute, non-extremely hazardous waste is generated, this dental practice disposes of the waste within one year of the date waste accumulation started.

A dental practice with more than one location can designate one location as the consolidation point for the universal wastes from all of its locations.

Check box if applicable and provide information.

- ☒ This dental practice has more than one location and consolidates universal waste at this address:

C. Transportation

Only DTSC-registered hazardous waste transporters may transport hazardous waste from the dental practice.

The dental practice may ship universal waste to recyclers or transport universal waste to a recycler or local household hazardous waste program. When shipping or transporting universal waste, this dental practice ensures the waste is in appropriate containers and packaging to prevent breakage and leaks. This dental practice only transports the universal waste it generates.

Transportation of other generators' waste is prohibited except if this dental practice is registered as a waste transporter.

IV. Waste Vendors and Household Hazardous Waste

This dental practice disposes of hazardous waste through:

Check applicable boxes and complete information.

☐ **DTSC-registered hazardous waste transporter**

Company name _____

Company address _____

Company telephone number _____

Types of waste disposed: _____

☐ **DTSC-registered universal waste transporter**

Company name _____

Company address _____

Company telephone number _____

Types of waste disposed: _____

☐ **Mail or transport to a recycler or universal waste collection site**

Company name _____

Company address _____

Company telephone number _____

Types of waste disposed: _____

- ☐ **Transport to a local household hazardous waste program** (*not all programs accept waste from businesses*)

Agency name _____

Agency address _____

Agency telephone number _____

Types of waste disposed: _____

V. Other Requirements

A. Spills

This dental office keeps spill kits appropriate for use on spills of hazardous waste. Staff are trained on how to clean spills. Staff wear personnel protective equipment when cleaning a spill.

B. Closure Plan

The dental practice, upon closure or sale of the practice, will ensure all hazardous wastes are properly disposed.

VI. Documentation

Shipping and tracking documentation are retained for a minimum of five years.

Employee training on hazardous waste management is documented and the documentation is retained for up to one year after individual leaves employment.

These documents are located:

Checklist for Hazardous Waste Disposal

Equipment

- x Appropriate containers for individual hazardous wastes.
- x Secondary containers for liquid hazardous wastes.
- x Personal protective equipment.
- x Spill kits.

Employee Training Checklist

- x Informed of the person responsible for hazardous waste management in the office.
- x Instructed on what wastes are managed as hazardous or universal waste.
- x Instructed on labeling and use of containers.
- x Instructed on use of appropriate personal protective equipment when handling hazardous waste.
- x Instructed on how to clean up spills of hazardous waste.
- x Informed on how the practice disposes of waste. Provide additional training as needed.

[Year]

[illegible]

[Year]

[illegible]

Hazardous and Universal Waste Management and Disposal Plan

Individual Training

California Northstate University
College of Dental Medicine
9700 West Taron Drive, Elk Grove, CA

Name of Trainer: _____

Training Subject: Hazardous and Universal Waste Management and Disposal Plan

Training Materials Used: _____

Name of Employee: _____

Date of Hire/Assignment: _____

I, _____ [print employee name] hereby certify that I received training as described above.

I understand this training and agree to comply with the safety procedures for my work area.

Employee Signature

Date

Copy this blank page for each employee who will be trained. Make additional copies for future employees. Place a completed copy in employee personnel file or other appropriate employee file.

Medical Waste Management and Disposal Plan

California Northstate University College of Dental Medicine
9700 West Taron Drive, Elk Grove, CA

This document describes the medical waste management and disposal procedures of this dental practice, a small quantity generator (*generates less than 200 pounds of regulated medical waste per month*). This document contains information required by the California Medical Waste Management Act, Health and Safety Code Sections 117600-118360. The MWMA is enforced by the California Department of Public Health (CDPH) and by designated local enforcement agencies. (*The local enforcement agency may provide forms which require the same information as contained in this plan.*)

(Go to the state Department of Public Health Web site for application form and list of local enforcement agencies, <http://www.cdph.ca.gov/certlic/medicalwaste/Pages/Generators.aspx>. Please refer to the "Waste Management Guide" and "Frequently Asked Questions" sections of the CDA Regulatory Compliance Manual for additional information on the management of regulated medical waste. This information is available on cda.org.)

This dental practice is registered as a small-quantity medical waste generator with: (*check appropriate box*)

☐ CDPH

☐ Local enforcement agency: _____

This plan is reviewed at least annually and updated as needed. The enforcement agency will be notified within 30 days of when this dental practice moves to another location or closes. The individual in this dental practice who is responsible for medical waste management is:

 (*Print name and title*)

I hereby certify that the information provided in this medical waste management plan is complete and correct.

 (*Signature of person named above and date*)

Plan reviewed:

_____	_____	_____
_____	_____	_____
_____	_____	_____

I. Definitions

Medical waste means any biohazardous, pathology, pharmaceutical, sharps, or trace chemotherapy waste not regulated by the federal Resource Conservation and Recovery Act of 1976. See Section 117690 of the MWMA for a detailed definition of medical waste.

A. **Biohazardous waste in a dental practice** includes:

- Waste material derived from the treatment of a human that is suspected of being infected with a highly communicable disease.
- Laboratory waste such as human specimen culture that are infected with pathogens that are infectious to humans.
- Waste that, at the point of transport from the dental practice or at the point of disposal contains recognizable fluid human blood, fluid human blood products, containers, or equipment containing human blood that is fluid.
- Waste containing discarded materials contaminated with excretion, exudate, or secretions from humans or animals that are required to be isolated by infection control staff, the attending dentist or the local health officer to protect others from highly communicable diseases.

B. **Pathology waste in a dental practice** means human body parts, with the exception of teeth, removed at surgery and surgery specimens or tissues removed at surgery or autopsy that are suspected by the dentist of being contaminated with infectious agents known to be contagious to humans or having been fixed in formaldehyde or another fixative.

C. **Pharmaceutical waste in a dental practice** does not include controlled substances. Disposal of controlled substances must be managed through a “reverse distributor” registered with the DEA.

D. **Sharps waste** means a device that has acute rigid corners, edges, or protuberances capable of cutting or piercing, including, but not limited to, hypodermic needles, hypodermic needles with syringes, blades, needles with attached tubing, acupuncture needles, root canal files, and broken glass items used in health care such as Pasteur pipettes and blood vials contaminated with biohazardous waste.

Medical waste does not include (1) disposal items, such as gauze or cotton, soiled with nonfluid blood or saliva, (2) teeth not meeting the definition of biohazardous waste, or (3) urine, feces, saliva, sputum, nasal secretions, sweat, tears, or vomitus, unless it contains visible or recognizable fluid blood. These items are not considered “regulated medical waste” as defined above and may be disposed as regular solid waste. Such items should be disposed in regular solid waste containers. (MMWA §§ 117690, 117700)

Note: With respect to extracted teeth, neither Cal/OSHA or the MWMA prohibit dentists from giving patients back their own extracted teeth. ***Teeth containing amalgam or other heavy metal should managed either as universal waste or hazardous waste and never be discarded as regulated medical waste or solid waste.***

CALIFORNIA NORTHSTATE UNIVERSITY COLLEGE OF DENTAL MEDICINE



ADDITIONAL DOCUMENTATION NEEDED
PRIOR TO SITE VISIT

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Criteria D and Standard 1-5 (Financial Resources): The long and short-term financial commitment of the institution to the program is documented.

The reviewers noted that the financial information provided in the application does not match with what was stated in the application. For example, the sum of the tuition revenue does not appear to align with the application information; additionally, clinic revenue does not appear accurate since students will not be significantly participating in the clinical setting in the first two years of the program. Additionally, the reviewers request clarification on the details of student tuition and fees, and information on how the instrument program will be funded.

Response:

There has been many revisions of the tuition revenue and the latest version was not reflected in the reports. The revised budget is displayed below. As shown in the Cost Estimate table, tuition in year 1 is set at \$76,000.00. The College of Dental Medicine is on a calendar cycle. As indicated in the budget below, total tuition revenue for Year 1 is \$3,040,000 (\$76,000/2=\$38,000 * 80 students) as outlined in red below. Year 1 has an anticipated start date in September 2020 upon CODA approval.

The clinical revenue is projected to generate revenue in year 2022 as outlined in blue below. By year 2022, students in their third year would be participating in the clinical setting along with faculty through the Faculty Practice Plan.

CALIFORNIA NORTHSTATE UNIVERSITY					
COLLEGE OF DENTISTRY					
PROFIT & LOSS					
BUDGET FOR 2020-2024					
	2020	2021	2022	2023	2024
Revenue					
Tuition	3,040,000	9,424,000	13,003,410	20,352,591	30,476,099
Tuition Scholarships	(40,000)	(126,000)	(220,000)	(287,500)	(324,000)
Fees	130,000	226,000	322,000	584,100	781,200
Dental Kit Lease Program (pass through)	640,000	960,000	1,592,000	2,064,000	2,536,000
Dental Clinic Income	-	-	1,500,000	1,575,000	1,653,750
Total Revenue	3,770,000	10,484,000	16,197,410	24,288,191	35,123,049
Expenses					
Salaries and Benefits - Faculty	5,094,900	7,842,150	10,589,400	13,336,650	16,348,413
Salaries and Benefits - Staff	911,725	917,848	924,094	935,477	954,064
Other Operations	2,143,008	2,206,309	2,271,502	2,338,645	2,407,794
Faculty/Staff Development	84,000	87,000	89,000	89,000	89,000
Legal/regulatory/accred	92,700	95,481	98,345	101,296	104,335
Prof liab insurance	34,806	37,696	38,827	39,992	41,192
Student Services	25,750	26,523	27,318	28,138	28,982
Education materials/supplies	95,069	97,921	100,859	103,884	107,001
Marketing	171,000	40,000	41,200	42,436	43,709
Preclin/Clinic costs	-	-	1,350,000	1,338,750	1,405,688
Building maint/util	11,330	11,670	12,020	12,381	12,752
Dental Kit Purchase Expense and Repair	640,000	960,000	1,592,000	2,064,000	2,536,000
Depreciation	15,450	15,914	16,391	16,883	17,389
Total Expenses	9,319,738	12,338,511	17,150,957	20,447,531	24,096,317
Operating Profit (EBIT)	(5,549,738)	(1,854,511)	(953,547)	3,840,660	11,026,732
Other Income	46,350	47,741	49,173	50,648	52,167
Interest Expense <>	(103,000)	(106,090)	(109,273)	(112,551)	(115,927)
Earnings Before Taxes (EBT)	(5,606,388)	(1,912,861)	(1,013,647)	3,778,757	10,962,972
Taxes	-	-	-	-	-
Net Income	(5,606,388)	(1,912,861)	(1,013,647)	3,778,757	10,962,972

The table below presents the tuition and fees associated with the Dental Medicine program with projected estimated costs for Year 1 through Year 4. The College of Dental Medicine is going to purchase the instrument dental kit and lease it to students. The dental instrument lease and maintenance fee will be amortized over 4 equal payments as outlined in green below. Students will own these dental instrument kits upon graduation.

The estimated cost of study table below will be posted on the college's website for prospective applicants after the college has received CODA approval to begin instruction. Further, potential students on interview day will be briefed on the total cost of study as part of the Financial Aid presentation to ensure full disclosure.

	Year 1	Year 2	Year 3	Year 4
Cost Estimate	DM1	DM2* (estimated in inflation factor 2%) (range 0-5%)	DM3* (estimated in inflation factor 2%) (range 0-5%)	DM4* (estimated in inflation factor 2%) (range 0-5%)
Tuition	\$ 76,000	\$ 77,520	\$ 79,070	\$ 80,652
Student Association/ Support Fee (pass through fee)	\$ 500	\$ 500	\$ 500	\$ 500
Student Disability/Liability Coverage Fee (pass through fee)	\$ 54	\$ 55	\$ 56	\$ 57
Technology Fee	\$ 700	\$ 714	\$ 728	\$ 743
Books and Supplies (pass through fee)	\$ 1,000	\$ 1,020	\$ 1,040	\$ 1,061
Orientation Fee	\$ 75	\$ -	\$ -	\$ -
ADA/ASDA/ADHA Membership (pass through fee)	\$ 143	\$ 146	\$ 149	\$ 152
Dental Sim Lab Fee	\$ 500	\$ 510	\$ 520	\$ 531
CPR Fee (pass through fee)	\$ 40	\$ 40	\$ 40	\$ 40
Instrument Lease and Maintenance Fee (pass through fee) (total lease and fee amortized over 4 equal payments - student will own the instrument kit upon graduation)	\$ 4,000	\$ 4,000	\$ 4,000	\$ 4,000
Optical Loupes (pass through fee)	\$ 1,195	\$ -	\$ -	\$ -
Total Estimated Tuition and Fees	\$ 84,207	\$ 84,505	\$ 86,104	\$ 87,736
Total Estimated Cost for 4 year CDM degree Tuition and Fees:				\$ 342,552
Estimated other/optional Educational Related Costs	DM1	DM2	DM3	DM4
Health Insurance	\$ 3,200	\$ 3,200	\$ 3,200	\$ 3,200
Laptop	\$ 1,100	\$ 1,100	\$ 1,100	\$ 1,100
Room and Board	\$ 20,230	\$ 20,230	\$ 20,230	\$ 20,230
Transportation	\$ 4,410	\$ 4,410	\$ 4,410	\$ 4,410
Total Estimated Cost of Attendance per year	\$ 113,147	\$ 113,445	\$ 115,044	\$ 116,676
Total Estimated Cost of Attendance for 4 year CDM Degree Program				\$ 458,312

Criteria E: Contractual agreements are drafted and signed providing assurance that a program dependent upon the resources of a variety of institutions and/or extramural clinics and/or other entities has adequate support.

The reviewers request additional information on how the shared basic sciences content is managed between departments within the University. It was noted that the dental program will compensate the medical program \$400,000 per year for support of basic sciences. If an agreement or memorandum of understanding is in place, please provide the supporting documentation.

Response:

We have realized by your question that the method of reporting the potential participation of faculty in delivering CDM curriculum and the \$400,000 set aside for this purpose created some confusion. We have addressed this in two ways that should better describe what was intended. First we have provided the MOU between CDM, the University, and all the college deans demonstrating the combined willingness between the colleges to assist CDM's delivery of integrated health curriculum. The specific areas of interest specific to the interrelationship of the whole body on the orofacial complex are being identified and addressed in the curriculum syllabi that have been developed since the Commission asked for more specificity that was previously provided. These syllabi are included in the Exhibits. (See Exhibit D)

Secondly, the CDM budget has been adjusted to reflect projected spending for 60 faculty by year 4 of the program. As it was previously written as "at least 42 of 60 FTEs will be faculty responsible for the curriculum in dental medicine..." created the concern for how the other faculty or their colleges might be compensated for their contribution to the CDM curriculum delivery. The details by for how best to allocate faculty time identified responsible for curriculum delivery, and compensation are still being identified. At the time of the site visit we anticipate better clarity and can report at that time the further development and decisions in this regard. (See Exhibit B)

Criteria I: The first-year curriculum with general course and specific instructional objectives, learning activities, evaluation instruments (including, as applicable, laboratory evaluation forms, sample tests, quizzes, and grading criteria) is developed.

- The reviewers noted that courses are under development; however, tests and quizzes were lacking.

Tests and quizzes are currently under development for the integrated curriculum. Tests and quizzes will be available as an on-site exhibit, and will be case-based, in the INBDE format. With the change in Leadership at the School, there have been some changes in the direction of the curriculum, which now represents a traditional dental school curriculum with a biomedical sciences stream that is integrated with clinical dentistry.

- The course syllabi appeared to be from the medical school with no references to the dental school, and no evidence of a dental component. Please provide further evidence of the program's ability to comply with Dental Standard 2-13 related to the biomedical sciences curriculum.

The biomedical sciences stream is fully integrated with the dental school curriculum. The D1 curriculum schedule is attached: (See Exhibit C)

- Additionally, the reviewers request supplemental in-depth information for the first and second year curriculum in advance of the site visit. Please submit the final comprehensive and detailed course syllabi, including the course dates and times, designated instructors, overall curriculum and course schedules, etc. for years one and two.

Course syllabi and schedules are attached: (See Exhibit C2 and D)

Course Directors and instructors are attached: (See Exhibit D2)

Criteria J: As applicable, courses for the subsequent years of the curriculum are developed, including general and specific course objectives.

Related to Criteria and J, the reviewers noted that courses are under development; however, tests and quizzes were lacking. The course syllabi appeared to be from the medical school with no references to the dental school, and no evidence of a dental component. Please provide further evidence of the program's ability to comply with Dental Standard 2-13 related to the biomedical sciences curriculum.

Additionally, the reviewers request supplemental in-depth information for the first and second year curriculum in advance of the site visit. Please submit the final comprehensive and detailed course syllabi, including the course dates and times, designated instructors, overall curriculum and course schedules, etc. for years one and two.

Response:

Courses for the subsequent years of the curriculum are being finalized and will be available as an onsite exhibit.

Criteria K and Standard 4-5 (Facilities and Resources): If the capacity of the facility does not allow all students to be in laboratory, pre-clinical laboratory and/or clinic at the same time, a plan documenting how students/residents will spend laboratory, pre-clinical and/or clinical education sessions has been developed and is included.

The reviewers request verification that the program will have adequate facilities to support the proposed enrollment. 1. The program plans to admit 80 students per year with a facility that includes 60 dental treatment units and 44 simulation units. It was unclear to the reviewers how the program's facilities will accommodate the projected enrollment. 2. Please submit schedules for use of the facilities for each course in the curriculum, including a plan for facility usage when the program has enrolled students in all years. 3. Please also provide information on the facility construction and completion dates as well as any alternate plans to address delays in construction. 4. The reviewers request information on the timeline for construction of the additional clinic of 48 units that will be built.

Summary of Response

This response is divided to 3 sections.

- The first describes the facilities present and under development, including the number of simulation station and clinical chairs that will be available
- The second is a facilities description timeline
- The third is the conclusion that the number of chairs available will be adequate to provide the clinical experiences needed by students

Facility development planning and construction overview

California Northstate University has two campuses located in the Sacramento region - the College of Health Sciences is located on the campus in Rancho Cordova, and the Elk Grove Campus contains the Colleges of Medicine, Pharmacy, Psychology and Dental Medicine.

The currently existing facilities in Elk Grove to be used by the CDM are identified below as 9700 W. Taron Drive and 2400 Maritime Drive. The third facility planned for the CDM scheduled to come online in year three is identified as the “new CDM facility”. The new CDM facility will be constructed on one of two Elk Grove campus locations being considered by the University's architect to fit into their master plan.

Following the initial application submission, a number of modifications have occurred which resulted in an increase in the number of simulation units and dental treatment units. These modifications include an increase in the simulation laboratory size to include 81 simulation units comprised of 80 student and 1 faculty demonstration units. The plan for the clinical facilities has been modified to increase the number of dental treatment units to be built on the Elk Grove Campus to 128 dental treatment units - 28 units in the initial clinical site at 2400 Maritime Drive and 100 dental treatment units in the new CDM facility to be built on campus. The simulation laboratory experiences will be completely delivered within the 2400 Maritime building. In total, the facilities for clinical training will be delivered in a multi-phased construction plan utilizing 2400 Maritime Drive and the second location on the CNU Elk Grove campus, which in this

report is identified as the “[new CDM facility](#)”. For the first two years the facilities to be used for simulation and clinical education will occur at the 2400 Maritime Drive building and the didactic education will occur at 9700 W. Taron Drive. The 9700 W. Taron Drive building is located on Campus and houses the Colleges of Medicine, Pharmacy, and Psychology. The 9700 W. Taron Drive facility is in the process of planning and remodeling to provide two additional classrooms for the College of Dental Medicine. The Maritime Drive facility is being remodeled to house the simulation lab and a dental clinic. The new CDM facility’s architectural design is currently under development and envisioned to be a 5-story, 85,000 square foot building.

Facility Descriptions

9700 W. Taron Drive facility located on the Elk Grove Campus

Currently this facility houses the Colleges of Medicine and Pharmacy and will house the College of Dental Medicine during the initial years of its development. This facility currently has sufficient didactic, seminar, small group learning rooms, basic science, and anatomy laboratory availability to support the College of Dental Medicine for the first two to three years of operation. This facility is available now and has the following components:

- Both existing lecture halls on first floor can be split by retractable room dividers to provide 2 lecture halls for 80-100 students dedicated for use by CDM. Spring break 2020 installation of additional room dividers
- There is an existing Anatomy lab which will be used by CDM
- There are existing basic science laboratory facilities which will be used by CDM

2400 Maritime Drive facility located on the Elk Grove CNU Campus:

The facility at 2400 Maritime Drive is currently undergoing remodeling. When completed, it will provide a simulation laboratory and a clinical facility. In the initial two years of operation, this facility along with 9700 W Taron Drive (above) will serve the needs of the College of Dental Medicine. This building will have the following components:

- There is a total of 16,000 sq. ft.
- [First floor](#)
 - 8,000 sq. ft.
 - It will house phase 1 of Clinical facility with 28 dental treatment units and clinical operations support space using A-Dec dental equipment. Following completion of the new CDM facility (below), the clinical facilities in the Maritime building will likely be utilized for a faculty practice. Initially, this clinical facility will be used for screening and faculty treatment clinics to build an adequate patient base for clinical training starting in year 3. It is necessary to begin building a patient base or patient population to support the needs of the future D3 class’ transition into full comprehensive clinical care, and to develop the soft or interpersonal skills and clinical skill of the students prior to their transition into the D3 year and full comprehensive care of patients.
 - Timeline:
 - Demolition and construction is in process.
 - Anticipated completion is August/Sept 2020

- **Second floor**
 - 8,000 sq ft
 - It will house the 81 seat simulation laboratory stations with equipment provided by A-Dec along with other space to support the simulation lab and clinical experience.
 - Timeline:
 - Demolition and construction is in progress now.
 - A-Dec simulation and lab benches contract has been signed
 - Anticipated completion is April/May 2020

New CDM Facility to be built on the Elk Grove Campus:

This new CDM facility is expected to be completed by Year 3. At that point, it, along with the 2400 Maritime Drive facility, will be the main facilities of the College of Dental Medicine that provide the didactic, science lab, simulation lab, and clinical training.

The architectural plans for this facility have been and continue to be under development. There are two properties on Campus being considered for this facility by the architect as most suitable from a design and location standpoint. The University is using the same architectural firm for CDM that is designing the hospital and ambulatory care facility. The two campus locations under consideration for CDM include a site adjacent to the 2400 Maritime Drive building and one identified as 140 Stonelake Drive. Both locations are on the Elk Grove campus on land owned by the University. A conceptual draft of the proposed building is included with this response. The building will have the following components:

- This facility is envisioned to be a 5-story, 85,000 – 100,000 square foot building which will serve as the primary location for the clinical and didactic facilities for the College of Dental Medicine. At the time of the site visit, architectural plans will be available to be shared with the site visit team.

Current vision for new CDM Facility

- **First floor** – reception, student life & staff support space, possible faculty practice
- **Floors two and three** – will contain a combined total of 100 dental treatment units and clinical operations support space. Clinical operation support space such as sterilization, reception, dispensary, office space, reception, etc.
- **Fourth floor**- office space and space for growth of clinical treatment associated with program expansion for increases in class size, residency programs, faculty practice, etc.
- **Fifth floor** – academic space (lecture halls (3)), seminar and small group learning rooms, and offices for administration/faculty/staff.
- Timeline:
 - Site engineering and soil analysis for the land have been completed
 - Architectural planning for the 5-story building is under development by the San Francisco architectural firm of Fong and Chan
 - Henry Schein is the preferred vendor and will provide assistance to the architect for clinical design and the integration of all vendor supplied clinical equipment - currently under development

- Architectural plans to be completed for construction permitting June 2020 if not earlier
- Construction will begin in Summer/Fall 2020
- Occupancy permit will be issued in Spring 2022
- Clinical care will start in this facility in Fall 2022

Facilities Transition Timeline

The use of the three CNU buildings and facilities will evolve over the next four years as follows:

Year 1

- 9700 W. Taron Drive
 - D1 will have unrestricted the use of the two existing lecture halls (4,200 sq. ft. each) being are planned to be split, providing 4 classrooms (2,100 sq. ft. each), suitable for 80-100 students per classroom. These splits will be accomplished with soundproof, moveable walls, which allow for flexibility in class size. (See Exhibit E, F, G)
 - D1 will have access to anatomy lab using a pro-section study of head and neck and thoracic lab instruction. Interdisciplinary lab has capacity for schedule availability for D1 class on a rotational basis with COP (College of Pharmacy) and COM (College of Medicine). (See Exhibit H)
- 2400 Maritime Drive
 - D1 will have unlimited access to both pre-clinical and clinical space
 - Simulation facility (second floor)
 - Spring 2021- projected completion and occupancy permitting
 - Clinical facility (first floor)
 - Fall 2020- projected completion of clinical construction and occupancy permitting
 - Fall 2020 and Spring 2021- Advertising and promotion of the opening of the College of Dental Medicine. Marketing and advertisement to begin for the purpose of developing patient base for both student experiences and faculty practice.
 - Spring 2021- D1 students - Scheduling of patient screenings and other initial entrustable professional activities for students to gain experience and to build a patient base in preparation for year three of the program
 - Assuming a first class of 80: the class will be split into 3 groups of 26 or 27 students. Two students will be involved with every patient encounter with one student serving as the primary care giver and the other will serve as a chair side assistant. Rotations will be crafted allowing each group of students the experience of serving as care giver, assistant, or observer for each patient encounter.
 - Projection on patient needs is up to 3 patients per student

Year 2

- 9700 W. Taron Drive

- D1 and D2 will have access to two CDM dedicated lecture halls available to support didactic training
 - D1 will spend 4 days per week in didactic training
 - D2 will spend 1-2 day per week in didactic training
- Science laboratory access schedules will have been further developed to ensure adequate access for the additional class
- 2400 Maritime Drive
 - Simulation facility: D1 and D2 classes rotate through simulation lab
 - D1 will use sim lab 1 day per week
 - D2 will use sim lab up to 3 days per week
(See Exhibit I-J)
 - Clinical facility
 - D1 students begin to rotate in the spring semester with clinical encounters as described above in Year 1
 - Projection on patient needs is up to 3 patients per D1 student
 - D2 students will continue clinical experiences sessions for up to 1 day per week with patient screenings each semester to develop skills in patient interaction skills, such as health history, clinical oral examination, treatment planning, local anesthesia, oral prophylaxis, and impressions
 - Projection on patient needs for D2 students is 5-8 patients per D3 student
 - These activities serve to continue to develop patient management and clinical skills and to build the clinic's patient base in preparation for year 3 when full clinical experiences begin for the D3 class
(See Exhibit I-J)

Year 3

- 2400 Maritime Drive
 - Simulation laboratory: D1 and D2 classes rotate though the simulation laboratory as describe previously
 - Clinical facility: faculty practice development
- New CDM facility
 - Clinical facilities – Are envisioned to be 100 dental operatories. The first class of D3 students will transition into the newly completed main CDM facility using the dental treatment units on the second and third floor clinics for clinical experiences necessary to develop required clinical competencies. Students will be assigned to a Treatment Group Leader, a faculty supervisor serving as the primary attending. Each Treatment Group Leader will oversee 10 dental operatories and the students assigned to that Treatment Group.
 - Clinical usages schedule
 - D1 students begin to rotate in the spring with clinical encounters as previously described
 - D2 students continue clinical rotations as previously described to prepare for full comprehensive care
 - D3 students begin full comprehensive care

- Didactic and Basic Science Lab facilities – Transitioning to new facility for providing didactic and laboratory instruction in new CDM facility.

Year 4

- New CDM Facility
 - Clinical facilities - By the 4th year of operation of the College, each clinical Treatment Group should be comprised of 10 D3 and 10 D4 students. Treatment will be provided with one student acting as the assistant and one serving as the primary care giver. D4 student will serve as primary care giver for a minimum 6 of 10 patient encounters per week and the D3 serving as the primary care giver for a minimum of 4 of 10 patient encounters per week. Clinical care credit will be awarded to the student providing the care. Attendance is mandatory. The treatment group coordinator along with clinical faculty will be the attending dentists overseeing the student's treatment of patients. It is anticipated there will be two treatment periods each weekday.
 - Didactic and laboratory facilities – D1 and D2 will have designated lecture halls for didactic instruction

Alternative planning in the event of construction delay of the new CDM facility

2400 Maritime Drive

At the time of the site visit, it should be clear whether the simulation laboratory on the second floor is sufficiently completed to allow the program to start in the Fall 2020. If unanticipated delays occur following the site visit which results in the simulation laboratory not completed at the start of the program, then additional biomedical sciences stream classes will be provided in the first semester, and these will be “If swapped out” for simulation experience time when the simulation laboratories are completed.

New CDM Facility

As indicated, the planning for this facility is under development. It is planned to be completed in the spring of 2023 for the inaugural class that will be transitioning into their 3rd year. This facility at the time of opening is envisioned to provide 100 dental treatment units, plus didactic, laboratory, office space, and more. In the event occupancy permitting should be delayed through the end of the year for 2022, then the 2400 Maritime Drive clinical facility can be used to provide clinical experiences for the 3rd year students. The clinical program CNU-CDM is implementing is similar to the programs at Western University in Pomona, California and Touro College of Dental Medicine in New York. The clinical program will involve 2 students per scheduled patient encounter wherein one student serves as primary care giver and the second student serves as the chairside assistant. With two patient encounters per day, or ten per week, this allows each student to serve as primary care giver for 5 patient encounters per week until such time as the second clinical facility is permitted for occupancy. If the delay extends for the entire third year, then student patient encounters and staff scheduling would be increased by extending scheduling of patient visits to a third appointment period in the evenings or by the addition of appointments on Saturdays.

Should CODA grant Initial Accreditation allowing for acceptance of an inaugural class in September of 2020, it is likely that the timing of the admission cycle for the first class will limit

the size of the first class to something less than the planned class of 80 students. Should construction delays occur, a smaller first class would enable the 28 chair clinic in the 2400 Maritime Drive building to provide sufficient space to proceed with the clinical training requiring only minor modifications in clinical scheduling. If the first class is less than or equal to 56 students, we would utilize the 2400 Maritime Drive clinic of 28 dental treatment units to fully accommodate clinical experiences for up to a year or until completion of construction and permitting of the second CDM facility. The primary reason the clinical training would be little affected by a delay in construction of the second clinical facility is the model of clinical care we plan to use as described above. So, for example, with a class size of up to 56 students, a clinic with 28 dental operatories would be sufficient to provide full clinical experiences with little modification to the curriculum and scheduling of patient treatment appointment blocks. If the class size is 56 to 80 students, then the addition of evening appointment blocks for weekdays and Saturdays would be needed to ensure adequate patient encounter experiences if construction is delayed for up to a year.

Conclusion

The current facility availability and the plans to create new facilities are described above. As the new facilities become available, the student educational experiences will be shifted to the new sites. This plan will allow CMD to start instruction in the fall of 2020 with a D1 class and transition as described to accommodate the addition of the D2, D3 and then D4 classes.

Criteria L: As applicable, evaluation instruments for laboratory, pre-clinical, clinical, and clinical enrichment experiences are developed.

While the application narrative indicates that evaluation instruments are under development, and many instruments/rubrics were provided, the reviewers noted that all evaluation instruments for laboratory, preclinical, clinical and clinical enrichment experience should be available for review at the time of the site visit.

Response:

To our understanding, there is no response required for this section at this time, but will have the materials available for review at the time of the site visit, as stated above.

Criteria N: As applicable, the adequacy of the patient caseload in terms of size, variety, and scope to support required clinical experiences is available.

The number of patients needed within the program appears to be an underestimate. Please provide the program's plan to achieve a sufficient patient load for all students within all types of dental procedures required by the program and Accreditation Standards. Additionally, please document the program's plan should a sufficient patient load not be achieved. Please also provide the program's full patient marketing plan and alternatives for marketing if the program does not achieve a sufficient caseload of patients.

ADEQUACY OF PATIENT CASELOAD

We have looked at the patient caseload from many different perspectives and used a variety of different models to try to project the numbers for patients needed to provide a sufficient number, variety, and scope of opportunities to develop the clinical competencies. In the analysis we relied on consultations with and the experiences gained from other dental schools such as the Universities of Kentucky, Minnesota, Western, Midwestern, Oregon, Touro, and UC San Francisco. Additionally, we used consultants from the Sacramento area for the demographic analysis of communities of need, general patient populations, and those experienced with clinical practice development. This analysis provided several results which gave a range of expectations for patient needs. Our observation of the results are in part dependent on the community the university's dental school is serving and in part dependent on the specific model of clinical care used by the school to educate their students.

For example, Western, Touro, and other dental schools assigned two dental students to every patient encounter wherein one student serves as an assistant to the student providing the care. This model is reported to have the effect of providing a reduction in number of total patients needed to develop the clinical competencies. For example, at Western University with 140 D3 & D4 students (70 per class) in clinic per year, they screen approximately 1500 patients per year and accept up to 90% as patients to provide their clinical competencies. On the other side of the spectrum, UCSF screens roughly 5000 applicants and accepts 50% or 2500 as patients for their 160 D3 & D4 students (80 per class). The total number of patients having been screened and the ratio of patients accepted for care appears to be in part due to the payer mix and complexity of the patients from the communities served by the school. In addition to the numbers of individuals screened and accepted as patients necessary to develop the competencies, once a level of competency is met, many universities then provide additional clinical experiences in community based educational clinics such as a Federally Qualified Health Center, Indian Health Clinic, or university affiliated clinic in a community of need. CNU plans to use this approach. These community-based clinics provide real world clinical experiences in terms of volume, diversity, complexity, and pace of patient care. These experiences serve to further prepare students for practice following graduation. The net effect of the specific model used for clinical education of students, the payer mix of patients, the complexity of care needed in the communities served, and the implementation of a community based clinical education each have an effect on the numbers of patients ultimately needed to develop the clinical competencies and experience necessary for graduation.

We recognize that building a patient base suitable to support a single-operator oral health care practice or a clinical practice in an oral health care institution does take time. Consequently, we plan to start building the patient base of the school starting year 1. This needs to begin in year one to prepare for the start of the D3 year when students transition main clinical facility under development is to open. We believe the following model strategically plans for a pragmatic and achievable patient base sufficient to develop the required clinical competencies and provide an enriched clinic training experience. It is our expectation to be able to begin providing introductory patient experiences as early as the second semester of the D1 year. These experiences would begin with introductory entrustable procedures such as taking medical histories and oral examinations. Each semester, our expectation is continued growth of the patient base in preparation for the semester the D2 class transition into the third year and begin full engagement in clinical training. We have further refined our assessment regarding the number of patients needed and it is below:

Assumptions: Planning is based number of patients per student per year

D1 students: 3 patients/student

D2 students: 5-8 patients/student

D3 students: 20-25 patients/student

D4 students: 20-25 patients/student (assuming community based educational clinics are not fully operational for student clerkship rotations)

80% of applicants screened are accepted as patients

First year:	80 D1 students, 3 patients/student = 240 patients under care	
	screen 300 patients x 80% acceptance =	240
	number patients needed for year 1	240

Second year:	80 D1 students, 3 patients/student = 240 patients under care	
	screen 300 patients x 80% acceptance =	240
	80 D2 students, 5-8 patients/student = 400 to 640 patients	
	screen 800 patients x 80% acceptance =	640
	number patients needed for year 2	880

Third year:	80 D1 students, 3 patients/student = 240 patients under care	
	screen 300 patients x 80% acceptance =	240
	80 D2 students, 5-8 patients/student = 400 to 640 patients	
	screen 800 patients x 80% acceptance =	640
	80 D3 students 20-25 patients/student = 1600 to 2000 patients	
	screen 2000 patients x 80% acceptance =	1600
	number patients needed for year 3	2480

Fourth year:	80 D1 students, 3 patients/student = 240 patients under care	
	screen 300 patients x 80% acceptance =	240
	80 D2 students, 5-8 patients/student = 400 to 640 patients	

screen 800 patients x 80% acceptance =	640
80 D3 students 20-25 patients/student = 1600 to 2000 patients	
screen 2000 patients x 80% acceptance =	1600
80 D4 students 20-25 patients/student = 1600 to 2000 patients	
screen 2000 patients x 80% acceptance =	1600
screen 5100 applicants to identify this number patients needed for year 4	4080

We have developed a marketing plan, below, to attract the number of patients needed as determined by the calculations listed above.

MARKETING PLAN

School of Dentistry- Patient Marketing Plan

Sacramento Demographics- 1.5 million (90.1% own a computer),
6.4% don't have health insurance

PEOPLE	
Population	
Population estimates, July 1, 2018, (V2018)	1,540,975
Age and Sex	
Persons under 5 years, percent	6.4%
Persons under 18 years, percent	23.6%
Persons 65 years and over, percent	14.1%
Female persons, percent	51.1%
Race and Hispanic Origin	
White alone, percent	63.0%
Black or African American alone, percent(a)	10.9%
American Indian and Alaska Native alone, percent(a)	1.5%
Asian alone, percent(a)	16.9%
Native Hawaiian and Other Pacific Islander alone, percent(a)	1.3%
Two or More Races, percent	6.4%
Hispanic or Latino, percent(b)	23.4%
White alone, not Hispanic or Latino, percent	44.2%
Population Characteristics	

Veterans, 2013-2017	81,541
Foreign born persons, percent, 2013-2017	20.7%
Housing	
Housing units, July 1, 2018, (V2018)	574,438
Owner-occupied housing unit rate, 2013-2017	55.5%
Median value of owner-occupied housing units, 2013-2017	\$299,900
Median selected monthly owner costs -with a mortgage, 2013-2017	\$1,781
Median selected monthly owner costs -without a mortgage, 2013-2017	\$493
Median gross rent, 2013-2017	\$1,122
Families & Living Arrangements	
Households, 2013-2017	532,050
Persons per household, 2013-2017	2.76
Living in same house 1 year ago, percent of persons age 1 year+, 2013-2017	83.3%
Language other than English spoken at home, percent of persons age 5 years+, 2013-2017	32.1%
Computer and Internet Use	
Households with a computer, percent, 2013-2017	91.7%
Households with a broadband Internet subscription, percent, 2013-2017	82.8%
Education	
High school graduate or higher, percent of persons age 25 years+, 2013-2017	87.0%
Bachelor's degree or higher, percent of persons age 25 years+, 2013-2017	29.9%
Health	
With a disability, under age 65 years, percent, 2013-2017	8.6%
Persons without health insurance, under age 65 years, percent	6.4%
Economy	
In civilian labor force, total, percent of population age 16 years+, 2013-2017	62.3%
In civilian labor force, female, percent of population age 16 years+, 2013-2017	58.0%
Total health care and social assistance receipts/revenue, 2012 (\$1,000)(c)	12,358,663
Income & Poverty	
Median household income (in 2017 dollars), 2013-2017	\$60,239
Persons in poverty, percent	14.1%

Value proposition to community and to affiliates (competitive differentiation)?

1. Lower cost alternative
2. World-class faculty

3. Excellent care delivered via faculty-supervised students
4. Innovative curriculum and cutting-edge technology?
5. Convenience for both Central California's San Joaquin Valley and Sacramento Valley farm communities

Marketing Channels:

I. Referrals-

- a. Program Affiliations
 - i. Carrington college – Dental Assisting and Dental Hygiene Programs
 - ii. Sac City College – Dental Hygiene Program
 - iii. FADE Institute – Dental Assisting, Registered Dental Assistant, and RDA Expanded Function II Programs
- b. **Hospital Affiliations? (leveraging existing MOUs from Medical School, FQHC, or others to establish relationships)**
 - i. VA
 - ii. Sutter
 - iii. Kaiser
 - iv. UC Davis Health
 - v. River City Medical Group

II. Local Colleges (generate goodwill in the community)

- a. Services provided through Student Health to:
 - i. CNU Student Health Services by referral
 - ii. [CSUS Student health Services by referral](#)
 - iii. UC Davis Students (<https://hpa.ucdavis.edu/dentistry>)
 1. *Health Professions Advising*
 - iv. Community college students

III. Insurance Mix?

- a. Will develop a listing of insurance plans under contract
 - i. **Denti-Cal Dental (Medicaid delivered dental care in California)**
 1. Senior Care Centers?
 - a. Assisted living facilities
 2. Services to the disabled
 3. Children
 4. Mothers
 5. Welfare
 1. https://www.dhcs.ca.gov/services/Documents/MDSD_Presentation_for_Medi-Cal_Families_10_22.pdf
 - ii. **Managed care- Sacramento County GMC program**
 1. Data on Sacramento utilization:
 <https://www.dhcs.ca.gov/services/Pages/DMCPerformanceMeasures.aspx>
 2. <https://first5sacramento.saccounty.net/Results/Documents/Sac-GMCExecSummUpdate-2015-Final.pdf>

3. An important recent development in the CNU area is the release of the 2020 Governor's Budget proposal. In this proposal, there is a plan to eliminate the current Medicaid Dental Managed Care system and move all current beneficiaries in that system into the fee-for-service system. This will allow an increased choice of providers for almost 500,000 current California Medicaid beneficiaries.

IV. Local community Relationships-

- a. Chambers of commerce (*connecting with the community and small businesses that may not have very good health insurance*):
 - i. Sac Metro Chamber of Commerce
 - ii. Hispanic Chamber of Commerce
 - iii. Black Chamber of Commerce
 - iv. CalAsian Chamber of Commerce
- b. First Five Sacramento Dental: <https://first5sacdentel.org/resources/>
 - i. <https://first5sacramento.saccounty.net/Meetings/Documents/MCDAC/2016/SacDentalResources-Eng-Sp.pdf>
 - ii. Serving on advisory board:
<https://first5sacramento.saccounty.net/Meetings/Documents/Rosters/AdvisoryCommittee.pdf>
- c. Dental Site listing: <http://www.dentalsite.com/dentists/densch.html>
- d. <https://cchcs.ca.gov/wp-content/uploads/sites/60/NR/CCHCS-FactSheet.pdf>
- e. Greater Economic Council: <https://www.selectsacramento.com/>
 - i. PR Stories?
 - ii. Included is information about small business (67% of local businesses have 1-4 people): <https://www.selectsacramento.com/talent/demographics/>
 1. Perhaps services from the school can offset dental costs. Wonder if you can purchase a list of these small business via GSEC to advertise to?

V. Associations (membership in the community to stay abreast of trends etc.), collaborating in the community to generate goodwill:

- i. CDA CARES
 1. Access to care program of the California Dental Association Foundation
 2. faculty and student participation to showcase faculty (story can be written up and testimonials can be utilized for patient and student recruitment)
- ii. California Care Force- free clinic sponsored by California Association of Oral and Maxillofacial Surgeons
 1. faculty and student participation to showcase faculty (story can be written up and testimonials can be utilized for patient and student recruitment)..
 - a. Community goodwill
 2. Following this line of thinking, perhaps an open house event for several hours of free examination services for x amount of people that show by a certain time

- a. Introduction to the community...media/press kit
- 3. https://www.dhcs.ca.gov/services/chdp/Documents/Letters/chdppi_n0505.pdf
- iii. Sacramento District Dental Society: <http://www.sdds.org/>
- iv. American Dental Association: <https://www.ada.org/en>

VI. Channels of communication to drive the value proposition messaging?

- a. Ads in Sac Business Journal
 - i. Print, digital (banner ads, advertorials, and morning and afternoon edition)
 - ii. PR Stories
 - iii. Sponsorships like the Sac Business Review and SBJ?
 - 1. Announcement at event (promo reel about new school) at event
 - a. Over 900 people attend
 - b. Media coverage provided
- b. Sac Bee
 - i. PR Stories
 - ii. News releases regarding opening of dental school
 - 1. Services provided
 - 2. Seeking patients interested in being screened as potential patients
- c. Digital advertising for a wider reach
 - i. Social Media- FB/Instagram (sponsored ads)
 - 1. Also, need a presence of the school to point the call to action to direct attention to CDM
 - ii. Newspaper (online banners ROS (run of site) on news sites, and behavioral advertising/retargeting on geo-fenced, white list websites)
- d. Hispanic community
 - i. Radio, TV, mobile ads
- e. Radio
 - i. NPR- PR/new stories
 - ii. Press about school opening
- f. Email blasts
 - i. Find lists to purchase
- g. Google Adwords
 - i. Key words on website
 - ii. Sponsored ad words

VII. Website

- a. Video Testimonials
 - i. School Breaking ground/buildout
 - ii. Dean and Faculty testimonials to start
 - iii. Student and patients to follow
- b. CRM (Customer Relationship Management) Database to track leads, and manage demographics, communication plans, and email blast repository
 - i. Embedded Appointment system?

Criteria O: Class schedule(s) noting how each class will utilize the facility are developed.

As a supplement to Criteria K and Standard 4-5 (Facilities and Resources), the reviewers request information on how the facility will be used based on the projected enrollment and space capability of the facility. Please submit class schedules, facility usage, etc. to support enrollment of 80 students in the first year, 160 students in the second year, 240 students in the third year, and 320 students in the fourth year. In addition please provide a contingency plan for all facilities utilized.

Response:

This criteria has been responded to in Criteria K response. Please let us know if additional information is needed.

Criteria P: As applicable, diagram or blueprints of the didactic, laboratory, pre-clinical laboratory and clinical facilities, and equipment needs are developed to support the anticipated enrollment date.

As a supplement to criteria K and Standard 4-5 (Facilities and Resources), the reviewers request information to document how the facilities will be used based on enrollment and space availability.

Response:

This criteria has been responded to in Criteria K response. Please let us know if additional information is needed.

Equipment Needs

The College of Dental Medicine has developed and agreed upon the equipment needs of the Simulation lab. The signed and finalized contract has been included as an exhibit.

(See Exhibit K-L)

Standard 6 Research Program: The reviewers noted that opportunities will be provided to engage in research; however, it was unclear whether there will be a budget to support student research. Please provide additional information on the research program and student support for engagement in research.

Response:

As indicated in the self-study, California Northstate University College of Dental Medicine's (CDM) research program will have an emphasis on translational and community service research aimed at addressing the significant disparities in oral health and access to oral health care among residents of California's Northern Central Valley.

The CDM budget includes \$29,000 for research. This budget item is included in the total of the operating expenses line item identified as "Other Operations". (See Exhibit X)

The initial CDM research portfolio is already in place based on grants and contracts brought by Dr. Paul Glassman, Associate Dean for Research and Community Engagement. These grants focus on translation of dental prevention and behavior support science into clinical care, integrated into communities, and using innovative delivery models to demonstrate the ability to improve access to oral health services, improve health outcomes, and lower the cost of care.

Even prior to the formal establishment of the CDM, there have been discussions and interest in supporting the research and community engagement activities with health and social service agencies, government agencies and other members of the dental industry.

Faculty will be expected to engage in scholarly activities. Support for these activities will be provided by the leadership and the Office of Research and Community Engagement. Dr. Glassman, Associate Dean for Research and Community Engagement has obtained over \$30 million in grants and contracts for translational and community service research and is prepared to provide leadership and support in this area.

The structure and function of the Research Committee and research tracking activities are described in the self-study including the availability of IT support and a dedicated Research Coordinator.

Student Research Activities

Students will participate in CDM research activities in multiple ways. As described in the self-study, these include:

- Assignments to community sites where translational and community service research is taking place and where they will directly participate in components of the research activities.
- Specific assignments in the curriculum to review literature, gather data, document findings and receive feedback from course faculty.
- Elective participation in faculty-led projects.

The CDM will have a \$25,000 annual research fund to stimulate and support faculty projects. One requirement of these projects will be involvement of student mentees. Students will have the opportunity to participate in literature search, project design, interventions, data collection and analysis, and developing conclusions.

Summary

The main points of this question response are:

- California Northstate University College of Dental Medicine's (CDM) research program will have an emphasis on translational and community service research aimed at addressing the significant disparities in oral health and access to oral health care among residents of California's Northern Central Valley.
- CDM has planned mechanisms and a support structure for faculty research with an emphasis on the goal listed above.
- CDM will have a \$25,000 annual research fund.
- Students will participate in research activities in multiple ways including being mentees directly involved in faculty research.

Additional Requested Information:

Program Start Date

The commission asked for further information regarding the start date of that was reported in the initial application. It was reported in the initial application that August 6, 2020 as the projected start date. This date was developed early last year and was based on what we now know was a misunderstanding for when we could anticipate a decision on initial accreditation. Now having a better understanding of the accreditation process and timing, we have changed the program's start date to September 28, 2020 should the program receive Initial Accreditation.

Further Program Developments

Faculty Changes

There have been some developments/changes to our faculty.

- Dr. Sheila Brear has been appointed as Dean of Academic Affairs
- Dr. Rosemary Wu has been appointed to interim Dean of Clinical Affairs

Faculty Development Event – 1/22/20

We have also successfully held our first Faculty Development Event that took place on 1/22/20 at California Northstate University. In attendance were 50-60 parties who have expressed interested in becoming part or full time faculty for the College of Dental Medicine. Dr. Suzanne Clark (College of Pharmacy, California Northstate University) gave a talk regarding team based learning along with three class of 2021 PharmD students (Janie Yu, Luis Tolento Cortes, and Elizabeth Ann Browning).

Response to New or Updated Standards

Overview:

There are 4 standards that are new or were updated to take effect July 2019 and will take effect in July 2020. The following describe CNU's plans to address these standards.

Standard 2-8.e.

Standard:

“The dental school must have a curriculum management plan that ensures...” ...
e. “incorporation of emerging didactic and clinical technologies to support the dental education program curriculum. “

Response:

As a new dental school, CNU has an opportunity to ensure that material presented in the education program is modern, evidence-based, and incorporates emerging didactic and clinical understanding and technologies. An important part of the hiring process and faculty development process for CODM will be instruction, training, and coaching for faculty members to ensure that this vision is carried out. As the curriculum is developed and progresses the associate Dean for clinical affairs will conduct ongoing course evaluations which will include review of course material by outside reviewers. The purpose of these reviews will be, in part, to ensure that material being taught supports this vision.

Standard 2-24d

Standard:

At a minimum, graduates must be competent in providing oral health care within the scope of general dentistry, as defined by the school, including:

d. health promotion and disease prevention, including caries management

Response:

The initial self-study responded to standard 2 24.d. as previously written which was “d. health promotion and disease prevention”. The new language refers to “health promotion and disease prevention, including caries management”. The addition is the reference to “caries management”.

Caries management includes multiple topics presented in multiple courses and experiences. In general, topics in caries management include: oral anatomy and physiology, pathophysiology of the caries disease, risk assessment, medical and behavior prevention of caries, and medical and surgical management of the consequences of the caries disease. These topics are presented in the following courses and experiences:

Course #	Course Title	Credits	Year	Term
Odont 521	Dental Anatomy <i>LAL and LAB</i>	6	DS 1	Fall

Course #	Course Title	Credits	Year	Term
Odont 522	Cariology <i>LAL</i>	3	DS 1	Spring

Course #	Course Title	Credits	Year	Term
Odont 611	Operative Dentistry <i>LAL and LAB</i>	6	DS 2	Fall

Course #	Course Title	Credits	Year	Term
Odont 662	Comprehensive Care Family Dentistry <i>CLIN and LAB</i>	3	DS 2	Spring

Course #	Course Title	Credits	Year	Term
Odont 762	Comprehensive Care Family Dentistry <i>CLIN</i>	8	DS 3	Spring

Course #	Course Title	Credits	Year	Term
Odont 861	Comprehensive Care Family Dentistry <i>CLIN</i>	8	DS 4	Fall

Course #	Course Title	Credits	Year	Term
Odont 862	Comprehensive Care Family Dentistry <i>CLIN</i>	8	DS 4	Spring

Course #	Course Title	Credits	Year	Term
BSS 701	Dental Public Health <i>LAL</i>	2	DS 3	Fall

Course #	Course Title	Credits	Year	Term
BSS 861	Clinical Clerkship: Community-based Education <i>4 weeks, 30 hours per week plus call</i> <i>CLIN</i>	8	DS 4	Fall

Course #	Course Title	Credits	Year	Term
BSS 871	Seminar in Dental Public Health <i>SEM</i>	2	DS 4	Fall

Course #	Course Title	Credits	Year	Term
BSS 862	Clinical Clerkship: Community-based Education <i>4 weeks, 30 hours per week plus call</i> <i>CLIN</i>	8	DS 4	Spring

Description:

Managing dental caries disease is fundamental to the scope of general practice. The series of courses and experiences described above build upon one another over the course of the educational program. Fundamentals of the anatomy of oral structure including teeth is initially delivered along with a course dedicated to Cariology. These concepts are then reinforced and put into use in all of the various additional courses which use didactic and clinical experiences to integrate medical behavioral and surgical prevention and management of the dental caries disease. The culmination of these experiences is the clinical application during patient care in both community rotations and the school's clinics.

Standard 2-25

Standard:

Graduates must be competent in assessing and managing the treatment of patients with special needs.

Intent:

An appropriate patient pool should be available to provide experiences that may include patients whose medical, physical, psychological, or social situations make it necessary to consider a wide range of assessment and care options. As defined by the school, these individuals may include, but are not limited to, people with developmental disabilities, cognitive impairment, complex medical problems, significant physical limitations, and the vulnerable elderly. Clinical instruction and experience with the patients with special needs should include instruction in proper communication techniques including the use of respectful nomenclature, assessing the treatment needs compatible with the special need, and providing services or referral as appropriate.

Response:

The initial accreditation self-study responded to the standard as it is written which was “Graduates must be competent in assessing the treatment needs of patients with special needs.”. The revised standard adds the language “...and managing...”.

In addition to the hospital dental program and didactic experiences described in the initial self-study report, CDM will recruit and treat patients with special needs as a part of the patient pool served by the school’s clinics. One of the reasons the expected acceptance rates of patients screened for treatment is expected to be high, is the school intends to recognize the prevalence of people with complicated medical, physical, and mental conditions prevalent in our society. We will ensure that a majority of individuals with those conditions are accepted through the screening process. We consider this essential in order to provide students with experiences that they need to adequately serve the population they will face upon graduation.

CDM intends to recruit and train faculty members to be sure they are comfortable providing and supervising care for people with special needs accepted into the clinical program. This will take the form of specific faculty development programming related to serving people with complicated medical, physical, and mental conditions. The majority of people with these conditions will be served in the normal clinical environment. Those with more complicated conditions may be seen in the hospital dental program described in the initial self-study.

Caseloads for individual students will be monitored to ensure that they have experiences serving patients with a variety of oral health, medical, physical, and mental conditions. This is an explicit goal of the school and tracking mechanisms will be in place to ensure the goal is achieved.

Standard 3-1

Standard:

The number, distribution and qualifications of faculty and staff must be sufficient to meet the dental school's stated purpose/mission, goals and objectives, at all sites where required educational activity occurs. The faculty member responsible for the specific discipline must be qualified through appropriate knowledge and experience in the discipline as determined by the credentialing of the individual faculty as defined by the program/institution.

Intent: Faculty should have knowledge and experience at an appropriate level for the curriculum areas for which they are responsible. The collective faculty of the dental school should have competence in all areas of the dentistry covered in the program.

Response:

The original self-study responded to the standard as it was then written which was "The number and distribution of faculty and staff must be sufficient to meet the dental school's stated purpose/mission, goals and objectives, at all sites where required educational activity occurs." The revised Standard added the sentence, "The faculty member responsible for the specific discipline must be qualified through appropriate knowledge and experience in the discipline as determined by the credentialing of the individual faculty as defined by the program/institution."

In addition to the information in the original self-study, we want to clarify that CODM is in the process of identifying faculty members for the educational program. There is an initial group of designated faculty able to start the program. In addition, we have a roster of approximately 130 individuals from Sacramento District Dental Society who have expressed interest in becoming faculty members at CODM by submitting a CODA BioSketch and CV. Under the direction of the Dean and Associate Dean for Academic Affairs, these faculty members are being screened and plans initiated for hiring. Additionally, a faculty training program has been initiated with the first in the series of meetings scheduled for January 22, 2020. The most important criteria in the hiring process and in assessing potential faculty member's qualifications, is the evaluation of whether they have the knowledge and experience required in the discipline in which they will be teaching.

In addition, the Associate Dean for Academic Affairs is responsible for the process of faculty evaluation and promotion. Through ongoing data gathering and evaluation system, faculty members are evaluated, both for their suitability for promotion as a member of the University Promotion and Advancement Committee, and for the currency of the material they are responsible for teaching.

COLLEGE OF DENTISTRY

PROFIT & LOSS

BUDGET FOR 2020-2024

	2020	2021	2022	2023	2024
Revenue					
Tuition	3,040,000	9,424,000	13,003,410	20,352,591	30,476,099
Tuition Scholarships	(40,000)	(126,000)	(220,000)	(287,500)	(324,000)
Fees	130,000	226,000	322,000	584,100	781,200
Dental Kit Lease Program (pass through)	640,000	960,000	1,592,000	2,064,000	2,536,000
Dental Clinic Income	-	-	1,500,000	1,575,000	1,653,750
Total Revenue	3,770,000	10,484,000	16,197,410	24,288,191	35,123,049
Expenses					
Salaries and Benefits - Faculty	5,094,900	7,842,150	10,589,400	13,336,650	16,348,413
Salaries and Benefits - Staff	911,725	917,848	924,094	935,477	954,064
Other Operations	2,143,008	2,206,309	2,271,502	2,338,645	2,407,794
Faculty/Staff Development	84,000	87,000	89,000	89,000	89,000
Legal/regulatory/accred	92,700	95,481	98,345	101,296	104,335
Prof liab insurance	34,806	37,696	38,827	39,992	41,192
Student Services	25,750	26,523	27,318	28,138	28,982
Education materials/supplies	95,069	97,921	100,859	103,884	107,001
Marketing	171,000	40,000	41,200	42,436	43,709
Preclin/Clinic costs	-	-	1,350,000	1,338,750	1,405,688
Building maint/util	11,330	11,670	12,020	12,381	12,752
Dental Kit Purchase Expense and Repair	640,000	960,000	1,592,000	2,064,000	2,536,000
Depreciatlon	15,450	15,914	16,391	16,883	17,389
Total Expenses	9,319,738	12,338,511	17,150,957	20,447,531	24,096,317
Operating Profit (EBIT)	(5,549,738)	(1,854,511)	(953,547)	3,840,660	11,026,732
Other Income	46,350	47,741	49,173	50,648	52,167
Interest Expense < >	(103,000)	(106,090)	(109,273)	(112,551)	(115,927)
Earnings Before Taxes (EBT)	(5,606,388)	(1,912,861)	(1,013,647)	3,778,757	10,962,972
Taxes	-	-	-	-	-
Net Income	(5,606,388)	(1,912,861)	(1,013,647)	3,778,757	10,962,972

MEMORANDUM OF UNDERSTANDING REGARDING
CALIFORNIA NORTHSTATE UNIVERSITY'S COLLEGE OF DENTAL MEDICINE PERSONNEL

The purpose of this Memorandum of Understanding ("MOU") is to formally record the mutual interest of California Northstate University's College of Dental Medicine ("CDM"), and California Northstate University's College of Medicine ("COM") and California Northstate University ("CNU") to enter into an agreement between COM and/or CNU to participate in the delivery of and facilitation of the curriculum at CDM.

CNU and CDM have agreed on the availability and interest of CNU's colleges' faculty to support CDM's curriculum. CNU supports these negotiations and is prepared to provide further support from CNU's other colleges, the College of Medicine ("COM"), College of Psychology ("Psy"), College of Health Sciences ("CHS"), College of Masters of Pharmaceutical Science (MPS), and College of Pharmacy ("COP"), collective referred to herein as "CNU".

CDM has represented that they will need the following at this time, but may be amended as needed:

- The hiring plan for CDM includes 15 Full Time Equivalent ("FTE") pre-enrollment faculty with an increase of 15 FTEs per annum for a mature 60 FTE for CDM by year 4.
- At least 42 of the 60 FTEs will be faculty of CDM responsible for the curriculum in dental medicine.
- The remainder of the FTEs for the health sciences curriculum may be from the CNU Colleges of Dental Medicine, Medicine, Health Sciences, Pharmacy, Masters of Pharmaceutical Science and Psychology or from business professionals with expertise in matters such as practice management and legal.

The CNU Colleges collectively have represented that they will have the faculty available to assist with the personnel needs for CDM and will work together to meet all of the hiring and teaching needs.

All Parties agree that this understanding may be amended by mutual agreement of all Parties and that subsequent agreements will need to be drafted for the individuals who have significant FTE overlaps with multiple Parties.

IN WITNESS THEREOF, this MOU has been executed by the parties hereto as of the date of the last signing party:

California Northstate University

Signed: _____

Name: _____

Title: _____

Date: _____

**California Northstate University,
College of Medicine**

Signed: _____

Name: _____

Title: _____

Date: _____

**California Northstate University,
College of Dental Medicine**

Signed: _____

Name: _____

Title: _____

Date: _____

**California Northstate University
College of Psychology**

Signed: _____

Name: _____

Title: _____

Date: _____

**California Northstate University
College of Health Sciences**


Signed: _____

Name: _____

Title: _____

Date: _____

**California Northstate University
College of Masters of Pharmaceutical Science**

Signed: 

Name: Catherine Yang

Title: Dean

Date: 1/23/2020

IN WITNESS THEREOF, this MOU has been executed by the parties hereto as of the date of the last signing party:

California Northstate University

Signed: _____

Name: _____

Title: _____

Date: _____

**California Northstate University,
College of Medicine**

Signed: Joseph Silva

Name: Joseph Silva

Title: Dean

Date: 1/23/20

**California Northstate University,
College of Dental Medicine**

Signed: _____

Name: _____

Title: _____

Date: _____

**California Northstate University
College of Psychology**

Signed: _____

Name: _____

Title: _____

Date: _____

**California Northstate University
College of Health Sciences**

Signed: _____

Name: _____

Title: _____

Date: _____

**California Northstate University
College of Masters of Pharmaceutical Science**

Signed: _____

Name: _____

Title: _____

Date: _____

IN WITNESS THEREOF, this MOU has been executed by the parties hereto as of the date of the last signing party:

California Northstate University

Signed: _____

Name: _____

Title: _____

Date: _____

California Northstate University,
College of Medicine

Signed: _____

Name: _____

Title: _____

Date: _____

California Northstate University,
College of Dental Medicine

Signed: _____

Name: _____

Title: _____

Date: _____

California Northstate University
College of Psychology

Signed: _____

Name: _____

Title: _____

Date: _____

California Northstate University
College of Health Sciences

Signed: H. M. R.

Name: Heather M. Brown

Title: DEAN, College of Health Sciences

Date: 1/23/20

California Northstate University
College of Masters of Pharmaceutical Science

Signed: _____

Name: _____

Title: _____

Date: _____

Exhibit B

IN WITNESS THEREOF, this MOU has been executed by the parties hereto as of the date of the last signing party:

California Northstate University

Signed: Alvin Cheung

Name: Alvin Cheung

Title: President

Date: 1/23/2020

California Northstate University,
College of Medicine

Signed: _____

Name: _____

Title: _____

Date: _____

California Northstate University,
College of Dental Medicine

Signed: Kevin Keating

Name: KEVIN KEATING

Title: Dean

Date: 1/23/2020

California Northstate University
College of Psychology

Signed: _____

Name: _____

Title: _____

Date: _____

California Northstate University
College of Health Sciences

Signed: _____

Name: _____

Title: _____

Date: _____

California Northstate University
College of Masters of Pharmaceutical Science

Signed: _____

Name: _____

Title: _____

Date: _____

IN WITNESS THEREOF, this MOU has been executed by the parties hereto as of the date of the last signing party:

California Northstate University
College of Pharmacy

Signed: 

Name: Xiaodong Feng

Title: Dean

Date: 1/22/2020

IN WITNESS THEREOF, this MOU has been executed by the parties hereto as of the date of the last signing party:

California Northstate University

Signed: _____

Name: _____

Title: _____

Date: _____

**California Northstate University,
College of Medicine**

Signed: _____

Name: _____

Title: _____

Date: _____

**California Northstate University,
College of Dental Medicine**

Signed: _____

Name: _____

Title: _____

Date: _____

**California Northstate University
College of Psychology**

Signed: 

Name: Brian McLaughlin

Title: Dean

Date: 1/27/20

**California Northstate University
College of Health Sciences**

Signed: _____

Name: _____

Title: _____

Date: _____

**California Northstate University
College of Masters of Pharmaceutical Science**

Signed: _____

Name: _____

Title: _____

Date: _____

Exhibit C

Week	Date	Topic	Integrated Biomedical Sciences	Date	Integrated Biomedical Sciences	Date	Integrated Oral Health Sciences	Date	Time	Integrated Behavioral and Social Sciences	Integrated Clinical Sciences	
			Monday 8:00am-5:00pm Orientation Week		Tuesday 8:00am-5:00pm Orientation Week		Wednesday 8:00am-5:00pm Orientation Week			Thursday 8:00am-5:00pm Orientation Week	Friday 8:00am-5:00pm Orientation Week	
1	9/28/2020	Integrated Sciences: Biomolecules	Major classes of biomolecules , bonds and bond strength, nucleic acids (DNA, RNA), water. Glycosylation, phosphorylation. Enzymes. Antibiotic mechanism of Penicillin.	9/29/2020	Amino acids and proteins . Urea cycle. Amino acids. Peptide bonds. mRNA. Proteins: primary and secondary structure, misfolding and examples of diseases. Prions and their impact on proteins, and dental significance.		OMFS 511; Odont 511 Communication Skills . Introduction to cultural humility and cultural proficiency. Listening skills and developing a rapport. The patient interview. Practice, feedback and reflection.	10/1/2020	8:00-5:00	BSS 501 Managing Student Life Resiliency and sustainability. Importance of sleep, diet, and exercise. Posture. Mindfulness and meditation. Substance misuse and consequences.	Introduction to Dental Equipment and Kit Distribution . Review inventory of the kit and organize instruments. Assign faculty to student group.	
2		Integrated Sciences: Biomolecules	Metabolism . Effect of temperature, pH, substrate. Allostery and control of metabolism. Covalent modifications.		Carbohydrates, glucose and glycosylation , glycolysis and ATP, NADH, TCA cycle. Lactic acidemia. Oxidative phosphorylation. Mitochondria and the production of ATP, conversion to energy.		OMFS 511 Odont 511 Medical History . Physical Evaluation and Risk Assessment. ASA Classification, Review of symptoms. Facial, oral and dental signs of medical conditions. Radiographic signs suggesting medical condition. The dental examination : extraoral and intraoral examination for screening purposes.		8:00-5:00	BSS 501 Managing Student Life Learning and health resources on campus. Recognizing students in distress, management. Who to contact. Ethics and professionalism. Respect for others. Personal mission statements and values.	Administrative day . Set up electronic identification. Assign and passwords for students. Provide magnification vendors.	
3		Integrated Sciences: Biomolecules	Lipids, fatty acids, triacylglycerols , phospholipids, cholesterol, lipases. Acetyl CoA.		HS 631 Metabolism : Insulin, glucagon, betaoxidation, gluconeogenesis. Fasting state. Diabetes.		HS 631 Endocrine and metabolic disorders . Diabetes, pancreatic cancer, adrenal insufficiency, cushings syndrome, thyroid diseases.		8:00-5:00	OMFS 511 Common examples of dental management modifications. Coordination of care between physician and dentist. HS 641 Drug Actions and Interactions in Dentistry , commonly prescribed medications, common oral consequences of systemic drugs.	SIM Lab Orientation . Introduction of instruments and burs. Dental terminology and glossary of terms. Introduce nomenclature and teeth surfaces	
4		Integrated Sciences: Cell Biology	Basics of the cell . Plasma membrane, lipids, phospholipids and cholesterol, lipid rafts		Membrane proteins (extrinsic, intrinsic), transport across membranes		HS 611 Kidney Disease : acute and chronic, lab testing, dialysis, medications and dental management. Transplant patients. Hepatic Disease : Viral hepatitis, alcoholic liver disease, hepatocellular carcinoma.		8-5:00	Odont 511 Foundations of Odontology . Infection control, use of PPE and other barriers; use of antibacterials and antiseptics. Sterilization procedures. Outline of infectious diseases to which there is potential exposure. Practice: PPE and cubicle set up. (Remainder of Odont 511 when clinics available)	Hand piece familiarization and initiation of handpiece practice . View tutorial of "Learn-A-Prep II" as enamel, dentin and pulp. Review the drawings of the occlusal surfaces of the teeth on the block to represent initial caries lesions (in dentin). Faculty will guide the shape of which the preparations to be cut, such as the "x" "u" etc. .	
5		Integrated Sciences: Cell Biology	Subcellular organelles (cytoplasm, nucleus, DNA, DNA structure and replication)		Endoplasmic reticulum and golgi apparatus , lysosomes, mitochondria and ATP, Cytoskeleton.		HS 621 Gastrointestinal Disease : Gastric reflux and the effect on teeth; peptic ulcers, inflammatory bowel disease, cancer.		8:00-12:00 1:00-5:00pm	BSS 522 BS 533 Ethics in Dental Medicine and Health Care I . Licensure, continuing education, Diversion programs. California Dental Association Code of Ethics. Beneficence and non-maleficence. Standard of Care, Unprofessional conduct, sedation licensure. Research and the Helsinki Statement. Care of animals in research, and ethical use of human tissue. Record keeping, business and professional codes. Anti Kickback laws. Financial disclosures.	Dental anatomy: Morphology of Centrals and Incisors and Continuation of "Learn-A-Prep II" to differentiate the hardness between the enamel and dentin layers . Begin conservative preparations involving occlusal surfaces. Practice small class 1 and small, slot-type Class 2 outlines. Faculty will guide the depth of the preparations. Review for Mid-Term Exam	
6		Integrated Sciences: Cell Biology	The cell cycle and phases , mitosis, apoptosis, intrinsic and extrinsic pathways. p53 and p27. Viruses, apoptosis and cancer . Microtubule interacting drugs.		Introduction to Genetics. DNA, RNA, Replication. Ribosomes. Genotypes. Stem cells and regrowing the dental pulp. Stem cells and regrowing dentin and potentially the entire tooth. Use of DNA in forensic analysis.		HS 621; HS 641 Xerostomia . Causes (pharmacy, conditions of the salivary glands), sequelae, quality of life. Carous lesion development. Tooth loss and the quality of life implications. Management of xerostomia and is sequelae (Clinical application of fluoride and silver diamine fluoride).		8:00am-5:00pm	BSS 522 BS 533 Ethics in Dental Medicine and Health Care II . The California Dental Practice Act and duties for auxiliary staff. Student presentations. BSS502 Introduction to Health Systems I Overview of the U.S. health care system I and II , Comparison of the U.S. health care system; Organization and components of the U.S. oral health care system. Oral health disparities and barriers to oral health and oral health care . Changing concepts of dental care – prevention and behavior support science.	Dental anatomy: Canines and Intra-arch relationships and supporting tooth structure . Continuation of "Learn-A-Prep II" . Create larger "cavity preparations" with teeth with old amalgam restorations that need to be removed.	
7		Integrated Sciences: Tissues of the Body	Epithelia, classification , histological preparation. Oral epithelium and histology. Pemphigus vulgaris, histological appearance, role of dentist in diagnosis. Glands.		Connective tissue connective tissue cells, extracellular matrix. Collagen, elastin, fibronectin and laminins, proteoglycans. Categories of connective tissue. Cartilage: structure and function. Fibrocartilage, elastic cartilage, hypertrophic cartilage.		HS 641 Controlled substances . Use of controlled substances in dentistry, prescribing guidelines and regulations. CARES. Substance use disorders, dependence (including opioids, tobacco, methamphetamines). Etiology and epidemiology. Coordination of dental care with other health professionals. Screening, intervention and referral.		8:00am-5:00pm	BSS502 Introduction to Health Systems II Value in health care . Quadruple Aim. Evolution from quality movement. Progress and impact on oral health care. Workforce: Expanding role of allied oral health personnel; integration . Telehealth-connected-teams and Virtual Dental Homes Social Determinants of Health	Dental anatomy: Premolars and Molars and Pulp Morphology . Continuation of "Learn-A-Prep II" . Class 5 Preparation Outlines. Four facial surfaces are represented to represent shapes of Class 5 cavity preparations, two as initial lesions and two as removal of old restorations.	
8		Integrated Sciences: Tissues of the Body	Bone : structure and function, types (cortical, trabecular, woven, histological appearance. Cells in bone and their function.		Muscle : types, structure, contraction and its control		OMFS 621 Geriatric Health and Functional Issues . Age related vision (cataract, macular degeneration, glaucoma and diabetic retinopathy), hearing, mobility. Cognitive impairment, dementias and Alzheimers (see also Neurological Disorders). Diabetes (see also endocrine and metabolic disorders). HS 641 Medications for memory loss. (For access to care, see "defects of limb and skeleton").		8:00am-5:00pm	BSS501 Introduction to Health Systems III The Safety-Net Role, organization, and financing. Policy: Impact of federal, state, and local policy. The Public Health Lens Understanding population Health. Session Review	Continuation of "Learn-A-Prep II" . Students practice box shapes with angles on the edge of the "Learn-A-Prep II" block to allow students to prepare and view convergent boxes, as would be cut in Class 2 amalgam preparations. There are also semicircles for students to practice possible shapes for Class 2 preparations for bonded resin composite restorations.	
9		Integrated Sciences: Basic Embryology	OMFS 621 Introduction to Human Development (Book: Developing Human, Moore, Chapter 1) The first 1-10 weeks, descriptive terms used. Summary of the first week through birth. (Chapter 21) Epigenetics, stem cells, and common signalling pathways		HS 522 Systemic vs pulmonary circulation, blood pressure , contraction, nodes, action potentials. Structural defects of the heart, arrhythmias, ECG, how to read it. How to take blood pressure and the significance of high and low blood pressure. "Normal" values. Extrinsic control of the heart, exercise, sympathetic drive and parasympathetic drive. B receptors and B blockers. Intrinsic control of the heart				8:00-5:00	BSS502 Introduction to Health Systems IV Student presentations	Virtual patient. Introduction of Dentofrom/ Typodont . Mount typodonts and introduce clock positions. Faculty will demonstrate proper ergonomic postures. HIPAA, OSHA Operatory Disinfection and Setup. Moisture Control	
10		Integrated Sciences: Cardiovascular and Circulatory Systems HS 522	HS 522 Dental significance of CVS : importance of medical history including medications. Purpose of CVS and pulmonary systems and homeostasis. Pump mechanism of the heart, stroke volume, cardiac output and heart rate. Anatomy of the heart and blood flow, valves.		HS 522 Coronary artery disease , clinical complications (B blockers, local anesthetics). Blood pressure regulation, baroreceptors, vasodilation and constriction. Antihypertensive drugs: B blockers, calcium channel blockers, ACE inhibitors.		HS 522 Cardiovascular Disease : Ischemic heart disease, coronary artery disease, myocardial infarction, acute coronary syndrome, hypertension, heart failure, congenital heart disease, valvular heart disease, infective endocarditis, dysrhythmia. Medical emergencies in the dental office related to cardiovascular disease. HS 641 Common medications for cardiovascular disease and oral adverse drug reaction and dental implications. Oral lesions in patients with substance use disorder and modifications of dental care.		8:00-5:00	Odont 522 Cariology Introduction and overview History of caries, current concepts of etiology Microflora and diet Sugar, sugar substitutes and dental deposits	Principles of conservative tooth preparations . Sealants, silver diamine fluoride, preventive resin restoration	
11		Integrated Sciences: Cardiovascular and Circulatory Systems HS 522	HS 522 Circulatory system : anatomy, vessels and their basic structure, valves. Blood flow and regulation. Effect of stress on blood pressure, B and A receptors		HS 522 Pulmonary system : anatomy and function. Breathing, gas exchange, control of breathing, Pneumothorax and asthma.		HS 522 Blood pressure and its clinical significance. How to take blood pressure. Identification of underlying medical conditions. Pacemakers and dental significance.		8:00-5:00	Odont 522 Cariology I Histology of dental caries, caries activity test Dentrifices Sealants I	Introduction to Dental Materials: Composite resins . Continuation of minimal preparation and sealant restorations. Adhesion to enamel and dentin.	
12		Integrated Sciences: Pulmonary Systems HS 522	HS 522 Blood pressure , effect of posture on blood distribution, skeletal muscle pump		Synapses and neurotransmitters , glia (Schwann cells and oligodendrocytes), myelin sheath. Astrocytes and microglia.		HS 522 Pulmonary Disease and dental significance: Asthma, cystic fibrosis, tuberculosis, lung cancer, lung transplantation. Medical emergencies in the dental office related to pulmonary disease.		8:00-10:00	Odont 522 Cariology II Sealants II Fluorides I Fluorides II Prevention of caries	Dental materials: bonding agents, photocuring and polymerization . Practice isolation techniques and light curing. Introduce pulpal considerations	

Exhibit C

13		Integrated Sciences: The Nervous System	Anatomy: CNS, PNS. Structural components of the nervous system, neurones and their function (membrane potential, action potential).		HS 512 The Autonomic nervous system , function, autonomic ganglion, neurotransmitters. Nervous patients and the response of the sympathetic nervous system. Drugs that inhibit the autonomic nervous system and their side effects.		Neurological Disorders: Parkinson's, Multiple Sclerosis, Stroke, ALS, Traumatic Brain Injury, Epilepsy, Seizures, Alzheimers and dementias (see also Dental Care for Geriatric Patients), Epidemiology. HS 641 medications, and dental management.		Odont 522 Cariology III Summary and Overview	Continue Dental Materials: Physical and Mechanical Properties and Dental Materials Fact Sheet. Review for final exam.	
14		Integrated Sciences: The Nervous System HS 512	HS 512 Anatomy of the Peripheral and Somatic Nerves and Spinal Cord. Structure of the peripheral nerves. Spinal and cranial nerves, anatomy and connection to the spinal cord. Dorsal root, ventral root. White and grey matter, dorsal and ventral horns.		HS 512 The brain: anatomy and function. Sensory and motor pathways. Injuries to the motor pathway.		HS 512 Neurodevelopment Disorders: Intellectual disability, Downs Syndrome, Cerebral Palsy, Autism Spectrum, ADHD. Dental evaluation and behavioral assessment (including legal guardianship). Oral side effects and interactions of drugs used. Dental treatment modification. Psychiatric Disorders: Anxiety, Obsessive-Compulsive, Posttraumatic stress, Mood disorders, Psychotic Disorders, Eating Disorders, etiology, medical management and HS 641 oral side effects of medications. Assessment for dental treatment and dental treatment modification.		OMFS 851 Introduction to Radiographic Analysis (Book: Exercises in Oral Radiology and Interpretation, Langlais, chapter 1) Normal anatomy of jaws: linking anatomic diagrams to radiographic appearance. (Book: Oral Radiology Principles and Interpretation, chapter 18 dental caries) Radiographic appearance of dental caries.	Final exam. Dental Materials: Biomaterials and Biocompatibility	
15			Final								
			Break								
		Integrated Sciences: Hematology HS 511	HS 511 Red Cells and platelets: Hemostasis. Clotting mechanisms (also, see oral pathology). Oxygen transport, hemoglobin, carbon monoxide, tissue hypoxia. CO2 and bicarbonate transport; oxygen and carbon dioxide exchange in the lungs. Normal CBC values.		HS 511 Case presentation , key questions to ask patients, and dental treatment modifications for leukemias, lymphoma and multiple myeloma (radiographic appearance). (Clotting cascade: see oral pathology)		HS 511 Bleeding disorders: Platelet, coagulation, drug-induced. Coordination of care with physician. Laboratory testing and significance of results. Dental treatment modifications. Oral lesions of patients with bleeding disorders.		OMFS 532 Surgical Anatomy of the Head and Neck. Anterior and posterior triangles of the neck, infratemporal fossa, salivary glands.	Introduction to Anterior restorations. Class V Composite. Direct anterior restorations.	
1		Integrated Sciences: Immunology	Barriers in host defense: anatomical (skin/mucosa) and physiological (saliva and constituents). Microbiological (commensals, normal oral flora). Commensal microbiota - Host immune response balance. Innate Immunity: Molecular and cellular elements.		Microbial peptides and innate immunity: cytokines, complement system		HS 521 Autoimmune and Connective Tissue Disorders. Systemic lupus erythematosus, rheumatoid arthritis, Sjogren's syndrome, scleroderma, fibromyalgia. Coordination of care, HS 641 medications and oral presentation. Potential dental emergencies		OMFS 532 Surgical Anatomy of the Head and Neck. Anterior and posterior triangles of the neck, infratemporal fossa, salivary glands.		
2		Integrated Sciences: Immunology	Cells of innate immunity. Functions of cells, Innate immune signalling, chemotaxis, interferon		Adaptive immunity: B and T cells and antibodies (immunoglobulin classes and subclasses). Antigens. Antigen presentation and T cell activation. Self tolerance.				OMFS 532 Surgical Anatomy of the Head and Neck. Anterior and posterior triangles of the neck, infratemporal fossa, salivary glands.	Direct posterior esthetic/Composite restorations. Shade and color matching exercises.	
3		Integrated Sciences: Immunology	Inflammation: Acute, chronic and immune response during infection (also see inflammation in oral pathology). Genetic variation.		Malfunction of the Immune System: Primary and secondary immunodeficiencies (HIV, autoimmune-Sjogren's, Pemphigus vulgaris and SLE and other examples). Hypersensitivity/ allergies; type iv hypersensitivity and examples.		Odont 521 HIV: Human Acquired Immune Deficiency Syndrome and Related Conditions. Etiology. Defining conditions of AIDS. Coordination of care. Medical management, laboratory testing and its significance to dental care. Dental management of the HIV patient. Oral manifestations. Medications used in HIV and their interactions. The management of occupational blood exposures.		OMFS 532 Surgical Anatomy of the Head and Neck. Anterior and posterior triangles of the neck, infratemporal fossa, salivary glands.	Caries Classification, Etiology and Epidemiology. CAMBRA. Caries Process, Detection and Diagnosis. Salivary. Impact on caries Process. Root caries and fluoride releasing materials.	
4		Integrated Sciences: Immunology	Immunity and vaccinations. Health issues around decisions to vaccinate. Vaccination programs in the US and infection risks to healthcare providers.		Case Presentation: A male patient 18 years attends university and moves away from home. He comes in to see his dentist after returning 6 months into the program, and complains of bleeding gums. After providing oral hygiene instruction and a cleaning (oral prophylaxis), the bleeding stops. Discuss the possible etiology of this complaint. What visual signs will you see before the treatment, as well as after the treatment?		Odont 521 Women's health. Puberty, menses, pregnancy, menopause, osteoporosis, breast cancer. Etiology, epidemiology, coordination of care; Laboratory testing and medical management. Treatment modifications. Caries and periodontal disease during pregnancy. Contraception. HS 641 Medications during pregnancy and breastfeeding. Bisphosphonate use for osteoporosis and dental complications. Violence against women.		OMFS 532 Surgical Anatomy of the Head and Neck. Anterior and posterior triangles of the neck, infratemporal fossa, salivary glands.	Clinical photography, Smile Analysis, Ergonomic Instruction. Indirect Vision and Lingual Pit. Amalgam preparations and fillings.	
5									OMFS 532 Surgical Anatomy of the Head and Neck. Anterior and posterior triangles of the neck, infratemporal fossa, salivary glands.	Review of Amalgam Material. Class I Amalgam, Class II Amalgam prep and restoration	
6		Integrated Sciences: Oral Microbiology Odont 512	Odont 512 Clinical relevance of normal oral flora , oral infections and their impact on health. Gram positive and gram negative bacteria, aerobic, anaerobic and facultative anaerobic bacteria, examples. Key pathogens in health and periodontal disease.		Odont 512 Fungi, viruses and lesions associated with viruses. HPV 16 and predisposition to cancer. Testing for the presence of viruses and immunization.		Introduction to Periodontal Disease I. Periodontium in health, gross and microscopic features. The correlation of clinical and histopathological features of the periodontal pocket; gingivitis; periodontitis acute and chronic. New Classification System: Stage I-IV and Rate of Progression A-C		OMFS 532 Surgical Anatomy of the Head and Neck. Anterior and posterior triangles of the neck, infratemporal fossa, salivary glands.	Principles of Esthetic Inlays/Onlays and Gold restorations. Introduce mock clinical treatment planning presentations. Assign virtual patient to each group to begin case preparation.	
7		Integrated Sciences: Oral Microbiology Odont 512	Odont 512 Oral Microenvironments , pH, microbial colonization. Dental plaque formation, acquired pellicle. Mutualistic relationships between bacteria, nutritional co-dependencies. Antagonistic colonies and bacteriocins.		Odont 512 Intermicrobial signalling. Plaque extracellular matrix and biofilm formation.		Odont 512 Introduction to Periodontal Disease II. Biofilm and periodontal microbiology; increased resistance of bacteria in biofilm. Colonization, supra- and sub- gingival plaque, calculus. Primary and secondary colonizers in plaque. The ecologic plaque hypothesis. Transmissibility of bacterial plaque between patients.		OMFS 532 Surgical Anatomy of the Head and Neck. Anterior and posterior triangles of the neck, infratemporal fossa, salivary glands.	Review: Cavity preparations, materials selection, instrument utilization, ergonomic positioning	
8		Integrated Sciences: Oral Microbiology	Microbiology of caries. Prevalence. Types of carious lesions. Process. Bacteria associated with carious lesions. Cariogenic bacteria, examples and characteristics.		Microbiology of Periodontal disease t gingivitis, periodontitis and peri-implantitis. Host factors; immune response and inflammation. Bacterial factors; proteases and tissue breakdown. Etiology.		Odont 512 Introduction to Periodontal Disease III: History (chief complaint, medical history, dental history) and examination (EO, IO mucosa, teeth); periodontal examination (tooth mobility, plaque and calculus, probing depths, recession, bleeding on probing, furcation involvement); palpation, suppuration, periodontal abscess; radiographs (vertical bitewings, periapicals, panoramic, other imaging). Diagnostic casts.		OMFS 532 Surgical Anatomy of the Head and Neck. Anterior and posterior triangles of the neck, infratemporal fossa, salivary glands.	Mock clinical treatment planning presentation. Simulated Clinical cases and competency examinations.	
9		Integrated Sciences: Oral Microbiology	Odont 512 Microbiology of other oral infections: Endodontic infections: bacteria involved, progression and pulp necrosis. Bone infections: Osteomyelitis and its association with bisphosphonate drugs, alveolar osteitis. Fungal infections: Candida, types of infection, management. Viral infections: HSV1, EBV (EBV and HIV, EBV and Burkitt's lymphoma; EBV and nasopharyngeal carcinoma), HSV8 (and Kaposi's sarcoma in HIV patients). Cocksackie virus (hand, foot and mouth with herpangina), HPV16 and oral squamous carcinoma. HPV and oral verruca vulgaris.		Odont 512 Microbiology of the oral cavity: balance and normal flora. Antibiotic stewardship: The dangers of inappropriate and overuse of antibiotics.		Odont 512 Introduction to Periodontal Disease IV: Periodontal disease and bone loss. Bone destruction patterns (vertical, horizontal, osseous craters, reverse architecture). Bony furcation involvement. Radiographic appearance of bone loss and clinical implications.		OMFS 532 Surgical Anatomy of the Head and Neck. Anterior and posterior triangles of the neck, infratemporal fossa, salivary glands.	Dental Materials: Impression materials and Alginate Impression Techniques. Introduce Gypsum Products and Demonstrate pouring Molds.	
10		Integrated Sciences: Oral Pathology HS 521	HS 521 Etiology of Disease: Environmental and Genetic; examples and mechanisms of disease. Cell injury: reversible and irreversible and sequelae. Neoplasia: Benign and malignant and metastasis		HS 521 Acute inflammation , vascular events, edema and complement. Clotting cascade (see also hematology), cellular events, pain, outcome.		HS 521 Immunological and mucocutaneous disease. Allergies, graft-versus-host disease. Oral presentation and management of: Vestibulobulbous conditions, erythema multiforme; Aphthous stomatitis. Behcets disease. Lichen Planus.		OMFS 532 Surgical Anatomy of the Head and Neck. Anterior and posterior triangles of the neck, infratemporal fossa, salivary glands.	Introduction to Four Handed Dentistry. Hand instrumentation, Instrument sharpening and maintenance.	
11		Integrated Sciences: Oral Pathology HS 521	HS 521 Chronic inflammation: Cells involved, process. Examples, features, cells involved, tissue repair and tissue destruction. Granulomatous inflammation (TB, leprosy, Chron's, sarcoidosis, sutures and talc.		HS 521 Cancer: Oral Pathology, Case studies and slides		HS 521 Head and Neck Cancer. Risk factors, Common cancers by location. Mortality. Signs and symptoms. Screening and current ADA protocol for biopsy. Biopsies. Tumor grading and prognosis. Management and treatment of head and neck cancer. Chemotherapy and radiation treatment and dental care, and dental complications.			Principles of Fixed Prosthesis. Reduction, Path of Insertion Premolar, Half Crown Preparation. Retention, resistance and margin design.	

Exhibit C

12		Integrated Sciences: Oral Pathology HS 521	HS 521 Oral Pathology: Case studies and slides		HS 521 Oral Pathology: Case studies and slides		HS 641 Introduction to Clinical Pharmacology I: Antimicrobial drugs. Medications used to control pain and their side effects. Central effects of opioids;				Introduction to Occlusion and the Masticatory System. Discuss the importance of understanding occlusion and the design of the masticatory system. Relay the clinical significance of Static occlusion, Centric Occlusion, Centric Relation.	
13		Integrated Sciences: Oral Pathology HS 521	Case Studies: Team Learning		Case Studies: Team Learning		HS 641 Introduction to Clinical Pharmacology II: Local anesthetics, chemistry and classification, influence of pH; Mechanisms of action. Impact on CNS, CVS, myocardium and peripheral vasculature.				How to determine centric relation or adapted centric posture? Introduce methods for determining and recording centric relation. Practice recording centric relation on group members.	
14		Integrated Sciences: Oral Pathology HS 521					HS 641 Introduction to Clinical Pharmacology III: Medications used to manage bacterial infections and their side effects (see also antibacterial stewardship)				Articulator Introduction and Whip Mix Face bow transfer and understanding vertical dimension. Introducing the facebow procedure.	
15										OMFS 532 Surgical Anatomy of the Head and Neck. Anterior and posterior triangles of the neck, infratemporal fossa, salivary glands.	Articulator Introduction and Whip Mix Articulator. Face bow transfer and understanding vertical dimension. Introducing the facebow procedure.	
		Integrated Sciences: Head and Neck Anatomy OMFS 532	OMFS 532 Cranial nerves I: Description and innervation		OMFS 532 Cranial nerves II: Description and innervation. How to test function.						Physiologic vs. Pathologic Occlusion, Mandibular Movement	
1		Integrated Sciences: Head and Neck Anatomy OMFS 532	OMFS 532 The Neck: Skeletal components of the neck, muscles of the neck. The Face: Skeletal components of the face, muscles of facial expression.		OMFS 532 Nerve supply to the neck and face: muscles, skin, blood vessels of the head and neck. Lymphatic drainage of the head and neck		OMFS 621 Defects of limbs and skeleton. Amputation, spinal cord injury, scoliosis. Coordination of care, modification of dental care. Wheelchair transfer to dental chair. Adaptations to oral care devices (see also Geriatric Health). Access to care issues.					
2		Integrated Sciences: Head and Neck Anatomy HS 521	Odont 521 Temporomandibular Joint: Muscle and ligament attachments, innervation, blood supply. Muscles of mastication.		Odont 521 The oral cavity: Muscles attachments, innervation, blood supply and anatomy.		Odont 521 Obstructive Sleep Apnea Etiology, symptoms, testing and classification. Possible sequelae. Dental management and medical management.				Introduction to removable prosthesis: Anterior Denture Teeth Set Up and Denture Rims. Denture occlusion and Posterior Teeth Set Up	
3		Integrated Sciences: Head and Neck Anatomy Odont 521	Odont 521 Sensory innervation of the oral cavity		Odont 521 The pharynx and larynx, the thyroid, the orbit, the paranasal air sinuses						Denture fabrication. Practice impression taking, fabricate preliminary cast and custom impression tray. Master impression using border molded custom tray with PVS or polyether.	
4		Integrated Sciences: Tooth Development, Morphology and Supporting Structures Odont 521	Odont 521 Stages of tooth development, dentinogenesis and mineralization, root formation, amelogenesis, enamel mineralization		Odont 521 Epithelial-Mesenchymal Interactions in Tooth Development		Odont 521; OMFS 511 Developmental Defects of the Craniofacial Complex and Orthopedic Disorders. Hereditary diseases/conditions (AJ, DL, Ectodermal Dysplasia, Epidermolysis Bullosa), Orofacial Clefts.				Introduction to Digital Dentistry. CAD CAM restoration Design and tutorial in software use.	
5		Integrated Sciences: Tooth Development, Morphology and Supporting Structures Odont 521	Odont 521 Teeth and Supporting Structures: Development, alveolar bone, junctional epithelium. Tooth morphology. Development and Eruption Dates		Review of Tooth Development, Morphology and Supporting Structures. Final Summative Exam.						Indications for Intraoral Scanners. Digital impressions, surgical guide fabrication, full arch or single unit and multi unit restorations.	
6		Integrated Sciences: Embryology and Craniofacial Development Odont 521	Odont 521 Jaws and Skeleton, Development of the TMJ		Odont 521 Cranial and Facial Structures. Tongue, palate, craniofacial syndromes		OMFS 511 Dental Care for Patients with Orofacial Clefts at All Stages of Life. Prosthetic Considerations.				Group activity of scanning peer's dentition and reinforcing digital work flow.	
7		Integrated Sciences: Embryology and Craniofacial Development Odont 521	Odont 521 Temporomandibular Joint Dysfunction Syndrome, Clenching, attrition, and sequelae								Introduction to Single Implant restorations. Screw versus Cement Retained Crowns. Hands on implant restoration workshops. Abutment selection, impression taking (analog and digital).	
8		Integrated Sciences: Saliva and Salivary Glands	Structure and Function, formation of saliva, innervation of the glands, signalling		Salivary Secretion: Secretory mechanisms, protein secretion, composition and function of saliva, salivary proteins						Implant supported dentures. Overdenture (locator) hands on workshop.	
9		Integrated Sciences: Dental Materials	Challenges to Materials in the Oral Cavity. Bonds. Metals and Alloys		Intermetallic Compounds, Ceramics and Glasses, Polymers, Composites						Implant materials. Titanium and Ceramic.	
10		Integrated Sciences: Dental Materials	Physical and Mechanical Properties, Thermal Properties, Colors and Esthetics		Safety, Adverse Reactions to Materials, Legal and Regulatory Requirements. Biocompatibility Testing (in vitro, in vivo and clinical evaluation)						Software introduction for implant restoration treatment planning	
11		Integrated Sciences: Dental Materials	Dental Implants and Osseointegration		Lithium disilicates and Nanostructure Composites						Final instrument, kit and typodont clean up/check out	
12		Integrated Sciences	Integrated Case Presentations		Integrated Case Presentations						Final instrument, kit and typodont clean up/check out	
13		Integrated Sciences	Integrated Case Presentations		Integrated Case Presentations							
14		Integrated Sciences	OSCE		OSCE						Integrated Case Presentations	
15											Integrated Case Presentations	
											OSCE	

Exhibit C2

First Year D1 Fall Semester Week 1					
	Monday	Tuesday	Wednesday	Thursday	Friday
8:00am-12:00pm	Human Systems: LAL Hematology Blood, red cells and hemostasis	Human Systems: LAL Hematology/Pharm Anemia, pharmacology of management and dental significance	Oral and Maxillofacial Studies LAL Embryology Craniofacial development I	Odontology LAL and LAB Anatomy Cranium and contents I	Odontology: SIM Restorative Techniques
12:00-1:00					
1:00-5:00pm	Human Systems: LAL Hematology Bleeding disorders and their dental significance	Human Systems: LAL Pharmacology Pharmacology of Anticoagulants and dental significance	Oral and Maxillofacial Studies LAL Embryology Craniofacial development II	Odontology LAL and LAB Anatomy Cranium, foramina and contents II	Odontology: SIM Restorative Techniques

First Year D1 Fall Se					
	Monday	Tuesday	Wednesday	Thursday	Friday
8:00am-12:00pm	Human Systems: LAL Hematology Blood, white cells and Immune response	Human Systems: LAL Bacteriology Oral flora, oral infections and their impact on health	Oral and Maxillofacial Studies LAL Embryology Teeth and associated structures	Odontology LAL and LAB Anatomy Cranial nerves I	Odontology: SIM Restorative Techniques
12:00-1:00					

Exhibit C2

1:00-5:00pm	Human Systems: LAL Immunology Humoral Immunity and Host Repsonse	Human Systems: LAL Immunology Immunity and vaccinations	Oral and Maxillofacial Studies LAL Embryology Teeth and associated structures	Odontology LAL and LAB Anatomy Cranial nerves II	Odontology: SIM Restorative Techniques
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First Year D1 Fall Semester Week 3					
	Monday	Tuesday	Wednesday	Thursday	Friday
8:00am-12:00pm	Human Systems: LAL Immunology Immune deficiency, pharmacology in management	Human Systems: LAL Immunology Hypersensitivity and allergic response. Dental significance.	Oral and Maxillofacial Studies LAL Embryology Craniofacial anomalies I	Odontology LAL and LAB Anatomy Cranial nerves III	Odontology: SIM Restorative Techniques
12:00-1:00					
1:00-5:00pm	Human Systems: LAL Immunology Dental significance of immune disorders and their management	Human Systems: LAL Pharmacology Antibiotics and pharmacokinetics I	Oral and Maxillofacial Studies LAL Embryology Craniofacial anomalies II	Odontology LAL and LAB Anatomy Temperomandibular joint, muscles, innervation and blood supply	Odontology: SIM Restorative Techniques

Exhibit C2

First Year D1 Fall Semester Week 4					
	Monday	Tuesday	Wednesday	Thursday	Friday
8:00am-12:00pm	Human Systems: LAL Pharmacology Antibiotics and pharmacokinetics II and dental significance	Human Systems: LAL Immunology Biofilms in the oral cavity	Oral and Maxillofacial Studies LAL Embryology Development of enamel and dentin I	Oral and Maxillofacial Studies LAL Anatomy/Pathology Disorders of the TMJ and sleep disorders	Odontology: SIM Restorative Techniques
12:00-1:00					
1:00-5:00pm	Human Systems: LAL Immunology Biofilms	Human Systems: LAL Pharmacology Biofilms and Pharmacy	Oral and Maxillofacial Studies LAL Embryology Development of enamel and dentin II	Odontology LAL and LAB Anatomy Innervation of the teeth and oral structures	Odontology: SIM Restorative Techniques

First Year D1 Fall Semester Week 5					
	Monday	Tuesday	Wednesday	Thursday	Friday

Exhibit C2

8:00am-12:00pm	Human Systems: LAL Pharmacy Antibiotic Stewardship and Dentistry	Human Systems: LAL Neurology Pain II: Dental significance of pain, placebos	Oral and Maxillofacial Studies LAL Embryology Developmental defects in enamel and dentin	Odontology LAL and LAB Anatomy/Pharm Local anesethetics in dentistry I	Odontology: SIM Restorative Techniques
12:00-1:00					
1:00-5:00pm	Human Systems: LAL Neurology Pain I	Human Systems: LAL Pharmacology Painkillers, and dental significance	Oral and Maxillofacial Studies LAL Embryology Dental management of patients with defects in enamel and dentin	Odontology LAL and LAB Anatomy/Pharm Local anesethetics in dentistry II	Odontology: SIM Restorative Techniques

First Year D1 Fall Semester Week 6					
	Monday	Tuesday	Wednesday	Thursday	Friday
8:00am-12:00pm	Human Systems: LAL Pharmacy Opioids, use and misuse	Human Systems: LAL Hematology, Pharmacology, Immunology, Neurology Review	Oral and Maxillofacial Studies LAL Embryology Review	Odontology LAL and LAB Anatomy/Pharm Review	Odontology: SIM Restorative Techniques
12:00-1:00					
1:00-5:00pm	Human Systems: LAL Hematology, Pharmacology, Immunology, Neurology Review	Human Systems Hematology, Pharmacology, Immunology, Neurology Exam	Oral and Maxillofacial Studies Embryology Exam	Odontology LAL and LAB Anatomy/Pharm Exam	Odontology: SIM Restorative Techniques

Exhibit C2

First Year D1 Fall Se					
	Monday	Tuesday	Wednesday	Thursday	Friday
8:00am-12:00pm	Odontology: LAL Histology Oral mucosa in health	Oral amd Maxillofacial Studies LAB LAL Oral Pathology Ulcerative Lesions, red and white lesions	Odontology: LAL Studies LAL Embryology Salivary gland development	Odontology LAL and LAB Anatomy Mouth and teeth and the edentulous state	Odontology: SIM Restorative Techniques
12:00-1:00					
1:00-5:00pm	Odontology: LAL Histology Salivary glands and saliva	Oral amd Maxillofacial Studies: LAB LAL Oral Pathology Diseases of the salivary glands	Odontology LAL and LAB Pharmacology Drug-induced xerostomia	Odontology LAL and LAB Anatomy Innervation of the salivary glands	Odontology: SIM Restorative Techniques

First Year D1 Fall Semester Week 8					
	Monday	Tuesday	Wednesday	Thursday	Friday
8:00am-12:00pm	Odontology LAL and LAB Anatomy Anterior triangle and thyroid, disorders of the thyroid, management	Oral amd Maxillofacial Studies: LAB LAL Oral Pathology Malignant lesions	Oral amd Maxillofacial Studies: LAL Salivary gland disorders and their management	Oral amd Maxillofacial Studies: LAB LAL Oral Medicine Sjogrens Syndrome, dental implications and management	Odontology: SIM Restorative Techniques
12:00-1:00					

Exhibit C2

1:00-5:00pm	Odontology LAL and LAB Anatomy Posterior triangle, common pathology, surgical significance	Oral and Maxillofacial Studies: LAB LAL Oral Pathology Cysts and odontogenic tumors	Oral and Maxillofacial Studies: LAB LAL Dental implications of xerostomia: Caries, comfort, complete dentures	Behavioral and Social Sciences: LAL Determinants of health Implications of the edentulous state	Odontology: SIM Restorative Techniques
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First Year D1 Fall Semester Week 9					
	Monday	Tuesday	Wednesday	Thursday	Friday
8:00am-12:00pm	Human Systems: LAL Metabolism Cardiovascular metabolism	Human Systems: LAL Pharmacy Lipid disorders, their management and dental significance	Odontology LAL LAB Anatomy The heart, muscles, function, innervation and blood supply	Odontology LAL LAB Anatomy Muscles of the head and neck I	Odontology: SIM Restorative Techniques
12:00-1:00					

Exhibit C2

1:00-5:00pm	Human Systems: LAL Metabolism/Pharm Hypertension and pharmacy	Human Systems: LAL Metabolism Mitochondria and citric acid cycle, oxidative phosphorylation	Oral and Maxillofacial Studies: Endocarditis and dental significance, prevention and management	Odontology LAL LAB Anatomy Muscles of the head and neck II	Odontology: SIM Restorative Techniques
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First Year D1 Fall Semester Week 10					
	Monday	Tuesday	Wednesday	Thursday	Friday
8:00am-12:00pm	Human Systems: LAL Metabolism Anabolism, catabolism, Enzymes, metabolic pathways, redox	Human Systems: LAL Physiology Muscle physiology	Odontology LAL LAB Anatomy The respiratory system I	Odontology LAL LAB Anatomy Muscles of the thorax and abdomen, innervation and blood supply	Odontology: SIM Restorative Techniques
12:00-1:00					
1:00-5:00pm	Human Systems: LAL Metabolism Lipid Metabolism, LDL, HDL, Cholesterol, Fatty acids	Human Systems: LAL Physiology Motor units, pathways and reflexes	Odontology LAL LAB Anatomy The respiratory system II	Odontology LAL LAB Anatomy Bones of the thorax, and the vertabral column,	Odontology: SIM Restorative Techniques

First Year D1 Fall Semester Week 11					
	Monday	Tuesday	Wednesday	Thursday	Friday

Exhibit C2

8:00am-12:00pm		Human Systems: LAL	Oral and Maxillofacial Studies LAL	Odontology LAL and LAB	Odontology: SIM Restorative Techniques
12:00-1:00					
1:00-5:00pm		Human Systems: LAL	Oral and Maxillofacial Studies LAL		Odontology: SIM Restorative Techniques



California Northstate University College of Dental Medicine

Course Syllabus

Course #	Course Title	Credits	Year	Term
BSS 502	Introduction to Health Systems	1	DS 1	Fall

Course Description

This course will provide students with an understanding of health systems in the United State and other countries that are influencing the evolution of the oral health industry. It will present an overview of the major trends and forces shaping the oral health industry and direction that dental care and dental practice is likely to take in the next several decades.

Course Objectives:

1. Describe the U.S. health and oral health care systems.
2. List and explain factors driving change in the U.S. health care systems.
3. Discuss disruptive innovations becoming evident in oral health care delivery.
4. Explain the concept of value-based care and the components of systems able to improve population oral health and lower costs of doing so.

Maximum Enrollment: 80

Course Topics

Week	Topic
1	Overview of the U.S. health care system Comparison of the U.S. health care system with other developed countries in terms of organization, financing, expenditures and results
2	Overview of the U.S. oral health care system Organization and components of the U.S. oral health care system. Including delivery system, financing, consolidation. Understanding of who is getting oral health care and how, and who is not. Role and potential for disruptive innovation in oral health services delivery.

3	Oral health disparities and barriers to oral health and oral health care Who gets oral health care and who does not. The role of oral health care in obtaining and maintaining oral health.
4	Changing concepts of dental care – prevention and behavior support science Declining role of surgical interventions. Increasing role of community-based care. Principles of chronic disease management.
5	Value in health care National goal: The Quadruple Aim. Evolution from quality movement. Progress and impact on oral health care.
6	Workforce: Expanding role of allied oral health personnel and integration with general health care systems Review of types of allied personnel in California and other states: Evolution and trends.
7	Telehealth-connected-teams and Virtual Dental Homes Role of telehealth-connected teams and Virtual Dental Homes in reaching populations who do not traditionally receive dental care, lowering cost of delivery and lowering cost of consequences of untreated disease.
8	Social Determinants of Health: Impact on Oral Health and Oral Health Care Delivery Review of what are social determinants of health and how they impact oral health. Implications for oral health care delivery in an increasingly value-based world. The role of oral health care systems in addressing social determinants of health.
9	The Safety-Net Role, organization, and financing of health centers and safety-net delivery systems. Beyond health centers -the role of community-based oral health care activities.
10	Policy: Impact of federal, state, and local policy on oral health and oral health care delivery What is policy? At what levels does it operate? How does policy get created? How can policy be influenced? What is advocacy? How can oral health professionals influence policy?
11	The Public Health Lens Understanding consideration of population health vs individual health. Implications for oral health and oral health care
12	Student Projects Students pick (or assigned) a topic to prepare a paper and report out to whole class – individual vs groups?
13	Student Projects Students pick (or assigned) a topic to prepare a paper and report out to whole class – individual vs groups?
14	Student Projects Students pick (or assigned) a topic to prepare a paper and report out to whole class – individual vs groups?
15	Student Projects Students pick (or assigned) a topic to prepare a paper and report out to whole class – individual vs groups?

Calendar of Important Dates:

Date	
August 10, 2020	First day of Fall term for all DMD 1 students
August 31, 2020	Group Assignment Selection due
October 19, 2020	Group Assignment Presentation, Groups A, B
October 26, 2020	Group Assignment Presentation, Groups C, D
November 2, 2020	Group Assignment Presentation, Groups E, F
December 14, 2021	Group Assignment Presentation, Groups G, H

Course Coordinator, Instructors and Contact Information

Course Director: Paul Glassman DDS, MA, MBA

Room:

E mail: Paul.Glassman@cnsu.edu

Course Co-Director: Chaula Patel BDS, MA

Room:

E mail: Chaula.Patel@cnsu.edu

Office hours

Classroom and Meeting Times

Room: Classroom xxxx

Time: xxxx 1 hours per week

Prerequisite Courses

None

Required Textbook(s) and Material(s)

Books: TBD

On-line modules to be reviewed prior to class sessions

Evaluation Components

In keeping with the Team Based Learning (TBL) approach, grades will be determined as follows:

	Points	%
Class attendance and participation	25	25%
Group Assignment	25	25%
Final Examination	50	50%

GRADING

A score of at least 75% of the possible points is required in each grading area listed above to pass the course.

In order to progress from one semester to the next, students must pass all courses with a letter a grade of C or higher and maintain a minimum cumulative grade point average (GPA) of 2.0. The breakdown for assignment of letter grades and grade points for each letter grade are as follows:

Percent	Letter Grade/Action
90.0 – 100%	A
80.0 – 89.9%	B
75.0 – 79.9%	C - Pass
60.0 – 74.9%	D – Requiring remediation (successful remediation recorded as C, unsuccessful remediation recorded as F)
Below 60.0%	F – Fail (course must be repeated)
Incomplete	I

Incomplete

During a semester, a student may not complete all required assignments and/or examinations due to extenuating circumstances, such as, but not limited to, an illness or a family emergency. In such a case, the course director may give a grade of Incomplete for the course. The course with the incomplete grade has to be completed successfully within the time frame as being defined by the student's academic plan, normally in the same academic year, otherwise a leave of absence would be required.

Core-Course Policies

All students are required to adhere to the Academic Policies that impact on student progression and conduct while attending the DMD program, including the following: Academic Progression Policy, Excused Absence Policy, Exam Policy, Course Grade Appeal Policy, Course Add/Drop Policy and Attendance Policy. Refer to the current Student Handbook for the detailed policies.

Topics and Schedule

(Subject to change. Updates will be posted to CANVAS and announced by email)

All readings are in Vital Source, or as assigned and posted to CANVAS

Each didactic session including LAL is 2 hours. Each clinical session is 4 hours. Students are divided into groups of 4 students (groups 1-20) for each of their 3 sessions. Each group of 4 will attend either Monday, Tuesday, Wednesday or Thursday clinic.

Exhibit D

Date	Topics	Readings*	Instructor	Notes
Week 1 LAL			McLaughlin/ Assael	
1: Clinic assignment				
Week 2				
2: Clinic assignment				
Week 3 Psychological disorders 1				
Week 3: clinic assignment				
Week 4: psychological disorders 2				
Week 4 Clinic assignment				
Week 5: Psychological disorders 3				Case assignments X4 to groups
Week 5 clinic assignment				
Week 6				
Week 6 clinic				
Week 7				

Exhibit D

Week 7 clinic				
Week 8				
Week 8 clinic				
Week 9				
Week 9				
Week 10				
Week 10				
Week 11				
Week 11				
Week 12				
Week 12				
Week 13				
Week 13				
Week 14				
Week 14				
Week 15				

Exhibit D

Week 15				
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**Course Learning Outcomes and links to Program Learning Outcomes (Appendix A)
and Institutional Learning Outcomes (Appendix B)**

No.	Course Learning Outcome	DMD PLO	DMD ILO	Learning Hierarchy ^b	Assessment Method
1					
2					
3					
4					

^a plo's appendix A

^b Learning Hierarchy based on Bloom's Taxonomy with 1=Memorization and/or Comprehension;
2=Application and/or Analysis; 3=Synthesis and/or Evaluation.

Teaching/ Learning Methodology

CLO Rubrics

CLO 1:

Indicators	Initial	Developing	Developed	Proficient

CLO 2:

Indicato	Init	Developi	Develop	Proficie

Appendix A

Program Learning Outcomes (PLOs) CNU College of Dental Medicine

1. Patient-Centered Care: Demonstrate understanding of healthcare disparities and cultural awareness in patient counseling and patient advocacy
2. Evidence-Based Care: Apply current, evidence-based oral healthcare within the scope of general dentistry
3. Culturally competent, empathic communication: Demonstrate patient centered, empathic, and culturally competent communication and interpersonal skills
4. Oral and Written Communication: Demonstrate sound oral and written communications in patient care
5. Critical Thinking: Utilize critical thinking, problem solving skills and systemic thinking in assessing and making reasoned, evidence-based decisions in patient care
6. Ethics and Professionalism: Demonstrate professionalism and ethical decision making
7. Biomedical Sciences Knowledge: Demonstrate an understanding of the fundamentals of biomedical sciences and apply them appropriately in oral healthcare
8. Practice Management: Apply legal, regulatory and business management concepts related to provision of oral healthcare services

DMD Program Learning Outcomes (PLOs) Proficiency Rubric

PLO 1: Patient-Centered Care

Demonstrate understanding of healthcare disparities and cultural awareness and capability in patient counseling and providing appropriate patient advocacy

Indicators	Initial	Developing	Developed	Proficient
1.1. Education. Demonstrates ability to educate all audiences through effectively communicating information and assessing learning	<ul style="list-style-type: none"> Does not appropriately counsel patients Does not check for understanding, ask questions, and/or asks inappropriate questions. 	<ul style="list-style-type: none"> Counsels patients but leaves out pertinent information needed by patient Communicates with basic level of clarity but 	<ul style="list-style-type: none"> Generally demonstrates empathy, communicates accurate information clearly, checks for understanding Seeks to ensure 	<ul style="list-style-type: none"> Consistently demonstrates empathy, communicates accurate information clearly, checks for understanding Ensures

	<ul style="list-style-type: none"> Does not demonstrate the ability to find and utilize appropriate resources and references necessary for providing accurate counseling, consultation and education 	<p>does not always check for understanding or rephrase when confusion occurs.</p> <ul style="list-style-type: none"> Demonstrates the ability to find a one or two resources, yet the resources are not the best or most appropriate for providing accurate counseling, consultation and education 	<p>understanding and generally asks questions.</p> <ul style="list-style-type: none"> Frequently demonstrates the ability to find and utilize appropriate resources and references necessary for providing accurate counseling, consultation and education 	<p>understanding and asks appropriate questions.</p> <ul style="list-style-type: none"> Consistently demonstrates the ability to find and utilize appropriate resources and references for providing accurate patient counseling, consultation and education
1.2. Patient advocacy. Represents the patient's best interests	<ul style="list-style-type: none"> Does not demonstrate the ability represent a patient's best interest 	<ul style="list-style-type: none"> Demonstrates awareness of issues that impact a patient Demonstrates minimal ability to articulate these issues but does not demonstrate ability to sufficiently advocate on a patient's behalf 	<ul style="list-style-type: none"> Demonstrates sufficient awareness of issues that impact a patient Demonstrates ability to articulate these issues Demonstrates ability to sufficiently advocate on a patient's behalf 	<ul style="list-style-type: none"> Demonstrates full awareness of the most important issues that impact a patient Demonstrates ability to clearly and effectively articulate these issues Demonstrates ability to effectively advocate on a patient's behalf

PLO 2: Evidence-Based Care.

Apply sound, current, and evidence-based oral healthcare within the scope of general dentistry

Indicators	Initial	Developing	Developed	Proficient
2.1. Patient-centered care. Demonstrates ability to provide patient-centered care as the	<ul style="list-style-type: none"> Does not demonstrate ability to provide patient-centered care at the medication expert level; e.g., 	<ul style="list-style-type: none"> Demonstrates ability to provide patient-centered care as the medication expert in some, but not all, areas 	<ul style="list-style-type: none"> Demonstrates ability to provide patient-centered care as the medication expert (generally demonstrates 	<ul style="list-style-type: none"> Demonstrates ability to provide sufficient patient-centered care as the expert (collects and

medication expert (collect and interpret evidence, prioritize, formulate assessments and recommendations, implement, monitor and adjust plans, and document activities)	demonstrates ability to collect but not sufficiently interpret evidence, does not prioritize, formulates basic assessments and recommendations, does not sufficiently monitor and adjust plans nor document activities.	as follows: collect and interpret evidence, prioritize, formulate assessments and recommendations, implement, monitor and adjust plans, and document activities	ability to collect and interpret evidence, prioritize, formulate assessments and recommendations, implement, monitor and adjust plans, and document activities)	interprets evidence, prioritizes, formulates assessments and recommendations, implements, monitors and adjusts plans, and documents activities)
2.2. Systems management. Demonstrates ability to manage patient healthcare needs using human, financial, technological, and physical resources to optimize the safety and efficacy of medication use systems	<ul style="list-style-type: none"> • Does not demonstrate understanding of oral healthcare delivery systems parts • Does not demonstrate understanding of the forces that influence components of the oral healthcare delivery system, including their connection to patient care • Does not demonstrate understanding of any challenges to systems that affect oral healthcare delivery Does not demonstrate understanding of how to work with different subsystems to deliver oral	<ul style="list-style-type: none"> • Demonstrates understanding of some parts of oral healthcare delivery systems but does not identify how they are related to each other • Demonstrates understanding of some forces that influence the parts of healthcare delivery systems, but demonstrate minimal understanding of their connection to patient care • Demonstrates understanding of some challenges that can affect delivery of oral healthcare • Demonstrates some understanding of how to work with different subsystems and how they 	<ul style="list-style-type: none"> • Demonstrates understanding of most major components of oral healthcare systems and their respective relationships • Demonstrates understanding of the forces that influence the components of healthcare delivery systems, and demonstrate some understanding of their influence on the quality of patient care • Demonstrates understanding of most challenges that can affect delivery of oral healthcare, but does not demonstrate complete comprehension of the effects Demonstrates basic	<ul style="list-style-type: none"> • Demonstrates understanding of the major components of oral healthcare systems, their respective relationships, and their functions related to patient care • Demonstrates thorough understanding of the forces that influence components of healthcare delivery systems and demonstrate full understanding of their influence and implications on the quality of patient care • Demonstrates understanding of pertinent challenges to specific aspects of healthcare delivery by demonstrating

	healthcare	function to deliver oral healthcare, but demonstrate minimal awareness or understanding of one's own role within the oral healthcare delivery system	understanding of how to work with different subsystems and how they function to deliver oral healthcare and demonstrate some understanding of one's role within the oral healthcare delivery system, but does not necessarily demonstrate application of knowledge in a manner that maximizes the quality of oral healthcare	abilities to thoroughly discuss the implications for the appropriate parts of oral health care delivery systems Demonstrates excellent understanding of how to work with different subsystems involved while also demonstrating understanding of one's role within the subsystems, and demonstrate appropriate application of knowledge in a manner that maximizes the quality of oral healthcare
2.3. Health and wellness. Designs prevention, intervention, and educational strategies for individuals and communities to manage chronic disease and improve oral health and wellness	<ul style="list-style-type: none"> Does not demonstrate understanding of how the arts can be utilized to optimize patients' well-being 	<ul style="list-style-type: none"> Demonstrates knowledge of some of the ways that the arts can be utilized to optimize patients' well-being 	<ul style="list-style-type: none"> Demonstrates sufficient knowledge of multiple ways that the arts can be utilized to optimize patients' well-being 	<ul style="list-style-type: none"> Demonstrates thorough knowledge of the ways that the arts can be utilized to optimize patients' well-being and creatively applies this knowledge to improve well-being and the practice and delivery of oral healthcare
2.4. Population-based care.	<ul style="list-style-type: none"> Does not demonstrate 	<ul style="list-style-type: none"> Demonstrates minimal 	<ul style="list-style-type: none"> Demonstrates sufficient 	<ul style="list-style-type: none"> Demonstrates superb

Exhibit D

Demonstrates understanding of how population-based care influences patient-centered care and the development of practice guidelines and evidence-based best practices	awareness of population-based care.	<p>understanding of population-based care and how it influences patient-centered care</p> <ul style="list-style-type: none"> • Does not demonstrate awareness of how these notions influence the development of practice guidelines 	<p>understanding of population-based care and how it influences patient-centered care</p> <ul style="list-style-type: none"> • Demonstrates sufficient understanding of how population-based care influences the development of practice guidelines and best practices for patient care 	<p>understanding of population-based care and how it influences patient-centered care</p> <ul style="list-style-type: none"> • Demonstrates superb understanding of how population-based care influences the development of practice guidelines and demonstrates knowledge of best practices for patient care
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PLO 3: Culturally Competent, Empathic Communication.

Demonstrate patient centered, empathic and culturally competent communication and interpersonal skills

Indicators	Initial	Developing	Developed	Proficient
3.1. Empathy. Demonstrates the ability to communicate with the patient empathically.	<ul style="list-style-type: none"> Does not demonstrate the ability to communicate with the patient empathically. 	<ul style="list-style-type: none"> Demonstrates some ability, but experiences lapses in the ability to communicate empathically 	<ul style="list-style-type: none"> Demonstrates the ability to communicate empathically, with few lapses. 	<ul style="list-style-type: none"> Demonstrates an advanced ability, and never experiences lapses in communicating empathically.
3.2. Cultural competence. Demonstrates the ability to engage in communication with the patient that is culturally aware and accepting.	<ul style="list-style-type: none"> Does not demonstrate communication and interactions that convey respect or concern for patients and the community. Does not demonstrate an awareness of customs, beliefs, or perspectives in diverse patients Does not demonstrate awareness of cultural and linguistic needs of patients in order to communicate health information 	<ul style="list-style-type: none"> Demonstrates communication and interactions characteristic of a minimal level of respect, and little concern for patients and the community is apparent through use of some appropriate communication, but student does not employ follow-up questions for clarification, when necessary, and student provides inappropriate detail in responses Demonstrates a minimal level of awareness of customs, beliefs, or perspectives in diverse patients Demonstrates minimal awareness of cultural and 	<ul style="list-style-type: none"> Demonstrates appropriate communication and interactions that are characteristic of a basic level of respect, and concern for patients and the community is apparent through use of appropriate communication, where student uses some clear, but not necessarily relevant or detailed, follow-up questions and responses Demonstrates awareness of customs and beliefs, but may not clarify with patients about personal perspectives Demonstrates awareness of the cultural and 	<ul style="list-style-type: none"> Demonstrates professional communication and interactions by showing empathy, respect, and concern for patients and the community through use of appropriate communication where follow-up questions (as needed) and responses are clear, relevant, and detailed Demonstrates awareness of customs, beliefs, or perspectives in diverse patients; ask appropriate questions to clarify perspectives and perceptions in diverse patients Demonstrates full awareness of and responsiveness to

		linguistic needs of patients; either does not or only attempt to adapt behaviors, but does so ineffectively, to communicate health information	linguistic needs of diverse patients, and adapt behaviors to communicate health information, but communication may not be effective	cultural and linguistic needs of diverse patients by adapting behaviors appropriately in order to effectively communicate health information
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PLO 4: Oral and Written Communication.

Demonstrate sound oral and written communications in patient care

Indicators	Initial	Developing	Developed	Proficient
4.1. Oral communication. Demonstrate sound oral communication in patient care.	<ul style="list-style-type: none"> Does not demonstrate logical reasoning in oral communications in patient care. Does not demonstrate the ability to cite sound evidence that support ideas within presentations or discussions. 	<ul style="list-style-type: none"> Demonstrates some logical reasoning in oral communications in patient care but demonstrates some lapses. Demonstrates some ability to cite sound evidence that support ideas within presentations or discussions, but demonstrates some lapses. 	<ul style="list-style-type: none"> Generally demonstrates logical reasoning in oral communications in patient care. Generally demonstrates the ability to cite sound evidence that support ideas within presentations or discussions. 	<ul style="list-style-type: none"> Consistently demonstrates logical reasoning in oral communications in patient care. Consistently demonstrates the ability to cite sound evidence that support ideas within presentations or discussions.
4.2. Written communication. Demonstrate sound written communication in patient care.	<ul style="list-style-type: none"> Does not demonstrate logical reasoning in written communications in patient care. Does not demonstrate the written ability to cite sound evidence that support ideas. 	<ul style="list-style-type: none"> Demonstrates some logical reasoning in written communications in patient care but demonstrates some lapses. Demonstrates some written ability to cite sound evidence that support ideas, but demonstrates some lapses. 	<ul style="list-style-type: none"> Generally logical reasoning in written communications in patient care. Generally demonstrates the written ability to cite sound evidence that support ideas. 	<ul style="list-style-type: none"> Consistently demonstrates logical reasoning in written communications in patient care. Consistently demonstrates the written ability to cite sound evidence that support ideas.

PLO 5: Critical Thinking.

Utilize critical thinking, problem solving skills and systemic thinking in assessing and making reasoned, evidence-based decisions in patient care

Indicators	Initial	Developing	Developed	Proficient
5.1. Problem solving. Identifies problems; explore and prioritize potential strategies; and designs, implements, and evaluates viable solutions	<ul style="list-style-type: none"> Is not able to correctly identify the problem or issue being considered. Does not identify appropriate resources. Includes extraneous information or inappropriate or insufficient resources. Does not demonstrate understanding of the content of materials reviewed. Makes inappropriate inferences. Does not evaluate possible alternatives or generates ideas that are illogical or extraneous to issue at hand. Does not propose a solution or does not articulate decision. Does not adequately provide rationale for selected alternative or 	<ul style="list-style-type: none"> Identifies the problem or issue but does not demonstrate awareness of all the factors associated with the problem or issues that impact decision making. Identifies a few, but not all, resources needed for decision making. Demonstrates ability to interpret some information and data but not all. Does not fully or effectively evaluate alternative solutions. Proposes a decision with many apparent weaknesses (i.e., not feasible, lack of regard for consequences, lack of supporting evidence, illogical, irrelevant to issue at hand, etc.). Provides 	<ul style="list-style-type: none"> Correctly identifies problem or issue being considered and demonstrates adequate awareness of the factors associated with this problem or issue that impact decision making. Identifies most of the resources needed. Demonstrates ability to interpret most information and data. Considers and evaluates possible solutions in a way that generally leads to a logical decision or course of action. Proposes a solution that does not contain apparent weaknesses that may or may not be the obvious clear choice. Solutions chosen demonstrate consideration of 	<ul style="list-style-type: none"> Consistently correctly identifies the problem or issue being considered and all of the primary factors associated with this problem or issue that impact decision making. Articulates the importance of these factors. Identifies all appropriate resources. Demonstrates ability to correctly interpret information and data needed for appropriate decision making. Demonstrates awareness of importance of these data in decision-making process. Considers and evaluates possible solutions effectively and thoroughly. Evaluation leads to sound, logical, and “best” decision or

	decision	rationale for selected alternative or decision but does not build a solid position with supporting evidence. Is unable to defend decision or course of action.	most of the strengths, weaknesses, feasibility, effects, consequences, relevance, etc.). Provides rationale for selected alternative or decision which includes some solid supporting evidence. Is able to defend decision or course of action at a basic level.	course of action. <ul style="list-style-type: none"> Proposes a solution that is entirely appropriate to the situation at hand. Solutions chosen demonstrate consideration of all of the important and relevant strengths, weaknesses, feasibility, effects, consequences, etc.). Provides rationale for selected alternative or decision and builds a solid position with appropriate and relevant supporting evidence. Effectively defends decision or course of action.
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PLO 6: Ethics and Professionalism.

Demonstrating professionalism and ethical decision making

Indicators	Initial	Developing	Developed	Proficient
6.1. Professionalism. Demonstrates behaviors and values that are consistent with the trust given to the profession by patients, other healthcare providers, and society	<ul style="list-style-type: none"> Does not consistently demonstrate professional attitudes and behaviors (altruism, excellence, duty, accountability, honesty, and integrity) Demonstrates frequent lapses in accountability or quality of work 	<ul style="list-style-type: none"> Demonstrates some professional attitudes and behaviors yet there is inconsistency that may impede on the quality of work or treatment of patients and other healthcare team members (altruism, excellence, duty, accountability, honesty, and integrity) 	<ul style="list-style-type: none"> Generally demonstrates most of the professional attitudes and behaviors (altruism, excellence, duty, accountability, honesty, and integrity) that are required in the profession Demonstrates ability to use these behaviors and values to improve healthcare 	<ul style="list-style-type: none"> Consistently demonstrates the professional attitudes and behaviors that uphold the integrity and competence of the work and the treatment of patients and other healthcare team professionals (altruism, excellence, duty, accountability, honesty, and integrity) Consistently uses these behaviors and values to improve healthcare
6.2. Ethics. Demonstrates the ability to make decisions consistent with the values of practitioners and scholars of oral healthcare.	<ul style="list-style-type: none"> Does not make ethical decisions consistent with the values of practitioners and scholars of oral healthcare. 	<ul style="list-style-type: none"> Demonstrates the ability to exercise ethical decision making, and a rudimentary knowledge of ethics within oral healthcare. 	<ul style="list-style-type: none"> Demonstrates the ability to exercise clear and ethical decision making, and a sufficient knowledge of ethics within oral healthcare. 	Demonstrates the ability to exercise clear and ethical decision making, and an advanced knowledge of ethics within oral healthcare.

PLO 7: Biomedical Sciences Knowledge.

Demonstrate an understanding of the fundamentals of biomedical sciences and apply them appropriately in oral healthcare

Indicators	Initial	Developing	Developed	Proficient
7.1. Diagnostic and pharmacologic. Demonstrates the ability to describe how to deliver patient assessments, knowledge of medicines, and delivering diagnoses.	<ul style="list-style-type: none"> Does not demonstrate the ability to describe diagnostic and pharmacologic knowledge related to oral health. 	<ul style="list-style-type: none"> Demonstrates a rudimentary ability to describe diagnostic and pharmacologic knowledge related to oral health. 	<ul style="list-style-type: none"> Demonstrates a sufficient ability to describe diagnostic and pharmacologic knowledge related to oral health. 	<ul style="list-style-type: none"> Demonstrates an advanced ability to describe diagnostic and pharmacologic knowledge related to oral health.
7.2. Orofacial pain/temporomandibular/ Sleep disorder. Demonstrates the ability to describe the anatomical, physiological, and neurological basis; classification, epidemiology, and etiology; and assessments and treatments of orofacial pain, temporomandibular joint disease, and sleep disorders.	<ul style="list-style-type: none"> Does not demonstrate the ability to describe scientific or assessment knowledge related to OFP/TMJ disease and sleep disorders. 	<ul style="list-style-type: none"> Demonstrates a rudimentary ability to describe scientific or assessment knowledge related to OFP/TMJ disease and sleep disorders. 	<ul style="list-style-type: none"> Demonstrates a sufficient ability to describe scientific or assessment knowledge related to OFP/TMJ disease and sleep disorders. 	<ul style="list-style-type: none"> Demonstrates an advanced ability to describe scientific or assessment knowledge related to OFP/TMJ disease and sleep disorders.
7.3. Maxillofacial pathology Demonstrates the ability to describe the scientific aspects of head and neck diseases, as well as knowledge of assessment and diagnosis.	<ul style="list-style-type: none"> Does not demonstrate the ability to describe the scientific or assessment knowledge related to head and neck diseases. 	<ul style="list-style-type: none"> Demonstrates a rudimentary ability to describe the scientific or assessment knowledge related to head and neck diseases. 	<ul style="list-style-type: none"> Demonstrates a sufficient ability to describe the scientific or assessment knowledge related to head and neck diseases. 	<ul style="list-style-type: none"> Demonstrates an advanced ability to describe the scientific or assessment knowledge related to head and neck diseases.

PLO 8: Practice Management.

Apply legal, regulatory, and business management concepts related to the provision of oral healthcare services

Indicators	Initial	Developing	Developed	Proficient
8.1. Legal aspects Applies legal and regulatory concepts related to the provision of oral healthcare services.	<ul style="list-style-type: none"> Does not demonstrate an understanding or the ability to apply legal and regulatory concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates a rudimentary understanding and ability to apply legal and regulatory concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates a sound understanding and ability to apply legal and regulatory concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates an advanced understanding and ability to apply legal and regulatory concepts related to the provision of oral healthcare sciences.
8.2. Business management Applies business management concepts to the provision of oral healthcare services.	<ul style="list-style-type: none"> Does not demonstrate an understanding or the ability to apply business management concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates a rudimentary understanding and ability to apply business management concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates a sound understanding and ability to apply business management concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates an advanced understanding and ability to apply business management concepts related to the provision of oral healthcare sciences.

Appendix B

California Northstate University Institutional Learning Objectives

ILO 1: Critical thinking: Exercise reasoned judgment to assess technical information and make well-informed decisions using evidence-based approaches

ILO 2: Written communication. Demonstrate the ability to write coherent, supported, and logically structured prose

ILO 3: Oral communication: Demonstrates oral communication skills

ILO 4: Professionalism. Interact with respect, empathy, diplomacy, and cultural competence

ILO 5: Quantitative reasoning: Demonstrate ability to use mathematics and statistics in problem solving

ILO 6: Information literacy: Identify and search relevant libraries of information and databases; synthesize information obtained from primary literature using properly referenced citations

DMD Institutional Learning Outcomes (ILOs) Proficiency Rubric

ILO 1: Critical thinking: Exercise reasoned judgment to assess technical information and make well-informed decisions using evidence-based approaches

Indicator	Initial	Developing	Developed	Proficient
1.1. Demonstrates identification of problem or issues	<ul style="list-style-type: none"> Does not correctly identify the problem or issue being considered Does not demonstrate understanding of the psychological factors that contribute to current patient state 	<ul style="list-style-type: none"> Identifies the problem or issue but does not demonstrate awareness of all the factors impacting decision making Demonstrates understanding of some possible psychological factors that contribute to current patient state 	<ul style="list-style-type: none"> Correctly identifies the problem or issue but does not demonstrate awareness of all factors impacting decision making Demonstrates understanding of most psychological factors that contribute to the current patient state 	<ul style="list-style-type: none"> Correctly identifies all of the primary factors associated with problem or issue impacting decision making Demonstrates thorough understanding of all possible psychological factors that contribute to the current patient state

Exhibit D

1.2. Demonstrates identification of resources	<ul style="list-style-type: none"> Does not identify appropriate resources 	<ul style="list-style-type: none"> Identifies a few resources needed 	<ul style="list-style-type: none"> Identifies most of the resources needed 	<ul style="list-style-type: none"> Correctly identifies all appropriate resources
1.3. Finds and interprets data needed for critical thinking and decision making	<ul style="list-style-type: none"> Does not demonstrate understanding of the data needed for critical thinking and decision making 	<ul style="list-style-type: none"> Demonstrates ability to interpret some data but not all 	<ul style="list-style-type: none"> Demonstrates ability to interpret most data 	<ul style="list-style-type: none"> Demonstrates ability to correctly interpret data needed for decision making
1.4. Demonstrates knowledge of alternatives when evaluating for possible solutions	<ul style="list-style-type: none"> Does not evaluate possible alternatives for treatment or diagnosis 	<ul style="list-style-type: none"> Does not effectively evaluate alternative treatment or diagnostic solutions 	<ul style="list-style-type: none"> Evaluates possible treatment and diagnostic solutions leading to a logical decision 	<ul style="list-style-type: none"> Effectively and thoroughly considers and evaluates possible diagnostic and treatment solutions
1.5. Proposes and selects appropriate solutions	<ul style="list-style-type: none"> Does not propose solutions to the client's needs 	<ul style="list-style-type: none"> Proposes solutions without consideration of alternatives 	<ul style="list-style-type: none"> Solutions chosen demonstrate consideration of most of the strengths, weaknesses, and consequences of the decision 	<ul style="list-style-type: none"> Proposes solutions that are appropriate to the situation and demonstrate consideration of all relevant strengths, weaknesses, and consequences
1.6. Presents rationale for course of action	<ul style="list-style-type: none"> Does not adequately provide rationale for treatment decision 	<ul style="list-style-type: none"> Provides rationale for decision but does not integrate into mental health treatment plan 	<ul style="list-style-type: none"> Provides rationale for decision with solid supporting evidence from available psychological literature and/or case factors 	<ul style="list-style-type: none"> Provides rationale for decision and with appropriate and relevant supporting case evidence and integrates findings into treatment plan

ILO 2: Written communication. Demonstrate the ability to write coherent, supported, and logically structured prose

Indicators	Initial	Developing	Developed	Proficient
2.1. Demonstrates knowledge and awareness of intended audience	<ul style="list-style-type: none"> Does not demonstrate knowledge or awareness of audience for which the document is intended 	<ul style="list-style-type: none"> Demonstrates some ability to craft a document appropriate for its audience 	<ul style="list-style-type: none"> Demonstrates ability to craft a document appropriate for its audience 	<ul style="list-style-type: none"> Consistently demonstrates ability to craft documents appropriate for the audience
2.2. Demonstrates clear and logical thought	<ul style="list-style-type: none"> Does not demonstrate clear or logical thought in their documentation 	<ul style="list-style-type: none"> Writing does not sufficiently conceptualize case variables or analyze subject under discussion 	<ul style="list-style-type: none"> Demonstrates general clear or logical thought in their documentation 	<ul style="list-style-type: none"> Research and clinical documentation demonstrates clear and focused thinking

Exhibit D

2.3. Demonstrates support for and development of ideas	<ul style="list-style-type: none"> Does not explain or develop ideas 	<ul style="list-style-type: none"> Demonstrates minimal support for ideas 	<ul style="list-style-type: none"> Writing contains examples that generally support ideas 	<ul style="list-style-type: none"> Supports ideas with relevant, clear, impactful examples
2.4. Demonstrates appropriate use of evidence to support arguments	<ul style="list-style-type: none"> Demonstrates an attempt to use proper citations to support ideas 	<ul style="list-style-type: none"> Uses credible and relevant sources to support ideas appropriate in the study of psychology 	<ul style="list-style-type: none"> Consistently uses credible and relevant sources to support ideas 	<ul style="list-style-type: none"> Demonstrates skillful use of credible and relevant sources to develop and support ideas
2.5. Demonstrates appropriate use of language, syntax, and mechanics	<ul style="list-style-type: none"> Has excessive or severe errors in language usage 	<ul style="list-style-type: none"> Generally conveys meaning to readers with clarity, though writing may include some errors 	<ul style="list-style-type: none"> Language conveys meaning to readers and writing contains very few errors 	<ul style="list-style-type: none"> Uses language effectively and skillfully to communicate meaning to readers

ILO 3: Oral communication: Demonstrates oral communication skills

Indicators	Initial	Developing	Developed	Proficient
3.1. Demonstrates knowledge and awareness of intended audience	<ul style="list-style-type: none"> Does not demonstrate knowledge or awareness of audience for which the communication is intended 	<ul style="list-style-type: none"> Demonstrates some ability to communicate in a manner appropriate to the audience 	<ul style="list-style-type: none"> Demonstrates ability to communicate appropriate to the audience 	<ul style="list-style-type: none"> Consistently demonstrates ability to communicate in a manner appropriate to the audience
3.2. Demonstrates clear and logical thought	<ul style="list-style-type: none"> Does not demonstrate clear or logical thought in their communication 	<ul style="list-style-type: none"> Communication does not sufficiently conceptualize case variables or analyze subject under discussion 	<ul style="list-style-type: none"> Demonstrates general clear or logical thought in their communication 	<ul style="list-style-type: none"> Communication demonstrates clear and focused thinking
3.3. Demonstrates effective use of language in their communication	<ul style="list-style-type: none"> Does not know professional psychological language or uses jargon Does not know the proper technical language regarding mental health treatment 	<ul style="list-style-type: none"> Demonstrates inaccurate use of psychological language or uses jargon in professional communications Utilizes scientific language that is incomprehensible to patients 	<ul style="list-style-type: none"> Demonstrates appropriate use of professional language and minimal jargon Utilizes generalized language to interact with patients 	<ul style="list-style-type: none"> Demonstrates use of appropriate, professional language Utilizes generalized language to interact with patients
3.4. Demonstrates appropriate active listening techniques	<ul style="list-style-type: none"> Does not acknowledge other viewpoints 	<ul style="list-style-type: none"> Demonstrates little attempt to recognize other viewpoints 	<ul style="list-style-type: none"> Recognizes other viewpoints but has difficulty incorporating them 	<ul style="list-style-type: none"> Listens to questions with a consideration of alternative

Exhibit D

when addressing questions	<ul style="list-style-type: none"> • Has great difficulty answering questions 	<ul style="list-style-type: none"> • Answers are simplistic and lack intellectual depth 	into case conceptualization <ul style="list-style-type: none"> • Adequately answers patient questions 	viewpoints <ul style="list-style-type: none"> • Answers questions thoughtfully referencing evidence
3.5. Orally communicates meaning to audience	<ul style="list-style-type: none"> • Vocal delivery is too soft or too fast • Long, unintended silences and/or speech disruptions frequently distract audience • Speaker makes no attempt to engage audience 	<ul style="list-style-type: none"> • Vocal delivery is audible • Speech rate or volume disruptions occasionally distract from comprehension • Attempts to engage audience 	<ul style="list-style-type: none"> • Vocal delivery is varied and dynamic • Speech rate, volume, and tone enhance listener interest and facilitate understanding • Generally engages audience 	<ul style="list-style-type: none"> • Vocal delivery is varied and dynamic • Speech rate, volume, and tone enhance listener interest and facilitate understanding • Thoroughly engages audience
3.6. Utilizes non-verbal means to enhance message	<ul style="list-style-type: none"> • Eye contact, body language, and facial expressions are inappropriate 	<ul style="list-style-type: none"> • Eye contact, body language, and facial expressions neither enhance nor hinder oral effectiveness 	<ul style="list-style-type: none"> • Use of eye contact, body language, and facial expressions are mostly consistent with the verbal message 	<ul style="list-style-type: none"> • Use of eye contact, body language, and facial expressions that are consistent with the verbal message

ILO 4: Professionalism. Interact with respect, empathy, diplomacy, and cultural competence

Indicators	Initial	Developing	Developed	Proficient
4.1. Demonstrates professional attitudes and behaviors	<ul style="list-style-type: none"> • Does not generally demonstrate professional attitudes or behaviors expected from a dentist 	<ul style="list-style-type: none"> • Demonstrates some attitudes and behaviors that may be characteristic of a dentist 	<ul style="list-style-type: none"> • Generally demonstrates attitudes and behaviors expected from a dentist 	<ul style="list-style-type: none"> • Consistently demonstrates attitudes and behaviors expected from a dentist
4.2. Demonstrates personal responsibility and accountability	<ul style="list-style-type: none"> • Does not demonstrate personal accountability or responsibility for work completed 	<ul style="list-style-type: none"> • Demonstrates minimal personal accountability and responsibility for work completed 	<ul style="list-style-type: none"> • Demonstrates personal accountability and responsibility for the work completed 	<ul style="list-style-type: none"> • Consistently demonstrates personal accountability and responsibility for work completed
4.3. Demonstrates respectful and sensitive behaviors to the cultural and linguistic needs of diverse patients	<ul style="list-style-type: none"> • Does not demonstrate an awareness of patients' customs, beliefs, or perspectives • Does not demonstrate awareness of linguistic needs of patients 	<ul style="list-style-type: none"> • Demonstrates a minimal level of awareness of customs, beliefs, or perspectives of patients • Demonstrates minimal awareness of cultural and linguistic needs of patients 	<ul style="list-style-type: none"> • Demonstrates awareness of customs and beliefs • Demonstrates awareness of the cultural and linguistic needs of patients 	<ul style="list-style-type: none"> • Demonstrates awareness of customs, beliefs, or perspectives in patients • Demonstrates full awareness and responds to the cultural and linguistic needs of patients
4.4. Demonstrates professional	<ul style="list-style-type: none"> • Appears inattentive and impatient • Uses inappropriate 	<ul style="list-style-type: none"> • Appears unfocused and distracted • Uses acceptable 	<ul style="list-style-type: none"> • Appears composed and focused • Uses appropriate 	<ul style="list-style-type: none"> • Uses articulate, tactful, and diplomatic speech

Exhibit D

demeanor	body language • Dresses in attire that is inappropriate	body language • Dresses in attire that is not offensive	body language • Dresses in attire that is professional	<ul style="list-style-type: none">• Uses professional body language• Dresses in attire that is professional, and well-suited for the environment
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Exhibit D

ILO 5: Quantitative reasoning: Demonstrate ability to use mathematics and statistics in problem solving

Indicators	Initial	Developing	Developed	Proficient
5.1. Demonstrates ability to perform calculations and apply mathematical principles to solve problems	<ul style="list-style-type: none"> Does not demonstrate ability to apply statistical or psychometric principles 	<ul style="list-style-type: none"> Demonstrates ability to perform basic statistical calculations but does not know how to apply psychometric principles to solve problems 	<ul style="list-style-type: none"> Demonstrates ability to perform most statistical calculations accurately and to apply psychometric principles to solve problems 	<ul style="list-style-type: none"> Consistently demonstrates ability to perform statistical calculations accurately and to appropriately apply psychometric principles to solve problems
5.2. Demonstrates understanding of experimental designs and methodology	<ul style="list-style-type: none"> Displays difficulty proposing a basic experiment or research project 	<ul style="list-style-type: none"> Comprehends basic experiments designed by others 	<ul style="list-style-type: none"> Evaluates research, method, and protocol to review valid and reliable research 	<ul style="list-style-type: none"> Proposes appropriate and innovative designs to address a new hypothesis and research question
5.3. Demonstrates logical and appropriate interpretation of data	<ul style="list-style-type: none"> Demonstrates a limited ability to interpret scientific data 	<ul style="list-style-type: none"> Attempts to interpret scientific data 	<ul style="list-style-type: none"> Demonstrates the ability to interpret scientific data 	<ul style="list-style-type: none"> Interprets data in the context of current scientific knowledge
5.4. Demonstrates logical thought patterns in generating conclusions	<ul style="list-style-type: none"> Does not generate conclusions based on current scientific data and statistics 	<ul style="list-style-type: none"> Generates conclusions that may be based on current scientific data and statistics 	<ul style="list-style-type: none"> Generates conclusions using scientific and statistical data 	<ul style="list-style-type: none"> Accurately generates conclusions using appropriate scientific and mathematical data

ILO 6: Information literacy: Identify and search relevant libraries of information and databases; synthesize information obtained from primary literature using properly referenced citations

Indicators	Initial	Developing	Developed	Proficient
6.1. Demonstrates appropriate ability search and acquire resources	<ul style="list-style-type: none"> Does not identify or solicit help in obtaining external resources to support topic 	<ul style="list-style-type: none"> Identified resources may not be sufficient in quality and infrequently solicits guidance from library personnel 	<ul style="list-style-type: none"> Identifies resources appropriate for scientific inquiry and solicits guidance from library personnel 	<ul style="list-style-type: none"> Identifies a variety of relevant sources and regularly seeks guidance from library personnel
6.2. Demonstrates appropriate incorporation of references	<ul style="list-style-type: none"> Does not incorporate references 	<ul style="list-style-type: none"> Incorporates references from psychological sources that do not clearly support 	<ul style="list-style-type: none"> Incorporates relevant references that generally supports ideas 	<ul style="list-style-type: none"> Incorporates relevant references from respected psychological sources

Exhibit D

		ideas		
6.3. Demonstrates appropriate citation of references	<ul style="list-style-type: none">• Does not use citations	<ul style="list-style-type: none">• Uses citations but they are not formatted in APA style	<ul style="list-style-type: none">• Demonstrates use of appropriate citations in context	<ul style="list-style-type: none">• Uses properly cited references and includes all necessary information in reference list



California Northstate University College of Dental Medicine

Course Syllabus

Course #	Course Title	Credits	Year	Term
BSS 533	California Dental Practice Act	1	DS2	Summer

Credit Hour Policy

For each 15-week semester, one (1) hour of credit is assigned per hour each week of classroom or direct faculty didactic instruction (that is, per hour of lecture or student in-class time) and a minimum of two (2) hours of out-of-class student work (homework). For practicum and internship time, one (1) hour of credit is assigned per three (3) hours each week of student time spent in this activity.

Maximum Enrollment: 80

Calendar of Important Dates:

Date	
June 1, 2021	Start Summer session
June XX, 2021	Quiz #1
June XX, 2021	Group projects
July, XX 2021	Final exam and presentations

Course Coordinator, Instructors and Contact Information

Course Director: Joel Whiteman DDS

Room:

E mail:

Office hours: Wednesdays 12:00pm-1:00pm, and 3:00pm-4:00pm (or by appointment)

DMD (Course co-director): Paul Glassman DDS

Room:

E-mail:

Office hours: Wednesdays 12:00pm-1:00pm, and 3:00pm-4:00pm (or by appointment)

Holly Jacobson BA (course administrator)

Room: xxx

E mail: holly.jacobson@cnsu.edu

Classroom and Meeting Times

Room: Classroom xxxx

Time: xxxx 2 hours per week

Course Description

This course will cover the California law that governs the practice of dentistry in the State of California. The topics that will be covered will be allowable duties of licensed auxiliary staff, dental licensure and continuing education requirements. The course will also include standard of care, proper record keeping, sedation and special permits as well as appropriate business and professional codes that apply to the dental office.

Prerequisite Courses

None

Prerequisite Knowledge

None

Required Textbook(s) and Material(s)

1)California Dental Practice Act

2)California Business and Professional codes related to the practice of Dentistry

Technology

1. Computer-assisted instruction (Clickers) and SCANTRON Sheets
2. Web-based course management (Canvas) and Examsoft
3. Audio/Video recordings where applicable
4. PowerPoint
5. Epic electronic health record
6. PACS, DICOM compatible imaging software

Evaluation Components

In keeping with the Team Based Learning (TBL) approach, grades will be determined as follows:

Individual Components	80%
Quiz #1	20%
Final Exam	60%

Team Components	20%
Group Presentations	10%
Peer Evaluations	10%

GRADING

All students must demonstrate minimal individual competency. Therefore, students earning less than 75% on the total Individual component score will not have team component scores added to calculate their final course grade. During the course, students who score less than 75% on individual components may be subject to periodic course content review and may receive an Academic Alert.

In order to progress from one semester to the next, students must pass all courses with a letter grade of C or higher and maintain a minimum cumulative grade point average (GPA) of 2.0. The breakdown for assignment of letter grades and grade points for each letter grade are as follows:

Percent	Letter Grade/Action
90.0 – 100%	A
80.0 – 89.9%	B
75.0 – 79.9%	C - Pass
60.0 – 74.9%	D – Requiring remediation (successful remediation recorded as C, unsuccessful remediation recorded as F)
Below 60.0%	F – Fail (course must be repeated)

Incomplete	I
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Incomplete

During a semester, a student may not complete all required assignments and/or examinations due to extenuating circumstances, such as, but not limited to, an illness or a family emergency. In such a case, the course director may give a grade of Incomplete for the course. The course with the incomplete grade has to be completed successfully within the time frame as being defined by the student's academic plan, normally in the same academic year, otherwise a leave of absence would be required.

Core-Course Policies

All students are required to adhere to the Academic Policies that impact on student progression and conduct while attending the DMD program, including the following: Academic Progression Policy, Excused Absence Policy, Exam Policy, Course Grade Appeal Policy, Course Add/Drop Policy and Attendance Policy. Refer to the current Student Handbook for the detailed policies.

Course Specific Policies

1. Group Projects cases are to be submitted via CANVAS by 11:59pm PST on the deadline indicated. Only one group member should submit the assignment on behalf of the group. The course coordinator reserves the right to deduct points for late submission (20% of assignment grade for every 24 hours the assignment is turned in late).
Presentation of group cases requires the active participation of each team member, preferably presenting the component of the case the student was responsible for developing. The teams will each have 30 minutes for presentation which is ample time for participation of each member
2. Grade appeal for any individual assignments (including exams) should be submitted to the course coordinator in writing within 5 business days of grade release.
3. There will be no rounding of the final grade for this course.

Topics and Schedule

(Subject to change. Updates will be posted to CANVAS and announced by email)

All readings are in Vital Source, or as assigned and posted to CANVAS

Each didactic session including LAL is 2 hours. Each clinical session is 4 hours. Students are divided into groups of 4 students (groups 1-20) for each of their 3 sessions. Each group of 4 will attend either Monday, Tuesday, Wednesday or Thursday clinic.

Date	Topics	Readings*	Instructor	Notes
Week 1	Licensure, Continuing education, and Diversion programs	DPA		Case assignments to groups
Week 2	Allowable duties for auxiliary staff (DA, RDA, RDAEF, RDH and RDHAP)	DPA		
Week 3	Standard of Care, Unprofessional conduct, Sedation licensure, proper medications prescribing and special permits	DPA, Business and Professional codes		
Week 4:	Record keeping, Business and Professional codes, Anti-Kickback laws, financial disclosures	DPA, Business and Professional codes		
Week 5:	Final exam and presentations			

**Course Learning Outcomes and links to Program Learning Outcomes (Appendix A)
and Institutional Learning Outcomes (Appendix B)**

No.	Course Learning Outcome	DMD PLO	DMD ILO	Learning Hierarchy ^b	Assessment Method
1	Understand the different methods of licensure, how to keep that license active and the responsibilities of a treating dentist.	4,5,6,8	1,2,3,4,5,6	1,2,3	Didactic exam and group presentations
2	Demonstrate an understanding of the allowable duties of each dental auxiliary.	1,3,4,5,6,8	1,2,3,4,5,6	1,2,3	Didactic exam and group presentations
3	Demonstrate an understanding of the ethical and business and professional codes for the State of California.	1,3,4,5,6,8	1,2,3,4,5,6	1,2,3	Didactic exam and group presentations
4	Display an overall understanding of the California Dental Practice Act.	1,3,4,5,6,8	1,2,3,4,5,6	1,2,3	Didactic exam and group presentations

^a plo's appendix A

^b Learning Hierarchy based on Bloom's Taxonomy with 1=Memorization and/or Comprehension; 2=Application and/or Analysis; 3=Synthesis and/or Evaluation.

Teaching/ Learning Methodology

- 1) Didactic: lecture and required readings
- 2) Learning Activities: Group Projects
- 3) Peer Assessment

CLO Rubrics

CLO 1: Understand the different methods of licensure, how to keep that license active and the responsibilities of a treating dentist.

Indicators	Initial	Developing	Developed	Proficient
Demonstrate and understanding of licensure and subsequent responsibilities.	Has little to no knowledge of licensure in California.	Begins to display a basic knowledge of licensure and subsequent responsibilities.	Has a detailed knowledge of California licensure and responsibilities of a licensed Dentist.	Consistently applies critical thinking to licensure and the responsibilities associated with it.

CLO 2: Demonstrate an understanding of the allowable duties of each dental auxiliary.

Indicators	Initial	Developing	Developed	Proficient
Demonstrate an understanding of the allowable duties of each dental auxiliary.	Has little to no knowledge of the allowable duties of dental auxiliary personnel.	Has a basic knowledge of the duties allowed to be performed by dental auxiliary personnel.	Has a detailed knowledge of what is allowed in accordance with the DPA.	Consistently applies critical thinking to the dynamic overseeing of dental auxiliary.

CLO 3: Demonstrate an understanding of the ethical and business and professional codes for the State of California.

Indicators	Initial	Developing	Developed	Proficient
Demonstrate an understanding of the ethical and business and professional codes for the State of California.	Has little to no knowledge of the ethical and business and professional codes in California.	Demonstrates a basic knowledge of the ethical and business and professional codes.	Demonstrates a detailed knowledge of the business and professional codes.	Applies critical thinking to the business and professional codes.

CLO 4: Display an overall understanding of the California Dental Practice Act.

Exhibit D

Indicators	Initial	Developing	Developed	Proficient
Demonstrate an overall understanding of the California Dental Practice Act.	Has little to no knowledge of the DPA.	Displays a basic understanding of the DPA.	Has a detailed knowledge of the DPA.	Demonstrates the ability to apply critical thinking towards the DPA.

Appendix A

Program Learning Outcomes (PLOs) CNU College of Dental Medicine

1. Patient-Centered Care: Demonstrate understanding of healthcare disparities and cultural awareness in patient counseling and patient advocacy
2. Evidence-Based Care: Apply current, evidence-based oral healthcare within the scope of general dentistry
3. Culturally competent, empathic communication: Demonstrate patient centered, empathic, and culturally competent communication and interpersonal skills
4. Oral and Written Communication: Demonstrate sound oral and written communications in patient care
5. Critical Thinking: Utilize critical thinking, problem solving skills and systemic thinking in assessing and making reasoned, evidence-based decisions in patient care
6. Ethics and Professionalism: Demonstrate professionalism and ethical decision making
7. Biomedical Sciences Knowledge: Demonstrate an understanding of the fundamentals of biomedical sciences and apply them appropriately in oral healthcare
8. Practice Management: Apply legal, regulatory and business management concepts related to provision of oral healthcare services

DMD Program Learning Outcomes (PLOs) Proficiency Rubric

PLO 1: Patient-Centered Care

Demonstrate understanding of healthcare disparities and cultural awareness and capability in patient counseling and providing appropriate patient advocacy

Indicators	Initial	Developing	Developed	Proficient
1.1. Education. Demonstrates ability to educate all audiences through effectively communicating information and assessing learning	<ul style="list-style-type: none"> Does not appropriately counsel patients Does not check for understanding, ask questions, and/or asks inappropriate questions. 	<ul style="list-style-type: none"> Counsels patients but leaves out pertinent information needed by patient Communicates with basic level of clarity but 	<ul style="list-style-type: none"> Generally demonstrates empathy, communicates accurate information clearly, checks for understanding Seeks to ensure 	<ul style="list-style-type: none"> Consistently demonstrates empathy, communicates accurate information clearly, checks for understanding Ensures

	<ul style="list-style-type: none"> Does not demonstrate the ability to find and utilize appropriate resources and references necessary for providing accurate counseling, consultation and education 	<p>does not always check for understanding or rephrase when confusion occurs.</p> <ul style="list-style-type: none"> Demonstrates the ability to find a one or two resources, yet the resources are not the best or most appropriate for providing accurate counseling, consultation and education 	<p>understanding and generally asks questions.</p> <ul style="list-style-type: none"> Frequently demonstrates the ability to find and utilize appropriate resources and references necessary for providing accurate counseling, consultation and education 	<p>understanding and asks appropriate questions.</p> <ul style="list-style-type: none"> Consistently demonstrates the ability to find and utilize appropriate resources and references for providing accurate patient counseling, consultation and education
1.2. Patient advocacy. Represents the patient's best interests	<ul style="list-style-type: none"> Does not demonstrate the ability represent a patient's best interest 	<ul style="list-style-type: none"> Demonstrates awareness of issues that impact a patient Demonstrates minimal ability to articulate these issues but does not demonstrate ability to sufficiently advocate on a patient's behalf 	<ul style="list-style-type: none"> Demonstrates sufficient awareness of issues that impact a patient Demonstrates ability to articulate these issues Demonstrates ability to sufficiently advocate on a patient's behalf 	<ul style="list-style-type: none"> Demonstrates full awareness of the most important issues that impact a patient Demonstrates ability to clearly and effectively articulate these issues Demonstrates ability to effectively advocate on a patient's behalf

PLO 2: Evidence-Based Care.

Apply sound, current, and evidence-based oral healthcare within the scope of general dentistry

Indicators	Initial	Developing	Developed	Proficient
2.1. Patient-centered care. Demonstrates ability to provide patient-centered care as the	<ul style="list-style-type: none"> Does not demonstrate ability to provide patient-centered care at the medication expert level; e.g., 	<ul style="list-style-type: none"> Demonstrates ability to provide patient-centered care as the medication expert in some, but not all, areas 	<ul style="list-style-type: none"> Demonstrates ability to provide patient-centered care as the medication expert (generally demonstrates 	<ul style="list-style-type: none"> Demonstrates ability to provide sufficient patient-centered care as the expert (collects and

medication expert (collect and interpret evidence, prioritize, formulate assessments and recommendations, implement, monitor and adjust plans, and document activities)	demonstrates ability to collect but not sufficiently interpret evidence, does not prioritize, formulates basic assessments and recommendations, does not sufficiently monitor and adjust plans nor document activities.	as follows: collect and interpret evidence, prioritize, formulate assessments and recommendations, implement, monitor and adjust plans, and document activities	ability to collect and interpret evidence, prioritize, formulate assessments and recommendations, implement, monitor and adjust plans, and document activities)	interprets evidence, prioritizes, formulates assessments and recommendations, implements, monitors and adjusts plans, and documents activities)
2.2. Systems management. Demonstrates ability to manage patient healthcare needs using human, financial, technological, and physical resources to optimize the safety and efficacy of medication use systems	<ul style="list-style-type: none"> • Does not demonstrate understanding of oral healthcare delivery systems parts • Does not demonstrate understanding of the forces that influence components of the oral healthcare delivery system, including their connection to patient care • Does not demonstrate understanding of any challenges to systems that affect oral healthcare delivery Does not demonstrate understanding of how to work with different subsystems to deliver oral	<ul style="list-style-type: none"> • Demonstrates understanding of some parts of oral healthcare delivery systems but does not identify how they are related to each other • Demonstrates understanding of some forces that influence the parts of healthcare delivery systems, but demonstrate minimal understanding of their connection to patient care • Demonstrates understanding of some challenges that can affect delivery of oral healthcare • Demonstrates some understanding of how to work with different subsystems and how they 	<ul style="list-style-type: none"> • Demonstrates understanding of most major components of oral healthcare systems and their respective relationships • Demonstrates understanding of the forces that influence the components of healthcare delivery systems, and demonstrate some understanding of their influence on the quality of patient care • Demonstrates understanding of most challenges that can affect delivery of oral healthcare, but does not demonstrate complete comprehension of the effects Demonstrates basic	<ul style="list-style-type: none"> • Demonstrates understanding of the major components of oral healthcare systems, their respective relationships, and their functions related to patient care • Demonstrates thorough understanding of the forces that influence components of healthcare delivery systems and demonstrate full understanding of their influence and implications on the quality of patient care • Demonstrates understanding of pertinent challenges to specific aspects of healthcare delivery by demonstrating

	healthcare	function to deliver oral healthcare, but demonstrate minimal awareness or understanding of one's own role within the oral healthcare delivery system	understanding of how to work with different subsystems and how they function to deliver oral healthcare and demonstrate some understanding of one's role within the oral healthcare delivery system, but does not necessarily demonstrate application of knowledge in a manner that maximizes the quality of oral healthcare	abilities to thoroughly discuss the implications for the appropriate parts of oral health care delivery systems Demonstrates excellent understanding of how to work with different subsystems involved while also demonstrating understanding of one's role within the subsystems, and demonstrate appropriate application of knowledge in a manner that maximizes the quality of oral healthcare
2.3. Health and wellness. Designs prevention, intervention, and educational strategies for individuals and communities to manage chronic disease and improve oral health and wellness	<ul style="list-style-type: none"> • Does not demonstrate understanding of how the arts can be utilized to optimize patients' well-being 	<ul style="list-style-type: none"> • Demonstrates knowledge of some of the ways that the arts can be utilized to optimize patients' well-being 	<ul style="list-style-type: none"> • Demonstrates sufficient knowledge of multiple ways that the arts can be utilized to optimize patients' well-being 	<ul style="list-style-type: none"> • Demonstrates thorough knowledge of the ways that the arts can be utilized to optimize patients' well-being and creatively applies this knowledge to improve well-being and the practice and delivery of oral healthcare
2.4. Population-based care.	<ul style="list-style-type: none"> • Does not demonstrate 	<ul style="list-style-type: none"> • Demonstrates minimal 	<ul style="list-style-type: none"> • Demonstrates sufficient 	<ul style="list-style-type: none"> • Demonstrates superb

Exhibit D

Demonstrates understanding of how population-based care influences patient-centered care and the development of practice guidelines and evidence-based best practices	awareness of population-based care.	<p>understanding of population-based care and how it influences patient-centered care</p> <ul style="list-style-type: none"> • Does not demonstrate awareness of how these notions influence the development of practice guidelines 	<p>understanding of population-based care and how it influences patient-centered care</p> <ul style="list-style-type: none"> • Demonstrates sufficient understanding of how population-based care influences the development of practice guidelines and best practices for patient care 	<p>understanding of population-based care and how it influences patient-centered care</p> <ul style="list-style-type: none"> • Demonstrates superb understanding of how population-based care influences the development of practice guidelines and demonstrates knowledge of best practices for patient care
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PLO 3: Culturally Competent, Empathic Communication.

Demonstrate patient centered, empathic and culturally competent communication and interpersonal skills

Indicators	Initial	Developing	Developed	Proficient
3.1. Empathy. Demonstrates the ability to communicate with the patient empathically.	<ul style="list-style-type: none"> Does not demonstrate the ability to communicate with the patient empathically. 	<ul style="list-style-type: none"> Demonstrates some ability, but experiences lapses in the ability to communicate empathically 	<ul style="list-style-type: none"> Demonstrates the ability to communicate empathically, with few lapses. 	<ul style="list-style-type: none"> Demonstrates an advanced ability, and never experiences lapses in communicating empathically.
3.2. Cultural competence. Demonstrates the ability to engage in communication with the patient that is culturally aware and accepting.	<ul style="list-style-type: none"> Does not demonstrate communication and interactions that convey respect or concern for patients and the community. Does not demonstrate an awareness of customs, beliefs, or perspectives in diverse patients Does not demonstrate awareness of cultural and linguistic needs of patients in order to communicate health information 	<ul style="list-style-type: none"> Demonstrates communication and interactions characteristic of a minimal level of respect, and little concern for patients and the community is apparent through use of some appropriate communication, but student does not employ follow-up questions for clarification, when necessary, and student provides inappropriate detail in responses Demonstrates a minimal level of awareness of customs, beliefs, or perspectives in diverse patients Demonstrates minimal awareness of cultural and 	<ul style="list-style-type: none"> Demonstrates appropriate communication and interactions that are characteristic of a basic level of respect, and concern for patients and the community is apparent through use of appropriate communication, where student uses some clear, but not necessarily relevant or detailed, follow-up questions and responses Demonstrates awareness of customs and beliefs, but may not clarify with patients about personal perspectives Demonstrates awareness of the cultural and 	<ul style="list-style-type: none"> Demonstrates professional communication and interactions by showing empathy, respect, and concern for patients and the community through use of appropriate communication where follow-up questions (as needed) and responses are clear, relevant, and detailed Demonstrates awareness of customs, beliefs, or perspectives in diverse patients; ask appropriate questions to clarify perspectives and perceptions in diverse patients Demonstrates full awareness of and responsiveness to

		linguistic needs of patients; either does not or only attempt to adapt behaviors, but does so ineffectively, to communicate health information	linguistic needs of diverse patients, and adapt behaviors to communicate health information, but communication may not be effective	cultural and linguistic needs of diverse patients by adapting behaviors appropriately in order to effectively communicate health information
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PLO 4: Oral and Written Communication.

Demonstrate sound oral and written communications in patient care

Indicators	Initial	Developing	Developed	Proficient
4.1. Oral communication. Demonstrate sound oral communication in patient care.	<ul style="list-style-type: none"> Does not demonstrate logical reasoning in oral communications in patient care. Does not demonstrate the ability to cite sound evidence that support ideas within presentations or discussions. 	<ul style="list-style-type: none"> Demonstrates some logical reasoning in oral communications in patient care but demonstrates some lapses. Demonstrates some ability to cite sound evidence that support ideas within presentations or discussions, but demonstrates some lapses. 	<ul style="list-style-type: none"> Generally demonstrates logical reasoning in oral communications in patient care. Generally demonstrates the ability to cite sound evidence that support ideas within presentations or discussions. 	<ul style="list-style-type: none"> Consistently demonstrates logical reasoning in oral communications in patient care. Consistently demonstrates the ability to cite sound evidence that support ideas within presentations or discussions.
4.2. Written communication. Demonstrate sound written communication in patient care.	<ul style="list-style-type: none"> Does not demonstrate logical reasoning in written communications in patient care. Does not demonstrate the written ability to cite sound evidence that support ideas. 	<ul style="list-style-type: none"> Demonstrates some logical reasoning in written communications in patient care but demonstrates some lapses. Demonstrates some written ability to cite sound evidence that support ideas, but demonstrates some lapses. 	<ul style="list-style-type: none"> Generally logical reasoning in written communications in patient care. Generally demonstrates the written ability to cite sound evidence that support ideas. 	<ul style="list-style-type: none"> Consistently demonstrates logical reasoning in written communications in patient care. Consistently demonstrates the written ability to cite sound evidence that support ideas.

PLO 5: Critical Thinking.

Utilize critical thinking, problem solving skills and systemic thinking in assessing and making reasoned, evidence-based decisions in patient care

Indicators	Initial	Developing	Developed	Proficient
5.1. Problem solving. Identifies problems; explore and prioritize potential strategies; and designs, implements, and evaluates viable solutions	<ul style="list-style-type: none"> Is not able to correctly identify the problem or issue being considered. Does not identify appropriate resources. Includes extraneous information or inappropriate or insufficient resources. Does not demonstrate understanding of the content of materials reviewed. Makes inappropriate inferences. Does not evaluate possible alternatives or generates ideas that are illogical or extraneous to issue at hand. Does not propose a solution or does not articulate decision. Does not adequately provide rationale for selected alternative or 	<ul style="list-style-type: none"> Identifies the problem or issue but does not demonstrate awareness of all the factors associated with the problem or issues that impact decision making. Identifies a few, but not all, resources needed for decision making. Demonstrates ability to interpret some information and data but not all. Does not fully or effectively evaluate alternative solutions. Proposes a decision with many apparent weaknesses (i.e., not feasible, lack of regard for consequences, lack of supporting evidence, illogical, irrelevant to issue at hand, etc.). Provides 	<ul style="list-style-type: none"> Correctly identifies problem or issue being considered and demonstrates adequate awareness of the factors associated with this problem or issue that impact decision making. Identifies most of the resources needed. Demonstrates ability to interpret most information and data. Considers and evaluates possible solutions in a way that generally leads to a logical decision or course of action. Proposes a solution that does not contain apparent weaknesses that may or may not be the obvious clear choice. Solutions chosen demonstrate consideration of 	<ul style="list-style-type: none"> Consistently correctly identifies the problem or issue being considered and all of the primary factors associated with this problem or issue that impact decision making. Articulates the importance of these factors. Identifies all appropriate resources. Demonstrates ability to correctly interpret information and data needed for appropriate decision making. Demonstrates awareness of importance of these data in decision-making process. Considers and evaluates possible solutions effectively and thoroughly. Evaluation leads to sound, logical, and “best” decision or

	decision	rationale for selected alternative or decision but does not build a solid position with supporting evidence. Is unable to defend decision or course of action.	most of the strengths, weaknesses, feasibility, effects, consequences, relevance, etc.). Provides rationale for selected alternative or decision which includes some solid supporting evidence. Is able to defend decision or course of action at a basic level.	course of action. <ul style="list-style-type: none"> Proposes a solution that is entirely appropriate to the situation at hand. Solutions chosen demonstrate consideration of all of the important and relevant strengths, weaknesses, feasibility, effects, consequences, etc.). Provides rationale for selected alternative or decision and builds a solid position with appropriate and relevant supporting evidence. Effectively defends decision or course of action.
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PLO 6: Ethics and Professionalism.

Demonstrating professionalism and ethical decision making

Indicators	Initial	Developing	Developed	Proficient
6.1. Professionalism. Demonstrates behaviors and values that are consistent with the trust given to the profession by patients, other healthcare providers, and society	<ul style="list-style-type: none"> Does not consistently demonstrate professional attitudes and behaviors (altruism, excellence, duty, accountability, honesty, and integrity) Demonstrates frequent lapses in accountability or quality of work 	<ul style="list-style-type: none"> Demonstrates some professional attitudes and behaviors yet there is inconsistency that may impede on the quality of work or treatment of patients and other healthcare team members (altruism, excellence, duty, accountability, honesty, and integrity) 	<ul style="list-style-type: none"> Generally demonstrates most of the professional attitudes and behaviors (altruism, excellence, duty, accountability, honesty, and integrity) that are required in the profession Demonstrates ability to use these behaviors and values to improve healthcare 	<ul style="list-style-type: none"> Consistently demonstrates the professional attitudes and behaviors that uphold the integrity and competence of the work and the treatment of patients and other healthcare team professionals (altruism, excellence, duty, accountability, honesty, and integrity) Consistently uses these behaviors and values to improve healthcare
6.2. Ethics. Demonstrates the ability to make decisions consistent with the values of practitioners and scholars of oral healthcare.	<ul style="list-style-type: none"> Does not make ethical decisions consistent with the values of practitioners and scholars of oral healthcare. 	<ul style="list-style-type: none"> Demonstrates the ability to exercise ethical decision making, and a rudimentary knowledge of ethics within oral healthcare. 	<ul style="list-style-type: none"> Demonstrates the ability to exercise clear and ethical decision making, and a sufficient knowledge of ethics within oral healthcare. 	Demonstrates the ability to exercise clear and ethical decision making, and an advanced knowledge of ethics within oral healthcare.

PLO 7: Biomedical Sciences Knowledge.

Demonstrate an understanding of the fundamentals of biomedical sciences and apply them appropriately in oral healthcare

Indicators	Initial	Developing	Developed	Proficient
7.1. Diagnostic and pharmacologic. Demonstrates the ability to describe how to deliver patient assessments, knowledge of medicines, and delivering diagnoses.	<ul style="list-style-type: none"> Does not demonstrate the ability to describe diagnostic and pharmacologic knowledge related to oral health. 	<ul style="list-style-type: none"> Demonstrates a rudimentary ability to describe diagnostic and pharmacologic knowledge related to oral health. 	<ul style="list-style-type: none"> Demonstrates a sufficient ability to describe diagnostic and pharmacologic knowledge related to oral health. 	<ul style="list-style-type: none"> Demonstrates an advanced ability to describe diagnostic and pharmacologic knowledge related to oral health.
7.2. Orofacial pain/temporomandibular/ Sleep disorder. Demonstrates the ability to describe the anatomical, physiological, and neurological basis; classification, epidemiology, and etiology; and assessments and treatments of orofacial pain, temporomandibular joint disease, and sleep disorders.	<ul style="list-style-type: none"> Does not demonstrate the ability to describe scientific or assessment knowledge related to OFP/TMJ disease and sleep disorders. 	<ul style="list-style-type: none"> Demonstrates a rudimentary ability to describe scientific or assessment knowledge related to OFP/TMJ disease and sleep disorders. 	<ul style="list-style-type: none"> Demonstrates a sufficient ability to describe scientific or assessment knowledge related to OFP/TMJ disease and sleep disorders. 	<ul style="list-style-type: none"> Demonstrates an advanced ability to describe scientific or assessment knowledge related to OFP/TMJ disease and sleep disorders.
7.3. Maxillofacial pathology Demonstrates the ability to describe the scientific aspects of head and neck diseases, as well as knowledge of assessment and diagnosis.	<ul style="list-style-type: none"> Does not demonstrate the ability to describe the scientific or assessment knowledge related to head and neck diseases. 	<ul style="list-style-type: none"> Demonstrates a rudimentary ability to describe the scientific or assessment knowledge related to head and neck diseases. 	<ul style="list-style-type: none"> Demonstrates a sufficient ability to describe the scientific or assessment knowledge related to head and neck diseases. 	<ul style="list-style-type: none"> Demonstrates an advanced ability to describe the scientific or assessment knowledge related to head and neck diseases.

PLO 8: Practice Management.

Apply legal, regulatory, and business management concepts related to the provision of oral healthcare services

Indicators	Initial	Developing	Developed	Proficient
8.1. Legal aspects Applies legal and regulatory concepts related to the provision of oral healthcare services.	<ul style="list-style-type: none"> Does not demonstrate an understanding or the ability to apply legal and regulatory concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates a rudimentary understanding and ability to apply legal and regulatory concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates a sound understanding and ability to apply legal and regulatory concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates an advanced understanding and ability to apply legal and regulatory concepts related to the provision of oral healthcare sciences.
8.2. Business management Applies business management concepts to the provision of oral healthcare services.	<ul style="list-style-type: none"> Does not demonstrate an understanding or the ability to apply business management concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates a rudimentary understanding and ability to apply business management concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates a sound understanding and ability to apply business management concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates an advanced understanding and ability to apply business management concepts related to the provision of oral healthcare sciences.

Appendix B

California Northstate University Institutional Learning Objectives

ILO 1: Critical thinking: Exercise reasoned judgment to assess technical information and make well-informed decisions using evidence-based approaches

ILO 2: Written communication. Demonstrate the ability to write coherent, supported, and logically structured prose

ILO 3: Oral communication: Demonstrates oral communication skills

ILO 4: Professionalism. Interact with respect, empathy, diplomacy, and cultural competence

ILO 5: Quantitative reasoning: Demonstrate ability to use mathematics and statistics in problem solving

ILO 6: Information literacy: Identify and search relevant libraries of information and databases; synthesize information obtained from primary literature using properly referenced citations

DMD Institutional Learning Outcomes (ILOs) Proficiency Rubric

ILO 1: Critical thinking: Exercise reasoned judgment to assess technical information and make well-informed decisions using evidence-based approaches

Indicator	Initial	Developing	Developed	Proficient
1.1. Demonstrates identification of problem or issues	<ul style="list-style-type: none"> Does not correctly identify the problem or issue being considered Does not demonstrate understanding of the psychological factors that contribute to current patient state 	<ul style="list-style-type: none"> Identifies the problem or issue but does not demonstrate awareness of all the factors impacting decision making Demonstrates understanding of some possible psychological factors that contribute to current patient state 	<ul style="list-style-type: none"> Correctly identifies the problem or issue but does not demonstrate awareness of all factors impacting decision making Demonstrates understanding of most psychological factors that contribute to the current patient state 	<ul style="list-style-type: none"> Correctly identifies all of the primary factors associated with problem or issue impacting decision making Demonstrates thorough understanding of all possible psychological factors that contribute to the current patient state

Exhibit D

1.2. Demonstrates identification of resources	<ul style="list-style-type: none"> Does not identify appropriate resources 	<ul style="list-style-type: none"> Identifies a few resources needed 	<ul style="list-style-type: none"> Identifies most of the resources needed 	<ul style="list-style-type: none"> Correctly identifies all appropriate resources
1.3. Finds and interprets data needed for critical thinking and decision making	<ul style="list-style-type: none"> Does not demonstrate understanding of the data needed for critical thinking and decision making 	<ul style="list-style-type: none"> Demonstrates ability to interpret some data but not all 	<ul style="list-style-type: none"> Demonstrates ability to interpret most data 	<ul style="list-style-type: none"> Demonstrates ability to correctly interpret data needed for decision making
1.4. Demonstrates knowledge of alternatives when evaluating for possible solutions	<ul style="list-style-type: none"> Does not evaluate possible alternatives for treatment or diagnosis 	<ul style="list-style-type: none"> Does not effectively evaluate alternative treatment or diagnostic solutions 	<ul style="list-style-type: none"> Evaluates possible treatment and diagnostic solutions leading to a logical decision 	<ul style="list-style-type: none"> Effectively and thoroughly considers and evaluates possible diagnostic and treatment solutions
1.5. Proposes and selects appropriate solutions	<ul style="list-style-type: none"> Does not propose solutions to the client's needs 	<ul style="list-style-type: none"> Proposes solutions without consideration of alternatives 	<ul style="list-style-type: none"> Solutions chosen demonstrate consideration of most of the strengths, weaknesses, and consequences of the decision 	<ul style="list-style-type: none"> Proposes solutions that are appropriate to the situation and demonstrate consideration of all relevant strengths, weaknesses, and consequences
1.6. Presents rationale for course of action	<ul style="list-style-type: none"> Does not adequately provide rationale for treatment decision 	<ul style="list-style-type: none"> Provides rationale for decision but does not integrate into mental health treatment plan 	<ul style="list-style-type: none"> Provides rationale for decision with solid supporting evidence from available psychological literature and/or case factors 	<ul style="list-style-type: none"> Provides rationale for decision and with appropriate and relevant supporting case evidence and integrates findings into treatment plan

ILO 2: Written communication. Demonstrate the ability to write coherent, supported, and logically structured prose

Indicators	Initial	Developing	Developed	Proficient
2.1. Demonstrates knowledge and awareness of intended audience	<ul style="list-style-type: none"> Does not demonstrate knowledge or awareness of audience for which the document is intended 	<ul style="list-style-type: none"> Demonstrates some ability to craft a document appropriate for its audience 	<ul style="list-style-type: none"> Demonstrates ability to craft a document appropriate for its audience 	<ul style="list-style-type: none"> Consistently demonstrates ability to craft documents appropriate for the audience
2.2. Demonstrates clear and logical thought	<ul style="list-style-type: none"> Does not demonstrate clear or logical thought in their documentation 	<ul style="list-style-type: none"> Writing does not sufficiently conceptualize case variables or analyze subject under discussion 	<ul style="list-style-type: none"> Demonstrates general clear or logical thought in their documentation 	<ul style="list-style-type: none"> Research and clinical documentation demonstrates clear and focused thinking

Exhibit D

2.3. Demonstrates support for and development of ideas	<ul style="list-style-type: none"> Does not explain or develop ideas 	<ul style="list-style-type: none"> Demonstrates minimal support for ideas 	<ul style="list-style-type: none"> Writing contains examples that generally support ideas 	<ul style="list-style-type: none"> Supports ideas with relevant, clear, impactful examples
2.4. Demonstrates appropriate use of evidence to support arguments	<ul style="list-style-type: none"> Demonstrates an attempt to use proper citations to support ideas 	<ul style="list-style-type: none"> Uses credible and relevant sources to support ideas appropriate in the study of psychology 	<ul style="list-style-type: none"> Consistently uses credible and relevant sources to support ideas 	<ul style="list-style-type: none"> Demonstrates skillful use of credible and relevant sources to develop and support ideas
2.5. Demonstrates appropriate use of language, syntax, and mechanics	<ul style="list-style-type: none"> Has excessive or severe errors in language usage 	<ul style="list-style-type: none"> Generally conveys meaning to readers with clarity, though writing may include some errors 	<ul style="list-style-type: none"> Language conveys meaning to readers and writing contains very few errors 	<ul style="list-style-type: none"> Uses language effectively and skillfully to communicate meaning to readers

ILO 3: Oral communication: Demonstrates oral communication skills

Indicators	Initial	Developing	Developed	Proficient
3.1. Demonstrates knowledge and awareness of intended audience	<ul style="list-style-type: none"> Does not demonstrate knowledge or awareness of audience for which the communication is intended 	<ul style="list-style-type: none"> Demonstrates some ability to communicate in a manner appropriate to the audience 	<ul style="list-style-type: none"> Demonstrates ability to communicate appropriate to the audience 	<ul style="list-style-type: none"> Consistently demonstrates ability to communicate in a manner appropriate to the audience
3.2. Demonstrates clear and logical thought	<ul style="list-style-type: none"> Does not demonstrate clear or logical thought in their communication 	<ul style="list-style-type: none"> Communication does not sufficiently conceptualize case variables or analyze subject under discussion 	<ul style="list-style-type: none"> Demonstrates general clear or logical thought in their communication 	<ul style="list-style-type: none"> Communication demonstrates clear and focused thinking
3.3. Demonstrates effective use of language in their communication	<ul style="list-style-type: none"> Does not know professional psychological language or uses jargon Does not know the proper technical language regarding mental health treatment 	<ul style="list-style-type: none"> Demonstrates inaccurate use of psychological language or uses jargon in professional communications Utilizes scientific language that is incomprehensible to patients 	<ul style="list-style-type: none"> Demonstrates appropriate use of professional language and minimal jargon Utilizes generalized language to interact with patients 	<ul style="list-style-type: none"> Demonstrates use of appropriate, professional language Utilizes generalized language to interact with patients
3.4. Demonstrates appropriate active listening techniques	<ul style="list-style-type: none"> Does not acknowledge other viewpoints 	<ul style="list-style-type: none"> Demonstrates little attempt to recognize other viewpoints 	<ul style="list-style-type: none"> Recognizes other viewpoints but has difficulty incorporating them 	<ul style="list-style-type: none"> Listens to questions with a consideration of alternative

Exhibit D

when addressing questions	<ul style="list-style-type: none"> • Has great difficulty answering questions 	<ul style="list-style-type: none"> • Answers are simplistic and lack intellectual depth 	into case conceptualization <ul style="list-style-type: none"> • Adequately answers patient questions 	viewpoints <ul style="list-style-type: none"> • Answers questions thoughtfully referencing evidence
3.5. Orally communicates meaning to audience	<ul style="list-style-type: none"> • Vocal delivery is too soft or too fast • Long, unintended silences and/or speech disruptions frequently distract audience • Speaker makes no attempt to engage audience 	<ul style="list-style-type: none"> • Vocal delivery is audible • Speech rate or volume disruptions occasionally distract from comprehension • Attempts to engage audience 	<ul style="list-style-type: none"> • Vocal delivery is varied and dynamic • Speech rate, volume, and tone enhance listener interest and facilitate understanding • Generally engages audience 	<ul style="list-style-type: none"> • Vocal delivery is varied and dynamic • Speech rate, volume, and tone enhance listener interest and facilitate understanding • Thoroughly engages audience
3.6. Utilizes non-verbal means to enhance message	<ul style="list-style-type: none"> • Eye contact, body language, and facial expressions are inappropriate 	<ul style="list-style-type: none"> • Eye contact, body language, and facial expressions neither enhance nor hinder oral effectiveness 	<ul style="list-style-type: none"> • Use of eye contact, body language, and facial expressions are mostly consistent with the verbal message 	<ul style="list-style-type: none"> • Use of eye contact, body language, and facial expressions that are consistent with the verbal message

ILO 4: Professionalism. Interact with respect, empathy, diplomacy, and cultural competence

Indicators	Initial	Developing	Developed	Proficient
4.1. Demonstrates professional attitudes and behaviors	<ul style="list-style-type: none"> • Does not generally demonstrate professional attitudes or behaviors expected from a dentist 	<ul style="list-style-type: none"> • Demonstrates some attitudes and behaviors that may be characteristic of a dentist 	<ul style="list-style-type: none"> • Generally demonstrates attitudes and behaviors expected from a dentist 	<ul style="list-style-type: none"> • Consistently demonstrates attitudes and behaviors expected from a dentist
4.2. Demonstrates personal responsibility and accountability	<ul style="list-style-type: none"> • Does not demonstrate personal accountability or responsibility for work completed 	<ul style="list-style-type: none"> • Demonstrates minimal personal accountability and responsibility for work completed 	<ul style="list-style-type: none"> • Demonstrates personal accountability and responsibility for the work completed 	<ul style="list-style-type: none"> • Consistently demonstrates personal accountability and responsibility for work completed
4.3. Demonstrates respectful and sensitive behaviors to the cultural and linguistic needs of diverse patients	<ul style="list-style-type: none"> • Does not demonstrate an awareness of patients' customs, beliefs, or perspectives • Does not demonstrate awareness of linguistic needs of patients 	<ul style="list-style-type: none"> • Demonstrates a minimal level of awareness of customs, beliefs, or perspectives of patients • Demonstrates minimal awareness of cultural and linguistic needs of patients 	<ul style="list-style-type: none"> • Demonstrates awareness of customs and beliefs • Demonstrates awareness of the cultural and linguistic needs of patients 	<ul style="list-style-type: none"> • Demonstrates awareness of customs, beliefs, or perspectives in patients • Demonstrates full awareness and responds to the cultural and linguistic needs of patients
4.4. Demonstrates professional	<ul style="list-style-type: none"> • Appears inattentive and impatient • Uses inappropriate 	<ul style="list-style-type: none"> • Appears unfocused and distracted • Uses acceptable 	<ul style="list-style-type: none"> • Appears composed and focused • Uses appropriate 	<ul style="list-style-type: none"> • Uses articulate, tactful, and diplomatic speech

Exhibit D

demeanor	body language • Dresses in attire that is inappropriate	body language • Dresses in attire that is not offensive	body language • Dresses in attire that is professional	<ul style="list-style-type: none">• Uses professional body language• Dresses in attire that is professional, and well-suited for the environment
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Exhibit D

ILO 5: Quantitative reasoning: Demonstrate ability to use mathematics and statistics in problem solving

Indicators	Initial	Developing	Developed	Proficient
5.1. Demonstrates ability to perform calculations and apply mathematical principles to solve problems	<ul style="list-style-type: none"> Does not demonstrate ability to apply statistical or psychometric principles 	<ul style="list-style-type: none"> Demonstrates ability to perform basic statistical calculations but does not know how to apply psychometric principles to solve problems 	<ul style="list-style-type: none"> Demonstrates ability to perform most statistical calculations accurately and to apply psychometric principles to solve problems 	<ul style="list-style-type: none"> Consistently demonstrates ability to perform statistical calculations accurately and to appropriately apply psychometric principles to solve problems
5.2. Demonstrates understanding of experimental designs and methodology	<ul style="list-style-type: none"> Displays difficulty proposing a basic experiment or research project 	<ul style="list-style-type: none"> Comprehends basic experiments designed by others 	<ul style="list-style-type: none"> Evaluates research, method, and protocol to review valid and reliable research 	<ul style="list-style-type: none"> Proposes appropriate and innovative designs to address a new hypothesis and research question
5.3. Demonstrates logical and appropriate interpretation of data	<ul style="list-style-type: none"> Demonstrates a limited ability to interpret scientific data 	<ul style="list-style-type: none"> Attempts to interpret scientific data 	<ul style="list-style-type: none"> Demonstrates the ability to interpret scientific data 	<ul style="list-style-type: none"> Interprets data in the context of current scientific knowledge
5.4. Demonstrates logical thought patterns in generating conclusions	<ul style="list-style-type: none"> Does not generate conclusions based on current scientific data and statistics 	<ul style="list-style-type: none"> Generates conclusions that may be based on current scientific data and statistics 	<ul style="list-style-type: none"> Generates conclusions using scientific and statistical data 	<ul style="list-style-type: none"> Accurately generates conclusions using appropriate scientific and mathematical data

ILO 6: Information literacy: Identify and search relevant libraries of information and databases; synthesize information obtained from primary literature using properly referenced citations

Indicators	Initial	Developing	Developed	Proficient
6.1. Demonstrates appropriate ability search and acquire resources	<ul style="list-style-type: none"> Does not identify or solicit help in obtaining external resources to support topic 	<ul style="list-style-type: none"> Identified resources may not be sufficient in quality and infrequently solicits guidance from library personnel 	<ul style="list-style-type: none"> Identifies resources appropriate for scientific inquiry and solicits guidance from library personnel 	<ul style="list-style-type: none"> Identifies a variety of relevant sources and regularly seeks guidance from library personnel
6.2. Demonstrates appropriate incorporation of references	<ul style="list-style-type: none"> Does not incorporate references 	<ul style="list-style-type: none"> Incorporates references from psychological sources that do not clearly support 	<ul style="list-style-type: none"> Incorporates relevant references that generally supports ideas 	<ul style="list-style-type: none"> Incorporates relevant references from respected psychological sources

Exhibit D

		ideas		
6.3. Demonstrates appropriate citation of references	<ul style="list-style-type: none">• Does not use citations	<ul style="list-style-type: none">• Uses citations but they are not formatted in APA style	<ul style="list-style-type: none">• Demonstrates use of appropriate citations in context	<ul style="list-style-type: none">• Uses properly cited references and includes all necessary information in reference list



California Northstate University College of Dental Medicine

Course Syllabus

Course #	Course Title	Credits	Year	Term
ODONT522	<i>Cariology</i>	3	DS1	Spring

Credit Hour Policy

For each 15-week semester, one (1) hour of credit is assigned per hour each week of classroom or direct faculty didactic instruction (that is, per hour of lecture or student in-class time) and a minimum of two (2) hours of out-of-class student work (homework). For practicum and internship time, one (1) hour of credit is assigned per three (3) hours each week of student time spent in this activity.

Maximum Enrollment: 80

Calendar of Important Dates:

Date	
August 12, 2021	First day of Fall term for all DMD 1 students
September 2, 2021	First Quiz
September 30, 2021	Midterm exam
November 4, 2021	Second Quiz
December 16, 2021	Final Exam

Course Coordinator, Instructors and Contact Information

Course Director: Richard Simonsen, DDS

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Exhibit D

Room:

E mail: Richard.Simonsen@cnsu.edu

Office hours

Holly Jacobson BA (course administrator)

Room: xxx

E mail: holly.jacobson@cnsu.edu

Classroom and Meeting Times

Room: Classroom xxxx

Time: xxxx 2 hours per week

Clinic and meeting times

Room:

Time:

Course Description

The course is designed to teach student dentist understand the caries disease etiology and the development of the disease. Also the course teaches student dentist how to diagnose the disease, evaluate and access the risk, then able to develop a plan to treat and prevent the caries disease.

Furthermore, the student will learn how to educate patient about the caries disease and how to prevent the disease.

Prerequisite Courses

ODONT 521: Dental Anatomy

Prerequisite Knowledge

A basic knowledge of Dental Anatomy

Required Textbook(s) and Material(s)

Cariology, third edition, by Ernest Newbrun

Technology

1. Computer-assisted instruction (Clickers) and SCANTRON Sheets
2. Web-based course management (Canvas) and Examsoft
3. Audio/Video recordings where applicable
4. PowerPoint
5. Epic electronic health record
6. PACS, DICOM compatible imaging software

Evaluation Components

In keeping with the Team Based Learning (TBL) approach, grades will be determined as follows:

Individual Components	80%
First Quiz	10%
Midterm	25%
Second Quiz	10%
Final Exam	35%

Team Components	20%
CCBL Participation and	10%
Peer Review	10%

GRADING

All students must demonstrate minimal individual competency. Therefore, students earning less than 75% on the total Individual component score will not have team component scores added to calculate their final course grade. During the course, students who score less than 75% on individual components may be subject to periodic course content review and may receive an Academic Alert.

In order to progress from one semester to the next, students must pass all courses with a letter a grade of C or higher and maintain a minimum cumulative grade point average (GPA) of 2.0. The breakdown for assignment of letter grades and grade points for each letter grade are as follows:

Percent	Letter Grade/Action
90.0 – 100%	A
80.0 – 89.9%	B
75.0 – 79.9%	C - Pass
60.0 – 74.9%	D – Requiring remediation (successful

	remediation recorded as C, unsuccessful remediation recorded as F)
Below 60.0%	F – Fail (course must be repeated)
Incomplete	I

Incomplete

During a semester, a student may not complete all required assignments and/or examinations due to extenuating circumstances, such as, but not limited to, an illness or a family emergency. In such a case, the course director may give a grade of Incomplete for the course. The course with the incomplete grade has to be completed successfully within the time frame as being defined by the student's academic plan, normally in the same academic year, otherwise a leave of absence would be required.

Core-Course Policies

All students are required to adhere to the Academic Policies that impact on student progression and conduct while attending the DMD program, including the following: Academic Progression Policy, Excused Absence Policy, Exam Policy, Course Grade Appeal Policy, Course Add/Drop Policy and Attendance Policy. Refer to the current Student Handbook for the detailed policies.

Course Specific Policies

1. Group Projects cases are to be submitted via CANVAS by 11:59pm PST on the deadline indicated. Only one group member should submit the assignment on behalf of the group. The course coordinator reserves the right to deduct points for late submission (20% of assignment grade for every 24 hours the assignment is turned in late).
Presentation of group cases requires the active participation of each team member, preferably presenting the component of the case the student was responsible for developing. The teams will each have 30 minutes for presentation which is ample time for participation of each member
2. Grade appeal for any individual assignments (including exams) should be submitted to the course coordinator in writing within 5 business days of grade release.
3. There will be no rounding of the final grade for this course.

Topics and Schedule

(Subject to change. Updates will be posted to CANVAS and announced by email)

All readings are in Vital Source, or as assigned and posted to CANVAS

Each didactic session including LAL is 2 hours. Each clinical session is 4 hours. Students are divided into groups of 4 students (groups 1-20) for each of their 3 sessions. Each group of 4 will attend either Monday, Tuesday, Wednesday or Thursday clinic.

Date	Topics	Readings*	Instructor	Notes
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Exhibit D

Week 1 LAL	Introduction and Overview		Simonsen	
Week 2	Histology and Early theory of the etiology of Caries Current Concept of Caries Etiology	Chapter 1,2	Simonsen	
Week 3	Microflora Substrate of Diet and Caries	Chapter 3,4	Simonsen	
Week 4:	Sugar, Sugar Substitutes, and Noncaloric Sweetening Agents Dental Deposits	Chapter 5,6	Simonsen	
Week 5:	Histology of Dental Caries Caries Activity Test	Chapter 7,8	Simonsen	
Week 6	Dentifrices	Chapter 9	Simonsen	
Week 7	Mid Term Exam		Simonsen	

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Week 8	Occlusal Sealants	Chapter 10	Simonsen	
Week 9	Occlusal Sealants Cont'd	Chapter 10, Cont'd	Simonsen	
Week 10	The Uses of Fluorides in Preventive Dentistry	Chapter 11	Simonsen	
Week 11	The Uses of Fluorides in Preventive Dentistry Cont'd	Chapter 11, Cont'd	Simonsen	
Week 11				
Week 12	Control and Prevention of Dental Caries Continue	Chapter 12	Simonsen	
Week 12				
Week 13	Control and Prevention of Dental Caries, Cont'd	Chapter 12, Cont'd	Simonsen	
Week 13				
Week 14	Summary and overview		Simonsen	
Week 14				
Week 15	Final Exam		Simonsen	

Course Learning Outcomes and links to Program Learning Outcomes (Appendix A) and Institutional Learning Outcomes (Appendix B)

No.	Course Learning Outcome	DMD PLO	DMD ILO	Learning Hierarchy ^b	Assessment Method
1	Develop an understanding of the caries etiology	1,2,3,4,7	1,2,3,4,6	1,2,3	Quizzes, Final exam
2	Develop an understanding of Histopathology of dental caries	1,2,3,4,7	2,3,4,6	1,2	Quizzes, Final Exam
3	Develop an ability to access etiology and risk factors for caries disease	1,2,3,4,5,6,8	1,2,3,4,6	1,2,3	Quizzes, Final Exam
4	Demonstrate an ability to control and prevent dental caries with various methods	1,2,3,4,6,8	1,2,4,6	1,2,3	Quizzes, Final Exam

^a plo's appendix A

^b Learning Hierarchy based on Bloom's Taxonomy with 1=Memorization and/or Comprehension; 2=Application and/or Analysis; 3=Synthesis and/or Evaluation.

Teaching/ Learning Methodology

1. LAL: Lecture and active learning **CLO Rubrics**
2. Peer Group Assessments
3. Group projects

CLO Rubrics

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CLO 1: Develop a comprehensive understanding of the etiology of caries, what is the caries develop process and the risk factors affect the cavity developing.

Indicators	Initial	Developing	Developed	Proficient
Demonstrates an understanding of the etiology of the caries disease, how the disease develop, and what are the risk factors.	Does not understand the etiology of the caries disease, how the disease develop, and what are the risk factors.	Demonstrates a rudimentary understanding of these elements	Has a detailed understanding of the etiology of the caries disease, how the disease develop and what are the risk factors.	Consistently demonstrates the ability to apply the knowledge and skill as a dental student and can assist other students in this domain

CLO 2: Develop skills in oral diagnosis and develop preventive methods to individual patient

Indicators	Initial	Developing	Developed	Proficient
Demonstrates skills in oral diagnosis and prevention of future disease.	Has no or limited skills in the oral diagnosis and prevention of future disease.	Demonstrates a rudimentary understanding or oral diagnosis and prevention of future disease.	Is capable of applying basic scientific knowledge to clinical examples	Consistently applies biomedical knowledge to clinical situations utilizing innovation and analysis

Appendix A

Program Learning Outcomes (PLOs) CNU College of Dental Medicine

1. Patient-Centered Care: Demonstrate understanding of healthcare disparities and cultural awareness in patient counseling and patient advocacy
2. Evidence-Based Care: Apply current, evidence-based oral healthcare within the scope of general dentistry
3. Culturally competent, empathic communication: Demonstrate patient centered, empathic, and culturally competent communication and interpersonal skills
4. Oral and Written Communication: Demonstrate sound oral and written communications in patient care
5. Critical Thinking: Utilize critical thinking, problem solving skills and systemic thinking in assessing and making reasoned, evidence-based decisions in patient care
6. Ethics and Professionalism: Demonstrate professionalism and ethical decision making
7. Biomedical Sciences Knowledge: Demonstrate an understanding of the fundamentals of biomedical sciences and apply them appropriately in oral healthcare
8. Practice Management: Apply legal, regulatory and business management concepts related to provision of oral healthcare services

DMD Program Learning Outcomes (PLOs) Proficiency Rubric

PLO 1: Patient-Centered Care

Demonstrate understanding of healthcare disparities and cultural awareness and capability in patient counseling and providing appropriate patient advocacy

Indicators	Initial	Developing	Developed	Proficient
1.1. Education. Demonstrates ability to educate all audiences through effectively communicating information and assessing learning	<ul style="list-style-type: none"> Does not appropriately counsel patients Does not check for understanding, ask questions, and/or asks inappropriate questions. 	<ul style="list-style-type: none"> Counsels patients but leaves out pertinent information needed by patient Communicates with basic level of clarity but 	<ul style="list-style-type: none"> Generally demonstrates empathy, communicates accurate information clearly, checks for understanding Seeks to ensure 	<ul style="list-style-type: none"> Consistently demonstrates empathy, communicates accurate information clearly, checks for understanding Ensures

	<ul style="list-style-type: none"> Does not demonstrate the ability to find and utilize appropriate resources and references necessary for providing accurate counseling, consultation and education 	<p>does not always check for understanding or rephrase when confusion occurs.</p> <ul style="list-style-type: none"> Demonstrates the ability to find a one or two resources, yet the resources are not the best or most appropriate for providing accurate counseling, consultation and education 	<p>understanding and generally asks questions.</p> <ul style="list-style-type: none"> Frequently demonstrates the ability to find and utilize appropriate resources and references necessary for providing accurate counseling, consultation and education 	<p>understanding and asks appropriate questions.</p> <ul style="list-style-type: none"> Consistently demonstrates the ability to find and utilize appropriate resources and references for providing accurate patient counseling, consultation and education
1.2. Patient advocacy. Represents the patient's best interests	<ul style="list-style-type: none"> Does not demonstrate the ability represent a patient's best interest 	<ul style="list-style-type: none"> Demonstrates awareness of issues that impact a patient Demonstrates minimal ability to articulate these issues but does not demonstrate ability to sufficiently advocate on a patient's behalf 	<ul style="list-style-type: none"> Demonstrates sufficient awareness of issues that impact a patient Demonstrates ability to articulate these issues Demonstrates ability to sufficiently advocate on a patient's behalf 	<ul style="list-style-type: none"> Demonstrates full awareness of the most important issues that impact a patient Demonstrates ability to clearly and effectively articulate these issues Demonstrates ability to effectively advocate on a patient's behalf

PLO 2: Evidence-Based Care.

Apply sound, current, and evidence-based oral healthcare within the scope of general dentistry

Indicators	Initial	Developing	Developed	Proficient
2.1. Patient-centered care. Demonstrates ability to provide patient-centered care as the	<ul style="list-style-type: none"> Does not demonstrate ability to provide patient-centered care at the medication expert level; e.g., 	<ul style="list-style-type: none"> Demonstrates ability to provide patient-centered care as the medication expert in some, but not all, areas 	<ul style="list-style-type: none"> Demonstrates ability to provide patient-centered care as the medication expert (generally demonstrates 	<ul style="list-style-type: none"> Demonstrates ability to provide sufficient patient-centered care as the expert (collects and

medication expert (collect and interpret evidence, prioritize, formulate assessments and recommendations, implement, monitor and adjust plans, and document activities)	demonstrates ability to collect but not sufficiently interpret evidence, does not prioritize, formulates basic assessments and recommendations, does not sufficiently monitor and adjust plans nor document activities.	as follows: collect and interpret evidence, prioritize, formulate assessments and recommendations, implement, monitor and adjust plans, and document activities	ability to collect and interpret evidence, prioritize, formulate assessments and recommendations, implement, monitor and adjust plans, and document activities)	interprets evidence, prioritizes, formulates assessments and recommendations, implements, monitors and adjusts plans, and documents activities)
2.2. Systems management. Demonstrates ability to manage patient healthcare needs using human, financial, technological, and physical resources to optimize the safety and efficacy of medication use systems	<ul style="list-style-type: none"> • Does not demonstrate understanding of oral healthcare delivery systems parts • Does not demonstrate understanding of the forces that influence components of the oral healthcare delivery system, including their connection to patient care • Does not demonstrate understanding of any challenges to systems that affect oral healthcare delivery <p>Does not demonstrate understanding of how to work with different subsystems to deliver oral</p>	<ul style="list-style-type: none"> • Demonstrates understanding of some parts of oral healthcare delivery systems but does not identify how they are related to each other • Demonstrates understanding of some forces that influence the parts of healthcare delivery systems, but demonstrate minimal understanding of their connection to patient care • Demonstrates understanding of some challenges that can affect delivery of oral healthcare • Demonstrates some understanding of how to work with different subsystems and how they 	<ul style="list-style-type: none"> • Demonstrates understanding of most major components of oral healthcare systems and their respective relationships • Demonstrates understanding of the forces that influence the components of healthcare delivery systems, and demonstrate some understanding of their influence on the quality of patient care • Demonstrates understanding of most challenges that can affect delivery of oral healthcare, but does not demonstrate complete comprehension of the effects <p>Demonstrates basic</p>	<ul style="list-style-type: none"> • Demonstrates understanding of the major components of oral healthcare systems, their respective relationships, and their functions related to patient care • Demonstrates thorough understanding of the forces that influence components of healthcare delivery systems and demonstrate full understanding of their influence and implications on the quality of patient care • Demonstrates understanding of pertinent challenges to specific aspects of healthcare delivery by demonstrating

	healthcare	function to deliver oral healthcare, but demonstrate minimal awareness or understanding of one's own role within the oral healthcare delivery system	understanding of how to work with different subsystems and how they function to deliver oral healthcare and demonstrate some understanding of one's role within the oral healthcare delivery system, but does not necessarily demonstrate application of knowledge in a manner that maximizes the quality of oral healthcare	abilities to thoroughly discuss the implications for the appropriate parts of oral health care delivery systems Demonstrates excellent understanding of how to work with different subsystems involved while also demonstrating understanding of one's role within the subsystems, and demonstrate appropriate application of knowledge in a manner that maximizes the quality of oral healthcare
2.3. Health and wellness. Designs prevention, intervention, and educational strategies for individuals and communities to manage chronic disease and improve oral health and wellness	<ul style="list-style-type: none"> Does not demonstrate understanding of how the arts can be utilized to optimize patients' well-being 	<ul style="list-style-type: none"> Demonstrates knowledge of some of the ways that the arts can be utilized to optimize patients' well-being 	<ul style="list-style-type: none"> Demonstrates sufficient knowledge of multiple ways that the arts can be utilized to optimize patients' well-being 	<ul style="list-style-type: none"> Demonstrates thorough knowledge of the ways that the arts can be utilized to optimize patients' well-being and creatively applies this knowledge to improve well-being and the practice and delivery of oral healthcare
2.4. Population-based care.	<ul style="list-style-type: none"> Does not demonstrate 	<ul style="list-style-type: none"> Demonstrates minimal 	<ul style="list-style-type: none"> Demonstrates sufficient 	<ul style="list-style-type: none"> Demonstrates superb

Exhibit D

Demonstrates understanding of how population-based care influences patient-centered care and the development of practice guidelines and evidence-based best practices	awareness of population-based care.	<p>understanding of population-based care and how it influences patient-centered care</p> <ul style="list-style-type: none"> • Does not demonstrate awareness of how these notions influence the development of practice guidelines 	<p>understanding of population-based care and how it influences patient-centered care</p> <ul style="list-style-type: none"> • Demonstrates sufficient understanding of how population-based care influences the development of practice guidelines and best practices for patient care 	<p>understanding of population-based care and how it influences patient-centered care</p> <ul style="list-style-type: none"> • Demonstrates superb understanding of how population-based care influences the development of practice guidelines and demonstrates knowledge of best practices for patient care
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PLO 3: Culturally Competent, Empathic Communication.

Demonstrate patient centered, empathic and culturally competent communication and interpersonal skills

Indicators	Initial	Developing	Developed	Proficient
3.1. Empathy. Demonstrates the ability to communicate with the patient empathically.	<ul style="list-style-type: none"> Does not demonstrate the ability to communicate with the patient empathically. 	<ul style="list-style-type: none"> Demonstrates some ability, but experiences lapses in the ability to communicate empathically 	<ul style="list-style-type: none"> Demonstrates the ability to communicate empathically, with few lapses. 	<ul style="list-style-type: none"> Demonstrates an advanced ability, and never experiences lapses in communicating empathically.
3.2. Cultural competence. Demonstrates the ability to engage in communication with the patient that is culturally aware and accepting.	<ul style="list-style-type: none"> Does not demonstrate communication and interactions that convey respect or concern for patients and the community. Does not demonstrate an awareness of customs, beliefs, or perspectives in diverse patients Does not demonstrate awareness of cultural and linguistic needs of patients in order to communicate health information 	<ul style="list-style-type: none"> Demonstrates communication and interactions characteristic of a minimal level of respect, and little concern for patients and the community is apparent through use of some appropriate communication, but student does not employ follow-up questions for clarification, when necessary, and student provides inappropriate detail in responses Demonstrates a minimal level of awareness of customs, beliefs, or perspectives in diverse patients Demonstrates minimal awareness of cultural and 	<ul style="list-style-type: none"> Demonstrates appropriate communication and interactions that are characteristic of a basic level of respect, and concern for patients and the community is apparent through use of appropriate communication, where student uses some clear, but not necessarily relevant or detailed, follow-up questions and responses Demonstrates awareness of customs and beliefs, but may not clarify with patients about personal perspectives Demonstrates awareness of the cultural and 	<ul style="list-style-type: none"> Demonstrates professional communication and interactions by showing empathy, respect, and concern for patients and the community through use of appropriate communication where follow-up questions (as needed) and responses are clear, relevant, and detailed Demonstrates awareness of customs, beliefs, or perspectives in diverse patients; ask appropriate questions to clarify perspectives and perceptions in diverse patients Demonstrates full awareness of and responsiveness to

		linguistic needs of patients; either does not or only attempt to adapt behaviors, but does so ineffectively, to communicate health information	linguistic needs of diverse patients, and adapt behaviors to communicate health information, but communication may not be effective	cultural and linguistic needs of diverse patients by adapting behaviors appropriately in order to effectively communicate health information
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PLO 4: Oral and Written Communication.

Demonstrate sound oral and written communications in patient care

Indicators	Initial	Developing	Developed	Proficient
4.1. Oral communication. Demonstrate sound oral communication in patient care.	<ul style="list-style-type: none"> Does not demonstrate logical reasoning in oral communications in patient care. Does not demonstrate the ability to cite sound evidence that support ideas within presentations or discussions. 	<ul style="list-style-type: none"> Demonstrates some logical reasoning in oral communications in patient care but demonstrates some lapses. Demonstrates some ability to cite sound evidence that support ideas within presentations or discussions, but demonstrates some lapses. 	<ul style="list-style-type: none"> Generally demonstrates logical reasoning in oral communications in patient care. Generally demonstrates the ability to cite sound evidence that support ideas within presentations or discussions. 	<ul style="list-style-type: none"> Consistently demonstrates logical reasoning in oral communications in patient care. Consistently demonstrates the ability to cite sound evidence that support ideas within presentations or discussions.
4.2. Written communication. Demonstrate sound written communication in patient care.	<ul style="list-style-type: none"> Does not demonstrate logical reasoning in written communications in patient care. Does not demonstrate the written ability to cite sound evidence that support ideas. 	<ul style="list-style-type: none"> Demonstrates some logical reasoning in written communications in patient care but demonstrates some lapses. Demonstrates some written ability to cite sound evidence that support ideas, but demonstrates some lapses. 	<ul style="list-style-type: none"> Generally logical reasoning in written communications in patient care. Generally demonstrates the written ability to cite sound evidence that support ideas. 	<ul style="list-style-type: none"> Consistently demonstrates logical reasoning in written communications in patient care. Consistently demonstrates the written ability to cite sound evidence that support ideas.

PLO 5: Critical Thinking.

Utilize critical thinking, problem solving skills and systemic thinking in assessing and making reasoned, evidence-based decisions in patient care

Indicators	Initial	Developing	Developed	Proficient
5.1. Problem solving. Identifies problems; explore and prioritize potential strategies; and designs, implements, and evaluates viable solutions	<ul style="list-style-type: none"> Is not able to correctly identify the problem or issue being considered. Does not identify appropriate resources. Includes extraneous information or inappropriate or insufficient resources. Does not demonstrate understanding of the content of materials reviewed. Makes inappropriate inferences. Does not evaluate possible alternatives or generates ideas that are illogical or extraneous to issue at hand. Does not propose a solution or does not articulate decision. Does not adequately provide rationale for selected alternative or 	<ul style="list-style-type: none"> Identifies the problem or issue but does not demonstrate awareness of all the factors associated with the problem or issues that impact decision making. Identifies a few, but not all, resources needed for decision making. Demonstrates ability to interpret some information and data but not all. Does not fully or effectively evaluate alternative solutions. Proposes a decision with many apparent weaknesses (i.e., not feasible, lack of regard for consequences, lack of supporting evidence, illogical, irrelevant to issue at hand, etc.). Provides 	<ul style="list-style-type: none"> Correctly identifies problem or issue being considered and demonstrates adequate awareness of the factors associated with this problem or issue that impact decision making. Identifies most of the resources needed. Demonstrates ability to interpret most information and data. Considers and evaluates possible solutions in a way that generally leads to a logical decision or course of action. Proposes a solution that does not contain apparent weaknesses that may or may not be the obvious clear choice. Solutions chosen demonstrate consideration of 	<ul style="list-style-type: none"> Consistently correctly identifies the problem or issue being considered and all of the primary factors associated with this problem or issue that impact decision making. Articulates the importance of these factors. Identifies all appropriate resources. Demonstrates ability to correctly interpret information and data needed for appropriate decision making. Demonstrates awareness of importance of these data in decision-making process. Considers and evaluates possible solutions effectively and thoroughly. Evaluation leads to sound, logical, and “best” decision or

	decision	rationale for selected alternative or decision but does not build a solid position with supporting evidence. Is unable to defend decision or course of action.	most of the strengths, weaknesses, feasibility, effects, consequences, relevance, etc.). Provides rationale for selected alternative or decision which includes some solid supporting evidence. Is able to defend decision or course of action at a basic level.	course of action. <ul style="list-style-type: none"> Proposes a solution that is entirely appropriate to the situation at hand. Solutions chosen demonstrate consideration of all of the important and relevant strengths, weaknesses, feasibility, effects, consequences, etc.). Provides rationale for selected alternative or decision and builds a solid position with appropriate and relevant supporting evidence. Effectively defends decision or course of action.
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PLO 6: Ethics and Professionalism.

Demonstrating professionalism and ethical decision making

Indicators	Initial	Developing	Developed	Proficient
6.1. Professionalism. Demonstrates behaviors and values that are consistent with the trust given to the profession by patients, other healthcare providers, and society	<ul style="list-style-type: none"> Does not consistently demonstrate professional attitudes and behaviors (altruism, excellence, duty, accountability, honesty, and integrity) Demonstrates frequent lapses in accountability or quality of work 	<ul style="list-style-type: none"> Demonstrates some professional attitudes and behaviors yet there is inconsistency that may impede on the quality of work or treatment of patients and other healthcare team members (altruism, excellence, duty, accountability, honesty, and integrity) 	<ul style="list-style-type: none"> Generally demonstrates most of the professional attitudes and behaviors (altruism, excellence, duty, accountability, honesty, and integrity) that are required in the profession Demonstrates ability to use these behaviors and values to improve healthcare 	<ul style="list-style-type: none"> Consistently demonstrates the professional attitudes and behaviors that uphold the integrity and competence of the work and the treatment of patients and other healthcare team professionals (altruism, excellence, duty, accountability, honesty, and integrity) Consistently uses these behaviors and values to improve healthcare
6.2. Ethics. Demonstrates the ability to make decisions consistent with the values of practitioners and scholars of oral healthcare.	<ul style="list-style-type: none"> Does not make ethical decisions consistent with the values of practitioners and scholars of oral healthcare. 	<ul style="list-style-type: none"> Demonstrates the ability to exercise ethical decision making, and a rudimentary knowledge of ethics within oral healthcare. 	<ul style="list-style-type: none"> Demonstrates the ability to exercise clear and ethical decision making, and a sufficient knowledge of ethics within oral healthcare. 	Demonstrates the ability to exercise clear and ethical decision making, and an advanced knowledge of ethics within oral healthcare.

PLO 7: Biomedical Sciences Knowledge.

Demonstrate an understanding of the fundamentals of biomedical sciences and apply them appropriately in oral healthcare

Indicators	Initial	Developing	Developed	Proficient
7.1. Diagnostic and pharmacologic. Demonstrates the ability to describe how to deliver patient assessments, knowledge of medicines, and delivering diagnoses.	<ul style="list-style-type: none"> Does not demonstrate the ability to describe diagnostic and pharmacologic knowledge related to oral health. 	<ul style="list-style-type: none"> Demonstrates a rudimentary ability to describe diagnostic and pharmacologic knowledge related to oral health. 	<ul style="list-style-type: none"> Demonstrates a sufficient ability to describe diagnostic and pharmacologic knowledge related to oral health. 	<ul style="list-style-type: none"> Demonstrates an advanced ability to describe diagnostic and pharmacologic knowledge related to oral health.
7.2. Orofacial pain/temporomandibular/ Sleep disorder. Demonstrates the ability to describe the anatomical, physiological, and neurological basis; classification, epidemiology, and etiology; and assessments and treatments of orofacial pain, temporomandibular joint disease, and sleep disorders.	<ul style="list-style-type: none"> Does not demonstrate the ability to describe scientific or assessment knowledge related to OFP/TMJ disease and sleep disorders. 	<ul style="list-style-type: none"> Demonstrates a rudimentary ability to describe scientific or assessment knowledge related to OFP/TMJ disease and sleep disorders. 	<ul style="list-style-type: none"> Demonstrates a sufficient ability to describe scientific or assessment knowledge related to OFP/TMJ disease and sleep disorders. 	<ul style="list-style-type: none"> Demonstrates an advanced ability to describe scientific or assessment knowledge related to OFP/TMJ disease and sleep disorders.
7.3. Maxillofacial pathology Demonstrates the ability to describe the scientific aspects of head and neck diseases, as well as knowledge of assessment and diagnosis.	<ul style="list-style-type: none"> Does not demonstrate the ability to describe the scientific or assessment knowledge related to head and neck diseases. 	<ul style="list-style-type: none"> Demonstrates a rudimentary ability to describe the scientific or assessment knowledge related to head and neck diseases. 	<ul style="list-style-type: none"> Demonstrates a sufficient ability to describe the scientific or assessment knowledge related to head and neck diseases. 	<ul style="list-style-type: none"> Demonstrates an advanced ability to describe the scientific or assessment knowledge related to head and neck diseases.

PLO 8: Practice Management.

Apply legal, regulatory, and business management concepts related to the provision of oral healthcare services

Indicators	Initial	Developing	Developed	Proficient
8.1. Legal aspects Applies legal and regulatory concepts related to the provision of oral healthcare services.	<ul style="list-style-type: none"> Does not demonstrate an understanding or the ability to apply legal and regulatory concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates a rudimentary understanding and ability to apply legal and regulatory concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates a sound understanding and ability to apply legal and regulatory concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates an advanced understanding and ability to apply legal and regulatory concepts related to the provision of oral healthcare sciences.
8.2. Business management Applies business management concepts to the provision of oral healthcare services.	<ul style="list-style-type: none"> Does not demonstrate an understanding or the ability to apply business management concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates a rudimentary understanding and ability to apply business management concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates a sound understanding and ability to apply business management concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates an advanced understanding and ability to apply business management concepts related to the provision of oral healthcare sciences.

Appendix B

California Northstate University Institutional Learning Objectives

ILO 1: Critical thinking: Exercise reasoned judgment to assess technical information and make well-informed decisions using evidence-based approaches

ILO 2: Written communication. Demonstrate the ability to write coherent, supported, and logically structured prose

ILO 3: Oral communication: Demonstrates oral communication skills

ILO 4: Professionalism. Interact with respect, empathy, diplomacy, and cultural competence

ILO 5: Quantitative reasoning: Demonstrate ability to use mathematics and statistics in problem solving

ILO 6: Information literacy: Identify and search relevant libraries of information and databases; synthesize information obtained from primary literature using properly referenced citations

DMD Institutional Learning Outcomes (ILOs) Proficiency Rubric

ILO 1: Critical thinking: Exercise reasoned judgment to assess technical information and make well-informed decisions using evidence-based approaches

Indicator	Initial	Developing	Developed	Proficient
1.1. Demonstrates identification of problem or issues	<ul style="list-style-type: none"> Does not correctly identify the problem or issue being considered Does not demonstrate understanding of the psychological factors that contribute to current patient state 	<ul style="list-style-type: none"> Identifies the problem or issue but does not demonstrate awareness of all the factors impacting decision making Demonstrates understanding of some possible psychological factors that contribute to current patient state 	<ul style="list-style-type: none"> Correctly identifies the problem or issue but does not demonstrate awareness of all factors impacting decision making Demonstrates understanding of most psychological factors that contribute to the current patient state 	<ul style="list-style-type: none"> Correctly identifies all of the primary factors associated with problem or issue impacting decision making Demonstrates thorough understanding of all possible psychological factors that contribute to the current patient state

Exhibit D

1.2. Demonstrates identification of resources	<ul style="list-style-type: none"> Does not identify appropriate resources 	<ul style="list-style-type: none"> Identifies a few resources needed 	<ul style="list-style-type: none"> Identifies most of the resources needed 	<ul style="list-style-type: none"> Correctly identifies all appropriate resources
1.3. Finds and interprets data needed for critical thinking and decision making	<ul style="list-style-type: none"> Does not demonstrate understanding of the data needed for critical thinking and decision making 	<ul style="list-style-type: none"> Demonstrates ability to interpret some data but not all 	<ul style="list-style-type: none"> Demonstrates ability to interpret most data 	<ul style="list-style-type: none"> Demonstrates ability to correctly interpret data needed for decision making
1.4. Demonstrates knowledge of alternatives when evaluating for possible solutions	<ul style="list-style-type: none"> Does not evaluate possible alternatives for treatment or diagnosis 	<ul style="list-style-type: none"> Does not effectively evaluate alternative treatment or diagnostic solutions 	<ul style="list-style-type: none"> Evaluates possible treatment and diagnostic solutions leading to a logical decision 	<ul style="list-style-type: none"> Effectively and thoroughly considers and evaluates possible diagnostic and treatment solutions
1.5. Proposes and selects appropriate solutions	<ul style="list-style-type: none"> Does not propose solutions to the client's needs 	<ul style="list-style-type: none"> Proposes solutions without consideration of alternatives 	<ul style="list-style-type: none"> Solutions chosen demonstrate consideration of most of the strengths, weaknesses, and consequences of the decision 	<ul style="list-style-type: none"> Proposes solutions that are appropriate to the situation and demonstrate consideration of all relevant strengths, weaknesses, and consequences
1.6. Presents rationale for course of action	<ul style="list-style-type: none"> Does not adequately provide rationale for treatment decision 	<ul style="list-style-type: none"> Provides rationale for decision but does not integrate into mental health treatment plan 	<ul style="list-style-type: none"> Provides rationale for decision with solid supporting evidence from available psychological literature and/or case factors 	<ul style="list-style-type: none"> Provides rationale for decision and with appropriate and relevant supporting case evidence and integrates findings into treatment plan

ILO 2: Written communication. Demonstrate the ability to write coherent, supported, and logically structured prose

Indicators	Initial	Developing	Developed	Proficient
2.1. Demonstrates knowledge and awareness of intended audience	<ul style="list-style-type: none"> Does not demonstrate knowledge or awareness of audience for which the document is intended 	<ul style="list-style-type: none"> Demonstrates some ability to craft a document appropriate for its audience 	<ul style="list-style-type: none"> Demonstrates ability to craft a document appropriate for its audience 	<ul style="list-style-type: none"> Consistently demonstrates ability to craft documents appropriate for the audience
2.2. Demonstrates clear and logical thought	<ul style="list-style-type: none"> Does not demonstrate clear or logical thought in their documentation 	<ul style="list-style-type: none"> Writing does not sufficiently conceptualize case variables or analyze subject under discussion 	<ul style="list-style-type: none"> Demonstrates general clear or logical thought in their documentation 	<ul style="list-style-type: none"> Research and clinical documentation demonstrates clear and focused thinking

Exhibit D

2.3. Demonstrates support for and development of ideas	<ul style="list-style-type: none"> Does not explain or develop ideas 	<ul style="list-style-type: none"> Demonstrates minimal support for ideas 	<ul style="list-style-type: none"> Writing contains examples that generally support ideas 	<ul style="list-style-type: none"> Supports ideas with relevant, clear, impactful examples
2.4. Demonstrates appropriate use of evidence to support arguments	<ul style="list-style-type: none"> Demonstrates an attempt to use proper citations to support ideas 	<ul style="list-style-type: none"> Uses credible and relevant sources to support ideas appropriate in the study of psychology 	<ul style="list-style-type: none"> Consistently uses credible and relevant sources to support ideas 	<ul style="list-style-type: none"> Demonstrates skillful use of credible and relevant sources to develop and support ideas
2.5. Demonstrates appropriate use of language, syntax, and mechanics	<ul style="list-style-type: none"> Has excessive or severe errors in language usage 	<ul style="list-style-type: none"> Generally conveys meaning to readers with clarity, though writing may include some errors 	<ul style="list-style-type: none"> Language conveys meaning to readers and writing contains very few errors 	<ul style="list-style-type: none"> Uses language effectively and skillfully to communicate meaning to readers

ILO 3: Oral communication: Demonstrates oral communication skills

Indicators	Initial	Developing	Developed	Proficient
3.1. Demonstrates knowledge and awareness of intended audience	<ul style="list-style-type: none"> Does not demonstrate knowledge or awareness of audience for which the communication is intended 	<ul style="list-style-type: none"> Demonstrates some ability to communicate in a manner appropriate to the audience 	<ul style="list-style-type: none"> Demonstrates ability to communicate appropriate to the audience 	<ul style="list-style-type: none"> Consistently demonstrates ability to communicate in a manner appropriate to the audience
3.2. Demonstrates clear and logical thought	<ul style="list-style-type: none"> Does not demonstrate clear or logical thought in their communication 	<ul style="list-style-type: none"> Communication does not sufficiently conceptualize case variables or analyze subject under discussion 	<ul style="list-style-type: none"> Demonstrates general clear or logical thought in their communication 	<ul style="list-style-type: none"> Communication demonstrates clear and focused thinking
3.3. Demonstrates effective use of language in their communication	<ul style="list-style-type: none"> Does not know professional psychological language or uses jargon Does not know the proper technical language regarding mental health treatment 	<ul style="list-style-type: none"> Demonstrates inaccurate use of psychological language or uses jargon in professional communications Utilizes scientific language that is incomprehensible to patients 	<ul style="list-style-type: none"> Demonstrates appropriate use of professional language and minimal jargon Utilizes generalized language to interact with patients 	<ul style="list-style-type: none"> Demonstrates use of appropriate, professional language Utilizes generalized language to interact with patients
3.4. Demonstrates appropriate active listening techniques	<ul style="list-style-type: none"> Does not acknowledge other viewpoints 	<ul style="list-style-type: none"> Demonstrates little attempt to recognize other viewpoints 	<ul style="list-style-type: none"> Recognizes other viewpoints but has difficulty incorporating them 	<ul style="list-style-type: none"> Listens to questions with a consideration of alternative

Exhibit D

when addressing questions	<ul style="list-style-type: none"> • Has great difficulty answering questions 	<ul style="list-style-type: none"> • Answers are simplistic and lack intellectual depth 	into case conceptualization <ul style="list-style-type: none"> • Adequately answers patient questions 	viewpoints <ul style="list-style-type: none"> • Answers questions thoughtfully referencing evidence
3.5. Orally communicates meaning to audience	<ul style="list-style-type: none"> • Vocal delivery is too soft or too fast • Long, unintended silences and/or speech disruptions frequently distract audience • Speaker makes no attempt to engage audience 	<ul style="list-style-type: none"> • Vocal delivery is audible • Speech rate or volume disruptions occasionally distract from comprehension • Attempts to engage audience 	<ul style="list-style-type: none"> • Vocal delivery is varied and dynamic • Speech rate, volume, and tone enhance listener interest and facilitate understanding • Generally engages audience 	<ul style="list-style-type: none"> • Vocal delivery is varied and dynamic • Speech rate, volume, and tone enhance listener interest and facilitate understanding • Thoroughly engages audience
3.6. Utilizes non-verbal means to enhance message	<ul style="list-style-type: none"> • Eye contact, body language, and facial expressions are inappropriate 	<ul style="list-style-type: none"> • Eye contact, body language, and facial expressions neither enhance nor hinder oral effectiveness 	<ul style="list-style-type: none"> • Use of eye contact, body language, and facial expressions are mostly consistent with the verbal message 	<ul style="list-style-type: none"> • Use of eye contact, body language, and facial expressions that are consistent with the verbal message

ILO 4: Professionalism. Interact with respect, empathy, diplomacy, and cultural competence

Indicators	Initial	Developing	Developed	Proficient
4.1. Demonstrates professional attitudes and behaviors	<ul style="list-style-type: none"> • Does not generally demonstrate professional attitudes or behaviors expected from a dentist 	<ul style="list-style-type: none"> • Demonstrates some attitudes and behaviors that may be characteristic of a dentist 	<ul style="list-style-type: none"> • Generally demonstrates attitudes and behaviors expected from a dentist 	<ul style="list-style-type: none"> • Consistently demonstrates attitudes and behaviors expected from a dentist
4.2. Demonstrates personal responsibility and accountability	<ul style="list-style-type: none"> • Does not demonstrate personal accountability or responsibility for work completed 	<ul style="list-style-type: none"> • Demonstrates minimal personal accountability and responsibility for work completed 	<ul style="list-style-type: none"> • Demonstrates personal accountability and responsibility for the work completed 	<ul style="list-style-type: none"> • Consistently demonstrates personal accountability and responsibility for work completed
4.3. Demonstrates respectful and sensitive behaviors to the cultural and linguistic needs of diverse patients	<ul style="list-style-type: none"> • Does not demonstrate an awareness of patients' customs, beliefs, or perspectives • Does not demonstrate awareness of linguistic needs of patients 	<ul style="list-style-type: none"> • Demonstrates a minimal level of awareness of customs, beliefs, or perspectives of patients • Demonstrates minimal awareness of cultural and linguistic needs of patients 	<ul style="list-style-type: none"> • Demonstrates awareness of customs and beliefs • Demonstrates awareness of the cultural and linguistic needs of patients 	<ul style="list-style-type: none"> • Demonstrates awareness of customs, beliefs, or perspectives in patients • Demonstrates full awareness and responds to the cultural and linguistic needs of patients
4.4. Demonstrates professional	<ul style="list-style-type: none"> • Appears inattentive and impatient • Uses inappropriate 	<ul style="list-style-type: none"> • Appears unfocused and distracted • Uses acceptable 	<ul style="list-style-type: none"> • Appears composed and focused • Uses appropriate 	<ul style="list-style-type: none"> • Uses articulate, tactful, and diplomatic speech

Exhibit D

demeanor	body language • Dresses in attire that is inappropriate	body language • Dresses in attire that is not offensive	body language • Dresses in attire that is professional	<ul style="list-style-type: none">• Uses professional body language• Dresses in attire that is professional, and well-suited for the environment
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Exhibit D

ILO 5: Quantitative reasoning: Demonstrate ability to use mathematics and statistics in problem solving

Indicators	Initial	Developing	Developed	Proficient
5.1. Demonstrates ability to perform calculations and apply mathematical principles to solve problems	<ul style="list-style-type: none"> Does not demonstrate ability to apply statistical or psychometric principles 	<ul style="list-style-type: none"> Demonstrates ability to perform basic statistical calculations but does not know how to apply psychometric principles to solve problems 	<ul style="list-style-type: none"> Demonstrates ability to perform most statistical calculations accurately and to apply psychometric principles to solve problems 	<ul style="list-style-type: none"> Consistently demonstrates ability to perform statistical calculations accurately and to appropriately apply psychometric principles to solve problems
5.2. Demonstrates understanding of experimental designs and methodology	<ul style="list-style-type: none"> Displays difficulty proposing a basic experiment or research project 	<ul style="list-style-type: none"> Comprehends basic experiments designed by others 	<ul style="list-style-type: none"> Evaluates research, method, and protocol to review valid and reliable research 	<ul style="list-style-type: none"> Proposes appropriate and innovative designs to address a new hypothesis and research question
5.3. Demonstrates logical and appropriate interpretation of data	<ul style="list-style-type: none"> Demonstrates a limited ability to interpret scientific data 	<ul style="list-style-type: none"> Attempts to interpret scientific data 	<ul style="list-style-type: none"> Demonstrates the ability to interpret scientific data 	<ul style="list-style-type: none"> Interprets data in the context of current scientific knowledge
5.4. Demonstrates logical thought patterns in generating conclusions	<ul style="list-style-type: none"> Does not generate conclusions based on current scientific data and statistics 	<ul style="list-style-type: none"> Generates conclusions that may be based on current scientific data and statistics 	<ul style="list-style-type: none"> Generates conclusions using scientific and statistical data 	<ul style="list-style-type: none"> Accurately generates conclusions using appropriate scientific and mathematical data

ILO 6: Information literacy: Identify and search relevant libraries of information and databases; synthesize information obtained from primary literature using properly referenced citations

Indicators	Initial	Developing	Developed	Proficient
6.1. Demonstrates appropriate ability search and acquire resources	<ul style="list-style-type: none"> Does not identify or solicit help in obtaining external resources to support topic 	<ul style="list-style-type: none"> Identified resources may not be sufficient in quality and infrequently solicits guidance from library personnel 	<ul style="list-style-type: none"> Identifies resources appropriate for scientific inquiry and solicits guidance from library personnel 	<ul style="list-style-type: none"> Identifies a variety of relevant sources and regularly seeks guidance from library personnel
6.2. Demonstrates appropriate incorporation of references	<ul style="list-style-type: none"> Does not incorporate references 	<ul style="list-style-type: none"> Incorporates references from psychological sources that do not clearly support 	<ul style="list-style-type: none"> Incorporates relevant references that generally supports ideas 	<ul style="list-style-type: none"> Incorporates relevant references from respected psychological sources

Exhibit D

		ideas		
6.3. Demonstrates appropriate citation of references	<ul style="list-style-type: none">• Does not use citations	<ul style="list-style-type: none">• Uses citations but they are not formatted in APA style	<ul style="list-style-type: none">• Demonstrates use of appropriate citations in context	<ul style="list-style-type: none">• Uses properly cited references and includes all necessary information in reference list



California Northstate University College of Dental Medicine

Course Syllabus

Course #	Course Title	Credits	Year	Term
ODONT 611	Operative Dentistry: LAL and LAB	6	DS 2	Summer/Fall

Credit Hour Policy

For each 15-week semester, one (1) hour of credit is assigned per hour each week of classroom or direct faculty didactic instruction (that is, per hour of lecture or student in-class time) and a minimum of two (2) hours of out-of-class student work (homework). For practicum and internship time, one (1) hour of credit is assigned per three (3) hours each week of student time spent in this activity.

Maximum Enrollment: 80

Calendar of Important Dates:

Date	
June 1, 2021	Start Summer Session DMD2
June XX, 2021	Quiz #1
July, XX 2021	Midterm/ Summer Session Final
Aug 3, 2021	First Day of Fall Term all DMD 2 students
September XX, 2021	Group project assignment
September XX, 2021	Quiz #2; Lab projects due
October XX, 2021	Quiz #3; Lab projects due
November XX, 2021	Quiz #4; Lab projects due
November XX, 2021	Start operative Competencies
December XX, 2021	Group presentations
December XX, 2021	Lab final

ODONT 611 Operative Syllabus

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December XX, 2020	Final exam
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Course Coordinator, Instructors and Contact Information

Course Director: Joel Whiteman DDS

Room:

E mail:

Office hours: Wednesday 12:00pm-1:00pm or by appointment

Course co-director: Richard Simonsen, DDS

Room:

E-mail:

Office hours: Wednesdays 12:00pm-1:00pm, and 3:00pm-4:00pm (or by appointment)

Holly Jacobson BA (course administrator)

Room: xxx

E mail: holly.jacobson@cnsu.edu

Classroom and Meeting Times

Room: Classroom xxxx

Time: xxxx 2 hours per week

Classroom LAB and Meeting Times

Room: Simulation Lab

Time: xxxxx 8 hours per week (4 credit hours)

Course Description

The course will focus on surgical treatment of caries, degenerative, and congenital diseases of the enamel and dentin. To effectively restore function to teeth through direct restorations a functional knowledge of the dental anatomy, instrumentation and material science is needed. These topics will be discussed in detail in the didactic portion of the course. A focus on minimally invasive procedures for caries management will be emphasized. The laboratory will provide instruction and development of the psychomotor skills necessary to perform direct restorations. A simulated clinical setting will help prepare the students for the treatment of caries and other degenerative diseases of the enamel and dentin through direct restorations.

Prerequisite Courses

ODONT 521: Dental Anatomy

ODONT 522: Cariology

Prerequisite Knowledge

A basic knowledge of Dentinal Anatomy and the biologic process of carious lesions.

Required Textbook(s) and Material(s)

- 1) *Summitt's Fundamentals of Operative Dentistry: A contemporary Approach, 4th Ed, Quintessence Publishing Co, 2013*
- 2) *Sturdevants's Art and Science of Operative Dentistry, 7th Ed, Elsevier Co, 2018*

Technology

1. Computer-assisted instruction (Clickers) and SCANTRON Sheets
2. Web-based course management (Canvas) and Examsoft
3. Audio/Video recordings where applicable
4. PowerPoint
5. Epic electronic health record
6. PACS, DICOM compatible imaging software
7. Dental operator
8. Simulator Lab

Evaluation Components

In keeping with the Team Based Learning (TBL) approach, grades will be determined as follows:

Individual Components	80%
Quiz #1	5%
Quiz #2	5%
Quiz #3	5%
Quiz #4	5%
Summer Session Final	20%
Final Exam	20%
Lab Exercises/Projects	20%

Team Components	20%
CCBL Participation and	10%
Peer Evaluation	10%

GRADING

All students must demonstrate minimal individual competency. Therefore, students earning less than 75% on the total Individual component score will not have team component scores added to calculate their final course grade. During the course, students who score less than 75% on individual components may be subject to periodic course content review and may receive an Academic Alert.

In order to progress from one semester to the next, students must pass all courses with a letter grade of C or higher and maintain a minimum cumulative grade point average (GPA) of 2.0. The breakdown for assignment of letter grades and grade points for each letter grade are as follows:

Percent	Letter Grade/Action
90.0 – 100%	A
80.0 – 89.9%	B
75.0 – 79.9%	C - Pass
60.0 – 74.9%	D – Requiring remediation (successful remediation recorded as C, unsuccessful remediation recorded as F)
Below 60.0%	F – Fail (course must be repeated)
Incomplete	I

Incomplete

During a semester, a student may not complete all required assignments and/or examinations due to extenuating circumstances, such as, but not limited to, an illness or a family emergency. In such a case, the course director may give a grade of Incomplete for the course. The course with the incomplete grade has to be completed successfully within the time frame as being defined by the student's academic plan, normally in the same academic year, otherwise a leave of absence would be required.

Core-Course Policies

All students are required to adhere to the Academic Policies that impact on student progression and conduct while attending the DMD program, including the following: Academic Progression Policy, Excused Absence Policy, Exam Policy, Course Grade Appeal Policy, Course Add/Drop Policy and Attendance Policy. Refer to the current Student Handbook for the detailed policies.

Course Specific Policies

1. Group Projects cases are to be submitted via CANVAS by 11:59pm PST on the deadline indicated. Only one group member should submit the assignment on behalf of the group. The course coordinator reserves the right to deduct points for late submission (20% of assignment grade for every 24 hours the assignment is turned in late).

Presentation of group cases requires the active participation of each team

member, preferably presenting the component of the case the student was responsible for developing. The teams will each have 30 minutes for presentation which is ample time for participation of each member

2. Grade appeal for any individual assignments (including exams) should be submitted to the course coordinator in writing within 5 business days of grade release.
3. There will be no rounding of the final grade for this course.

Topics and Schedule

(Subject to change. Updates will be posted to CANVAS and announced by email)

All readings are in Vital Source, or as assigned and posted to CANVAS

Each didactic session including LAL is 2 hours. Each clinical session is 4 hours. Students are divided into groups of 4 students (groups 1-20) for each of their 3 sessions. Each group of 4 will attend either Monday, Tuesday, Wednesday or Thursday clinic.

Date	Topics	Readings*	Instructor	Notes
Week 1 LAL	Introduction to Operative Dentistry and Biologic Considerations	Summitt CH 1 and Sturdevant Ch 1	Simonsen	
1: Lab	Typodont equilibration			
Week 2	Patient evaluation and treatment planning	Summitt CH 2,3 and 5		
2: Lab	Hand piece familiarization			
Week 3	Fundamentals of Tooth Preparation, Sealants, SDF and PRR restorations	Sturdevant CH 4		
Week 3: Lab	Begin initial tooth preparations			
Week 4:	Nomenclature and Instrumentation	Summitt CH 7		
Week 4 Lab	Differing tooth preparations			
Week 5:	Summer Session Midterm/Final			

Exhibit D

Week 5 Lab	Minimal Preparation/ sealant Midterm			
Week 6	Adhesion to enamel and Dentin	Summitt CH 9 and Sturdevant CH 5		
Week 6 Lab	Tooth Preparation Projects			
Week 7	Dental Biomaterials and Light Curing	Sturdevant CH 6, 13		
Week 7 Lab	Tooth Preparation Projects			
Week 8	Field Isolation and Pulpal Considerations	Summitt CH 6 and 8		Group Projection Assigned
Week 8 Lab	Isolation techniques/ Tooth preparation projects			
Week 9	Direct Anterior Restorations	Summitt CH 10and Sturdevant CH 8		
Week 9 Lab	Anterior composite projects			
Week 10	Additional Esthetic Procedures	Sturdevant CH 9		
Week 10 Lab	Anterior comp projects			
Week 11	Color and Shade matching	Summitt CH 4 and Sturdevant CH 9		
Week 11 Lab	Shade matching exercises			
Week 12	Direct posterior esthetic/composite restorations	Summitt CH 11 and Sturdevant CH 8		
Week 12 Lab	Direct posterior restorations			

Exhibit D

Week 13	Root Caries and Fluoride Releasing materials	Summitt CH 13, 14		
Week 13 Lab	Class V restorations			
Week 14	Amalgams Restorations	Summitt CH 12 and Sturdevant CH 10		
Week 14 Lab	Amalgam preparations and fillings			
Week 15	Esthetic Inlays/onlays and Gold restorations	Summitt CH 19, 20 and Sturdevant CH 12		
Week 15 Lab	Inlay/onlay preparations			
Week 16	Mock Clinical Treatment Planning			
Week 16 Lab	Start Lab Competencies/ mock cases			
Week 17	Mock Clinical Treatment Planning			
Week 17 Lab	Simulated Clinical Cases/ Competencies			
Week 18	Mock Clinical Treatment Planning			
Week 18 Lab	Simulated Clinical Cases/ Competencies			
Week 19	Mock Clinical Treatment Planning			
Week 19 Lab	Simulated Clinical Cases/ Competencies			
Week 20	Final Exam/ Group project presentations			
Week 20	Lab Competencies/ Lab Final			

**Course Learning Outcomes and links to Program Learning Outcomes (Appendix A)
and Institutional Learning Outcomes (Appendix B)**

No.	Course Learning Outcome	DMD PLO	DMD ILO	Learning Hierarchy ^b	Assessment Method
1	Develop a comprehensive understanding of the diagnosis of caries as well as the degenerative disease of the enamel and dentin and implement the proper treatment modalities.	1,2,3,5,7	1,2,3,5,6	1,2,3	Didactic Exam, Group projects
2	Develop skills in oral diagnosis and treatment planning for direct restorations.	1,2,3,4,5,6	1,3,4,5,6	1,2,3	Didactic Exam, Group Projects
3	Demonstrate the ability to properly remove carious lesions.	2,5,6,7,8	1,4,5	1,2,3	Lab exercises and exams
4	Demonstrate the ability to restore carious and non-carious lesions with direct restorations.	2,5,6,7,8	1,4,5	1,2,3	Lab exercises and exams
5	Understand esthetic considerations and demonstrate the ability to directly restore enamel and dentin in an esthetic manner.	1,2,3,5,6,7	1,2,3,4,5,6	1,2,3	Didactic exam; Lab exercises and exams
6	Understand Dental Biomaterials and their proper usage.	2,5,6,7	1,5,6	1,2,3	Didactic exam

^a plo's appendix A

^b Learning Hierarchy based on Bloom's Taxonomy with 1=Memorization and/or Comprehension;
2=Application and/or Analysis; 3=Synthesis and/or Evaluation.

Teaching/ Learning Methodology

1. LAL: Lecture and active learning **CLO Rubrics**
2. Lab: Sim Lab exercises, assignments.
3. Lab: Sim Lab exercises with digital technologies.
4. Peer Group Assessments
5. Group projects

CLO Rubrics

CLO 1: Develop a comprehensive understanding of the diagnosis of caries as well as the degenerative disease of the enamel and dentin and implement the proper treatment modalities.

Indicators	Initial	Developing	Developed	Proficient
Demonstrates an understanding of how to diagnose and treat the degenerative diseases of the enamel and dentin with direct restorations.	Does not understand how to diagnose and treat the degenerative diseases of the enamel and dentin with direct restorations	Demonstrates a rudimentary understanding of these elements	Has a detailed understanding of the diagnosis and treatment of the degenerative diseases of the enamel and dentin	Consistently demonstrates the ability to apply the knowledge and skill as a dental student and can assist other students in this domain

CLO 2: Develop skills in oral diagnosis and treatment planning for direct restorations.

Indicators	Initial	Developing	Developed	Proficient
Demonstrates skills in oral diagnosis and treatment planning for the restoration of the teeth with a direct restoration.	Has no or limited skills in the oral diagnosis and treatment planning	Demonstrates a rudimentary understanding or oral diagnosis and treatment planning	Is capable of applying basic scientific knowledge to clinical examples	Consistently applies biomedical knowledge to clinical situations utilizing innovation and analysis

CLO 3: Demonstrate the ability to properly remove carious lesions.

Indicators	Initial	Developing	Developed	Proficient
Apply didactic knowledge of tooth preparation to the clinical setting.	Has no or limited ability to apply the didactic knowledge of properly prepare a tooth	Demonstrates a rudimentary ability to prepare a tooth	Is capable of applying didactic knowledge to the clinical preparation of teeth	Consistently applies the didactic knowledge and biomedical sciences to clinical situations

Exhibit D

CLO 4: Demonstrate the ability to restore carious and non-carious lesions with direct restorations.

Indicators	Initial	Developing	Developed	Proficient
Demonstrate the ability to restore prepared teeth with direct restorations	Has no or limited ability to restore teeth with direct restorations	Has a rudimentary understanding and ability to restore teeth with direct restorations	Able to restore teeth with direct restorations	Consistently applies biomedical knowledge to the direct restoring of teeth in a clinical setting

CLO 5: Understand esthetic considerations and demonstrate the ability to directly restore enamel and dentin in an esthetic manner.

Indicators	Initial	Developing	Developed	Proficient
Demonstrates the ability to restore teeth with a direct restoration in an esthetic manner.	Unable to restore teeth in an esthetic manner	Has a rudimentary ability to restore a tooth with an esthetic direct restoration	Consistently applies didactic information to esthetically restore teeth with a direct restoration	Has a complete knowledge of esthetic considerations and is able to apply scientific evidence to artistically restore teeth

CLO 6: Understand Dental Biomaterials and their proper usage.

Indicators	Initial	Developing	Developed	Proficient
Demonstrates an understanding of Dental Biomaterials used in direct dental restorations.	Has little or no knowledge of Dental Biomaterials	Has a rudimentary understanding of Dental Biomaterials and their usage	Demonstrates an understanding of Dental Biomaterial and is able to apply to clinical situation	Consistently applies scientific evidence and understanding of Dental Biomaterial and is able to apply the knowledge in a clinical setting

Appendix A

Program Learning Outcomes (PLOs) CNU College of Dental Medicine

1. Patient-Centered Care: Demonstrate understanding of healthcare disparities and cultural awareness in patient counseling and patient advocacy
2. Evidence-Based Care: Apply current, evidence-based oral healthcare within the scope of general dentistry
3. Culturally competent, empathic communication: Demonstrate patient centered, empathic, and culturally competent communication and interpersonal skills
4. Oral and Written Communication: Demonstrate sound oral and written communications in patient care
5. Critical Thinking: Utilize critical thinking, problem solving skills and systemic thinking in assessing and making reasoned, evidence-based decisions in patient care
6. Ethics and Professionalism: Demonstrate professionalism and ethical decision making
7. Biomedical Sciences Knowledge: Demonstrate an understanding of the fundamentals of biomedical sciences and apply them appropriately in oral healthcare
8. Practice Management: Apply legal, regulatory and business management concepts related to provision of oral healthcare services

DMD Program Learning Outcomes (PLOs) Proficiency Rubric

PLO 1: Patient-Centered Care

Demonstrate understanding of healthcare disparities and cultural awareness and capability in patient counseling and providing appropriate patient advocacy

Indicators	Initial	Developing	Developed	Proficient
1.1. Education. Demonstrates ability to educate all audiences through effectively communicating information and assessing learning	<ul style="list-style-type: none"> Does not appropriately counsel patients Does not check for understanding, ask questions, and/or asks inappropriate questions. 	<ul style="list-style-type: none"> Counsels patients but leaves out pertinent information needed by patient Communicates with basic level of clarity but 	<ul style="list-style-type: none"> Generally demonstrates empathy, communicates accurate information clearly, checks for understanding Seeks to ensure 	<ul style="list-style-type: none"> Consistently demonstrates empathy, communicates accurate information clearly, checks for understanding Ensures

	<ul style="list-style-type: none"> Does not demonstrate the ability to find and utilize appropriate resources and references necessary for providing accurate counseling, consultation and education 	<p>does not always check for understanding or rephrase when confusion occurs.</p> <ul style="list-style-type: none"> Demonstrates the ability to find a one or two resources, yet the resources are not the best or most appropriate for providing accurate counseling, consultation and education 	<p>understanding and generally asks questions.</p> <ul style="list-style-type: none"> Frequently demonstrates the ability to find and utilize appropriate resources and references necessary for providing accurate counseling, consultation and education 	<p>understanding and asks appropriate questions.</p> <ul style="list-style-type: none"> Consistently demonstrates the ability to find and utilize appropriate resources and references for providing accurate patient counseling, consultation and education
1.2. Patient advocacy. Represents the patient's best interests	<ul style="list-style-type: none"> Does not demonstrate the ability represent a patient's best interest 	<ul style="list-style-type: none"> Demonstrates awareness of issues that impact a patient Demonstrates minimal ability to articulate these issues but does not demonstrate ability to sufficiently advocate on a patient's behalf 	<ul style="list-style-type: none"> Demonstrates sufficient awareness of issues that impact a patient Demonstrates ability to articulate these issues Demonstrates ability to sufficiently advocate on a patient's behalf 	<ul style="list-style-type: none"> Demonstrates full awareness of the most important issues that impact a patient Demonstrates ability to clearly and effectively articulate these issues Demonstrates ability to effectively advocate on a patient's behalf

PLO 2: Evidence-Based Care.

Apply sound, current, and evidence-based oral healthcare within the scope of general dentistry

Indicators	Initial	Developing	Developed	Proficient
2.1. Patient-centered care. Demonstrates ability to provide patient-centered care as the	<ul style="list-style-type: none"> Does not demonstrate ability to provide patient-centered care at the medication expert level; e.g., 	<ul style="list-style-type: none"> Demonstrates ability to provide patient-centered care as the medication expert in some, but not all, areas 	<ul style="list-style-type: none"> Demonstrates ability to provide patient-centered care as the medication expert (generally demonstrates 	<ul style="list-style-type: none"> Demonstrates ability to provide sufficient patient-centered care as the expert (collects and

medication expert (collect and interpret evidence, prioritize, formulate assessments and recommendations, implement, monitor and adjust plans, and document activities)	demonstrates ability to collect but not sufficiently interpret evidence, does not prioritize, formulates basic assessments and recommendations, does not sufficiently monitor and adjust plans nor document activities.	as follows: collect and interpret evidence, prioritize, formulate assessments and recommendations, implement, monitor and adjust plans, and document activities	ability to collect and interpret evidence, prioritize, formulate assessments and recommendations, implement, monitor and adjust plans, and document activities)	interprets evidence, prioritizes, formulates assessments and recommendations, implements, monitors and adjusts plans, and documents activities)
2.2. Systems management. Demonstrates ability to manage patient healthcare needs using human, financial, technological, and physical resources to optimize the safety and efficacy of medication use systems	<ul style="list-style-type: none"> • Does not demonstrate understanding of oral healthcare delivery systems parts • Does not demonstrate understanding of the forces that influence components of the oral healthcare delivery system, including their connection to patient care • Does not demonstrate understanding of any challenges to systems that affect oral healthcare delivery Does not demonstrate understanding of how to work with different subsystems to deliver oral	<ul style="list-style-type: none"> • Demonstrates understanding of some parts of oral healthcare delivery systems but does not identify how they are related to each other • Demonstrates understanding of some forces that influence the parts of healthcare delivery systems, but demonstrate minimal understanding of their connection to patient care • Demonstrates understanding of some challenges that can affect delivery of oral healthcare • Demonstrates some understanding of how to work with different subsystems and how they 	<ul style="list-style-type: none"> • Demonstrates understanding of most major components of oral healthcare systems and their respective relationships • Demonstrates understanding of the forces that influence the components of healthcare delivery systems, and demonstrate some understanding of their influence on the quality of patient care • Demonstrates understanding of most challenges that can affect delivery of oral healthcare, but does not demonstrate complete comprehension of the effects Demonstrates basic	<ul style="list-style-type: none"> • Demonstrates understanding of the major components of oral healthcare systems, their respective relationships, and their functions related to patient care • Demonstrates thorough understanding of the forces that influence components of healthcare delivery systems and demonstrate full understanding of their influence and implications on the quality of patient care • Demonstrates understanding of pertinent challenges to specific aspects of healthcare delivery by demonstrating

	healthcare	function to deliver oral healthcare, but demonstrate minimal awareness or understanding of one's own role within the oral healthcare delivery system	understanding of how to work with different subsystems and how they function to deliver oral healthcare and demonstrate some understanding of one's role within the oral healthcare delivery system, but does not necessarily demonstrate application of knowledge in a manner that maximizes the quality of oral healthcare	abilities to thoroughly discuss the implications for the appropriate parts of oral health care delivery systems Demonstrates excellent understanding of how to work with different subsystems involved while also demonstrating understanding of one's role within the subsystems, and demonstrate appropriate application of knowledge in a manner that maximizes the quality of oral healthcare
2.3. Health and wellness. Designs prevention, intervention, and educational strategies for individuals and communities to manage chronic disease and improve oral health and wellness	<ul style="list-style-type: none"> Does not demonstrate understanding of how the arts can be utilized to optimize patients' well-being 	<ul style="list-style-type: none"> Demonstrates knowledge of some of the ways that the arts can be utilized to optimize patients' well-being 	<ul style="list-style-type: none"> Demonstrates sufficient knowledge of multiple ways that the arts can be utilized to optimize patients' well-being 	<ul style="list-style-type: none"> Demonstrates thorough knowledge of the ways that the arts can be utilized to optimize patients' well-being and creatively applies this knowledge to improve well-being and the practice and delivery of oral healthcare
2.4. Population-based care.	<ul style="list-style-type: none"> Does not demonstrate 	<ul style="list-style-type: none"> Demonstrates minimal 	<ul style="list-style-type: none"> Demonstrates sufficient 	<ul style="list-style-type: none"> Demonstrates superb

Exhibit D

Demonstrates understanding of how population-based care influences patient-centered care and the development of practice guidelines and evidence-based best practices	awareness of population-based care.	<p>understanding of population-based care and how it influences patient-centered care</p> <ul style="list-style-type: none"> • Does not demonstrate awareness of how these notions influence the development of practice guidelines 	<p>understanding of population-based care and how it influences patient-centered care</p> <ul style="list-style-type: none"> • Demonstrates sufficient understanding of how population-based care influences the development of practice guidelines and best practices for patient care 	<p>understanding of population-based care and how it influences patient-centered care</p> <ul style="list-style-type: none"> • Demonstrates superb understanding of how population-based care influences the development of practice guidelines and demonstrates knowledge of best practices for patient care
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PLO 3: Culturally Competent, Empathic Communication.

Demonstrate patient centered, empathic and culturally competent communication and interpersonal skills

Indicators	Initial	Developing	Developed	Proficient
3.1. Empathy. Demonstrates the ability to communicate with the patient empathically.	<ul style="list-style-type: none"> Does not demonstrate the ability to communicate with the patient empathically. 	<ul style="list-style-type: none"> Demonstrates some ability, but experiences lapses in the ability to communicate empathically 	<ul style="list-style-type: none"> Demonstrates the ability to communicate empathically, with few lapses. 	<ul style="list-style-type: none"> Demonstrates an advanced ability, and never experiences lapses in communicating empathically.
3.2. Cultural competence. Demonstrates the ability to engage in communication with the patient that is culturally aware and accepting.	<ul style="list-style-type: none"> Does not demonstrate communication and interactions that convey respect or concern for patients and the community. Does not demonstrate an awareness of customs, beliefs, or perspectives in diverse patients Does not demonstrate awareness of cultural and linguistic needs of patients in order to communicate health information 	<ul style="list-style-type: none"> Demonstrates communication and interactions characteristic of a minimal level of respect, and little concern for patients and the community is apparent through use of some appropriate communication, but student does not employ follow-up questions for clarification, when necessary, and student provides inappropriate detail in responses Demonstrates a minimal level of awareness of customs, beliefs, or perspectives in diverse patients Demonstrates minimal awareness of cultural and 	<ul style="list-style-type: none"> Demonstrates appropriate communication and interactions that are characteristic of a basic level of respect, and concern for patients and the community is apparent through use of appropriate communication, where student uses some clear, but not necessarily relevant or detailed, follow-up questions and responses Demonstrates awareness of customs and beliefs, but may not clarify with patients about personal perspectives Demonstrates awareness of the cultural and 	<ul style="list-style-type: none"> Demonstrates professional communication and interactions by showing empathy, respect, and concern for patients and the community through use of appropriate communication where follow-up questions (as needed) and responses are clear, relevant, and detailed Demonstrates awareness of customs, beliefs, or perspectives in diverse patients; ask appropriate questions to clarify perspectives and perceptions in diverse patients Demonstrates full awareness of and responsiveness to

		linguistic needs of patients; either does not or only attempt to adapt behaviors, but does so ineffectively, to communicate health information	linguistic needs of diverse patients, and adapt behaviors to communicate health information, but communication may not be effective	cultural and linguistic needs of diverse patients by adapting behaviors appropriately in order to effectively communicate health information
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PLO 4: Oral and Written Communication.

Demonstrate sound oral and written communications in patient care

Indicators	Initial	Developing	Developed	Proficient
4.1. Oral communication. Demonstrate sound oral communication in patient care.	<ul style="list-style-type: none"> Does not demonstrate logical reasoning in oral communications in patient care. Does not demonstrate the ability to cite sound evidence that support ideas within presentations or discussions. 	<ul style="list-style-type: none"> Demonstrates some logical reasoning in oral communications in patient care but demonstrates some lapses. Demonstrates some ability to cite sound evidence that support ideas within presentations or discussions, but demonstrates some lapses. 	<ul style="list-style-type: none"> Generally demonstrates logical reasoning in oral communications in patient care. Generally demonstrates the ability to cite sound evidence that support ideas within presentations or discussions. 	<ul style="list-style-type: none"> Consistently demonstrates logical reasoning in oral communications in patient care. Consistently demonstrates the ability to cite sound evidence that support ideas within presentations or discussions.
4.2. Written communication. Demonstrate sound written communication in patient care.	<ul style="list-style-type: none"> Does not demonstrate logical reasoning in written communications in patient care. Does not demonstrate the written ability to cite sound evidence that support ideas. 	<ul style="list-style-type: none"> Demonstrates some logical reasoning in written communications in patient care but demonstrates some lapses. Demonstrates some written ability to cite sound evidence that support ideas, but demonstrates some lapses. 	<ul style="list-style-type: none"> Generally logical reasoning in written communications in patient care. Generally demonstrates the written ability to cite sound evidence that support ideas. 	<ul style="list-style-type: none"> Consistently demonstrates logical reasoning in written communications in patient care. Consistently demonstrates the written ability to cite sound evidence that support ideas.

PLO 5: Critical Thinking.

Utilize critical thinking, problem solving skills and systemic thinking in assessing and making reasoned, evidence-based decisions in patient care

Indicators	Initial	Developing	Developed	Proficient
5.1. Problem solving. Identifies problems; explore and prioritize potential strategies; and designs, implements, and evaluates viable solutions	<ul style="list-style-type: none"> Is not able to correctly identify the problem or issue being considered. Does not identify appropriate resources. Includes extraneous information or inappropriate or insufficient resources. Does not demonstrate understanding of the content of materials reviewed. Makes inappropriate inferences. Does not evaluate possible alternatives or generates ideas that are illogical or extraneous to issue at hand. Does not propose a solution or does not articulate decision. Does not adequately provide rationale for selected alternative or 	<ul style="list-style-type: none"> Identifies the problem or issue but does not demonstrate awareness of all the factors associated with the problem or issues that impact decision making. Identifies a few, but not all, resources needed for decision making. Demonstrates ability to interpret some information and data but not all. Does not fully or effectively evaluate alternative solutions. Proposes a decision with many apparent weaknesses (i.e., not feasible, lack of regard for consequences, lack of supporting evidence, illogical, irrelevant to issue at hand, etc.). Provides 	<ul style="list-style-type: none"> Correctly identifies problem or issue being considered and demonstrates adequate awareness of the factors associated with this problem or issue that impact decision making. Identifies most of the resources needed. Demonstrates ability to interpret most information and data. Considers and evaluates possible solutions in a way that generally leads to a logical decision or course of action. Proposes a solution that does not contain apparent weaknesses that may or may not be the obvious clear choice. Solutions chosen demonstrate consideration of 	<ul style="list-style-type: none"> Consistently correctly identifies the problem or issue being considered and all of the primary factors associated with this problem or issue that impact decision making. Articulates the importance of these factors. Identifies all appropriate resources. Demonstrates ability to correctly interpret information and data needed for appropriate decision making. Demonstrates awareness of importance of these data in decision-making process. Considers and evaluates possible solutions effectively and thoroughly. Evaluation leads to sound, logical, and “best” decision or

	decision	rationale for selected alternative or decision but does not build a solid position with supporting evidence. Is unable to defend decision or course of action.	most of the strengths, weaknesses, feasibility, effects, consequences, relevance, etc.). Provides rationale for selected alternative or decision which includes some solid supporting evidence. Is able to defend decision or course of action at a basic level.	course of action. <ul style="list-style-type: none"> Proposes a solution that is entirely appropriate to the situation at hand. Solutions chosen demonstrate consideration of all of the important and relevant strengths, weaknesses, feasibility, effects, consequences, etc.). Provides rationale for selected alternative or decision and builds a solid position with appropriate and relevant supporting evidence. Effectively defends decision or course of action.
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PLO 6: Ethics and Professionalism.

Demonstrating professionalism and ethical decision making

Indicators	Initial	Developing	Developed	Proficient
6.1. Professionalism. Demonstrates behaviors and values that are consistent with the trust given to the profession by patients, other healthcare providers, and society	<ul style="list-style-type: none"> Does not consistently demonstrate professional attitudes and behaviors (altruism, excellence, duty, accountability, honesty, and integrity) Demonstrates frequent lapses in accountability or quality of work 	<ul style="list-style-type: none"> Demonstrates some professional attitudes and behaviors yet there is inconsistency that may impede on the quality of work or treatment of patients and other healthcare team members (altruism, excellence, duty, accountability, honesty, and integrity) 	<ul style="list-style-type: none"> Generally demonstrates most of the professional attitudes and behaviors (altruism, excellence, duty, accountability, honesty, and integrity) that are required in the profession Demonstrates ability to use these behaviors and values to improve healthcare 	<ul style="list-style-type: none"> Consistently demonstrates the professional attitudes and behaviors that uphold the integrity and competence of the work and the treatment of patients and other healthcare team professionals (altruism, excellence, duty, accountability, honesty, and integrity) Consistently uses these behaviors and values to improve healthcare
6.2. Ethics. Demonstrates the ability to make decisions consistent with the values of practitioners and scholars of oral healthcare.	<ul style="list-style-type: none"> Does not make ethical decisions consistent with the values of practitioners and scholars of oral healthcare. 	<ul style="list-style-type: none"> Demonstrates the ability to exercise ethical decision making, and a rudimentary knowledge of ethics within oral healthcare. 	<ul style="list-style-type: none"> Demonstrates the ability to exercise clear and ethical decision making, and a sufficient knowledge of ethics within oral healthcare. 	Demonstrates the ability to exercise clear and ethical decision making, and an advanced knowledge of ethics within oral healthcare.

PLO 7: Biomedical Sciences Knowledge.

Demonstrate an understanding of the fundamentals of biomedical sciences and apply them appropriately in oral healthcare

Indicators	Initial	Developing	Developed	Proficient
7.1. Diagnostic and pharmacologic. Demonstrates the ability to describe how to deliver patient assessments, knowledge of medicines, and delivering diagnoses.	<ul style="list-style-type: none"> Does not demonstrate the ability to describe diagnostic and pharmacologic knowledge related to oral health. 	<ul style="list-style-type: none"> Demonstrates a rudimentary ability to describe diagnostic and pharmacologic knowledge related to oral health. 	<ul style="list-style-type: none"> Demonstrates a sufficient ability to describe diagnostic and pharmacologic knowledge related to oral health. 	<ul style="list-style-type: none"> Demonstrates an advanced ability to describe diagnostic and pharmacologic knowledge related to oral health.
7.2. Orofacial pain/temporomandibular/ Sleep disorder. Demonstrates the ability to describe the anatomical, physiological, and neurological basis; classification, epidemiology, and etiology; and assessments and treatments of orofacial pain, temporomandibular joint disease, and sleep disorders.	<ul style="list-style-type: none"> Does not demonstrate the ability to describe scientific or assessment knowledge related to OFP/TMJ disease and sleep disorders. 	<ul style="list-style-type: none"> Demonstrates a rudimentary ability to describe scientific or assessment knowledge related to OFP/TMJ disease and sleep disorders. 	<ul style="list-style-type: none"> Demonstrates a sufficient ability to describe scientific or assessment knowledge related to OFP/TMJ disease and sleep disorders. 	<ul style="list-style-type: none"> Demonstrates an advanced ability to describe scientific or assessment knowledge related to OFP/TMJ disease and sleep disorders.
7.3. Maxillofacial pathology Demonstrates the ability to describe the scientific aspects of head and neck diseases, as well as knowledge of assessment and diagnosis.	<ul style="list-style-type: none"> Does not demonstrate the ability to describe the scientific or assessment knowledge related to head and neck diseases. 	<ul style="list-style-type: none"> Demonstrates a rudimentary ability to describe the scientific or assessment knowledge related to head and neck diseases. 	<ul style="list-style-type: none"> Demonstrates a sufficient ability to describe the scientific or assessment knowledge related to head and neck diseases. 	<ul style="list-style-type: none"> Demonstrates an advanced ability to describe the scientific or assessment knowledge related to head and neck diseases.

PLO 8: Practice Management.

Apply legal, regulatory, and business management concepts related to the provision of oral healthcare services

Indicators	Initial	Developing	Developed	Proficient
8.1. Legal aspects Applies legal and regulatory concepts related to the provision of oral healthcare services.	<ul style="list-style-type: none"> Does not demonstrate an understanding or the ability to apply legal and regulatory concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates a rudimentary understanding and ability to apply legal and regulatory concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates a sound understanding and ability to apply legal and regulatory concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates an advanced understanding and ability to apply legal and regulatory concepts related to the provision of oral healthcare sciences.
8.2. Business management Applies business management concepts to the provision of oral healthcare services.	<ul style="list-style-type: none"> Does not demonstrate an understanding or the ability to apply business management concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates a rudimentary understanding and ability to apply business management concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates a sound understanding and ability to apply business management concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates an advanced understanding and ability to apply business management concepts related to the provision of oral healthcare sciences.

Appendix B

California Northstate University Institutional Learning Objectives

ILO 1: Critical thinking: Exercise reasoned judgment to assess technical information and make well-informed decisions using evidence-based approaches

ILO 2: Written communication. Demonstrate the ability to write coherent, supported, and logically structured prose

ILO 3: Oral communication: Demonstrates oral communication skills

ILO 4: Professionalism. Interact with respect, empathy, diplomacy, and cultural competence

ILO 5: Quantitative reasoning: Demonstrate ability to use mathematics and statistics in problem solving

ILO 6: Information literacy: Identify and search relevant libraries of information and databases; synthesize information obtained from primary literature using properly referenced citations

DMD Institutional Learning Outcomes (ILOs) Proficiency Rubric

ILO 1: Critical thinking: Exercise reasoned judgment to assess technical information and make well-informed decisions using evidence-based approaches

Indicator	Initial	Developing	Developed	Proficient
1.1. Demonstrates identification of problem or issues	<ul style="list-style-type: none"> Does not correctly identify the problem or issue being considered Does not demonstrate understanding of the psychological factors that contribute to current patient state 	<ul style="list-style-type: none"> Identifies the problem or issue but does not demonstrate awareness of all the factors impacting decision making Demonstrates understanding of some possible psychological factors that contribute to current patient state 	<ul style="list-style-type: none"> Correctly identifies the problem or issue but does not demonstrate awareness of all factors impacting decision making Demonstrates understanding of most psychological factors that contribute to the current patient state 	<ul style="list-style-type: none"> Correctly identifies all of the primary factors associated with problem or issue impacting decision making Demonstrates thorough understanding of all possible psychological factors that contribute to the current patient state

Exhibit D

1.2. Demonstrates identification of resources	<ul style="list-style-type: none"> Does not identify appropriate resources 	<ul style="list-style-type: none"> Identifies a few resources needed 	<ul style="list-style-type: none"> Identifies most of the resources needed 	<ul style="list-style-type: none"> Correctly identifies all appropriate resources
1.3. Finds and interprets data needed for critical thinking and decision making	<ul style="list-style-type: none"> Does not demonstrate understanding of the data needed for critical thinking and decision making 	<ul style="list-style-type: none"> Demonstrates ability to interpret some data but not all 	<ul style="list-style-type: none"> Demonstrates ability to interpret most data 	<ul style="list-style-type: none"> Demonstrates ability to correctly interpret data needed for decision making
1.4. Demonstrates knowledge of alternatives when evaluating for possible solutions	<ul style="list-style-type: none"> Does not evaluate possible alternatives for treatment or diagnosis 	<ul style="list-style-type: none"> Does not effectively evaluate alternative treatment or diagnostic solutions 	<ul style="list-style-type: none"> Evaluates possible treatment and diagnostic solutions leading to a logical decision 	<ul style="list-style-type: none"> Effectively and thoroughly considers and evaluates possible diagnostic and treatment solutions
1.5. Proposes and selects appropriate solutions	<ul style="list-style-type: none"> Does not propose solutions to the client's needs 	<ul style="list-style-type: none"> Proposes solutions without consideration of alternatives 	<ul style="list-style-type: none"> Solutions chosen demonstrate consideration of most of the strengths, weaknesses, and consequences of the decision 	<ul style="list-style-type: none"> Proposes solutions that are appropriate to the situation and demonstrate consideration of all relevant strengths, weaknesses, and consequences
1.6. Presents rationale for course of action	<ul style="list-style-type: none"> Does not adequately provide rationale for treatment decision 	<ul style="list-style-type: none"> Provides rationale for decision but does not integrate into mental health treatment plan 	<ul style="list-style-type: none"> Provides rationale for decision with solid supporting evidence from available psychological literature and/or case factors 	<ul style="list-style-type: none"> Provides rationale for decision and with appropriate and relevant supporting case evidence and integrates findings into treatment plan

ILO 2: Written communication. Demonstrate the ability to write coherent, supported, and logically structured prose

Indicators	Initial	Developing	Developed	Proficient
2.1. Demonstrates knowledge and awareness of intended audience	<ul style="list-style-type: none"> Does not demonstrate knowledge or awareness of audience for which the document is intended 	<ul style="list-style-type: none"> Demonstrates some ability to craft a document appropriate for its audience 	<ul style="list-style-type: none"> Demonstrates ability to craft a document appropriate for its audience 	<ul style="list-style-type: none"> Consistently demonstrates ability to craft documents appropriate for the audience
2.2. Demonstrates clear and logical thought	<ul style="list-style-type: none"> Does not demonstrate clear or logical thought in their documentation 	<ul style="list-style-type: none"> Writing does not sufficiently conceptualize case variables or analyze subject under discussion 	<ul style="list-style-type: none"> Demonstrates general clear or logical thought in their documentation 	<ul style="list-style-type: none"> Research and clinical documentation demonstrates clear and focused thinking

Exhibit D

2.3. Demonstrates support for and development of ideas	<ul style="list-style-type: none"> Does not explain or develop ideas 	<ul style="list-style-type: none"> Demonstrates minimal support for ideas 	<ul style="list-style-type: none"> Writing contains examples that generally support ideas 	<ul style="list-style-type: none"> Supports ideas with relevant, clear, impactful examples
2.4. Demonstrates appropriate use of evidence to support arguments	<ul style="list-style-type: none"> Demonstrates an attempt to use proper citations to support ideas 	<ul style="list-style-type: none"> Uses credible and relevant sources to support ideas appropriate in the study of psychology 	<ul style="list-style-type: none"> Consistently uses credible and relevant sources to support ideas 	<ul style="list-style-type: none"> Demonstrates skillful use of credible and relevant sources to develop and support ideas
2.5. Demonstrates appropriate use of language, syntax, and mechanics	<ul style="list-style-type: none"> Has excessive or severe errors in language usage 	<ul style="list-style-type: none"> Generally conveys meaning to readers with clarity, though writing may include some errors 	<ul style="list-style-type: none"> Language conveys meaning to readers and writing contains very few errors 	<ul style="list-style-type: none"> Uses language effectively and skillfully to communicate meaning to readers

ILO 3: Oral communication: Demonstrates oral communication skills

Indicators	Initial	Developing	Developed	Proficient
3.1. Demonstrates knowledge and awareness of intended audience	<ul style="list-style-type: none"> Does not demonstrate knowledge or awareness of audience for which the communication is intended 	<ul style="list-style-type: none"> Demonstrates some ability to communicate in a manner appropriate to the audience 	<ul style="list-style-type: none"> Demonstrates ability to communicate appropriate to the audience 	<ul style="list-style-type: none"> Consistently demonstrates ability to communicate in a manner appropriate to the audience
3.2. Demonstrates clear and logical thought	<ul style="list-style-type: none"> Does not demonstrate clear or logical thought in their communication 	<ul style="list-style-type: none"> Communication does not sufficiently conceptualize case variables or analyze subject under discussion 	<ul style="list-style-type: none"> Demonstrates general clear or logical thought in their communication 	<ul style="list-style-type: none"> Communication demonstrates clear and focused thinking
3.3. Demonstrates effective use of language in their communication	<ul style="list-style-type: none"> Does not know professional psychological language or uses jargon Does not know the proper technical language regarding mental health treatment 	<ul style="list-style-type: none"> Demonstrates inaccurate use of psychological language or uses jargon in professional communications Utilizes scientific language that is incomprehensible to patients 	<ul style="list-style-type: none"> Demonstrates appropriate use of professional language and minimal jargon Utilizes generalized language to interact with patients 	<ul style="list-style-type: none"> Demonstrates use of appropriate, professional language Utilizes generalized language to interact with patients
3.4. Demonstrates appropriate active listening techniques	<ul style="list-style-type: none"> Does not acknowledge other viewpoints 	<ul style="list-style-type: none"> Demonstrates little attempt to recognize other viewpoints 	<ul style="list-style-type: none"> Recognizes other viewpoints but has difficulty incorporating them 	<ul style="list-style-type: none"> Listens to questions with a consideration of alternative

Exhibit D

when addressing questions	<ul style="list-style-type: none"> • Has great difficulty answering questions 	<ul style="list-style-type: none"> • Answers are simplistic and lack intellectual depth 	into case conceptualization <ul style="list-style-type: none"> • Adequately answers patient questions 	viewpoints <ul style="list-style-type: none"> • Answers questions thoughtfully referencing evidence
3.5. Orally communicates meaning to audience	<ul style="list-style-type: none"> • Vocal delivery is too soft or too fast • Long, unintended silences and/or speech disruptions frequently distract audience • Speaker makes no attempt to engage audience 	<ul style="list-style-type: none"> • Vocal delivery is audible • Speech rate or volume disruptions occasionally distract from comprehension • Attempts to engage audience 	<ul style="list-style-type: none"> • Vocal delivery is varied and dynamic • Speech rate, volume, and tone enhance listener interest and facilitate understanding • Generally engages audience 	<ul style="list-style-type: none"> • Vocal delivery is varied and dynamic • Speech rate, volume, and tone enhance listener interest and facilitate understanding • Thoroughly engages audience
3.6. Utilizes non-verbal means to enhance message	<ul style="list-style-type: none"> • Eye contact, body language, and facial expressions are inappropriate 	<ul style="list-style-type: none"> • Eye contact, body language, and facial expressions neither enhance nor hinder oral effectiveness 	<ul style="list-style-type: none"> • Use of eye contact, body language, and facial expressions are mostly consistent with the verbal message 	<ul style="list-style-type: none"> • Use of eye contact, body language, and facial expressions that are consistent with the verbal message

ILO 4: Professionalism. Interact with respect, empathy, diplomacy, and cultural competence

Indicators	Initial	Developing	Developed	Proficient
4.1. Demonstrates professional attitudes and behaviors	<ul style="list-style-type: none"> • Does not generally demonstrate professional attitudes or behaviors expected from a dentist 	<ul style="list-style-type: none"> • Demonstrates some attitudes and behaviors that may be characteristic of a dentist 	<ul style="list-style-type: none"> • Generally demonstrates attitudes and behaviors expected from a dentist 	<ul style="list-style-type: none"> • Consistently demonstrates attitudes and behaviors expected from a dentist
4.2. Demonstrates personal responsibility and accountability	<ul style="list-style-type: none"> • Does not demonstrate personal accountability or responsibility for work completed 	<ul style="list-style-type: none"> • Demonstrates minimal personal accountability and responsibility for work completed 	<ul style="list-style-type: none"> • Demonstrates personal accountability and responsibility for the work completed 	<ul style="list-style-type: none"> • Consistently demonstrates personal accountability and responsibility for work completed
4.3. Demonstrates respectful and sensitive behaviors to the cultural and linguistic needs of diverse patients	<ul style="list-style-type: none"> • Does not demonstrate an awareness of patients' customs, beliefs, or perspectives • Does not demonstrate awareness of linguistic needs of patients 	<ul style="list-style-type: none"> • Demonstrates a minimal level of awareness of customs, beliefs, or perspectives of patients • Demonstrates minimal awareness of cultural and linguistic needs of patients 	<ul style="list-style-type: none"> • Demonstrates awareness of customs and beliefs • Demonstrates awareness of the cultural and linguistic needs of patients 	<ul style="list-style-type: none"> • Demonstrates awareness of customs, beliefs, or perspectives in patients • Demonstrates full awareness and responds to the cultural and linguistic needs of patients
4.4. Demonstrates professional	<ul style="list-style-type: none"> • Appears inattentive and impatient • Uses inappropriate 	<ul style="list-style-type: none"> • Appears unfocused and distracted • Uses acceptable 	<ul style="list-style-type: none"> • Appears composed and focused • Uses appropriate 	<ul style="list-style-type: none"> • Uses articulate, tactful, and diplomatic speech

Exhibit D

demeanor	body language • Dresses in attire that is inappropriate	body language • Dresses in attire that is not offensive	body language • Dresses in attire that is professional	<ul style="list-style-type: none">• Uses professional body language• Dresses in attire that is professional, and well-suited for the environment
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Exhibit D

ILO 5: Quantitative reasoning: Demonstrate ability to use mathematics and statistics in problem solving

Indicators	Initial	Developing	Developed	Proficient
5.1. Demonstrates ability to perform calculations and apply mathematical principles to solve problems	<ul style="list-style-type: none"> Does not demonstrate ability to apply statistical or psychometric principles 	<ul style="list-style-type: none"> Demonstrates ability to perform basic statistical calculations but does not know how to apply psychometric principles to solve problems 	<ul style="list-style-type: none"> Demonstrates ability to perform most statistical calculations accurately and to apply psychometric principles to solve problems 	<ul style="list-style-type: none"> Consistently demonstrates ability to perform statistical calculations accurately and to appropriately apply psychometric principles to solve problems
5.2. Demonstrates understanding of experimental designs and methodology	<ul style="list-style-type: none"> Displays difficulty proposing a basic experiment or research project 	<ul style="list-style-type: none"> Comprehends basic experiments designed by others 	<ul style="list-style-type: none"> Evaluates research, method, and protocol to review valid and reliable research 	<ul style="list-style-type: none"> Proposes appropriate and innovative designs to address a new hypothesis and research question
5.3. Demonstrates logical and appropriate interpretation of data	<ul style="list-style-type: none"> Demonstrates a limited ability to interpret scientific data 	<ul style="list-style-type: none"> Attempts to interpret scientific data 	<ul style="list-style-type: none"> Demonstrates the ability to interpret scientific data 	<ul style="list-style-type: none"> Interprets data in the context of current scientific knowledge
5.4. Demonstrates logical thought patterns in generating conclusions	<ul style="list-style-type: none"> Does not generate conclusions based on current scientific data and statistics 	<ul style="list-style-type: none"> Generates conclusions that may be based on current scientific data and statistics 	<ul style="list-style-type: none"> Generates conclusions using scientific and statistical data 	<ul style="list-style-type: none"> Accurately generates conclusions using appropriate scientific and mathematical data

ILO 6: Information literacy: Identify and search relevant libraries of information and databases; synthesize information obtained from primary literature using properly referenced citations

Indicators	Initial	Developing	Developed	Proficient
6.1. Demonstrates appropriate ability search and acquire resources	<ul style="list-style-type: none"> Does not identify or solicit help in obtaining external resources to support topic 	<ul style="list-style-type: none"> Identified resources may not be sufficient in quality and infrequently solicits guidance from library personnel 	<ul style="list-style-type: none"> Identifies resources appropriate for scientific inquiry and solicits guidance from library personnel 	<ul style="list-style-type: none"> Identifies a variety of relevant sources and regularly seeks guidance from library personnel
6.2. Demonstrates appropriate incorporation of references	<ul style="list-style-type: none"> Does not incorporate references 	<ul style="list-style-type: none"> Incorporates references from psychological sources that do not clearly support 	<ul style="list-style-type: none"> Incorporates relevant references that generally supports ideas 	<ul style="list-style-type: none"> Incorporates relevant references from respected psychological sources

Exhibit D

		ideas		
6.3. Demonstrates appropriate citation of references	<ul style="list-style-type: none">• Does not use citations	<ul style="list-style-type: none">• Uses citations but they are not formatted in APA style	<ul style="list-style-type: none">• Demonstrates use of appropriate citations in context	<ul style="list-style-type: none">• Uses properly cited references and includes all necessary information in reference list



California Northstate University College of Dental Medicine

Course Syllabus

Course #	Course Title	Credits	Year	Term
OMFS 512	<i>Oral Microbiology/Immunology</i>	3	DS 1	Spring

Credit Hour Policy

For each 15-week semester, one (1) hour of credit is assigned per hour each week of classroom or direct faculty didactic instruction (that is, per hour of lecture or student in-class time) and a minimum of two (2) hours of out-of-class student work (homework). For practicum and internship time, one (1) hour of credit is assigned per three (3) hours each week of student time spent in this activity.

Maximum Enrollment: 80

Calendar of Important Dates:

Date	
February 2, 2021	Exam 1
March 9, 2021	Exam 2
April 4, 2021	Submission of Group Case Presentation on CANVAS by 11:59pm
April 6, 2021	Group Case Presentations
April 13, 2021	Final Exam

Course Coordinator, Instructors and Contact Information

Rosemary Wu, DMD, MS (course co-director)

Room: xxx

E-mail: rosemary.wu@cnsu.edu

Office hours: Monday 12:00pm-1:00pm (or by appointment)

Kevin Keating, DDS (course co-director)

Room: xxx

E-mail: kevin.keating@cnsu.edu

Office hours: Wednesdays 12:00pm-1:00pm, and 3:00pm-4:00pm (or by appointment)

Holly Jacobson BA (course administrator)

Room: xxx

E mail: holly.jacobson@cnsu.edu

Classroom and Meeting Times

Room: Classroom xxxx

Time: xxxx 3 hours per week

Small group/interactive learning will occur in the same classroom during class time.

Course Description

This course is designed to encompass the foundations of immunology and microbiology, with a focus on the relationship to the oral cavity.

The host response resulting in homeostasis, the lack thereof, and the initiation of infection is reviewed, beginning with content on innate and adaptive immunity, immunodeficiency, immune tolerance, autoimmunity, and hypersensitivity.

The pathogenesis and treatment of bacterial, viral, and fungal infections is discussed in depth. In regards to bacteriology, various medically-relevant genera are discussed as well as diagnostic and treatment modalities. The oral microbiome in health and disease is presented including the ecologic niches of the oral region: teeth, periodontium, mucosa, saliva, and nasopharynx. The virology of the upper airway, mouth, and pharynx is presented including HPV, HIV, and acute viral diseases. Mycology is discussed with a focus on fungal infections that present in the oral cavity. Prions and their potential role in disease are discussed.

Small group/interactive learning occurs during the designated class time to facilitate students' learning. A final group case presentation will also take place as indicated on the course schedule.

Prerequisite Courses

None

Prerequisite Knowledge

None

Required Textbook(s) and Material(s)

1. Lamont, Richard J., George N. Hajishengallis, Hyun (Michael) Koo, and Howard F. Jenkinson. *Oral Microbiology and Immunology*. 3rd ed. Washington, DC: ASM Press, 2019.
2. Levinson, Warren, Peter Chin-Hong, Elizabeth A. Joyce, and Brian Schwartz. *Review of Medical Microbiology and Immunology: A Guide to Clinical Infectious Diseases*. 15th ed. McGraw-Hill Education, 2018.

Technology

- Computer-assisted instruction (Clickers) and SCANTRON Sheets
- Web-based course management (Canvas) and Examsoft
- Audio/Video recordings where applicable
- PowerPoint

Evaluation Components

In keeping with the Team Based Learning (TBL) approach, grades will be determined as follows:

Individual Components	80%
Exam 1	25%
Exam 2	25%
Final Exam	30%

Team Components	20%
Group Case Presentation	10%
Small Group/Interactive Learning Participation	5%
Peer Review	5%

GRADING

All students must demonstrate minimal individual competency. Therefore, students earning less than 75% on the total Individual component score will not have team component scores added to calculate their final course grade. During the course, students who score less than 75% on individual components may be subject to periodic course content review and may receive an Academic Alert.

In order to progress from one semester to the next, students must pass all courses with a letter a grade of C or higher and maintain a minimum cumulative grade point average (GPA) of 2.0. The breakdown for assignment of letter grades and grade points for each letter grade are as follows

Percent	Letter Grade/Action
90.0 – 100%	A
80.0 – 89.9%	B
75.0 – 79.9%	C - Pass
60.0 – 74.9%	D – Requiring remediation (successful remediation recorded as C, unsuccessful remediation recorded as F)
Below 60.0%	F – Fail (course must be repeated)
Incomplete	I

Incomplete

During a semester, a student may not complete all required assignments and/or examinations due to extenuating circumstances, such as, but not limited to, an illness or a family emergency. In such a case, the course director may give a grade of Incomplete for the course. The course with the incomplete grade has to be completed successfully within the time frame as being defined by the student's academic plan, normally in the same academic year, otherwise a leave of absence would be required.

Core-Course Policies

All students are required to adhere to the Academic Policies that impact on student progression and conduct while attending the DMD program, including the following: Academic Progression Policy, Excused Absence Policy, Exam Policy, Course Grade Appeal Policy, Course Add/Drop Policy and Attendance Policy. Refer to the current Student Handbook for the detailed policies.

Course Specific Policies

1. Small group/interactive learning occurs during the designated class time and participation is required. The content of small group/interactive learning discussions will be included on examinations. You are allowed one excused absence (contact the course coordinator to inform them of your absence). Additional absences will result in deduction of points from the "Small Group/Interactive Learning Participation" category.
2. Group Case Presentations are to be submitted via CANVAS by 11:59 PST on the deadline indicated. Only one group member should submit the assignment on behalf of the group. The course coordinator reserves the right to deduct points for late submission (20% of assignment grade deducted for late submission).
3. Grade appeal for any assignments or exams should be submitted to the course coordinator in writing within 5 business days of grade release.
4. There will be no rounding of the final grade for this course.

Key Words

innate immunity, adaptive immunity, immunodeficiency, immune tolerance, autoimmunity, hypersensitivity, oral cavity, bacteria, gram positive, gram negative, pathogenesis, treatment, teeth, periodontium, mucosa, saliva, nasopharynx, viruses, fungal infections, prions

Topics and Schedule

(Subject to change. Updates will be posted to CANVAS and announced by email)

All readings are in Vital Source, or as assigned and posted to CANVAS

Each didactic session is 3 hours, which includes small group/interactive learning time. Students will divide into groups of 5 students for small group/interactive learning activities. Students will be divided into groups of 8 for the Group Case Presentation assignment.

Date	Topics	Readings*	Instructor	Notes
Week 1: Lecture	Introduction to the Immune System and Innate Immunity	Levinson et al: Ch. 57, 58, 63	R. Wu	
Week 1: Small Group/Interactive Learning	Histology of the Innate Immune System			
Week 2: Lecture	Adaptive Immunity: T-Cell-Mediated Immune Response	Levinson et al: Ch. 59 (Origin and T Cells), Ch. 60, Ch.62 (MHC)	K. Keating	
Week 2: Small Group/Interactive Learning	Histology of the Adaptive Immune System			
Week 3: Lecture	Adaptive Immunity: B Cells and the Humoral Immune Response	Levinson et al: Ch. 59 (B Cells), Ch. 61	R. Wu	
Week 3: Small Group/Interactive Learning	Antibody Types and Properties			
Week 4: Lecture	Immunodeficiency, Immune Tolerance, Autoimmunity	Levinson et al: Ch. 65, 66, 68	K. Keating	
Week 4: Small Group/Interactive Learning	Hypersensitivity			
Week 5: Lecture	Exam 1: Immunology		R. Wu, K. Keating	
Week 5: Small Group/Interactive Learning	N/A			

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Week 6: Lecture	Bacteriology Part I: Introduction to Bacteriology and Pathogenesis Gram Positive, Gram Negative Cocci and Rods	Lamont et al: Ch. 1 Levinson et al: Ch. 7, 15-19	R. Wu	
Week 6: Small Group/Interactive Learning	Identification of Bacteria via Gram Staining and Cultures			
Week 7: Lecture	Bacteriology Part II: Mycobacteria, Actinomycetes, Mycoplasmas, Spirochetes, Chlamydiae	Levinson et al: Ch. 21-25	K. Keating	
Week 7: Small Group/Interactive Learning	Clinical Cases Group Case Presentations assigned			
Week 8: Lecture	Oral Microbiome in Health: Teeth, Periodontium, Mucosa, Saliva, Nasopharynx	Lamont et al: Ch. 3, 5 Levinson et al: Ch. 6 (Microbiome of the Respiratory Tract)	R. Wu	
Week 8: Small Group/Interactive Learning	Histology of the Oral Cavity			
Week 9: Lecture	Oral Microbiome in Disease: Introduction to Dental Caries and Periodontal Disease Systemic Diseases Associated with Oral Microbiota	Lamont et al: Ch. 11, 13, 19	K. Keating	
Week 9: Small Group/Interactive Learning	Histology of Dental Caries and Periodontal Disease			
Week 10: Lecture	Exam 2: Bacteriology, Oral Microbiome, Systemic Diseases Associated with Oral Microbiota		R. Wu, K. Keating	
Week 10: Small Group/Interactive Learning	N/A			
Week 11: Lecture	Virology Part I: Introduction to Virology, Herpesviruses, Poxviruses, HPV, Respiratory Viruses	Lamont et al: Ch. 16 Levinson et al: Ch. 37, 38	R. Wu	
Week 11: Small Group/Interactive Learning	Clinical Cases			
Week 12: Lecture	Virology Part II: Childhood Viruses, Enteric Viruses, Hepatitis, HIV	Lamont et al: Ch. 16 Levinson et al: Ch. 39, 40, 41, 45	K. Keating	

Exhibit D

Week 12: Small Group/Interactive Learning	Clinical Cases			
Week 13: Lecture	Mycology: Pathogenesis, Fungal Infections, Treatments Prions	Lamont et al: Ch. 17 Levinson et al: Ch. 44	R. Wu	
Week 13: Small Group/Interactive Learning	Clinical Cases			
Week 14: Lecture	Group Case Presentations		R. Wu, K. Keating	
Week 14: Small Group/Interactive Learning	N/A			
Week 15: Lecture	Final Exam: Virology, Mycology, Prions		R. Wu, K. Keating	
Week 15: Small Group/Interactive Learning	N/A			

**Course Learning Outcomes and links to Program Learning Outcomes (Appendix A)
and Institutional Learning Outcomes (Appendix B)**

No.	Course Learning Outcome	DMD PLO	DMD ILO	Learning Hierarchy ^b	Assessment Method
1					
2					
3					
4					

^a plo's appendix A

^b Learning Hierarchy based on Bloom's Taxonomy with 1=Memorization and/or Comprehension;
2=Application and/or Analysis; 3=Synthesis and/or Evaluation.

Teaching/ Learning Methodology

CLO Rubrics

CLO 1:

Indicators	Initial	Developing	Developed	Proficient

CLO 2:

Indicators	Initial	Developing	Developed	Proficient

Appendix A

Program Learning Outcomes (PLOs) CNU College of Dental Medicine

1. Patient-Centered Care: Demonstrate understanding of healthcare disparities and cultural awareness in patient counseling and patient advocacy
2. Evidence-Based Care: Apply current, evidence-based oral healthcare within the scope of general dentistry
3. Culturally competent, empathic communication: Demonstrate patient centered, empathic, and culturally competent communication and interpersonal skills
4. Oral and Written Communication: Demonstrate sound oral and written communications in patient care
5. Critical Thinking: Utilize critical thinking, problem solving skills and systemic thinking in assessing and making reasoned, evidence-based decisions in patient care
6. Ethics and Professionalism: Demonstrate professionalism and ethical decision making
7. Biomedical Sciences Knowledge: Demonstrate an understanding of the fundamentals of biomedical sciences and apply them appropriately in oral healthcare
8. Practice Management: Apply legal, regulatory and business management concepts related to provision of oral healthcare services

DMD Program Learning Outcomes (PLOs) Proficiency Rubric

PLO 1: Patient-Centered Care

Demonstrate understanding of healthcare disparities and cultural awareness and capability in patient counseling and providing appropriate patient advocacy

Indicators	Initial	Developing	Developed	Proficient
1.1. Education. Demonstrates ability to educate all audiences through effectively communicating information and assessing learning	<ul style="list-style-type: none"> Does not appropriately counsel patients Does not check for understanding, ask questions, and/or asks inappropriate questions. 	<ul style="list-style-type: none"> Counsels patients but leaves out pertinent information needed by patient Communicates with basic level of clarity but 	<ul style="list-style-type: none"> Generally demonstrates empathy, communicates accurate information clearly, checks for understanding Seeks to ensure 	<ul style="list-style-type: none"> Consistently demonstrates empathy, communicates accurate information clearly, checks for understanding Ensures

	<ul style="list-style-type: none"> Does not demonstrate the ability to find and utilize appropriate resources and references necessary for providing accurate counseling, consultation and education 	<p>does not always check for understanding or rephrase when confusion occurs.</p> <ul style="list-style-type: none"> Demonstrates the ability to find a one or two resources, yet the resources are not the best or most appropriate for providing accurate counseling, consultation and education 	<p>understanding and generally asks questions.</p> <ul style="list-style-type: none"> Frequently demonstrates the ability to find and utilize appropriate resources and references necessary for providing accurate counseling, consultation and education 	<p>understanding and asks appropriate questions.</p> <ul style="list-style-type: none"> Consistently demonstrates the ability to find and utilize appropriate resources and references for providing accurate patient counseling, consultation and education
1.2. Patient advocacy. Represents the patient's best interests	<ul style="list-style-type: none"> Does not demonstrate the ability represent a patient's best interest 	<ul style="list-style-type: none"> Demonstrates awareness of issues that impact a patient Demonstrates minimal ability to articulate these issues but does not demonstrate ability to sufficiently advocate on a patient's behalf 	<ul style="list-style-type: none"> Demonstrates sufficient awareness of issues that impact a patient Demonstrates ability to articulate these issues Demonstrates ability to sufficiently advocate on a patient's behalf 	<ul style="list-style-type: none"> Demonstrates full awareness of the most important issues that impact a patient Demonstrates ability to clearly and effectively articulate these issues Demonstrates ability to effectively advocate on a patient's behalf

PLO 2: Evidence-Based Care.

Apply sound, current, and evidence-based oral healthcare within the scope of general dentistry

Indicators	Initial	Developing	Developed	Proficient
2.1. Patient-centered care. Demonstrates ability to provide patient-centered care as the	<ul style="list-style-type: none"> Does not demonstrate ability to provide patient-centered care at the medication expert level; e.g., 	<ul style="list-style-type: none"> Demonstrates ability to provide patient-centered care as the medication expert in some, but not all, areas 	<ul style="list-style-type: none"> Demonstrates ability to provide patient-centered care as the medication expert (generally demonstrates 	<ul style="list-style-type: none"> Demonstrates ability to provide sufficient patient-centered care as the expert (collects and

medication expert (collect and interpret evidence, prioritize, formulate assessments and recommendations, implement, monitor and adjust plans, and document activities)	demonstrates ability to collect but not sufficiently interpret evidence, does not prioritize, formulates basic assessments and recommendations, does not sufficiently monitor and adjust plans nor document activities.	as follows: collect and interpret evidence, prioritize, formulate assessments and recommendations, implement, monitor and adjust plans, and document activities	ability to collect and interpret evidence, prioritize, formulate assessments and recommendations, implement, monitor and adjust plans, and document activities)	interprets evidence, prioritizes, formulates assessments and recommendations, implements, monitors and adjusts plans, and documents activities)
2.2. Systems management. Demonstrates ability to manage patient healthcare needs using human, financial, technological, and physical resources to optimize the safety and efficacy of medication use systems	<ul style="list-style-type: none"> • Does not demonstrate understanding of oral healthcare delivery systems parts • Does not demonstrate understanding of the forces that influence components of the oral healthcare delivery system, including their connection to patient care • Does not demonstrate understanding of any challenges to systems that affect oral healthcare delivery <p>Does not demonstrate understanding of how to work with different subsystems to deliver oral</p>	<ul style="list-style-type: none"> • Demonstrates understanding of some parts of oral healthcare delivery systems but does not identify how they are related to each other • Demonstrates understanding of some forces that influence the parts of healthcare delivery systems, but demonstrate minimal understanding of their connection to patient care • Demonstrates understanding of some challenges that can affect delivery of oral healthcare • Demonstrates some understanding of how to work with different subsystems and how they 	<ul style="list-style-type: none"> • Demonstrates understanding of most major components of oral healthcare systems and their respective relationships • Demonstrates understanding of the forces that influence the components of healthcare delivery systems, and demonstrate some understanding of their influence on the quality of patient care • Demonstrates understanding of most challenges that can affect delivery of oral healthcare, but does not demonstrate complete comprehension of the effects <p>Demonstrates basic</p>	<ul style="list-style-type: none"> • Demonstrates understanding of the major components of oral healthcare systems, their respective relationships, and their functions related to patient care • Demonstrates thorough understanding of the forces that influence components of healthcare delivery systems and demonstrate full understanding of their influence and implications on the quality of patient care • Demonstrates understanding of pertinent challenges to specific aspects of healthcare delivery by demonstrating

	healthcare	function to deliver oral healthcare, but demonstrate minimal awareness or understanding of one's own role within the oral healthcare delivery system	understanding of how to work with different subsystems and how they function to deliver oral healthcare and demonstrate some understanding of one's role within the oral healthcare delivery system, but does not necessarily demonstrate application of knowledge in a manner that maximizes the quality of oral healthcare	abilities to thoroughly discuss the implications for the appropriate parts of oral health care delivery systems Demonstrates excellent understanding of how to work with different subsystems involved while also demonstrating understanding of one's role within the subsystems, and demonstrate appropriate application of knowledge in a manner that maximizes the quality of oral healthcare
2.3. Health and wellness. Designs prevention, intervention, and educational strategies for individuals and communities to manage chronic disease and improve oral health and wellness	<ul style="list-style-type: none"> Does not demonstrate understanding of how the arts can be utilized to optimize patients' well-being 	<ul style="list-style-type: none"> Demonstrates knowledge of some of the ways that the arts can be utilized to optimize patients' well-being 	<ul style="list-style-type: none"> Demonstrates sufficient knowledge of multiple ways that the arts can be utilized to optimize patients' well-being 	<ul style="list-style-type: none"> Demonstrates thorough knowledge of the ways that the arts can be utilized to optimize patients' well-being and creatively applies this knowledge to improve well-being and the practice and delivery of oral healthcare
2.4. Population-based care.	<ul style="list-style-type: none"> Does not demonstrate 	<ul style="list-style-type: none"> Demonstrates minimal 	<ul style="list-style-type: none"> Demonstrates sufficient 	<ul style="list-style-type: none"> Demonstrates superb

Exhibit D

Demonstrates understanding of how population-based care influences patient-centered care and the development of practice guidelines and evidence-based best practices	awareness of population-based care.	<p>understanding of population-based care and how it influences patient-centered care</p> <ul style="list-style-type: none"> • Does not demonstrate awareness of how these notions influence the development of practice guidelines 	<p>understanding of population-based care and how it influences patient-centered care</p> <ul style="list-style-type: none"> • Demonstrates sufficient understanding of how population-based care influences the development of practice guidelines and best practices for patient care 	<p>understanding of population-based care and how it influences patient-centered care</p> <ul style="list-style-type: none"> • Demonstrates superb understanding of how population-based care influences the development of practice guidelines and demonstrates knowledge of best practices for patient care
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PLO 3: Culturally Competent, Empathic Communication.

Demonstrate patient centered, empathic and culturally competent communication and interpersonal skills

Indicators	Initial	Developing	Developed	Proficient
3.1. Empathy. Demonstrates the ability to communicate with the patient empathically.	<ul style="list-style-type: none"> Does not demonstrate the ability to communicate with the patient empathically. 	<ul style="list-style-type: none"> Demonstrates some ability, but experiences lapses in the ability to communicate empathically 	<ul style="list-style-type: none"> Demonstrates the ability to communicate empathically, with few lapses. 	<ul style="list-style-type: none"> Demonstrates an advanced ability, and never experiences lapses in communicating empathically.
3.2. Cultural competence. Demonstrates the ability to engage in communication with the patient that is culturally aware and accepting.	<ul style="list-style-type: none"> Does not demonstrate communication and interactions that convey respect or concern for patients and the community. Does not demonstrate an awareness of customs, beliefs, or perspectives in diverse patients Does not demonstrate awareness of cultural and linguistic needs of patients in order to communicate health information 	<ul style="list-style-type: none"> Demonstrates communication and interactions characteristic of a minimal level of respect, and little concern for patients and the community is apparent through use of some appropriate communication, but student does not employ follow-up questions for clarification, when necessary, and student provides inappropriate detail in responses Demonstrates a minimal level of awareness of customs, beliefs, or perspectives in diverse patients Demonstrates minimal awareness of cultural and 	<ul style="list-style-type: none"> Demonstrates appropriate communication and interactions that are characteristic of a basic level of respect, and concern for patients and the community is apparent through use of appropriate communication, where student uses some clear, but not necessarily relevant or detailed, follow-up questions and responses Demonstrates awareness of customs and beliefs, but may not clarify with patients about personal perspectives Demonstrates awareness of the cultural and 	<ul style="list-style-type: none"> Demonstrates professional communication and interactions by showing empathy, respect, and concern for patients and the community through use of appropriate communication where follow-up questions (as needed) and responses are clear, relevant, and detailed Demonstrates awareness of customs, beliefs, or perspectives in diverse patients; ask appropriate questions to clarify perspectives and perceptions in diverse patients Demonstrates full awareness of and responsiveness to

		linguistic needs of patients; either does not or only attempt to adapt behaviors, but does so ineffectively, to communicate health information	linguistic needs of diverse patients, and adapt behaviors to communicate health information, but communication may not be effective	cultural and linguistic needs of diverse patients by adapting behaviors appropriately in order to effectively communicate health information
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PLO 4: Oral and Written Communication.

Demonstrate sound oral and written communications in patient care

Indicators	Initial	Developing	Developed	Proficient
4.1. Oral communication. Demonstrate sound oral communication in patient care.	<ul style="list-style-type: none"> Does not demonstrate logical reasoning in oral communications in patient care. Does not demonstrate the ability to cite sound evidence that support ideas within presentations or discussions. 	<ul style="list-style-type: none"> Demonstrates some logical reasoning in oral communications in patient care but demonstrates some lapses. Demonstrates some ability to cite sound evidence that support ideas within presentations or discussions, but demonstrates some lapses. 	<ul style="list-style-type: none"> Generally demonstrates logical reasoning in oral communications in patient care. Generally demonstrates the ability to cite sound evidence that support ideas within presentations or discussions. 	<ul style="list-style-type: none"> Consistently demonstrates logical reasoning in oral communications in patient care. Consistently demonstrates the ability to cite sound evidence that support ideas within presentations or discussions.
4.2. Written communication. Demonstrate sound written communication in patient care.	<ul style="list-style-type: none"> Does not demonstrate logical reasoning in written communications in patient care. Does not demonstrate the written ability to cite sound evidence that support ideas. 	<ul style="list-style-type: none"> Demonstrates some logical reasoning in written communications in patient care but demonstrates some lapses. Demonstrates some written ability to cite sound evidence that support ideas, but demonstrates some lapses. 	<ul style="list-style-type: none"> Generally logical reasoning in written communications in patient care. Generally demonstrates the written ability to cite sound evidence that support ideas. 	<ul style="list-style-type: none"> Consistently demonstrates logical reasoning in written communications in patient care. Consistently demonstrates the written ability to cite sound evidence that support ideas.

PLO 5: Critical Thinking.

Utilize critical thinking, problem solving skills and systemic thinking in assessing and making reasoned, evidence-based decisions in patient care

Indicators	Initial	Developing	Developed	Proficient
5.1. Problem solving. Identifies problems; explore and prioritize potential strategies; and designs, implements, and evaluates viable solutions	<ul style="list-style-type: none"> Is not able to correctly identify the problem or issue being considered. Does not identify appropriate resources. Includes extraneous information or inappropriate or insufficient resources. Does not demonstrate understanding of the content of materials reviewed. Makes inappropriate inferences. Does not evaluate possible alternatives or generates ideas that are illogical or extraneous to issue at hand. Does not propose a solution or does not articulate decision. Does not adequately provide rationale for selected alternative or 	<ul style="list-style-type: none"> Identifies the problem or issue but does not demonstrate awareness of all the factors associated with the problem or issues that impact decision making. Identifies a few, but not all, resources needed for decision making. Demonstrates ability to interpret some information and data but not all. Does not fully or effectively evaluate alternative solutions. Proposes a decision with many apparent weaknesses (i.e., not feasible, lack of regard for consequences, lack of supporting evidence, illogical, irrelevant to issue at hand, etc.). Provides 	<ul style="list-style-type: none"> Correctly identifies problem or issue being considered and demonstrates adequate awareness of the factors associated with this problem or issue that impact decision making. Identifies most of the resources needed. Demonstrates ability to interpret most information and data. Considers and evaluates possible solutions in a way that generally leads to a logical decision or course of action. Proposes a solution that does not contain apparent weaknesses that may or may not be the obvious clear choice. Solutions chosen demonstrate consideration of 	<ul style="list-style-type: none"> Consistently correctly identifies the problem or issue being considered and all of the primary factors associated with this problem or issue that impact decision making. Articulates the importance of these factors. Identifies all appropriate resources. Demonstrates ability to correctly interpret information and data needed for appropriate decision making. Demonstrates awareness of importance of these data in decision-making process. Considers and evaluates possible solutions effectively and thoroughly. Evaluation leads to sound, logical, and “best” decision or

	decision	rationale for selected alternative or decision but does not build a solid position with supporting evidence. Is unable to defend decision or course of action.	most of the strengths, weaknesses, feasibility, effects, consequences, relevance, etc.). Provides rationale for selected alternative or decision which includes some solid supporting evidence. Is able to defend decision or course of action at a basic level.	course of action. <ul style="list-style-type: none"> Proposes a solution that is entirely appropriate to the situation at hand. Solutions chosen demonstrate consideration of all of the important and relevant strengths, weaknesses, feasibility, effects, consequences, etc.). Provides rationale for selected alternative or decision and builds a solid position with appropriate and relevant supporting evidence. Effectively defends decision or course of action.
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PLO 6: Ethics and Professionalism.

Demonstrating professionalism and ethical decision making

Indicators	Initial	Developing	Developed	Proficient
6.1. Professionalism. Demonstrates behaviors and values that are consistent with the trust given to the profession by patients, other healthcare providers, and society	<ul style="list-style-type: none"> Does not consistently demonstrate professional attitudes and behaviors (altruism, excellence, duty, accountability, honesty, and integrity) Demonstrates frequent lapses in accountability or quality of work 	<ul style="list-style-type: none"> Demonstrates some professional attitudes and behaviors yet there is inconsistency that may impede on the quality of work or treatment of patients and other healthcare team members (altruism, excellence, duty, accountability, honesty, and integrity) 	<ul style="list-style-type: none"> Generally demonstrates most of the professional attitudes and behaviors (altruism, excellence, duty, accountability, honesty, and integrity) that are required in the profession Demonstrates ability to use these behaviors and values to improve healthcare 	<ul style="list-style-type: none"> Consistently demonstrates the professional attitudes and behaviors that uphold the integrity and competence of the work and the treatment of patients and other healthcare team professionals (altruism, excellence, duty, accountability, honesty, and integrity) Consistently uses these behaviors and values to improve healthcare
6.2. Ethics. Demonstrates the ability to make decisions consistent with the values of practitioners and scholars of oral healthcare.	<ul style="list-style-type: none"> Does not make ethical decisions consistent with the values of practitioners and scholars of oral healthcare. 	<ul style="list-style-type: none"> Demonstrates the ability to exercise ethical decision making, and a rudimentary knowledge of ethics within oral healthcare. 	<ul style="list-style-type: none"> Demonstrates the ability to exercise clear and ethical decision making, and a sufficient knowledge of ethics within oral healthcare. 	Demonstrates the ability to exercise clear and ethical decision making, and an advanced knowledge of ethics within oral healthcare.

PLO 7: Biomedical Sciences Knowledge.

Demonstrate an understanding of the fundamentals of biomedical sciences and apply them appropriately in oral healthcare

Indicators	Initial	Developing	Developed	Proficient
7.1. Diagnostic and pharmacologic. Demonstrates the ability to describe how to deliver patient assessments, knowledge of medicines, and delivering diagnoses.	<ul style="list-style-type: none"> Does not demonstrate the ability to describe diagnostic and pharmacologic knowledge related to oral health. 	<ul style="list-style-type: none"> Demonstrates a rudimentary ability to describe diagnostic and pharmacologic knowledge related to oral health. 	<ul style="list-style-type: none"> Demonstrates a sufficient ability to describe diagnostic and pharmacologic knowledge related to oral health. 	<ul style="list-style-type: none"> Demonstrates an advanced ability to describe diagnostic and pharmacologic knowledge related to oral health.
7.2. Orofacial pain/temporomandibular/ Sleep disorder. Demonstrates the ability to describe the anatomical, physiological, and neurological basis; classification, epidemiology, and etiology; and assessments and treatments of orofacial pain, temporomandibular joint disease, and sleep disorders.	<ul style="list-style-type: none"> Does not demonstrate the ability to describe scientific or assessment knowledge related to OFP/TMJ disease and sleep disorders. 	<ul style="list-style-type: none"> Demonstrates a rudimentary ability to describe scientific or assessment knowledge related to OFP/TMJ disease and sleep disorders. 	<ul style="list-style-type: none"> Demonstrates a sufficient ability to describe scientific or assessment knowledge related to OFP/TMJ disease and sleep disorders. 	<ul style="list-style-type: none"> Demonstrates an advanced ability to describe scientific or assessment knowledge related to OFP/TMJ disease and sleep disorders.
7.3. Maxillofacial pathology Demonstrates the ability to describe the scientific aspects of head and neck diseases, as well as knowledge of assessment and diagnosis.	<ul style="list-style-type: none"> Does not demonstrate the ability to describe the scientific or assessment knowledge related to head and neck diseases. 	<ul style="list-style-type: none"> Demonstrates a rudimentary ability to describe the scientific or assessment knowledge related to head and neck diseases. 	<ul style="list-style-type: none"> Demonstrates a sufficient ability to describe the scientific or assessment knowledge related to head and neck diseases. 	<ul style="list-style-type: none"> Demonstrates an advanced ability to describe the scientific or assessment knowledge related to head and neck diseases.

PLO 8: Practice Management.

Apply legal, regulatory, and business management concepts related to the provision of oral healthcare services

Indicators	Initial	Developing	Developed	Proficient
8.1. Legal aspects Applies legal and regulatory concepts related to the provision of oral healthcare services.	<ul style="list-style-type: none"> Does not demonstrate an understanding or the ability to apply legal and regulatory concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates a rudimentary understanding and ability to apply legal and regulatory concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates a sound understanding and ability to apply legal and regulatory concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates an advanced understanding and ability to apply legal and regulatory concepts related to the provision of oral healthcare sciences.
8.2. Business management Applies business management concepts to the provision of oral healthcare services.	<ul style="list-style-type: none"> Does not demonstrate an understanding or the ability to apply business management concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates a rudimentary understanding and ability to apply business management concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates a sound understanding and ability to apply business management concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates an advanced understanding and ability to apply business management concepts related to the provision of oral healthcare sciences.

Appendix B

California Northstate University Institutional Learning Objectives

ILO 1: Critical thinking: Exercise reasoned judgment to assess technical information and make well-informed decisions using evidence-based approaches

ILO 2: Written communication. Demonstrate the ability to write coherent, supported, and logically structured prose

ILO 3: Oral communication: Demonstrates oral communication skills

ILO 4: Professionalism. Interact with respect, empathy, diplomacy, and cultural competence

ILO 5: Quantitative reasoning: Demonstrate ability to use mathematics and statistics in problem solving

ILO 6: Information literacy: Identify and search relevant libraries of information and databases; synthesize information obtained from primary literature using properly referenced citations

DMD Institutional Learning Outcomes (ILOs) Proficiency Rubric

ILO 1: Critical thinking: Exercise reasoned judgment to assess technical information and make well-informed decisions using evidence-based approaches

Indicator	Initial	Developing	Developed	Proficient
1.1. Demonstrates identification of problem or issues	<ul style="list-style-type: none"> Does not correctly identify the problem or issue being considered Does not demonstrate understanding of the psychological factors that contribute to current patient state 	<ul style="list-style-type: none"> Identifies the problem or issue but does not demonstrate awareness of all the factors impacting decision making Demonstrates understanding of some possible psychological factors that contribute to current patient state 	<ul style="list-style-type: none"> Correctly identifies the problem or issue but does not demonstrate awareness of all factors impacting decision making Demonstrates understanding of most psychological factors that contribute to the current patient state 	<ul style="list-style-type: none"> Correctly identifies all of the primary factors associated with problem or issue impacting decision making Demonstrates thorough understanding of all possible psychological factors that contribute to the current patient state

Exhibit D

1.2. Demonstrates identification of resources	<ul style="list-style-type: none"> Does not identify appropriate resources 	<ul style="list-style-type: none"> Identifies a few resources needed 	<ul style="list-style-type: none"> Identifies most of the resources needed 	<ul style="list-style-type: none"> Correctly identifies all appropriate resources
1.3. Finds and interprets data needed for critical thinking and decision making	<ul style="list-style-type: none"> Does not demonstrate understanding of the data needed for critical thinking and decision making 	<ul style="list-style-type: none"> Demonstrates ability to interpret some data but not all 	<ul style="list-style-type: none"> Demonstrates ability to interpret most data 	<ul style="list-style-type: none"> Demonstrates ability to correctly interpret data needed for decision making
1.4. Demonstrates knowledge of alternatives when evaluating for possible solutions	<ul style="list-style-type: none"> Does not evaluate possible alternatives for treatment or diagnosis 	<ul style="list-style-type: none"> Does not effectively evaluate alternative treatment or diagnostic solutions 	<ul style="list-style-type: none"> Evaluates possible treatment and diagnostic solutions leading to a logical decision 	<ul style="list-style-type: none"> Effectively and thoroughly considers and evaluates possible diagnostic and treatment solutions
1.5. Proposes and selects appropriate solutions	<ul style="list-style-type: none"> Does not propose solutions to the client's needs 	<ul style="list-style-type: none"> Proposes solutions without consideration of alternatives 	<ul style="list-style-type: none"> Solutions chosen demonstrate consideration of most of the strengths, weaknesses, and consequences of the decision 	<ul style="list-style-type: none"> Proposes solutions that are appropriate to the situation and demonstrate consideration of all relevant strengths, weaknesses, and consequences
1.6. Presents rationale for course of action	<ul style="list-style-type: none"> Does not adequately provide rationale for treatment decision 	<ul style="list-style-type: none"> Provides rationale for decision but does not integrate into mental health treatment plan 	<ul style="list-style-type: none"> Provides rationale for decision with solid supporting evidence from available psychological literature and/or case factors 	<ul style="list-style-type: none"> Provides rationale for decision and with appropriate and relevant supporting case evidence and integrates findings into treatment plan

ILO 2: Written communication. Demonstrate the ability to write coherent, supported, and logically structured prose

Indicators	Initial	Developing	Developed	Proficient
2.1. Demonstrates knowledge and awareness of intended audience	<ul style="list-style-type: none"> Does not demonstrate knowledge or awareness of audience for which the document is intended 	<ul style="list-style-type: none"> Demonstrates some ability to craft a document appropriate for its audience 	<ul style="list-style-type: none"> Demonstrates ability to craft a document appropriate for its audience 	<ul style="list-style-type: none"> Consistently demonstrates ability to craft documents appropriate for the audience
2.2. Demonstrates clear and logical thought	<ul style="list-style-type: none"> Does not demonstrate clear or logical thought in their documentation 	<ul style="list-style-type: none"> Writing does not sufficiently conceptualize case variables or analyze subject under discussion 	<ul style="list-style-type: none"> Demonstrates general clear or logical thought in their documentation 	<ul style="list-style-type: none"> Research and clinical documentation demonstrates clear and focused thinking

Exhibit D

2.3. Demonstrates support for and development of ideas	<ul style="list-style-type: none"> Does not explain or develop ideas 	<ul style="list-style-type: none"> Demonstrates minimal support for ideas 	<ul style="list-style-type: none"> Writing contains examples that generally support ideas 	<ul style="list-style-type: none"> Supports ideas with relevant, clear, impactful examples
2.4. Demonstrates appropriate use of evidence to support arguments	<ul style="list-style-type: none"> Demonstrates an attempt to use proper citations to support ideas 	<ul style="list-style-type: none"> Uses credible and relevant sources to support ideas appropriate in the study of psychology 	<ul style="list-style-type: none"> Consistently uses credible and relevant sources to support ideas 	<ul style="list-style-type: none"> Demonstrates skillful use of credible and relevant sources to develop and support ideas
2.5. Demonstrates appropriate use of language, syntax, and mechanics	<ul style="list-style-type: none"> Has excessive or severe errors in language usage 	<ul style="list-style-type: none"> Generally conveys meaning to readers with clarity, though writing may include some errors 	<ul style="list-style-type: none"> Language conveys meaning to readers and writing contains very few errors 	<ul style="list-style-type: none"> Uses language effectively and skillfully to communicate meaning to readers

ILO 3: Oral communication: Demonstrates oral communication skills

Indicators	Initial	Developing	Developed	Proficient
3.1. Demonstrates knowledge and awareness of intended audience	<ul style="list-style-type: none"> Does not demonstrate knowledge or awareness of audience for which the communication is intended 	<ul style="list-style-type: none"> Demonstrates some ability to communicate in a manner appropriate to the audience 	<ul style="list-style-type: none"> Demonstrates ability to communicate appropriate to the audience 	<ul style="list-style-type: none"> Consistently demonstrates ability to communicate in a manner appropriate to the audience
3.2. Demonstrates clear and logical thought	<ul style="list-style-type: none"> Does not demonstrate clear or logical thought in their communication 	<ul style="list-style-type: none"> Communication does not sufficiently conceptualize case variables or analyze subject under discussion 	<ul style="list-style-type: none"> Demonstrates general clear or logical thought in their communication 	<ul style="list-style-type: none"> Communication demonstrates clear and focused thinking
3.3. Demonstrates effective use of language in their communication	<ul style="list-style-type: none"> Does not know professional psychological language or uses jargon Does not know the proper technical language regarding mental health treatment 	<ul style="list-style-type: none"> Demonstrates inaccurate use of psychological language or uses jargon in professional communications Utilizes scientific language that is incomprehensible to patients 	<ul style="list-style-type: none"> Demonstrates appropriate use of professional language and minimal jargon Utilizes generalized language to interact with patients 	<ul style="list-style-type: none"> Demonstrates use of appropriate, professional language Utilizes generalized language to interact with patients
3.4. Demonstrates appropriate active listening techniques	<ul style="list-style-type: none"> Does not acknowledge other viewpoints 	<ul style="list-style-type: none"> Demonstrates little attempt to recognize other viewpoints 	<ul style="list-style-type: none"> Recognizes other viewpoints but has difficulty incorporating them 	<ul style="list-style-type: none"> Listens to questions with a consideration of alternative

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when addressing questions	<ul style="list-style-type: none"> • Has great difficulty answering questions 	<ul style="list-style-type: none"> • Answers are simplistic and lack intellectual depth 	into case conceptualization <ul style="list-style-type: none"> • Adequately answers patient questions 	viewpoints <ul style="list-style-type: none"> • Answers questions thoughtfully referencing evidence
3.5. Orally communicates meaning to audience	<ul style="list-style-type: none"> • Vocal delivery is too soft or too fast • Long, unintended silences and/or speech disruptions frequently distract audience • Speaker makes no attempt to engage audience 	<ul style="list-style-type: none"> • Vocal delivery is audible • Speech rate or volume disruptions occasionally distract from comprehension • Attempts to engage audience 	<ul style="list-style-type: none"> • Vocal delivery is varied and dynamic • Speech rate, volume, and tone enhance listener interest and facilitate understanding • Generally engages audience 	<ul style="list-style-type: none"> • Vocal delivery is varied and dynamic • Speech rate, volume, and tone enhance listener interest and facilitate understanding • Thoroughly engages audience
3.6. Utilizes non-verbal means to enhance message	<ul style="list-style-type: none"> • Eye contact, body language, and facial expressions are inappropriate 	<ul style="list-style-type: none"> • Eye contact, body language, and facial expressions neither enhance nor hinder oral effectiveness 	<ul style="list-style-type: none"> • Use of eye contact, body language, and facial expressions are mostly consistent with the verbal message 	<ul style="list-style-type: none"> • Use of eye contact, body language, and facial expressions that are consistent with the verbal message

ILO 4: Professionalism. Interact with respect, empathy, diplomacy, and cultural competence

Indicators	Initial	Developing	Developed	Proficient
4.1. Demonstrates professional attitudes and behaviors	<ul style="list-style-type: none"> • Does not generally demonstrate professional attitudes or behaviors expected from a dentist 	<ul style="list-style-type: none"> • Demonstrates some attitudes and behaviors that may be characteristic of a dentist 	<ul style="list-style-type: none"> • Generally demonstrates attitudes and behaviors expected from a dentist 	<ul style="list-style-type: none"> • Consistently demonstrates attitudes and behaviors expected from a dentist
4.2. Demonstrates personal responsibility and accountability	<ul style="list-style-type: none"> • Does not demonstrate personal accountability or responsibility for work completed 	<ul style="list-style-type: none"> • Demonstrates minimal personal accountability and responsibility for work completed 	<ul style="list-style-type: none"> • Demonstrates personal accountability and responsibility for the work completed 	<ul style="list-style-type: none"> • Consistently demonstrates personal accountability and responsibility for work completed
4.3. Demonstrates respectful and sensitive behaviors to the cultural and linguistic needs of diverse patients	<ul style="list-style-type: none"> • Does not demonstrate an awareness of patients' customs, beliefs, or perspectives • Does not demonstrate awareness of linguistic needs of patients 	<ul style="list-style-type: none"> • Demonstrates a minimal level of awareness of customs, beliefs, or perspectives of patients • Demonstrates minimal awareness of cultural and linguistic needs of patients 	<ul style="list-style-type: none"> • Demonstrates awareness of customs and beliefs • Demonstrates awareness of the cultural and linguistic needs of patients 	<ul style="list-style-type: none"> • Demonstrates awareness of customs, beliefs, or perspectives in patients • Demonstrates full awareness and responds to the cultural and linguistic needs of patients
4.4. Demonstrates professional	<ul style="list-style-type: none"> • Appears inattentive and impatient • Uses inappropriate 	<ul style="list-style-type: none"> • Appears unfocused and distracted • Uses acceptable 	<ul style="list-style-type: none"> • Appears composed and focused • Uses appropriate 	<ul style="list-style-type: none"> • Uses articulate, tactful, and diplomatic speech

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demeanor	body language • Dresses in attire that is inappropriate	body language • Dresses in attire that is not offensive	body language • Dresses in attire that is professional	<ul style="list-style-type: none">• Uses professional body language• Dresses in attire that is professional, and well-suited for the environment
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ILO 5: Quantitative reasoning: Demonstrate ability to use mathematics and statistics in problem solving

Indicators	Initial	Developing	Developed	Proficient
5.1. Demonstrates ability to perform calculations and apply mathematical principles to solve problems	<ul style="list-style-type: none"> Does not demonstrate ability to apply statistical or psychometric principles 	<ul style="list-style-type: none"> Demonstrates ability to perform basic statistical calculations but does not know how to apply psychometric principles to solve problems 	<ul style="list-style-type: none"> Demonstrates ability to perform most statistical calculations accurately and to apply psychometric principles to solve problems 	<ul style="list-style-type: none"> Consistently demonstrates ability to perform statistical calculations accurately and to appropriately apply psychometric principles to solve problems
5.2. Demonstrates understanding of experimental designs and methodology	<ul style="list-style-type: none"> Displays difficulty proposing a basic experiment or research project 	<ul style="list-style-type: none"> Comprehends basic experiments designed by others 	<ul style="list-style-type: none"> Evaluates research, method, and protocol to review valid and reliable research 	<ul style="list-style-type: none"> Proposes appropriate and innovative designs to address a new hypothesis and research question
5.3. Demonstrates logical and appropriate interpretation of data	<ul style="list-style-type: none"> Demonstrates a limited ability to interpret scientific data 	<ul style="list-style-type: none"> Attempts to interpret scientific data 	<ul style="list-style-type: none"> Demonstrates the ability to interpret scientific data 	<ul style="list-style-type: none"> Interprets data in the context of current scientific knowledge
5.4. Demonstrates logical thought patterns in generating conclusions	<ul style="list-style-type: none"> Does not generate conclusions based on current scientific data and statistics 	<ul style="list-style-type: none"> Generates conclusions that may be based on current scientific data and statistics 	<ul style="list-style-type: none"> Generates conclusions using scientific and statistical data 	<ul style="list-style-type: none"> Accurately generates conclusions using appropriate scientific and mathematical data

ILO 6: Information literacy: Identify and search relevant libraries of information and databases; synthesize information obtained from primary literature using properly referenced citations

Indicators	Initial	Developing	Developed	Proficient
6.1. Demonstrates appropriate ability search and acquire resources	<ul style="list-style-type: none"> Does not identify or solicit help in obtaining external resources to support topic 	<ul style="list-style-type: none"> Identified resources may not be sufficient in quality and infrequently solicits guidance from library personnel 	<ul style="list-style-type: none"> Identifies resources appropriate for scientific inquiry and solicits guidance from library personnel 	<ul style="list-style-type: none"> Identifies a variety of relevant sources and regularly seeks guidance from library personnel
6.2. Demonstrates appropriate incorporation of references	<ul style="list-style-type: none"> Does not incorporate references 	<ul style="list-style-type: none"> Incorporates references from psychological sources that do not clearly support 	<ul style="list-style-type: none"> Incorporates relevant references that generally supports ideas 	<ul style="list-style-type: none"> Incorporates relevant references from respected psychological sources

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		ideas		
6.3. Demonstrates appropriate citation of references	<ul style="list-style-type: none">• Does not use citations	<ul style="list-style-type: none">• Uses citations but they are not formatted in APA style	<ul style="list-style-type: none">• Demonstrates use of appropriate citations in context	<ul style="list-style-type: none">• Uses properly cited references and includes all necessary information in reference list



California Northstate University College of Dental Medicine

Course Syllabus

Course #	Course Title	Credits	Year	Term
532	<i>Surgical Anatomy of the Head and Neck</i>	2	DS1	Spring

Credit Hour Policy

For each 15-week semester, one (1) hour of credit is assigned per hour each week of classroom or direct faculty didactic instruction (that is, per hour of lecture or student in-class time) and a minimum of two (2) hours of out-of-class student work (homework). For practicum and internship time, one (1) hour of credit is assigned per three (3) hours each week of student time spent in this activity.

Maximum Enrollment: 80

Calendar of Important Dates:

Date	

Course Coordinator, Instructors and Contact Information

Course Director:

Room:

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E mail:
Office hours

Holly Jacobson BA (course administrator)

Room: xxx
E mail: holly.jacobson@cnsu.edu

Classroom and Meeting Times

Room: Classroom xxxx
Time: xxxx 2 hours per week

Clinic and meeting times

Room:
Time:

Course Description

The course is designed to introduce students to head and neck anatomy and its clinical relevance as related to dentistry.

Students will learn basic embryology and should be able to recognize major anatomical structures of the head and neck. The structures of the viscerocranium that will be presented include osteology, myology, cranial nerves, vasculature, lymphatic drainage, salivary glands, oral cavity, fascial planes and neck anatomy.

Laboratory sessions will focus on clinical recognition and function of anatomic structures, including their abnormalities and disease. Anatomic structures as related to dentistry will be explored, including TMD, landmarks for local anesthesia and the pathway of odontogenic infections.

Prerequisite Courses

None

Prerequisite Knowledge

None

Required Textbook(s) and Material(s)

1. **Netter's Head and Neck Anatomy for Dentistry. 3rd Edition. Neil S. Norton**
2. **The Anatomical Basis of Dentistry. 3rd Edition. Bernard Liebgott**
3. **Bates' Guide to Physical Examination and History Taking. 12th Edition. Lynn S. Bickley**

Technology

- Power point
- Audio/Video recordings where applicable
- Web-based course management (Canvas) and Examsoft
- Radiology imaging software

Evaluation Components

In keeping with the Team Based Learning (TBL) approach, grades will be determined as follows:

Individual Components	80%
First Quiz	10%
Second Quiz	10%
Final Exam	30%
Clinical evaluation practical	30%

Team Components	20%
Group PCS projects	10%
Peer evaluation	10%

GRADING

All students must demonstrate minimal individual competency. Therefore, students earning less than 75% on the total Individual component score will not have team component scores added to

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calculate their final course grade. During the course, students who score less than 75% on individual components may be subject to periodic course content review and may receive an Academic Alert.

In order to progress from one semester to the next, students must pass all courses with a letter a grade of C or higher and maintain a minimum cumulative grade point average (GPA) of 2.0. The breakdown for assignment of letter grades and grade points for each letter grade are as follows:

Percent	Letter Grade/Action
90.0 – 100%	A
80.0 – 89.9%	B
75.0 – 79.9%	C - Pass
60.0 – 74.9%	D – Requiring remediation (successful remediation recorded as C, unsuccessful remediation recorded as F)
Below 60.0%	F – Fail (course must be repeated)
Incomplete	I

Incomplete

During a semester, a student may not complete all required assignments and/or examinations due to extenuating circumstances, such as, but not limited to, an illness or a family emergency. In such a case, the course director may give a grade of Incomplete for the course. The course with the incomplete grade has to be completed successfully within the time frame as being defined by the student's academic plan, normally in the same academic year, otherwise a leave of absence would be required.

Core-Course Policies

All students are required to adhere to the Academic Policies that impact on student progression and conduct while attending the DMD program, including the following: Academic Progression Policy, Excused Absence Policy, Exam Policy, Course Grade Appeal Policy, Course Add/Drop Policy and Attendance Policy. Refer to the current Student Handbook for the detailed policies.

Course Specific Policies

1.

Key Words

Pharyngeal arches and pouches, cleft lip/ palate, skull, maxilla, mandible, muscles of mastication, muscles of facial expression, TMJ, cranial nerves, trigeminal nerve, facial nerve, triangles of the neck, carotid artery, lymph nodes, odontogenic infections, salivary glands, thyroid and parathyroid glands, paranasal sinuses, extraocular muscles

Topics and Schedule

(Subject to change. Updates will be posted to CANVAS and announced by email)

All readings are in Vital Source, or as assigned and posted to CANVAS

Each didactic session including LAL is 2 hours. Each clinical session is 4 hours. Students are divided into groups of 4 students (groups 1-20) for each of their 3 sessions. Each group of 4 will attend either Monday, Tuesday, Wednesday or Thursday clinic.

Date	Topics	Readings*	Instructor	Notes
Week 1	Introduction to Embryology of the Head and Neck	Norton Chapter 1	McLaughlin/Assael	Pharyngeal arches and pouches
Week 1: Clinic assignment	Disturbances in the Development of the Head and Neck			Syndromes and Cleft Lip/Palate
Week 2	Osteology	Norton Chapter 2		Bones of the skull (cranium and maxilla) and the mandible
Week 2: Clinic assignment	Dental Radiology			Panorex and Cephalometric Films
Week 3	Myology	Norton Chapter 5, 8		
Week 3: clinic assignment	Identification of Muscles of Mastication and Facial Expression			
Week 4:	Anatomy of the Temporomandibular Joint	Norton Chapter 9		
Week 4: clinic assignment	Function and Disorders of the TMJ	Bickley Chapter 16		Articular Disc Perforation, Arthritis, Ankylosis
Week 5:	Cranial Nerves	Norton Chapter 3		

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Week 5: clinic assignment	Cranial Nerve Testing and Disorders	Bickley Chapter 17		Bell's Palsy, Trigeminal Neuralgia
Week 6	Cranial Nerves	Norton Chapter 3		
Week 6: clinic assignment	Local Anesthesia	Norton Chapter 21		Oral Nerve Blocks
Week 7	Arterial Blood Supply and Venous Drainage	Liebgott Chapter 8		
Week 7: clinic assignment	Measuring Blood Pressure and Palpation of the Pulses	Bickley Chapter 4, 12		
Week 8	Lymphatics	Liebgott Chapter 8 Norton Appendix A		
Week 8: clinic assignment	Palpation of Lymph Nodes	Bickley Chapter 7		
Week 9	Oral Cavity and Tongue	Norton Chapter 13, 14		
Week 9: clinic assignment	Clinical Oral Examination and Oral Cancer Screening	Bickley Chapter 7		
Week 10	Salivary Glands	Norton Chapter 6, 13		
Week 10: clinic assignment	Expression and Dysfunction of Salivary Glands			Xerostomia, Mucocoeles, Sialolithiasis, Pathology of the Parotid Gland
Week 11	Anatomy of the Neck	Norton Chapter 4		Triangles of the Neck, Major Vessels
Week 11: clinic assignment	Discussion of Thyroid and Parathyroid Glands	Bickley Chapter 7		Hypothyroidism, Hyperthyroidism
Week 12	Fascial Planes	Norton Chapter 17		

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Week 12: clinical assignment	Pathways of Odontogenic Infections			Abscess, Ludwig's Angina, Cervical Emphysema
Week 13	Nasal Cavity and Paranasal Sinuses	Norton Chapter 11, 12		
Week 13 : clinic assignment	HEENT Examination and Identification of Sinuses in Imaging	Bickley Chapter 7		
Week 14	Anatomy of the Orbit	Norton Chapter 19		
Week 14: clinic assignment	Testing the Extraocular Muscles and Diseases of the Orbit	Bickley Chapter 7		Diabetic Retinopathy, Glaucoma
Week 15	Final Exam			

**Course Learning Outcomes and links to Program Learning Outcomes (Appendix A)
and Institutional Learning Outcomes (Appendix B)**

No.	Course Learning Outcome	DMD PLO	DMD ILO	Learning Hierarchy ^b	Assessment Method
1					
2					
3					
4					

^a plo's appendix A

^b Learning Hierarchy based on Bloom's Taxonomy with 1=Memorization and/or Comprehension;
2=Application and/or Analysis; 3=Synthesis and/or Evaluation.

Teaching/ Learning Methodology

CLO Rubrics

CLO 1:

Indicators	Initial	Developing	Developed	Proficient

CLO 2:

Indicators	Initial	Developing	Developed	Proficient

Appendix A

Program Learning Outcomes (PLOs) CNU College of Dental Medicine

1. Patient-Centered Care: Demonstrate understanding of healthcare disparities and cultural awareness in patient counseling and patient advocacy
2. Evidence-Based Care: Apply current, evidence-based oral healthcare within the scope of general dentistry
3. Culturally competent, empathic communication: Demonstrate patient centered, empathic, and culturally competent communication and interpersonal skills
4. Oral and Written Communication: Demonstrate sound oral and written communications in patient care
5. Critical Thinking: Utilize critical thinking, problem solving skills and systemic thinking in assessing and making reasoned, evidence-based decisions in patient care
6. Ethics and Professionalism: Demonstrate professionalism and ethical decision making
7. Biomedical Sciences Knowledge: Demonstrate an understanding of the fundamentals of biomedical sciences and apply them appropriately in oral healthcare
8. Practice Management: Apply legal, regulatory and business management concepts related to provision of oral healthcare services

DMD Program Learning Outcomes (PLOs) Proficiency Rubric

PLO 1: Patient-Centered Care

Demonstrate understanding of healthcare disparities and cultural awareness and capability in patient counseling and providing appropriate patient advocacy

Indicators	Initial	Developing	Developed	Proficient
Education. Demonstrates ability to educate all audiences through effectively communicating information and assessing	<ul style="list-style-type: none"> ● Does not appropriately counsel patients ● Does not check for understanding, ask questions, and/or asks inappropriate questions. 	<ul style="list-style-type: none"> ● Counsels patients but leaves out pertinent information needed by patient ● Communicates with basic level of clarity but 	<ul style="list-style-type: none"> ● Generally demonstrates empathy, communicates accurate information clearly, checks for understanding ● Seeks to ensure 	<ul style="list-style-type: none"> ● Consistently demonstrates empathy, communicates accurate information clearly, checks for understanding ● Ensures

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learning	<ul style="list-style-type: none"> Does not demonstrate the ability to find and utilize appropriate resources and references necessary for providing accurate counseling, consultation and education 	<p>does not always check for understanding or rephrase when confusion occurs.</p> <ul style="list-style-type: none"> Demonstrates the ability to find a one or two resources, yet the resources are not the best or most appropriate for providing accurate counseling, consultation and education 	<p>understanding and generally asks questions.</p> <ul style="list-style-type: none"> Frequently demonstrates the ability to find and utilize appropriate resources and references necessary for providing accurate counseling, consultation and education 	<p>understanding and asks appropriate questions.</p> <ul style="list-style-type: none"> Consistently demonstrates the ability to find and utilize appropriate resources and references for providing accurate patient counseling, consultation and education
<p>patient advocacy. Represents the patient's best interests</p>	<ul style="list-style-type: none"> Does not demonstrate the ability represent a patient's best interest 	<ul style="list-style-type: none"> Demonstrates awareness of issues that impact a patient Demonstrates minimal ability to articulate these issues but does not demonstrate ability to sufficiently advocate on a patient's behalf 	<ul style="list-style-type: none"> Demonstrates sufficient awareness of issues that impact a patient Demonstrates ability to articulate these issues Demonstrates ability to sufficiently advocate on a patient's behalf 	<ul style="list-style-type: none"> Demonstrates full awareness of the most important issues that impact a patient Demonstrates ability to clearly and effectively articulate these issues Demonstrates ability to effectively advocate on a patient's behalf

PLO 2: Evidence-Based Care.

Apply sound, current, and evidence-based oral healthcare within the scope of general dentistry

Indicators	Initial	Developing	Developed	Proficient
<p>patient-centered care. Demonstrates ability to provide</p>	<ul style="list-style-type: none"> Does not demonstrate ability to provide patient-centered care at 	<ul style="list-style-type: none"> Demonstrates ability to provide patient-centered care as the medication 	<ul style="list-style-type: none"> Demonstrates ability to provide patient-centered care as the medication 	<ul style="list-style-type: none"> Demonstrates ability to provide sufficient patient-centered

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patient-centered care as the medication expert (collect and interpret evidence, prioritize, formulate assessments and recommendations, implement, monitor and adjust plans, and document activities)	the medication expert level; e.g., demonstrates ability to collect but not sufficiently interpret evidence, does not prioritize, formulates basic assessments and recommendations, does not sufficiently monitor and adjust plans nor document activities.	expert in some, but not all, areas as follows: collect and interpret evidence, prioritize, formulate assessments and recommendations, implement, monitor and adjust plans, and document activities	expert (generally demonstrates ability to collect and interpret evidence, prioritize, formulate assessments and recommendations, implement, monitor and adjust plans, and document activities)	care as the expert (collects and interprets evidence, prioritizes, formulates assessments and recommendations, implements, monitors and adjusts plans, and documents activities)
stems management. Demonstrates ability to manage patient healthcare needs using human, financial, technological, and physical resources to optimize the safety and efficacy of medication use systems	<ul style="list-style-type: none"> • Does not demonstrate understanding of oral healthcare delivery systems parts • Does not demonstrate understanding of the forces that influence components of the oral healthcare delivery system, including their connection to patient care • Does not demonstrate understanding of any challenges to systems that affect oral healthcare delivery <p>Does not demonstrate understanding of how to work</p>	<ul style="list-style-type: none"> • Demonstrates understanding of some parts of oral healthcare delivery systems but does not identify how they are related to each other • Demonstrates understanding of some forces that influence the parts of healthcare delivery systems, but demonstrate minimal understanding of their connection to patient care • Demonstrates understanding of some challenges that can affect delivery of oral healthcare • Demonstrates some understanding of 	<ul style="list-style-type: none"> • Demonstrates understanding of most major components of oral healthcare systems and their respective relationships • Demonstrates understanding of the forces that influence the components of healthcare delivery systems, and demonstrate some understanding of their influence on the quality of patient care • Demonstrates understanding of most challenges that can affect delivery of oral healthcare, but does not demonstrate complete 	<ul style="list-style-type: none"> • Demonstrates understanding of the major components of oral healthcare systems, their respective relationships, and their functions related to patient care • Demonstrates thorough understanding of the forces that influence components of healthcare delivery systems and demonstrate full understanding of their influence and implications on the quality of patient care • Demonstrates understanding of pertinent challenges to specific aspects

	with different subsystems to deliver oral healthcare	how to work with different subsystems and how they function to deliver oral healthcare, but demonstrate minimal awareness or understanding of one's own role within the oral healthcare delivery system	comprehension of the effects Demonstrates basic understanding of how to work with different subsystems and how they function to deliver oral healthcare and demonstrate some understanding of one's role within the oral healthcare delivery system, but does not necessarily demonstrate application of knowledge in a manner that maximizes the quality of oral healthcare	of healthcare delivery by demonstrating abilities to thoroughly discuss the implications for the appropriate parts of oral health care delivery systems Demonstrates excellent understanding of how to work with different subsystems involved while also demonstrating understanding of one's role within the subsystems, and demonstrate appropriate application of knowledge in a manner that maximizes the quality of oral healthcare
2.3. Health and wellness. Designs prevention, intervention, and educational strategies for individuals and communities to manage chronic disease and improve oral health and wellness	<ul style="list-style-type: none"> Does not demonstrate understanding of how the arts can be utilized to optimize patients' well-being 	<ul style="list-style-type: none"> Demonstrates knowledge of some of the ways that the arts can be utilized to optimize patients' well-being 	<ul style="list-style-type: none"> Demonstrates sufficient knowledge of multiple ways that the arts can be utilized to optimize patients' well-being 	<ul style="list-style-type: none"> Demonstrates thorough knowledge of the ways that the arts can be utilized to optimize patients' well-being and creatively applies this knowledge to improve well-being and the

				practice and delivery of oral healthcare
2.4. Population-based care. Demonstrates understanding of how population-based care influences patient-centered care and the development of practice guidelines and evidence-based best practices	<ul style="list-style-type: none"> • Does not demonstrate awareness of population-based care. 	<ul style="list-style-type: none"> • Demonstrates minimal understanding of population-based care and how it influences patient-centered care • Does not demonstrate awareness of how these notions influence the development of practice guidelines 	<ul style="list-style-type: none"> • Demonstrates sufficient understanding of population-based care and how it influences patient-centered care • Demonstrates sufficient understanding of how population-based care influences the development of practice guidelines and best practices for patient care 	<ul style="list-style-type: none"> • Demonstrates superb understanding of population-based care and how it influences patient-centered care • Demonstrates superb understanding of how population-based care influences the development of practice guidelines and demonstrates knowledge of best practices for patient care

PLO 3: Culturally Competent, Empathic Communication.

Demonstrate patient centered, empathic and culturally competent communication and interpersonal skills

Indicators	Initial	Developing	Developed	Proficient
Empathy. Demonstrates the ability to communicate with the patient empathically.	<ul style="list-style-type: none"> Does not demonstrate the ability to communicate with the patient empathically. 	<ul style="list-style-type: none"> Demonstrates some ability, but experiences lapses in the ability to communicate empathically 	<ul style="list-style-type: none"> Demonstrates the ability to communicate empathically, with few lapses. 	<ul style="list-style-type: none"> Demonstrates an advanced ability, and never experiences lapses in communicating empathically.
Cultural competence. Demonstrates the ability to engage in communication with the patient that is culturally aware and accepting.	<ul style="list-style-type: none"> Does not demonstrate communication and interactions that convey respect or concern for patients and the community. Does not demonstrate an awareness of customs, beliefs, or perspectives in diverse patients Does not demonstrate awareness of cultural and linguistic needs of patients in order to communicate health information 	<ul style="list-style-type: none"> Demonstrates communication and interactions characteristic of a minimal level of respect, and little concern for patients and the community is apparent through use of some appropriate communication, but student does not employ follow-up questions for clarification, when necessary, and student provides inappropriate detail in responses Demonstrates a minimal level of awareness of customs, beliefs, or perspectives in diverse patients Demonstrates minimal awareness of 	<ul style="list-style-type: none"> Demonstrates appropriate communication and interactions that are characteristic of a basic level of respect, and concern for patients and the community is apparent through use of appropriate communication, where student uses some clear, but not necessarily relevant or detailed, follow-up questions and responses Demonstrates awareness of customs and beliefs, but may not clarify with patients about personal perspectives Demonstrates awareness of the cultural and 	<ul style="list-style-type: none"> Demonstrates professional communication and interactions by showing empathy, respect, and concern for patients and the community through use of appropriate communication where follow-up questions (as needed) and responses are clear, relevant, and detailed Demonstrates awareness of customs, beliefs, or perspectives in diverse patients; ask appropriate questions to clarify perspectives and perceptions in diverse patients Demonstrates full awareness of and responsiveness

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		cultural and linguistic needs of patients; either does not or only attempt to adapt behaviors, but does so ineffectively, to communicate health information	linguistic needs of diverse patients, and adapt behaviors to communicate health information, but communication may not be effective	to cultural and linguistic needs of diverse patients by adapting behaviors appropriately in order to effectively communicate health information
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PLO 4: Oral and Written Communication.

Demonstrate sound oral and written communications in patient care

Indicators	Initial	Developing	Developed	Proficient
Oral communication. Demonstrate sound oral communication in patient care.	<ul style="list-style-type: none"> Does not demonstrate logical reasoning in oral communications in patient care. Does not demonstrate the ability to cite sound evidence that support ideas within presentations or discussions. 	<ul style="list-style-type: none"> Demonstrates some logical reasoning in oral communications in patient care but demonstrates some lapses. Demonstrates some ability to cite sound evidence that support ideas within presentations or discussions, but demonstrates some lapses. 	<ul style="list-style-type: none"> Generally demonstrates logical reasoning in oral communications in patient care. Generally demonstrates the ability to cite sound evidence that support ideas within presentations or discussions. 	<ul style="list-style-type: none"> Consistently demonstrates logical reasoning in oral communications in patient care. Consistently demonstrates the ability to cite sound evidence that support ideas within presentations or discussions.
Written communication. Demonstrate sound written communication in patient care.	<ul style="list-style-type: none"> Does not demonstrate logical reasoning in written communications in patient care. Does not demonstrate the written ability to cite sound evidence that support ideas. 	<ul style="list-style-type: none"> Demonstrates some logical reasoning in written communications in patient care but demonstrates some lapses. Demonstrates some written ability to cite sound evidence that support ideas, but demonstrates some lapses. 	<ul style="list-style-type: none"> Generally logical reasoning in written communications in patient care. Generally demonstrates the written ability to cite sound evidence that support ideas. 	<ul style="list-style-type: none"> Consistently demonstrates logical reasoning in written communications in patient care. Consistently demonstrates the written ability to cite sound evidence that support ideas.

PLO 5: Critical Thinking.

Utilize critical thinking, problem solving skills and systemic thinking in assessing and making reasoned, evidence-based decisions in patient care

Indicators	Initial	Developing	Developed	Proficient
5.1. Problem solving. Identifies problems; explore and prioritize potential strategies; and designs, implements, and evaluates viable solutions	<ul style="list-style-type: none"> ● Is not able to correctly identify the problem or issue being considered. ● Does not identify appropriate resources. Includes extraneous information or inappropriate or insufficient resources. ● Does not demonstrate understanding of the content of materials reviewed. Makes inappropriate inferences. ● Does not evaluate possible alternatives or generates ideas that are illogical or extraneous to issue at hand. ● Does not propose a solution or does not articulate decision. Does not adequately provide 	<ul style="list-style-type: none"> ● Identifies the problem or issue but does not demonstrate awareness of all the factors associated with the problem or issues that impact decision making. ● Identifies a few, but not all, resources needed for decision making. ● Demonstrates ability to interpret some information and data but not all. ● Does not fully or effectively evaluate alternative solutions. ● Proposes a decision with many apparent weaknesses (i.e., not feasible, lack of regard for consequences, lack of supporting evidence, illogical, irrelevant to issue at hand, 	<ul style="list-style-type: none"> ● Correctly identifies problem or issue being considered and demonstrates adequate awareness of the factors associated with this problem or issue that impact decision making. ● Identifies most of the resources needed. ● Demonstrates ability to interpret most information and data. ● Considers and evaluates possible solutions in a way that generally leads to a logical decision or course of action. ● Proposes a solution that does not contain apparent weaknesses that may or may not be the obvious clear choice. Solutions chosen 	<ul style="list-style-type: none"> ● Consistently correctly identifies the problem or issue being considered and all of the primary factors associated with this problem or issue that impact decision making. Articulates the importance of these factors. ● Identifies all appropriate resources. ● Demonstrates ability to correctly interpret information and data needed for appropriate decision making. Demonstrates awareness of importance of these data in decision-making process. ● Considers and evaluates possible solutions effectively and thoroughly. Evaluation

	rationale for selected alternative or decision	etc.). Provides rationale for selected alternative or decision but does not build a solid position with supporting evidence. Is unable to defend decision or course of action.	demonstrate consideration of most of the strengths, weaknesses, feasibility, effects, consequences, relevance, etc.). Provides rationale for selected alternative or decision which includes some solid supporting evidence. Is able to defend decision or course of action at a basic level.	leads to sound, logical, and “best” decision or course of action. ● Proposes a solution that is entirely appropriate to the situation at hand. Solutions chosen demonstrate consideration of all of the important and relevant strengths, weaknesses, feasibility, effects, consequences, etc.). Provides rationale for selected alternative or decision and builds a solid position with appropriate and relevant supporting evidence. Effectively defends decision or course of action.
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PLO 6: Ethics and Professionalism.

Demonstrating professionalism and ethical decision making

Indicators	Initial	Developing	Developed	Proficient
Professionalism. Demonstrates behaviors and values that are consistent with the trust given to the profession by patients, other healthcare providers, and society	<ul style="list-style-type: none"> Does not consistently demonstrate professional attitudes and behaviors (altruism, excellence, duty, accountability, honesty, and integrity) Demonstrates frequent lapses in accountability or quality of work 	<ul style="list-style-type: none"> Demonstrates some professional attitudes and behaviors yet there is inconsistency that may impede on the quality of work or treatment of patients and other healthcare team members (altruism, excellence, duty, accountability, honesty, and integrity) 	<ul style="list-style-type: none"> Generally demonstrates most of the professional attitudes and behaviors (altruism, excellence, duty, accountability, honesty, and integrity) that are required in the profession Demonstrates ability to use these behaviors and values to improve healthcare 	<ul style="list-style-type: none"> Consistently demonstrates the professional attitudes and behaviors that uphold the integrity and competence of the work and the treatment of patients and other healthcare team professionals (altruism, excellence, duty, accountability, honesty, and integrity) Consistently uses these behaviors and values to improve healthcare
Ethics. Demonstrates the ability to make decisions consistent with the values of practitioners and scholars of oral healthcare.	<ul style="list-style-type: none"> Does not make ethical decisions consistent with the values of practitioners and scholars of oral healthcare. 	<ul style="list-style-type: none"> Demonstrates the ability to exercise ethical decision making, and a rudimentary knowledge of ethics within oral healthcare. 	<ul style="list-style-type: none"> Demonstrates the ability to exercise clear and ethical decision making, and a sufficient knowledge of ethics within oral healthcare. 	Demonstrates the ability to exercise clear and ethical decision making, and an advanced knowledge of ethics within oral healthcare.

PLO 7: Biomedical Sciences Knowledge.

Demonstrate an understanding of the fundamentals of biomedical sciences and apply them appropriately in oral healthcare

Indicators	Initial	Developing	Developed	Proficient
Diagnostic and pharmacologic. Demonstrates the ability to describe how to deliver patient assessments, knowledge of medicines, and delivering diagnoses.	<ul style="list-style-type: none"> Does not demonstrate the ability to describe diagnostic and pharmacologic knowledge related to oral health. 	<ul style="list-style-type: none"> Demonstrates a rudimentary ability to describe diagnostic and pharmacologic knowledge related to oral health. 	<ul style="list-style-type: none"> Demonstrates a sufficient ability to describe diagnostic and pharmacologic knowledge related to oral health. 	<ul style="list-style-type: none"> Demonstrates an advanced ability to describe diagnostic and pharmacologic knowledge related to oral health.
Orofacial pain/temporomandibular / disorder. Demonstrates the ability to describe the anatomical, physiological, and neurological basis; classification, epidemiology, and etiology; and assessments and treatments of orofacial pain, temporomandibular joint disease, and sleep disorders.	<ul style="list-style-type: none"> Does not demonstrate the ability to describe scientific or assessment knowledge related to OFP/TMJ disease and sleep disorders. 	<ul style="list-style-type: none"> Demonstrates a rudimentary ability to describe scientific or assessment knowledge related to OFP/TMJ disease and sleep disorders. 	<ul style="list-style-type: none"> Demonstrates a sufficient ability to describe scientific or assessment knowledge related to OFP/TMJ disease and sleep disorders. 	<ul style="list-style-type: none"> Demonstrates an advanced ability to describe scientific or assessment knowledge related to OFP/TMJ disease and sleep disorders.
7.3. Maxillofacial pathology Demonstrates the ability to describe the scientific aspects of head and neck diseases, as well as knowledge of assessment and diagnosis.	<ul style="list-style-type: none"> Does not demonstrate the ability to describe the scientific or assessment knowledge related to head and neck diseases. 	<ul style="list-style-type: none"> Demonstrates a rudimentary ability to describe the scientific or assessment knowledge related to head and neck diseases. 	<ul style="list-style-type: none"> Demonstrates a sufficient ability to describe the scientific or assessment knowledge related to head and neck diseases. 	<ul style="list-style-type: none"> Demonstrates an advanced ability to describe the scientific or assessment knowledge related to head and neck diseases.

PLO 8: Practice Management.

Apply legal, regulatory, and business management concepts related to the provision of oral healthcare services

Indicators	Initial	Developing	Developed	Proficient
Legal aspects s legal and regulatory concepts related to the provision of oral healthcare services.	<ul style="list-style-type: none"> Does not demonstrate an understanding or the ability to apply legal and regulatory concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates a rudimentary understanding and ability to apply legal and regulatory concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates a sound understanding and ability to apply legal and regulatory concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates an advanced understanding and ability to apply legal and regulatory concepts related to the provision of oral healthcare sciences.
Business management s business management concepts to the provision of oral healthcare services.	<ul style="list-style-type: none"> Does not demonstrate an understanding or the ability to apply business management concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates a rudimentary understanding and ability to apply business management concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates a sound understanding and ability to apply business management concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates an advanced understanding and ability to apply business management concepts related to the provision of oral healthcare sciences.

Appendix B

California Northstate University Institutional Learning Objectives

ILO 1: Critical thinking: Exercise reasoned judgment to assess technical information and make well-informed decisions using evidence-based approaches

ILO 2: Written communication. Demonstrate the ability to write coherent, supported, and logically structured prose

ILO 3: Oral communication: Demonstrates oral communication skills

ILO 4: Professionalism. Interact with respect, empathy, diplomacy, and cultural competence

ILO 5: Quantitative reasoning: Demonstrate ability to use mathematics and statistics in problem solving

ILO 6: Information literacy: Identify and search relevant libraries of information and databases; synthesize information obtained from primary literature using properly referenced citations

DMD Institutional Learning Outcomes (ILOs) Proficiency Rubric

ILO 1: Critical thinking: Exercise reasoned judgment to assess technical information and make well-informed decisions using evidence-based approaches

Indicator	Initial	Developing	Developed	Proficient
1.1. Demonstrates identification of problem or issues	<ul style="list-style-type: none"> Does not correctly identify the problem or issue being considered Does not demonstrate understanding of the psychological factors that contribute to current patient state 	<ul style="list-style-type: none"> Identifies the problem or issue but does not demonstrate awareness of all the factors impacting decision making Demonstrates understanding of some possible psychological factors that contribute to current patient state 	<ul style="list-style-type: none"> Correctly identifies the problem or issue but does not demonstrate awareness of all factors impacting decision making Demonstrates understanding of most psychological factors that contribute to the current patient state 	<ul style="list-style-type: none"> Correctly identifies all of the primary factors associated with problem or issue impacting decision making Demonstrates thorough understanding of all possible psychological factors that contribute to the current patient state

Exhibit D

1.2. Demonstrates identification of resources	<ul style="list-style-type: none"> Does not identify appropriate resources 	<ul style="list-style-type: none"> Identifies a few resources needed 	<ul style="list-style-type: none"> Identifies most of the resources needed 	<ul style="list-style-type: none"> Correctly identifies all appropriate resources
1.3. Finds and interprets data needed for critical thinking and decision making	<ul style="list-style-type: none"> Does not demonstrate understanding of the data needed for critical thinking and decision making 	<ul style="list-style-type: none"> Demonstrates ability to interpret some data but not all 	<ul style="list-style-type: none"> Demonstrates ability to interpret most data 	<ul style="list-style-type: none"> Demonstrates ability to correctly interpret data needed for decision making
1.4. Demonstrates knowledge of alternatives when evaluating for possible solutions	<ul style="list-style-type: none"> Does not evaluate possible alternatives for treatment or diagnosis 	<ul style="list-style-type: none"> Does not effectively evaluate alternative treatment or diagnostic solutions 	<ul style="list-style-type: none"> Evaluates possible treatment and diagnostic solutions leading to a logical decision 	<ul style="list-style-type: none"> Effectively and thoroughly considers and evaluates possible diagnostic and treatment solutions
1.5. Proposes and selects appropriate solutions	<ul style="list-style-type: none"> Does not propose solutions to the client's needs 	<ul style="list-style-type: none"> Proposes solutions without consideration of alternatives 	<ul style="list-style-type: none"> Solutions chosen demonstrate consideration of most of the strengths, weaknesses, and consequences of the decision 	<ul style="list-style-type: none"> Proposes solutions that are appropriate to the situation and demonstrate consideration of all relevant strengths, weaknesses, and consequences
1.6. Presents rationale for course of action	<ul style="list-style-type: none"> Does not adequately provide rationale for treatment decision 	<ul style="list-style-type: none"> Provides rationale for decision but does not integrate into mental health treatment plan 	<ul style="list-style-type: none"> Provides rationale for decision with solid supporting evidence from available psychological literature and/or case factors 	<ul style="list-style-type: none"> Provides rationale for decision and with appropriate and relevant supporting case evidence and integrates findings into treatment plan

ILO 2: Written communication. Demonstrate the ability to write coherent, supported, and logically structured prose

Indicators	Initial	Developing	Developed	Proficient
2.1. Demonstrates knowledge and awareness of intended audience	<ul style="list-style-type: none"> Does not demonstrate knowledge or awareness of audience for which the document is intended 	<ul style="list-style-type: none"> Demonstrates some ability to craft a document appropriate for its audience 	<ul style="list-style-type: none"> Demonstrates ability to craft a document appropriate for its audience 	<ul style="list-style-type: none"> Consistently demonstrates ability to craft documents appropriate for the audience
2.2. Demonstrates clear and logical thought	<ul style="list-style-type: none"> Does not demonstrate clear or logical thought in their documentation 	<ul style="list-style-type: none"> Writing does not sufficiently conceptualize case variables or analyze subject 	<ul style="list-style-type: none"> Demonstrates general clear or logical thought in their documentation 	<ul style="list-style-type: none"> Research and clinical documentation demonstrates clear and focused

Exhibit D

		under discussion		thinking
2.3. Demonstrates support for and development of ideas	<ul style="list-style-type: none"> Does not explain or develop ideas 	<ul style="list-style-type: none"> Demonstrates minimal support for ideas 	<ul style="list-style-type: none"> Writing contains examples that generally support ideas 	<ul style="list-style-type: none"> Supports ideas with relevant, clear, impactful examples
2.4. Demonstrates appropriate use of evidence to support arguments	<ul style="list-style-type: none"> Demonstrates an attempt to use proper citations to support ideas 	<ul style="list-style-type: none"> Uses credible and relevant sources to support ideas appropriate in the study of psychology 	<ul style="list-style-type: none"> Consistently uses credible and relevant sources to support ideas 	<ul style="list-style-type: none"> Demonstrates skillful use of credible and relevant sources to develop and support ideas
2.5. Demonstrates appropriate use of language, syntax, and mechanics	<ul style="list-style-type: none"> Has excessive or severe errors in language usage 	<ul style="list-style-type: none"> Generally conveys meaning to readers with clarity, though writing may include some errors 	<ul style="list-style-type: none"> Language conveys meaning to readers and writing contains very few errors 	<ul style="list-style-type: none"> Uses language effectively and skillfully to communicate meaning to readers

ILO 3: Oral communication: Demonstrates oral communication skills

Indicators	Initial	Developing	Developed	Proficient
3.1. Demonstrates knowledge and awareness of intended audience	<ul style="list-style-type: none"> Does not demonstrate knowledge or awareness of audience for which the communication is intended 	<ul style="list-style-type: none"> Demonstrates some ability to communicate in a manner appropriate to the audience 	<ul style="list-style-type: none"> Demonstrates ability to communicate appropriate to the audience 	<ul style="list-style-type: none"> Consistently demonstrates ability to communicate in a manner appropriate to the audience
3.2. Demonstrates clear and logical thought	<ul style="list-style-type: none"> Does not demonstrate clear or logical thought in their communication 	<ul style="list-style-type: none"> Communication does not sufficiently conceptualize case variables or analyze subject under discussion 	<ul style="list-style-type: none"> Demonstrates general clear or logical thought in their communication 	<ul style="list-style-type: none"> Communication demonstrates clear and focused thinking
3.3. Demonstrates effective use of language in their communication	<ul style="list-style-type: none"> Does not know professional psychological language or uses jargon Does not know the proper technical language regarding mental health treatment 	<ul style="list-style-type: none"> Demonstrates inaccurate use of psychological language or uses jargon in professional communications Utilizes scientific language that is incomprehensible to patients 	<ul style="list-style-type: none"> Demonstrates appropriate use of professional language and minimal jargon Utilizes generalized language to interact with patients 	<ul style="list-style-type: none"> Demonstrates use of appropriate, professional language Utilizes generalized language to interact with patients

Exhibit D

3.4. Demonstrates appropriate active listening techniques when addressing questions	<ul style="list-style-type: none"> Does not acknowledge other viewpoints Has great difficulty answering questions 	<ul style="list-style-type: none"> Demonstrates little attempt to recognize other viewpoints Answers are simplistic and lack intellectual depth 	<ul style="list-style-type: none"> Recognizes other viewpoints but has difficulty incorporating them into case conceptualization Adequately answers patient questions 	<ul style="list-style-type: none"> Listens to questions with a consideration of alternative viewpoints Answers questions thoughtfully referencing evidence
3.5. Orally communicates meaning to audience	<ul style="list-style-type: none"> Vocal delivery is too soft or too fast Long, unintended silences and/or speech disruptions frequently distract audience Speaker makes no attempt to engage audience 	<ul style="list-style-type: none"> Vocal delivery is audible Speech rate or volume disruptions occasionally distract from comprehension Attempts to engage audience 	<ul style="list-style-type: none"> Vocal delivery is varied and dynamic Speech rate, volume, and tone enhance listener interest and facilitate understanding Generally engages audience 	<ul style="list-style-type: none"> Vocal delivery is varied and dynamic Speech rate, volume, and tone enhance listener interest and facilitate understanding Thoroughly engages audience
3.6. Utilizes non-verbal means to enhance message	<ul style="list-style-type: none"> Eye contact, body language, and facial expressions are inappropriate 	<ul style="list-style-type: none"> Eye contact, body language, and facial expressions neither enhance nor hinder oral effectiveness 	<ul style="list-style-type: none"> Use of eye contact, body language, and facial expressions are mostly consistent with the verbal message 	<ul style="list-style-type: none"> Use of eye contact, body language, and facial expressions that are consistent with the verbal message

ILO 4: Professionalism. Interact with respect, empathy, diplomacy, and cultural competence

Indicators	Initial	Developing	Developed	Proficient
4.1. Demonstrates professional attitudes and behaviors	<ul style="list-style-type: none"> Does not generally demonstrate professional attitudes or behaviors expected from a dentist 	<ul style="list-style-type: none"> Demonstrates some attitudes and behaviors that may be characteristic of a dentist 	<ul style="list-style-type: none"> Generally demonstrates attitudes and behaviors expected from a dentist 	<ul style="list-style-type: none"> Consistently demonstrates attitudes and behaviors expected from a dentist
4.2. Demonstrates personal responsibility and accountability	<ul style="list-style-type: none"> Does not demonstrate personal accountability or responsibility for work completed 	<ul style="list-style-type: none"> Demonstrates minimal personal accountability and responsibility for work completed 	<ul style="list-style-type: none"> Demonstrates personal accountability and responsibility for the work completed 	<ul style="list-style-type: none"> Consistently demonstrates personal accountability and responsibility for work completed

Exhibit D

4.3. Demonstrates respectful and sensitive behaviors to the cultural and linguistic needs of diverse patients	<ul style="list-style-type: none"> • Does not demonstrate an awareness of patients' customs, beliefs, or perspectives • Does not demonstrate awareness of linguistic needs of patients 	<ul style="list-style-type: none"> • Demonstrates a minimal level of awareness of customs, beliefs, or perspectives of patients • Demonstrates minimal awareness of cultural and linguistic needs of patients 	<ul style="list-style-type: none"> • Demonstrates awareness of customs and beliefs • Demonstrates awareness of the cultural and linguistic needs of patients 	<ul style="list-style-type: none"> • Demonstrates awareness of customs, beliefs, or perspectives in patients • Demonstrates full awareness and responds to the cultural and linguistic needs of patients
4.4. Demonstrates professional demeanor	<ul style="list-style-type: none"> • Appears inattentive and impatient • Uses inappropriate body language • Dresses in attire that is inappropriate 	<ul style="list-style-type: none"> • Appears unfocused and distracted • Uses acceptable body language • Dresses in attire that is not offensive 	<ul style="list-style-type: none"> • Appears composed and focused • Uses appropriate body language • Dresses in attire that is professional 	<ul style="list-style-type: none"> • Uses articulate, tactful, and diplomatic speech • Uses professional body language • Dresses in attire that is professional, and well-suited for the environment

Exhibit D

ILO 5: Quantitative reasoning: Demonstrate ability to use mathematics and statistics in problem solving

Indicators	Initial	Developing	Developed	Proficient
5.1. Demonstrates ability to perform calculations and apply mathematical principles to solve problems	<ul style="list-style-type: none"> Does not demonstrate ability to apply statistical or psychometric principles 	<ul style="list-style-type: none"> Demonstrates ability to perform basic statistical calculations but does not know how to apply psychometric principles to solve problems 	<ul style="list-style-type: none"> Demonstrates ability to perform most statistical calculations accurately and to apply psychometric principles to solve problems 	<ul style="list-style-type: none"> Consistently demonstrates ability to perform statistical calculations accurately and to appropriately apply psychometric principles to solve problems
5.2. Demonstrates understanding of experimental designs and methodology	<ul style="list-style-type: none"> Displays difficulty proposing a basic experiment or research project 	<ul style="list-style-type: none"> Comprehends basic experiments designed by others 	<ul style="list-style-type: none"> Evaluates research, method, and protocol to review valid and reliable research 	<ul style="list-style-type: none"> Proposes appropriate and innovative designs to address a new hypothesis and research question
5.3. Demonstrates logical and appropriate interpretation of data	<ul style="list-style-type: none"> Demonstrates a limited ability to interpret scientific data 	<ul style="list-style-type: none"> Attempts to interpret scientific data 	<ul style="list-style-type: none"> Demonstrates the ability to interpret scientific data 	<ul style="list-style-type: none"> Interprets data in the context of current scientific knowledge
5.4. Demonstrates logical thought patterns in generating conclusions	<ul style="list-style-type: none"> Does not generate conclusions based on current scientific data and statistics 	<ul style="list-style-type: none"> Generates conclusions that may be based on current scientific data and statistics 	<ul style="list-style-type: none"> Generates conclusions using scientific and statistical data 	<ul style="list-style-type: none"> Accurately generates conclusions using appropriate scientific and mathematical data

ILO 6: Information literacy: Identify and search relevant libraries of information and databases; synthesize information obtained from primary literature using properly referenced citations

Indicators	Initial	Developing	Developed	Proficient
6.1. Demonstrates appropriate ability search and acquire resources	<ul style="list-style-type: none"> Does not identify or solicit help in obtaining external resources to support topic 	<ul style="list-style-type: none"> Identified resources may not be sufficient in quality and infrequently solicits guidance from library personnel 	<ul style="list-style-type: none"> Identifies resources appropriate for scientific inquiry and solicits guidance from library personnel 	<ul style="list-style-type: none"> Identifies a variety of relevant sources and regularly seeks guidance from library personnel

Exhibit D

6.2. Demonstrates appropriate incorporation of references	● Does not incorporate references	● Incorporates references from psychological sources that do not clearly support ideas	● Incorporates relevant references that generally supports ideas	● Incorporates relevant references from respected psychological sources
6.3. Demonstrates appropriate citation of references	● Does not use citations	● Uses citations but they are not formatted in APA style	● Demonstrates use of appropriate citations in context	● Uses properly cited references and includes all necessary information in reference list



California Northstate University College of Dental Medicine

Course Syllabus

Course #	Course Title	Credits	Year	Term
OMFS 631	<i>Dental Anesthesiology I: Local Anesthesia</i>	3	DS 2	Fall

Credit Hour Policy

For each 15-week semester, one (1) hour of credit is assigned per hour each week of classroom or direct faculty didactic instruction (that is, per hour of lecture or student in-class time) and a minimum of two (2) hours of out-of-class student work (homework). For practicum and internship time, one (1) hour of credit is assigned per three (3) hours each week of student time spent in this activity.

Maximum Enrollment: 80

Calendar of Important Dates:

Date	

Course Coordinator, Instructors and Contact Information

Course Director:
Room:
E mail:
Office hours

Holly Jacobson BA (course administrator)

Room: xxx
E mail: holly.jacobson@cnsu.edu

Classroom and Meeting Times

Room: Classroom xxxx
Time: xxxx 2 hours per week

Clinic and meeting times

Room:
Time:

Course Description

Prerequisite Courses

None



Prerequisite Knowledge

None

Required Textbook(s) and Material(s)

Handbook of Local Anesthesia Stanley F. Malamed <6th edition available, new edition coming before class will be given>

AAOMS Parameters of Care- Journal of Oral and Maxillofacial Surgery, Vol. 75, Number 8, Suppl 1 August 2017

Technology

Evaluation Components

In keeping with the Team Based Learning (TBL) approach, grades will be determined as follows:

Individual Components	%
Exam I	20%
Exam II	20%
Exam III	20%
Final Exam-Comprehensive	40%

Team Components	%
	%

	%
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GRADING

All students must demonstrate minimal individual competency. Therefore, students earning less than 75% on the total Individual component score will not have team component scores added to calculate their final course grade. During the course, students who score less than 75% on individual components may be subject to periodic course content review and may receive an Academic Alert.

In order to progress from one semester to the next, students must pass all courses with a letter a grade of C or higher and maintain a minimum cumulative grade point average (GPA) of 2.0. The breakdown for assignment of letter grades and grade points for each letter grade are as follows:

Percent	Letter Grade/Action
90.0 – 100%	A
80.0 – 89.9%	B
75.0 – 79.9%	C - Pass
60.0 – 74.9%	D – Requiring remediation (successful remediation recorded as C, unsuccessful remediation recorded as F)
Below 60.0%	F – Fail (course must be repeated)
Incomplete	I

Incomplete

During a semester, a student may not complete all required assignments and/or examinations due to extenuating circumstances, such as, but not limited to, an illness or a family emergency. In such a case, the course director may give a grade of Incomplete for the course. The course with the incomplete grade has to be completed successfully within the time frame as being defined by the student's academic plan, normally in the same academic year, otherwise a leave of absence would be required.

Core-Course Policies

All students are required to adhere to the Academic Policies that impact on student progression and conduct while attending the DMD program, including the following: Academic Progression Policy, Excused Absence Policy, Exam Policy, Course Grade Appeal Policy, Course Add/Drop Policy and Attendance Policy. Refer to the current Student Handbook for the detailed policies.

Course Specific Policies

1.

OMFS 631 Dental Anesthesiology 1 Syllabus

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Topics and Schedule

(Subject to change. Updates will be posted to CANVAS and announced by email)

All readings are in Vital Source, or as assigned and posted to CANVAS

Each didactic session including LAL is 2 hours. Each clinical session is 4 hours. Students are divided into groups of 4 students (groups 1-20) for each of their 3 sessions. Each group of 4 will attend either Monday, Tuesday, Wednesday or Thursday clinic.

Date	Topics	Readings*	Instructor	Notes
	Introduction/organization of course-Introduction of AAOMS Parameters of Care	POC e35-e31		
	The Anatomic Basis of Local Anesthesia	Malamed Chapter 12		
Week 2	Pharmacology of Local Anesthetics and Vasoconstrictors 1	Malamed Chapter 1 and 2		
	Pharmacology of Local Anesthetics and Vasoconstrictors 2	Malamed Chapters 3 and 4		
Week 3	Techniques of Maxillary Anesthesia	Malamed Chapter 13		
	Techniques of Mandibular Anesthesia	Malamed Chapter 14		
Week 4:	Examination I			
Week 4	The Armamentarium	Malamed Chapters 5-9		

Exhibit D

Week 5:	Lab-Armamentarium	Malamed Chapters 5-9		
Week 5	Complications and Management of Local Anesthesia	Malamed Chapters 17		
Week 6	Complications and Management of Local Anesthesia II	Malamed Chapter 18		
Week 6	Legal Considerations, Informed consent, Safety Considerations	Malamed Chapter 19		
Week 7	Supplemental Injection Techniques	Malamed Chapter 15		
Week 7	Anesthetic Considerations in Dental Specialties	Malamed Chapter 16		
Week 8	Examination			
Week 8	Physical and Psychological Evaluation	Malamed Chapter 10 POC e12-e27		
Week 9	Post-operative pain control- oral analgesics, long lasting local anesthetic agents			
Week 9	Small Group Cadaver Lab			
Week 10	Small Group Cadaver Lab			
Week 10	Small Group Cadaver Lab			
Week 11	Small Group-Peer Injections (if desired)			
Week 11	Small Group-Peer Injections (if desired)			

Exhibit D

Week 12	Examination			
Week 12				
c				
Week 13				
Week 13				
Week 14				
Week 14				
Week 15				
Week 15	Final Examination			

**Course Learning Outcomes and links to Program Learning Outcomes (Appendix A)
and Institutional Learning Outcomes (Appendix B)**

No.	Course Learning Outcome	DMD PLO	DMD ILO	Learning Hierarchy ^b	Assessment Method
1					
2					
3					
4					

^a plo's appendix A

^b Learning Hierarchy based on Bloom's Taxonomy with 1=Memorization and/or Comprehension;
2=Application and/or Analysis; 3=Synthesis and/or Evaluation.

Teaching/ Learning Methodology

CLO Rubrics

CLO 1:

Indicators	Initial	Developing	Developed	Proficient

CLO 2:

Indicators	Initial	Developing	Developed	Proficient

Appendix A

Program Learning Outcomes (PLOs) CNU College of Dental Medicine

1. Patient-Centered Care: Demonstrate understanding of healthcare disparities and cultural awareness in patient counseling and patient advocacy
2. Evidence-Based Care: Apply current, evidence-based oral healthcare within the scope of general dentistry
3. Culturally competent, empathic communication: Demonstrate patient centered, empathic, and culturally competent communication and interpersonal skills
4. Oral and Written Communication: Demonstrate sound oral and written communications in patient care
5. Critical Thinking: Utilize critical thinking, problem solving skills and systemic thinking in assessing and making reasoned, evidence-based decisions in patient care
6. Ethics and Professionalism: Demonstrate professionalism and ethical decision making
7. Biomedical Sciences Knowledge: Demonstrate an understanding of the fundamentals of biomedical sciences and apply them appropriately in oral healthcare
8. Practice Management: Apply legal, regulatory and business management concepts related to provision of oral healthcare services

DMD Program Learning Outcomes (PLOs) Proficiency Rubric

PLO 1: Patient-Centered Care

Demonstrate understanding of healthcare disparities and cultural awareness and capability in patient counseling and providing appropriate patient advocacy

Indicators	Initial	Developing	Developed	Proficient
Education. Demonstrates ability to educate all audiences through effectively communicating information and	<ul style="list-style-type: none"> ● Does not appropriately counsel patients ● Does not check for understanding, ask questions, and/or asks inappropriate questions. 	<ul style="list-style-type: none"> ● Counsels patients but leaves out pertinent information needed by patient ● Communicates with basic level of clarity but 	<ul style="list-style-type: none"> ● Generally demonstrates empathy, communicates accurate information clearly, checks for understanding 	<ul style="list-style-type: none"> ● Consistently demonstrates empathy, communicates accurate information clearly, checks for understanding

assessing learning	<ul style="list-style-type: none"> Does not demonstrate the ability to find and utilize appropriate resources and references necessary for providing accurate counseling, consultation and education 	<p>does not always check for understanding or rephrase when confusion occurs.</p> <ul style="list-style-type: none"> Demonstrates the ability to find a one or two resources, yet the resources are not the best or most appropriate for providing accurate counseling, consultation and education 	<ul style="list-style-type: none"> Seeks to ensure understanding and generally asks questions. Frequently demonstrates the ability to find and utilize appropriate resources and references necessary for providing accurate counseling, consultation and education 	<ul style="list-style-type: none"> Ensures understanding and asks appropriate questions. Consistently demonstrates the ability to find and utilize appropriate resources and references for providing accurate patient counseling, consultation and education
patient advocacy. Represents the patient's best interests	<ul style="list-style-type: none"> Does not demonstrate the ability represent a patient's best interest 	<ul style="list-style-type: none"> Demonstrates awareness of issues that impact a patient Demonstrates minimal ability to articulate these issues but does not demonstrate ability to sufficiently advocate on a patient's behalf 	<ul style="list-style-type: none"> Demonstrates sufficient awareness of issues that impact a patient Demonstrates ability to articulate these issues Demonstrates ability to sufficiently advocate on a patient's behalf 	<ul style="list-style-type: none"> Demonstrates full awareness of the most important issues that impact a patient Demonstrates ability to clearly and effectively articulate these issues Demonstrates ability to effectively advocate on a patient's behalf

PLO 2: Evidence-Based Care.

Apply sound, current, and evidence-based oral healthcare within the scope of general dentistry

Indicators	Initial	Developing	Developed	Proficient
patient-centered care. Demonstrates ability to provide	<ul style="list-style-type: none"> Does not demonstrate ability to provide patient-centered care at 	<ul style="list-style-type: none"> Demonstrates ability to provide patient-centered care as the medication 	<ul style="list-style-type: none"> Demonstrates ability to provide patient-centered care as the medication 	<ul style="list-style-type: none"> Demonstrates ability to provide sufficient patient-centered

patient-centered care as the medication expert (collect and interpret evidence, prioritize, formulate assessments and recommendations, implement, monitor and adjust plans, and document activities)	the medication expert level; e.g., demonstrates ability to collect but not sufficiently interpret evidence, does not prioritize, formulates basic assessments and recommendations, does not sufficiently monitor and adjust plans nor document activities.	expert in some, but not all, areas as follows: collect and interpret evidence, prioritize, formulate assessments and recommendations, implement, monitor and adjust plans, and document activities	expert (generally demonstrates ability to collect and interpret evidence, prioritize, formulate assessments and recommendations, implement, monitor and adjust plans, and document activities)	care as the expert (collects and interprets evidence, prioritizes, formulates assessments and recommendations, implements, monitors and adjusts plans, and documents activities)
stems management. Demonstrates ability to manage patient healthcare needs using human, financial, technological, and physical resources to optimize the safety and efficacy of medication use systems	<ul style="list-style-type: none"> • Does not demonstrate understanding of oral healthcare delivery systems parts • Does not demonstrate understanding of the forces that influence components of the oral healthcare delivery system, including their connection to patient care • Does not demonstrate understanding of any challenges to systems that affect oral healthcare delivery <p>Does not demonstrate understanding of how to work with different</p>	<ul style="list-style-type: none"> • Demonstrates understanding of some parts of oral healthcare delivery systems but does not identify how they are related to each other • Demonstrates understanding of some forces that influence the parts of healthcare delivery systems, but demonstrate minimal understanding of their connection to patient care • Demonstrates understanding of some challenges that can affect delivery of oral healthcare • Demonstrates some understanding of 	<ul style="list-style-type: none"> • Demonstrates understanding of most major components of oral healthcare systems and their respective relationships • Demonstrates understanding of the forces that influence the components of healthcare delivery systems, and demonstrate some understanding of their influence on the quality of patient care • Demonstrates understanding of most challenges that can affect delivery of oral healthcare, but does not demonstrate complete 	<ul style="list-style-type: none"> • Demonstrates understanding of the major components of oral healthcare systems, their respective relationships, and their functions related to patient care • Demonstrates thorough understanding of the forces that influence components of healthcare delivery systems and demonstrate full understanding of their influence and implications on the quality of patient care • Demonstrates understanding of pertinent challenges to specific aspects

	subsystems to deliver oral healthcare	how to work with different subsystems and how they function to deliver oral healthcare, but demonstrate minimal awareness or understanding of one's own role within the oral healthcare delivery system	comprehension of the effects Demonstrates basic understanding of how to work with different subsystems and how they function to deliver oral healthcare and demonstrate some understanding of one's role within the oral healthcare delivery system, but does not necessarily demonstrate application of knowledge in a manner that maximizes the quality of oral healthcare	of healthcare delivery by demonstrating abilities to thoroughly discuss the implications for the appropriate parts of oral health care delivery systems Demonstrates excellent understanding of how to work with different subsystems involved while also demonstrating understanding of one's role within the subsystems, and demonstrate appropriate application of knowledge in a manner that maximizes the quality of oral healthcare
2.3. Health and wellness. Designs prevention, intervention, and educational strategies for individuals and communities to manage chronic disease and improve oral health and wellness	<ul style="list-style-type: none"> Does not demonstrate understanding of how the arts can be utilized to optimize patients' well-being 	<ul style="list-style-type: none"> Demonstrates knowledge of some of the ways that the arts can be utilized to optimize patients' well-being 	<ul style="list-style-type: none"> Demonstrates sufficient knowledge of multiple ways that the arts can be utilized to optimize patients' well-being 	<ul style="list-style-type: none"> Demonstrates thorough knowledge of the ways that the arts can be utilized to optimize patients' well-being and creatively applies this knowledge to improve well-being and the

				practice and delivery of oral healthcare
2.4. Population-based care. Demonstrates understanding of how population-based care influences patient-centered care and the development of practice guidelines and evidence-based best practices	<ul style="list-style-type: none"> • Does not demonstrate awareness of population-based care. 	<ul style="list-style-type: none"> • Demonstrates minimal understanding of population-based care and how it influences patient-centered care • Does not demonstrate awareness of how these notions influence the development of practice guidelines 	<ul style="list-style-type: none"> • Demonstrates sufficient understanding of population-based care and how it influences patient-centered care • Demonstrates sufficient understanding of how population-based care influences the development of practice guidelines and best practices for patient care 	<ul style="list-style-type: none"> • Demonstrates superb understanding of population-based care and how it influences patient-centered care • Demonstrates superb understanding of how population-based care influences the development of practice guidelines and demonstrates knowledge of best practices for patient care

PLO 3: Culturally Competent, Empathic Communication.

Demonstrate patient centered, empathic and culturally competent communication and interpersonal skills

Indicators	Initial	Developing	Developed	Proficient
Empathy. Demonstrates the ability to communicate with the patient empathically.	<ul style="list-style-type: none"> Does not demonstrate the ability to communicate with the patient empathically. 	<ul style="list-style-type: none"> Demonstrates some ability, but experiences lapses in the ability to communicate empathically 	<ul style="list-style-type: none"> Demonstrates the ability to communicate empathically, with few lapses. 	<ul style="list-style-type: none"> Demonstrates an advanced ability, and never experiences lapses in communicating empathically.
Cultural competence. Demonstrates the ability to engage in communication with the patient that is culturally aware and accepting.	<ul style="list-style-type: none"> Does not demonstrate communication and interactions that convey respect or concern for patients and the community. Does not demonstrate an awareness of customs, beliefs, or perspectives in diverse patients Does not demonstrate awareness of cultural and linguistic needs of patients in order to communicate health information 	<ul style="list-style-type: none"> Demonstrates communication and interactions characteristic of a minimal level of respect, and little concern for patients and the community is apparent through use of some appropriate communication, but student does not employ follow-up questions for clarification, when necessary, and student provides inappropriate detail in responses Demonstrates a minimal level of awareness of customs, beliefs, or perspectives in diverse patients Demonstrates minimal awareness of 	<ul style="list-style-type: none"> Demonstrates appropriate communication and interactions that are characteristic of a basic level of respect, and concern for patients and the community is apparent through use of appropriate communication, where student uses some clear, but not necessarily relevant or detailed, follow-up questions and responses Demonstrates awareness of customs and beliefs, but may not clarify with patients about personal perspectives Demonstrates awareness of the cultural and 	<ul style="list-style-type: none"> Demonstrates professional communication and interactions by showing empathy, respect, and concern for patients and the community through use of appropriate communication where follow-up questions (as needed) and responses are clear, relevant, and detailed Demonstrates awareness of customs, beliefs, or perspectives in diverse patients; ask appropriate questions to clarify perspectives and perceptions in diverse patients Demonstrates full awareness of and responsiveness

		cultural and linguistic needs of patients; either does not or only attempt to adapt behaviors, but does so ineffectively, to communicate health information	linguistic needs of diverse patients, and adapt behaviors to communicate health information, but communication may not be effective	to cultural and linguistic needs of diverse patients by adapting behaviors appropriately in order to effectively communicate health information
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PLO 4: Oral and Written Communication.

Demonstrate sound oral and written communications in patient care

Indicators	Initial	Developing	Developed	Proficient
Oral communication. Demonstrate sound oral communication in patient care.	<ul style="list-style-type: none"> Does not demonstrate logical reasoning in oral communications in patient care. Does not demonstrate the ability to cite sound evidence that support ideas within presentations or discussions. 	<ul style="list-style-type: none"> Demonstrates some logical reasoning in oral communications in patient care but demonstrates some lapses. Demonstrates some ability to cite sound evidence that support ideas within presentations or discussions, but demonstrates some lapses. 	<ul style="list-style-type: none"> Generally demonstrates logical reasoning in oral communications in patient care. Generally demonstrates the ability to cite sound evidence that support ideas within presentations or discussions. 	<ul style="list-style-type: none"> Consistently demonstrates logical reasoning in oral communications in patient care. Consistently demonstrates the ability to cite sound evidence that support ideas within presentations or discussions.
Written communication. Demonstrate sound written communication in patient care.	<ul style="list-style-type: none"> Does not demonstrate logical reasoning in written communications in patient care. Does not demonstrate the written ability to cite sound evidence that support ideas. 	<ul style="list-style-type: none"> Demonstrates some logical reasoning in written communications in patient care but demonstrates some lapses. Demonstrates some written ability to cite sound evidence that support ideas, but demonstrates some lapses. 	<ul style="list-style-type: none"> Generally logical reasoning in written communications in patient care. Generally demonstrates the written ability to cite sound evidence that support ideas. 	<ul style="list-style-type: none"> Consistently demonstrates logical reasoning in written communications in patient care. Consistently demonstrates the written ability to cite sound evidence that support ideas.

PLO 5: Critical Thinking.

Utilize critical thinking, problem solving skills and systemic thinking in assessing and making reasoned, evidence-based decisions in patient care

Indicators	Initial	Developing	Developed	Proficient
5.1. Problem solving. Identifies problems; explore and prioritize potential strategies; and designs, implements, and evaluates viable solutions	<ul style="list-style-type: none"> ● Is not able to correctly identify the problem or issue being considered. ● Does not identify appropriate resources. Includes extraneous information or inappropriate or insufficient resources. ● Does not demonstrate understanding of the content of materials reviewed. Makes inappropriate inferences. ● Does not evaluate possible alternatives or generates ideas that are illogical or extraneous to issue at hand. ● Does not propose a solution or does not articulate decision. Does not adequately provide 	<ul style="list-style-type: none"> ● Identifies the problem or issue but does not demonstrate awareness of all the factors associated with the problem or issues that impact decision making. ● Identifies a few, but not all, resources needed for decision making. ● Demonstrates ability to interpret some information and data but not all. ● Does not fully or effectively evaluate alternative solutions. ● Proposes a decision with many apparent weaknesses (i.e., not feasible, lack of regard for consequences, lack of supporting evidence, illogical, irrelevant to 	<ul style="list-style-type: none"> ● Correctly identifies problem or issue being considered and demonstrates adequate awareness of the factors associated with this problem or issue that impact decision making. ● Identifies most of the resources needed. ● Demonstrates ability to interpret most information and data. ● Considers and evaluates possible solutions in a way that generally leads to a logical decision or course of action. ● Proposes a solution that does not contain apparent weaknesses that may or may not be the obvious clear choice. Solutions chosen 	<ul style="list-style-type: none"> ● Consistently correctly identifies the problem or issue being considered and all of the primary factors associated with this problem or issue that impact decision making. Articulates the importance of these factors. ● Identifies all appropriate resources. ● Demonstrates ability to correctly interpret information and data needed for appropriate decision making. Demonstrates awareness of importance of these data in decision-making process. ● Considers and evaluates possible solutions effectively and thoroughly. Evaluation

	<p>rationale for selected alternative or decision</p>	<p>issue at hand, etc.). Provides rationale for selected alternative or decision but does not build a solid position with supporting evidence. Is unable to defend decision or course of action.</p>	<p>demonstrate consideration of most of the strengths, weaknesses, feasibility, effects, consequences, relevance, etc.). Provides rationale for selected alternative or decision which includes some solid supporting evidence. Is able to defend decision or course of action at a basic level.</p>	<p>leads to sound, logical, and “best” decision or course of action.</p> <ul style="list-style-type: none"> ● Proposes a solution that is entirely appropriate to the situation at hand. Solutions chosen demonstrate consideration of all of the important and relevant strengths, weaknesses, feasibility, effects, consequences, etc.). Provides rationale for selected alternative or decision and builds a solid position with appropriate and relevant supporting evidence. Effectively defends decision or course of action.
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PLO 6: Ethics and Professionalism.

Demonstrating professionalism and ethical decision making

Indicators	Initial	Developing	Developed	Proficient
Professionalism. Demonstrates behaviors and values that are consistent with the trust given to the profession by patients, other healthcare providers, and society	<ul style="list-style-type: none"> Does not consistently demonstrate professional attitudes and behaviors (altruism, excellence, duty, accountability, honesty, and integrity) Demonstrates frequent lapses in accountability or quality of work 	<ul style="list-style-type: none"> Demonstrates some professional attitudes and behaviors yet there is inconsistency that may impede on the quality of work or treatment of patients and other healthcare team members (altruism, excellence, duty, accountability, honesty, and integrity) 	<ul style="list-style-type: none"> Generally demonstrates most of the professional attitudes and behaviors (altruism, excellence, duty, accountability, honesty, and integrity) that are required in the profession Demonstrates ability to use these behaviors and values to improve healthcare 	<ul style="list-style-type: none"> Consistently demonstrates the professional attitudes and behaviors that uphold the integrity and competence of the work and the treatment of patients and other healthcare team professionals (altruism, excellence, duty, accountability, honesty, and integrity) Consistently uses these behaviors and values to improve healthcare
Ethics. Demonstrates the ability to make decisions consistent with the values of practitioners and scholars of oral healthcare.	<ul style="list-style-type: none"> Does not make ethical decisions consistent with the values of practitioners and scholars of oral healthcare. 	<ul style="list-style-type: none"> Demonstrates the ability to exercise ethical decision making, and a rudimentary knowledge of ethics within oral healthcare. 	<ul style="list-style-type: none"> Demonstrates the ability to exercise clear and ethical decision making, and a sufficient knowledge of ethics within oral healthcare. 	Demonstrates the ability to exercise clear and ethical decision making, and an advanced knowledge of ethics within oral healthcare.

PLO 7: Biomedical Sciences Knowledge.

Demonstrate an understanding of the fundamentals of biomedical sciences and apply them appropriately in oral healthcare

Indicators	Initial	Developing	Developed	Proficient
Diagnostic and pharmacologic. Demonstrates the ability to describe how to deliver patient assessments, knowledge of medicines, and delivering diagnoses.	● Does not demonstrate the ability to describe diagnostic and pharmacologic knowledge related to oral health.	● Demonstrates a rudimentary ability to describe diagnostic and pharmacologic knowledge related to oral health.	● Demonstrates a sufficient ability to describe diagnostic and pharmacologic knowledge related to oral health.	● Demonstrates an advanced ability to describe diagnostic and pharmacologic knowledge related to oral health.
Orofacial pain/temporomandibular / disorder. Demonstrates the ability to describe the anatomical, physiological, and neurological basis; classification, epidemiology, and etiology; and assessments and treatments of orofacial pain, temporomandibular joint disease, and sleep disorders.	● Does not demonstrate the ability to describe scientific or assessment knowledge related to OFP/TMJ disease and sleep disorders.	● Demonstrates a rudimentary ability to describe scientific or assessment knowledge related to OFP/TMJ disease and sleep disorders.	● Demonstrates a sufficient ability to describe scientific or assessment knowledge related to OFP/TMJ disease and sleep disorders.	● Demonstrates an advanced ability to describe scientific or assessment knowledge related to OFP/TMJ disease and sleep disorders.
7.3. Maxillofacial pathology Demonstrates the ability to describe the scientific aspects of head and neck diseases, as well as knowledge of assessment and diagnosis.	● Does not demonstrate the ability to describe the scientific or assessment knowledge related to head and neck diseases.	● Demonstrates a rudimentary ability to describe the scientific or assessment knowledge related to head and neck diseases.	● Demonstrates a sufficient ability to describe the scientific or assessment knowledge related to head and neck diseases.	● Demonstrates an advanced ability to describe the scientific or assessment knowledge related to head and neck diseases.

PLO 8: Practice Management.

Apply legal, regulatory, and business management concepts related to the provision of oral healthcare services

Indicators	Initial	Developing	Developed	Proficient
Legal aspects s legal and regulatory concepts related to the provision of oral healthcare services.	<ul style="list-style-type: none"> Does not demonstrate an understanding or the ability to apply legal and regulatory concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates a rudimentary understanding and ability to apply legal and regulatory concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates a sound understanding and ability to apply legal and regulatory concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates an advanced understanding and ability to apply legal and regulatory concepts related to the provision of oral healthcare sciences.
Business management s business management concepts to the provision of oral healthcare services.	<ul style="list-style-type: none"> Does not demonstrate an understanding or the ability to apply business management concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates a rudimentary understanding and ability to apply business management concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates a sound understanding and ability to apply business management concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates an advanced understanding and ability to apply business management concepts related to the provision of oral healthcare sciences.

Appendix B

California Northstate University Institutional Learning Objectives

ILO 1: Critical thinking: Exercise reasoned judgment to assess technical information and make well-informed decisions using evidence-based approaches

ILO 2: Written communication. Demonstrate the ability to write coherent, supported, and logically structured prose

ILO 3: Oral communication: Demonstrates oral communication skills

ILO 4: Professionalism. Interact with respect, empathy, diplomacy, and cultural competence

ILO 5: Quantitative reasoning: Demonstrate ability to use mathematics and statistics in problem solving

ILO 6: Information literacy: Identify and search relevant libraries of information and databases; synthesize information obtained from primary literature using properly referenced citations

DMD Institutional Learning Outcomes (ILOs) Proficiency Rubric

ILO 1: Critical thinking: Exercise reasoned judgment to assess technical information and make well-informed decisions using evidence-based approaches

Indicator	Initial	Developing	Developed	Proficient
1.1. Demonstrates identification of problem or issues	<ul style="list-style-type: none"> Does not correctly identify the problem or issue being considered Does not demonstrate understanding of the psychological factors that contribute to current patient state 	<ul style="list-style-type: none"> Identifies the problem or issue but does not demonstrate awareness of all the factors impacting decision making Demonstrates understanding of some possible psychological factors that contribute to current patient state 	<ul style="list-style-type: none"> Correctly identifies the problem or issue but does not demonstrate awareness of all factors impacting decision making Demonstrates understanding of most psychological factors that contribute to the current patient state 	<ul style="list-style-type: none"> Correctly identifies all of the primary factors associated with problem or issue impacting decision making Demonstrates thorough understanding of all possible psychological factors that contribute to the current patient state

Exhibit D

1.2. Demonstrates identification of resources	<ul style="list-style-type: none"> Does not identify appropriate resources 	<ul style="list-style-type: none"> Identifies a few resources needed 	<ul style="list-style-type: none"> Identifies most of the resources needed 	<ul style="list-style-type: none"> Correctly identifies all appropriate resources
1.3. Finds and interprets data needed for critical thinking and decision making	<ul style="list-style-type: none"> Does not demonstrate understanding of the data needed for critical thinking and decision making 	<ul style="list-style-type: none"> Demonstrates ability to interpret some data but not all 	<ul style="list-style-type: none"> Demonstrates ability to interpret most data 	<ul style="list-style-type: none"> Demonstrates ability to correctly interpret data needed for decision making
1.4. Demonstrates knowledge of alternatives when evaluating for possible solutions	<ul style="list-style-type: none"> Does not evaluate possible alternatives for treatment or diagnosis 	<ul style="list-style-type: none"> Does not effectively evaluate alternative treatment or diagnostic solutions 	<ul style="list-style-type: none"> Evaluates possible treatment and diagnostic solutions leading to a logical decision 	<ul style="list-style-type: none"> Effectively and thoroughly considers and evaluates possible diagnostic and treatment solutions
1.5. Proposes and selects appropriate solutions	<ul style="list-style-type: none"> Does not propose solutions to the client's needs 	<ul style="list-style-type: none"> Proposes solutions without consideration of alternatives 	<ul style="list-style-type: none"> Solutions chosen demonstrate consideration of most of the strengths, weaknesses, and consequences of the decision 	<ul style="list-style-type: none"> Proposes solutions that are appropriate to the situation and demonstrate consideration of all relevant strengths, weaknesses, and consequences
1.6. Presents rationale for course of action	<ul style="list-style-type: none"> Does not adequately provide rationale for treatment decision 	<ul style="list-style-type: none"> Provides rationale for decision but does not integrate into mental health treatment plan 	<ul style="list-style-type: none"> Provides rationale for decision with solid supporting evidence from available psychological literature and/or case factors 	<ul style="list-style-type: none"> Provides rationale for decision and with appropriate and relevant supporting case evidence and integrates findings into treatment plan

ILO 2: Written communication. Demonstrate the ability to write coherent, supported, and logically structured prose

Indicators	Initial	Developing	Developed	Proficient
2.1. Demonstrates knowledge and awareness of intended audience	<ul style="list-style-type: none"> Does not demonstrate knowledge or awareness of audience for which the document is intended 	<ul style="list-style-type: none"> Demonstrates some ability to craft a document appropriate for its audience 	<ul style="list-style-type: none"> Demonstrates ability to craft a document appropriate for its audience 	<ul style="list-style-type: none"> Consistently demonstrates ability to craft documents appropriate for the audience
2.2. Demonstrates clear and logical thought	<ul style="list-style-type: none"> Does not demonstrate clear or logical thought in their documentation 	<ul style="list-style-type: none"> Writing does not sufficiently conceptualize case variables or 	<ul style="list-style-type: none"> Demonstrates general clear or logical thought in their documentation 	<ul style="list-style-type: none"> Research and clinical documentation demonstrates clear

Exhibit D

		analyze subject under discussion		and focused thinking
2.3. Demonstrates support for and development of ideas	<ul style="list-style-type: none"> Does not explain or develop ideas 	<ul style="list-style-type: none"> Demonstrates minimal support for ideas 	<ul style="list-style-type: none"> Writing contains examples that generally support ideas 	<ul style="list-style-type: none"> Supports ideas with relevant, clear, impactful examples
2.4. Demonstrates appropriate use of evidence to support arguments	<ul style="list-style-type: none"> Demonstrates an attempt to use proper citations to support ideas 	<ul style="list-style-type: none"> Uses credible and relevant sources to support ideas appropriate in the study of psychology 	<ul style="list-style-type: none"> Consistently uses credible and relevant sources to support ideas 	<ul style="list-style-type: none"> Demonstrates skillful use of credible and relevant sources to develop and support ideas
2.5. Demonstrates appropriate use of language, syntax, and mechanics	<ul style="list-style-type: none"> Has excessive or severe errors in language usage 	<ul style="list-style-type: none"> Generally conveys meaning to readers with clarity, though writing may include some errors 	<ul style="list-style-type: none"> Language conveys meaning to readers and writing contains very few errors 	<ul style="list-style-type: none"> Uses language effectively and skillfully to communicate meaning to readers

ILO 3: Oral communication: Demonstrates oral communication skills

Indicators	Initial	Developing	Developed	Proficient
3.1. Demonstrates knowledge and awareness of intended audience	<ul style="list-style-type: none"> Does not demonstrate knowledge or awareness of audience for which the communication is intended 	<ul style="list-style-type: none"> Demonstrates some ability to communicate in a manner appropriate to the audience 	<ul style="list-style-type: none"> Demonstrates ability to communicate appropriate to the audience 	<ul style="list-style-type: none"> Consistently demonstrates ability to communicate in a manner appropriate to the audience
3.2. Demonstrates clear and logical thought	<ul style="list-style-type: none"> Does not demonstrate clear or logical thought in their communication 	<ul style="list-style-type: none"> Communication does not sufficiently conceptualize case variables or analyze subject under discussion 	<ul style="list-style-type: none"> Demonstrates general clear or logical thought in their communication 	<ul style="list-style-type: none"> Communication demonstrates clear and focused thinking
3.3. Demonstrates effective use of language in their communication	<ul style="list-style-type: none"> Does not know professional psychological language or uses jargon Does not know the proper technical language regarding mental health treatment 	<ul style="list-style-type: none"> Demonstrates inaccurate use of psychological language or uses jargon in professional communications Utilizes scientific language that is incomprehensible to patients 	<ul style="list-style-type: none"> Demonstrates appropriate use of professional language and minimal jargon Utilizes generalized language to interact with patients 	<ul style="list-style-type: none"> Demonstrates use of appropriate, professional language Utilizes generalized language to interact with patients

Exhibit D

3.4. Demonstrates appropriate active listening techniques when addressing questions	<ul style="list-style-type: none"> Does not acknowledge other viewpoints Has great difficulty answering questions 	<ul style="list-style-type: none"> Demonstrates little attempt to recognize other viewpoints Answers are simplistic and lack intellectual depth 	<ul style="list-style-type: none"> Recognizes other viewpoints but has difficulty incorporating them into case conceptualization Adequately answers patient questions 	<ul style="list-style-type: none"> Listens to questions with a consideration of alternative viewpoints Answers questions thoughtfully referencing evidence
3.5. Orally communicates meaning to audience	<ul style="list-style-type: none"> Vocal delivery is too soft or too fast Long, unintended silences and/or speech disruptions frequently distract audience Speaker makes no attempt to engage audience 	<ul style="list-style-type: none"> Vocal delivery is audible Speech rate or volume disruptions occasionally distract from comprehension Attempts to engage audience 	<ul style="list-style-type: none"> Vocal delivery is varied and dynamic Speech rate, volume, and tone enhance listener interest and facilitate understanding Generally engages audience 	<ul style="list-style-type: none"> Vocal delivery is varied and dynamic Speech rate, volume, and tone enhance listener interest and facilitate understanding Thoroughly engages audience
3.6. Utilizes non-verbal means to enhance message	<ul style="list-style-type: none"> Eye contact, body language, and facial expressions are inappropriate 	<ul style="list-style-type: none"> Eye contact, body language, and facial expressions neither enhance nor hinder oral effectiveness 	<ul style="list-style-type: none"> Use of eye contact, body language, and facial expressions are mostly consistent with the verbal message 	<ul style="list-style-type: none"> Use of eye contact, body language, and facial expressions that are consistent with the verbal message

ILO 4: Professionalism. Interact with respect, empathy, diplomacy, and cultural competence

Indicators	Initial	Developing	Developed	Proficient
4.1. Demonstrates professional attitudes and behaviors	<ul style="list-style-type: none"> Does not generally demonstrate professional attitudes or behaviors expected from a dentist 	<ul style="list-style-type: none"> Demonstrates some attitudes and behaviors that may be characteristic of a dentist 	<ul style="list-style-type: none"> Generally demonstrates attitudes and behaviors expected from a dentist 	<ul style="list-style-type: none"> Consistently demonstrates attitudes and behaviors expected from a dentist
4.2. Demonstrates personal responsibility and accountability	<ul style="list-style-type: none"> Does not demonstrate personal accountability or responsibility for work completed 	<ul style="list-style-type: none"> Demonstrates minimal personal accountability and responsibility for work completed 	<ul style="list-style-type: none"> Demonstrates personal accountability and responsibility for the work completed 	<ul style="list-style-type: none"> Consistently demonstrates personal accountability and responsibility for work completed

Exhibit D

4.3. Demonstrates respectful and sensitive behaviors to the cultural and linguistic needs of diverse patients	<ul style="list-style-type: none"> • Does not demonstrate an awareness of patients' customs, beliefs, or perspectives • Does not demonstrate awareness of linguistic needs of patients 	<ul style="list-style-type: none"> • Demonstrates a minimal level of awareness of customs, beliefs, or perspectives of patients • Demonstrates minimal awareness of cultural and linguistic needs of patients 	<ul style="list-style-type: none"> • Demonstrates awareness of customs and beliefs • Demonstrates awareness of the cultural and linguistic needs of patients 	<ul style="list-style-type: none"> • Demonstrates awareness of customs, beliefs, or perspectives in patients • Demonstrates full awareness and responds to the cultural and linguistic needs of patients
4.4. Demonstrates professional demeanor	<ul style="list-style-type: none"> • Appears inattentive and impatient • Uses inappropriate body language • Dresses in attire that is inappropriate 	<ul style="list-style-type: none"> • Appears unfocused and distracted • Uses acceptable body language • Dresses in attire that is not offensive 	<ul style="list-style-type: none"> • Appears composed and focused • Uses appropriate body language • Dresses in attire that is professional 	<ul style="list-style-type: none"> • Uses articulate, tactful, and diplomatic speech • Uses professional body language • Dresses in attire that is professional, and well-suited for the environment

ILO 5: Quantitative reasoning: Demonstrate ability to use mathematics and statistics in problem solving

Indicators	Initial	Developing	Developed	Proficient
5.1. Demonstrates ability to perform calculations and apply mathematical principles to solve problems	<ul style="list-style-type: none"> Does not demonstrate ability to apply statistical or psychometric principles 	<ul style="list-style-type: none"> Demonstrates ability to perform basic statistical calculations but does not know how to apply psychometric principles to solve problems 	<ul style="list-style-type: none"> Demonstrates ability to perform most statistical calculations accurately and to apply psychometric principles to solve problems 	<ul style="list-style-type: none"> Consistently demonstrates ability to perform statistical calculations accurately and to appropriately apply psychometric principles to solve problems
5.2. Demonstrates understanding of experimental designs and methodology	<ul style="list-style-type: none"> Displays difficulty proposing a basic experiment or research project 	<ul style="list-style-type: none"> Comprehends basic experiments designed by others 	<ul style="list-style-type: none"> Evaluates research, method, and protocol to review valid and reliable research 	<ul style="list-style-type: none"> Proposes appropriate and innovative designs to address a new hypothesis and research question
5.3. Demonstrates logical and appropriate interpretation of data	<ul style="list-style-type: none"> Demonstrates a limited ability to interpret scientific data 	<ul style="list-style-type: none"> Attempts to interpret scientific data 	<ul style="list-style-type: none"> Demonstrates the ability to interpret scientific data 	<ul style="list-style-type: none"> Interprets data in the context of current scientific knowledge
5.4. Demonstrates logical thought patterns in generating conclusions	<ul style="list-style-type: none"> Does not generate conclusions based on current scientific data and statistics 	<ul style="list-style-type: none"> Generates conclusions that may be based on current scientific data and statistics 	<ul style="list-style-type: none"> Generates conclusions using scientific and statistical data 	<ul style="list-style-type: none"> Accurately generates conclusions using appropriate scientific and mathematical data

ILO 6: Information literacy: Identify and search relevant libraries of information and databases; synthesize information obtained from primary literature using properly referenced citations

Indicators	Initial	Developing	Developed	Proficient
6.1. Demonstrates appropriate ability search and acquire resources	<ul style="list-style-type: none"> Does not identify or solicit help in obtaining external resources to support topic 	<ul style="list-style-type: none"> Identified resources may not be sufficient in quality and infrequently solicits guidance from library personnel 	<ul style="list-style-type: none"> Identifies resources appropriate for scientific inquiry and solicits guidance from library personnel 	<ul style="list-style-type: none"> Identifies a variety of relevant sources and regularly seeks guidance from library personnel

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6.2. Demonstrates appropriate incorporation of references	<ul style="list-style-type: none">• Does not incorporate references	<ul style="list-style-type: none">• Incorporates references from psychological sources that do not clearly support ideas	<ul style="list-style-type: none">• Incorporates relevant references that generally supports ideas	<ul style="list-style-type: none">• Incorporates relevant references from respected psychological sources
6.3. Demonstrates appropriate citation of references	<ul style="list-style-type: none">• Does not use citations	<ul style="list-style-type: none">• Uses citations but they are not formatted in APA style	<ul style="list-style-type: none">• Demonstrates use of appropriate citations in context	<ul style="list-style-type: none">• Uses properly cited references and includes all necessary information in reference list



California Northstate University College of Dental Medicine

Course Syllabus

Course #	Course Title	Credits	Year	Term
OMFS 632	Dental Anesthesiology 2: Pain and Anxiety Control, Analgesia, Medical Management of Local Anesthesia Patients	3	DS2	Spring

Credit Hour Policy

For each 15-week semester, one (1) hour of credit is assigned per hour each week of classroom or direct faculty didactic instruction (that is, per hour of lecture or student in-class time) and a minimum of two (2) hours of out-of-class student work (homework). For practicum and internship time, one (1) hour of credit is assigned per three (3) hours each week of student time spent in this activity.

Maximum Enrollment: 80

Calendar of Important Dates:

Date	
August 2021	First day of fall term for DMD 2 Students
September 2021	First Quiz
November 2021	Second Quiz
December 2021	Final Exam

Course Coordinator, Instructors and Contact Information

Course Director:

Oral Maxillofacial Studies 632

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Room:
E mail:
Office hours

Holly Jacobson BA (course administrator)

Room: xxx
E mail: holly.jacobson@cnsu.edu

Classroom and Meeting Times

Room: Classroom xxxx
Time: xxxx 2 hours per week

Clinic and meeting times

Room:
Time:

Course Description

Prerequisite Courses

Dental Anesthesiology 1: Local Anesthesia

Prerequisite Knowledge

Understanding of the pharmacokinetics and use of local anesthetics in dentistry

Required Textbook(s) and Material(s)

Handbook of Nitrous Oxide and Oxygen Sedation

4th ed.

Morris S. Clark, BS, BDS, DDS, DSc, FACD

Professor, Oral and Maxillofacial Surgery

Director of Anesthesia, Department of Surgical Dentistry, School of Dental Medicine

Professor of Surgery, School of Medicine, University of Colorado Health Sciences Center, Denver, Colorado

Ann L. Brunick, RDH, MS

Chairperson and Professor, Department of Dental Hygiene, University of South Dakota, Vermillion,

Oral Maxillofacial Studies 632

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South Dakota
9781455745470

SEDATION

A GUIDE TO PATIENT MANAGEMENT

5th ed.

Stanley F. Malamed, DDS

Professor of Anesthesia and Medicine, School of Dentistry, University of Southern California, Los Angeles, California

978-0-323-05680-9

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Technology

Evaluation Components

In keeping with the Team Based Learning (TBL) approach, grades will be determined as follows:

Individual Components	80%
First Quiz	10 %
Second Quiz	10 %
Final Exam	30%
Clinical evaluation practical	30 %

Team Components	20 %
Peer Evaluations	10 %
Group PCS Project	10%

GRADING

All students must demonstrate minimal individual competency. Therefore, students earning less than 75% on the total Individual component score will not have team component scores added to calculate their final course grade. During the course, students who score less than 75% on individual components may be subject to periodic course content review and may receive an Academic Alert.

In order to progress from one semester to the next, students must pass all courses with a letter a grade of C or higher and maintain a minimum cumulative grade point average (GPA) of 2.0. The breakdown for assignment of letter grades and grade points for each letter grade are as follows:

Percent	Letter Grade/Action
90.0 – 100%	A
80.0 – 89.9%	B
75.0 – 79.9%	C - Pass
60.0 – 74.9%	D – Requiring remediation (successful remediation recorded as C, unsuccessful remediation recorded as F)

Below 60.0%	F – Fail (course must be repeated)
Incomplete	I

Incomplete

During a semester, a student may not complete all required assignments and/or examinations due to extenuating circumstances, such as, but not limited to, an illness or a family emergency. In such a case, the course director may give a grade of Incomplete for the course. The course with the incomplete grade has to be completed successfully within the time frame as being defined by the student's academic plan, normally in the same academic year, otherwise a leave of absence would be required.

Core-Course Policies

All students are required to adhere to the Academic Policies that impact on student progression and conduct while attending the DMD program, including the following: Academic Progression Policy, Excused Absence Policy, Exam Policy, Course Grade Appeal Policy, Course Add/Drop Policy and Attendance Policy. Refer to the current Student Handbook for the detailed policies.

Course Specific Policies

Key Words: pain, stress, medical and dental history, vital signs, stress management, anxiety, nitrous oxide, oral sedation, inhalation agents, intravenous sedation, general anesthesia, ASA Classification, blood pressure, pregnancy, hemodialysis, drug-drug interactions, heart weight, BMI, temperature, heart rate, endocarditis, antibiotic prophylaxis, anti-coagulants, respiratory rate, emergency management

Topics and Schedule

(Subject to change. Updates will be posted to CANVAS and announced by email)

All readings are in Vital Source, or as assigned and posted to CANVAS

Each didactic session including LAL is 2 hours. Each clinical session is 4 hours. Students are divided into groups of 4 students (groups 1-20) for each of their 3 sessions. Each group of 4 will attend either Monday, Tuesday, Wednesday or Thursday clinic.

Exhibit D

Date	Topics	Readings*	Instructor	Notes
Week 1 Understanding Pain	Pain, Anxiety and Management.	Section 1; Chapter1 Malamed Part 1, Section 3 Clark		
1: Clinic assignment	Case assessment of a dental phobia patient			
Week 2 Pain Management	Spectrum of Pain and Anxiety Control in Dentistry	Section 2 Chpts 2-3 Malamed		
2: Clinic assignment	Conduct pain assessment of patient with new onset of dental pain			
Week 3 Patient Assessment	Patient medical history and Psychologic Evaluation in the Dental Office	Section 2, Chpt 4 Malamed pages 23-46		
Week 3: clinic assignment	Conduct history intake using standardized questionnaire			
Week 4: Patient Assessment	Complicated Medical History	Section 2 Chpt 4 Malamed		
Week 4 Clinic assignment	Conduct medical history assessment of a patient with complicated medical and dental history			
Week 5: Patient Assessment	Patient Physical Examination, vital signs,	Section 2 Chpt 4 Pages 47-55 Malamed		Case assignments X4 to groups
Week 5 clinic assignment	Complete BP, temperature, respiratory rate, heart rate on patient			
Week 6 Patient Co-morbidities/Special Considerations	ASA Classification, post-operative pain management, managing patient risks/comorbidities;	Section 2 Chpt 4 Special Considerations Malamed Part 1, Section 4 Clark		Case assignments to groups
Week 6 clinic	Complete final medical assessment of patient with complicated medical history and physical co-morbidities. <u>Determine consultations.</u>			
Week 7 Treatment Planning for stress and pain	Pain and stress management plan; post operative pain management: non-drug techniques	Section 2 Chpt 4,5 Section VIII Special Considerations Malamed		

Exhibit D

Week 7 clinic	Conduct non-drug techniques to manage patient level of stress and anxiety			
Week 8 Nitrous Oxide Background	History of Nitrous Oxide; history of dentistry and anesthesia; inhalation sedation	Part 1 Sect 1 Clark		
Week 8 clinic	Part I will begin by learning the physical requirements and equipment needed to administer nitrous oxide			
Week 9 Nitrous Oxide Anatomy, equipment	Pharmacokinetics, manufacturing and delivery, equipment, risks, addition, patient assessment,	Part I Sect 4-10 Clark Chapts 11-13 Malamed		
Week 9	Complete patient assessment for administration of nitrous oxide, attach monitoring equipment and assure competency			
Week 10 Nitrous Oxide	Administration of nitrous oxide; monitoring, equipment, anatomy of respiration and airway	Part II Section 8-14- Clark Chpt 14-15 Malamed		
Week 10	Administration of nitrous oxide to fellow classmates			
Week 11 Sedation,	Oral, Rectal, IM and intravenous sedation	Malamed Chapt 7-10		
Week 11	Administration of nitrous oxide to fellow classmates			
Week 12 Intravenous sedation/GA	IV sedation/GA	Malamed Chpts 20-31		
Week 12	IV and IM equipment-understanding venous access, IV, fluids, and intramuscular injections			
Week 13 Emergencies	Preparation for Emergencies	Malamed Chpts 32-34		
Week 13	Mock emergency scenario with nitrous oxide patient			
Week 14 Special Considerations	Pediatric Patient, Geriatric Patient, Compromised patients, medico-legal considerations	Malamed Sect VII Chpt 35-40		
Week 14	Case Report of Group Assignments			
Week 15	Test			

Exhibit D

Week 15				
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**Course Learning Outcomes and links to Program Learning Outcomes (Appendix A)
and Institutional Learning Outcomes (Appendix B)**

No.	Course Learning Outcome	DMD PLO	DMD ILO	Learning Hierarchy ^b	Assessment Method
1					
2					
3					
4					

^a plo's appendix A

^b Learning Hierarchy based on Bloom's Taxonomy with 1=Memorization and/or Comprehension;
2=Application and/or Analysis; 3=Synthesis and/or Evaluation.

Teaching/ Learning Methodology

CLO Rubrics

CLO 1:

Indicators	Initial	Developing	Developed	Proficient

CLO 2:

Indicato	Init	Developi	Develop	Proficie

Appendix A

Program Learning Outcomes (PLOs) CNU College of Dental Medicine

1. Patient-Centered Care: Demonstrate understanding of healthcare disparities and cultural awareness in patient counseling and patient advocacy
2. Evidence-Based Care: Apply current, evidence-based oral healthcare within the scope of general dentistry
3. Culturally competent, empathic communication: Demonstrate patient centered, empathic, and culturally competent communication and interpersonal skills
4. Oral and Written Communication: Demonstrate sound oral and written communications in patient care
5. Critical Thinking: Utilize critical thinking, problem solving skills and systemic thinking in assessing and making reasoned, evidence-based decisions in patient care
6. Ethics and Professionalism: Demonstrate professionalism and ethical decision making
7. Biomedical Sciences Knowledge: Demonstrate an understanding of the fundamentals of biomedical sciences and apply them appropriately in oral healthcare
8. Practice Management: Apply legal, regulatory and business management concepts related to provision of oral healthcare services

DMD Program Learning Outcomes (PLOs) Proficiency Rubric

PLO 1: Patient-Centered Care

Demonstrate understanding of healthcare disparities and cultural awareness and capability in patient counseling and providing appropriate patient advocacy

Indicators	Initial	Developing	Developed	Proficient
1.1. Education. Demonstrates ability to educate all audiences through effectively communicating information and assessing learning	<ul style="list-style-type: none"> Does not appropriately counsel patients Does not check for understanding, ask questions, and/or asks inappropriate questions. 	<ul style="list-style-type: none"> Counsels patients but leaves out pertinent information needed by patient Communicates with basic level of clarity but 	<ul style="list-style-type: none"> Generally, demonstrates empathy, communicates accurate information clearly, checks for understanding Seeks to ensure 	<ul style="list-style-type: none"> Consistently demonstrates empathy, communicates accurate information clearly, checks for understanding Ensures

	<ul style="list-style-type: none"> Does not demonstrate the ability to find and utilize appropriate resources and references necessary for providing accurate counseling, consultation and education 	<p>does not always check for understanding or rephrase when confusion occurs.</p> <ul style="list-style-type: none"> Demonstrates the ability to find a one or two resources, yet the resources are not the best or most appropriate for providing accurate counseling, consultation and education 	<p>understanding and generally asks questions.</p> <ul style="list-style-type: none"> Frequently demonstrates the ability to find and utilize appropriate resources and references necessary for providing accurate counseling, consultation and education 	<p>understanding and asks appropriate questions.</p> <ul style="list-style-type: none"> Consistently demonstrates the ability to find and utilize appropriate resources and references for providing accurate patient counseling, consultation and education
1.2. Patient advocacy. Represents the patient's best interests	<ul style="list-style-type: none"> Does not demonstrate the ability represent a patient's best interest 	<ul style="list-style-type: none"> Demonstrates awareness of issues that impact a patient Demonstrates minimal ability to articulate these issues but does not demonstrate ability to sufficiently advocate on a patient's behalf 	<ul style="list-style-type: none"> Demonstrates sufficient awareness of issues that impact a patient Demonstrates ability to articulate these issues Demonstrates ability to sufficiently advocate on a patient's behalf 	<ul style="list-style-type: none"> Demonstrates full awareness of the most important issues that impact a patient Demonstrates ability to clearly and effectively articulate these issues Demonstrates ability to effectively advocate on a patient's behalf

PLO 2: Evidence-Based Care.

Apply sound, current, and evidence-based oral healthcare within the scope of general dentistry

Indicators	Initial	Developing	Developed	Proficient
2.1. Patient-centered care. Demonstrates ability to provide patient-centered care as the	<ul style="list-style-type: none"> Does not demonstrate ability to provide patient-centered care at the medication expert level; e.g., 	<ul style="list-style-type: none"> Demonstrates ability to provide patient-centered care as the medication expert in some, but not all, areas 	<ul style="list-style-type: none"> Demonstrates ability to provide patient-centered care as the medication expert (generally demonstrates 	<ul style="list-style-type: none"> Demonstrates ability to provide sufficient patient-centered care as the expert (collects and

medication expert (collect and interpret evidence, prioritize, formulate assessments and recommendations, implement, monitor and adjust plans, and document activities)	demonstrates ability to collect but not sufficiently interpret evidence, does not prioritize, formulates basic assessments and recommendations, does not sufficiently monitor and adjust plans nor document activities.	as follows: collect and interpret evidence, prioritize, formulate assessments and recommendations, implement, monitor and adjust plans, and document activities	ability to collect and interpret evidence, prioritize, formulate assessments and recommendations, implement, monitor and adjust plans, and document activities)	interprets evidence, prioritizes, formulates assessments and recommendations, implements, monitors and adjusts plans, and documents activities)
2.2. Systems management. Demonstrates ability to manage patient healthcare needs using human, financial, technological, and physical resources to optimize the safety and efficacy of medication use systems	<ul style="list-style-type: none"> • Does not demonstrate understanding of oral healthcare delivery systems parts • Does not demonstrate understanding of the forces that influence components of the oral healthcare delivery system, including their connection to patient care • Does not demonstrate understanding of any challenges to systems that affect oral healthcare delivery Does not demonstrate understanding of how to work with different subsystems to deliver oral	<ul style="list-style-type: none"> • Demonstrates understanding of some parts of oral healthcare delivery systems but does not identify how they are related to each other • Demonstrates understanding of some forces that influence the parts of healthcare delivery systems, but demonstrate minimal understanding of their connection to patient care • Demonstrates understanding of some challenges that can affect delivery of oral healthcare • Demonstrates some understanding of how to work with different subsystems and how they 	<ul style="list-style-type: none"> • Demonstrates understanding of most major components of oral healthcare systems and their respective relationships • Demonstrates understanding of the forces that influence the components of healthcare delivery systems, and demonstrate some understanding of their influence on the quality of patient care • Demonstrates understanding of most challenges that can affect delivery of oral healthcare, but does not demonstrate complete comprehension of the effects Demonstrates basic	<ul style="list-style-type: none"> • Demonstrates understanding of the major components of oral healthcare systems, their respective relationships, and their functions related to patient care • Demonstrates thorough understanding of the forces that influence components of healthcare delivery systems and demonstrate full understanding of their influence and implications on the quality of patient care • Demonstrates understanding of pertinent challenges to specific aspects of healthcare delivery by demonstrating

	healthcare	function to deliver oral healthcare, but demonstrate minimal awareness or understanding of one's own role within the oral healthcare delivery system	understanding of how to work with different subsystems and how they function to deliver oral healthcare and demonstrate some understanding of one's role within the oral healthcare delivery system, but does not necessarily demonstrate application of knowledge in a manner that maximizes the quality of oral healthcare	abilities to thoroughly discuss the implications for the appropriate parts of oral health care delivery systems Demonstrates excellent understanding of how to work with different subsystems involved while also demonstrating understanding of one's role within the subsystems, and demonstrate appropriate application of knowledge in a manner that maximizes the quality of oral healthcare
2.3. Health and wellness. Designs prevention, intervention, and educational strategies for individuals and communities to manage chronic disease and improve oral health and wellness	<ul style="list-style-type: none"> Does not demonstrate understanding of how the arts can be utilized to optimize patients' well-being 	<ul style="list-style-type: none"> Demonstrates knowledge of some of the ways that the arts can be utilized to optimize patients' well-being 	<ul style="list-style-type: none"> Demonstrates sufficient knowledge of multiple ways that the arts can be utilized to optimize patients' well-being 	<ul style="list-style-type: none"> Demonstrates thorough knowledge of the ways that the arts can be utilized to optimize patients' well-being and creatively applies this knowledge to improve well-being and the practice and delivery of oral healthcare
2.4. Population-based care.	<ul style="list-style-type: none"> Does not demonstrate 	<ul style="list-style-type: none"> Demonstrates minimal 	<ul style="list-style-type: none"> Demonstrates sufficient 	<ul style="list-style-type: none"> Demonstrates superb

Exhibit D

Demonstrates understanding of how population-based care influences patient-centered care and the development of practice guidelines and evidence-based best practices	awareness of population-based care.	<p>understanding of population-based care and how it influences patient-centered care</p> <ul style="list-style-type: none"> • Does not demonstrate awareness of how these notions influence the development of practice guidelines 	<p>understanding of population-based care and how it influences patient-centered care</p> <ul style="list-style-type: none"> • Demonstrates sufficient understanding of how population-based care influences the development of practice guidelines and best practices for patient care 	<p>understanding of population-based care and how it influences patient-centered care</p> <ul style="list-style-type: none"> • Demonstrates superb understanding of how population-based care influences the development of practice guidelines and demonstrates knowledge of best practices for patient care
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PLO 3: Culturally Competent, Empathic Communication.

Demonstrate patient centered, empathic and culturally competent communication and interpersonal skills

Indicators	Initial	Developing	Developed	Proficient
3.1. Empathy. Demonstrates the ability to communicate with the patient empathically.	<ul style="list-style-type: none"> Does not demonstrate the ability to communicate with the patient empathically. 	<ul style="list-style-type: none"> Demonstrates some ability, but experiences lapses in the ability to communicate empathically 	<ul style="list-style-type: none"> Demonstrates the ability to communicate empathically, with few lapses. 	<ul style="list-style-type: none"> Demonstrates an advanced ability, and never experiences lapses in communicating empathically.
3.2. Cultural competence. Demonstrates the ability to engage in communication with the patient that is culturally aware and accepting.	<ul style="list-style-type: none"> Does not demonstrate communication and interactions that convey respect or concern for patients and the community. Does not demonstrate an awareness of customs, beliefs, or perspectives in diverse patients Does not demonstrate awareness of cultural and linguistic needs of patients in order to communicate health information 	<ul style="list-style-type: none"> Demonstrates communication and interactions characteristic of a minimal level of respect, and little concern for patients and the community is apparent through use of some appropriate communication, but student does not employ follow-up questions for clarification, when necessary, and student provides inappropriate detail in responses Demonstrates a minimal level of awareness of customs, beliefs, or perspectives in diverse patients Demonstrates minimal awareness of cultural and 	<ul style="list-style-type: none"> Demonstrates appropriate communication and interactions that are characteristic of a basic level of respect, and concern for patients and the community is apparent through use of appropriate communication, where student uses some clear, but not necessarily relevant or detailed, follow-up questions and responses Demonstrates awareness of customs and beliefs, but may not clarify with patients about personal perspectives Demonstrates awareness of the cultural and 	<ul style="list-style-type: none"> Demonstrates professional communication and interactions by showing empathy, respect, and concern for patients and the community through use of appropriate communication where follow-up questions (as needed) and responses are clear, relevant, and detailed Demonstrates awareness of customs, beliefs, or perspectives in diverse patients; ask appropriate questions to clarify perspectives and perceptions in diverse patients Demonstrates full awareness of and responsiveness to

		linguistic needs of patients; either does not or only attempt to adapt behaviors, but does so ineffectively, to communicate health information	linguistic needs of diverse patients, and adapt behaviors to communicate health information, but communication may not be effective	cultural and linguistic needs of diverse patients by adapting behaviors appropriately in order to effectively communicate health information
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PLO 4: Oral and Written Communication.

Demonstrate sound oral and written communications in patient care

Indicators	Initial	Developing	Developed	Proficient
4.1. Oral communication. Demonstrate sound oral communication in patient care.	<ul style="list-style-type: none"> Does not demonstrate logical reasoning in oral communications in patient care. Does not demonstrate the ability to cite sound evidence that support ideas within presentations or discussions. 	<ul style="list-style-type: none"> Demonstrates some logical reasoning in oral communications in patient care but demonstrates some lapses. Demonstrates some ability to cite sound evidence that support ideas within presentations or discussions, but demonstrates some lapses. 	<ul style="list-style-type: none"> Generally, demonstrates logical reasoning in oral communications in patient care. Generally, demonstrates the ability to cite sound evidence that support ideas within presentations or discussions. 	<ul style="list-style-type: none"> Consistently demonstrates logical reasoning in oral communications in patient care. Consistently demonstrates the ability to cite sound evidence that support ideas within presentations or discussions.
4.2. Written communication. Demonstrate sound written communication in patient care.	<ul style="list-style-type: none"> Does not demonstrate logical reasoning in written communications in patient care. Does not demonstrate the written ability to cite sound evidence that support ideas. 	<ul style="list-style-type: none"> Demonstrates some logical reasoning in written communications in patient care but demonstrates some lapses. Demonstrates some written ability to cite sound evidence that support ideas but demonstrates some lapses. 	<ul style="list-style-type: none"> Generally logical reasoning in written communications in patient care. Generally, demonstrates the written ability to cite sound evidence that support ideas. 	<ul style="list-style-type: none"> Consistently demonstrates logical reasoning in written communications in patient care. Consistently demonstrates the written ability to cite sound evidence that support ideas.

PLO 5: Critical Thinking.

Utilize critical thinking, problem solving skills and systemic thinking in assessing and making reasoned, evidence-based decisions in patient care

Indicators	Initial	Developing	Developed	Proficient
5.1. Problem solving. Identifies problems; explore and prioritize potential strategies; and designs, implements, and evaluates viable solutions	<ul style="list-style-type: none"> Is not able to correctly identify the problem or issue being considered. Does not identify appropriate resources. Includes extraneous information or inappropriate or insufficient resources. Does not demonstrate understanding of the content of materials reviewed. Makes inappropriate inferences. Does not evaluate possible alternatives or generates ideas that are illogical or extraneous to issue at hand. Does not propose a solution or does not articulate decision. Does not adequately provide rationale for selected alternative or 	<ul style="list-style-type: none"> Identifies the problem or issue but does not demonstrate awareness of all the factors associated with the problem or issues that impact decision making. Identifies a few, but not all, resources needed for decision making. Demonstrates ability to interpret some information and data but not all. Does not fully or effectively evaluate alternative solutions. Proposes a decision with many apparent weaknesses (i.e., not feasible, lack of regard for consequences, lack of supporting evidence, illogical, irrelevant to issue at hand, etc.). Provides 	<ul style="list-style-type: none"> Correctly identifies problem or issue being considered and demonstrates adequate awareness of the factors associated with this problem or issue that impact decision making. Identifies most of the resources needed. Demonstrates ability to interpret most information and data. Considers and evaluates possible solutions in a way that generally leads to a logical decision or course of action. Proposes a solution that does not contain apparent weaknesses that may or may not be the obvious clear choice. Solutions chosen demonstrate consideration of 	<ul style="list-style-type: none"> Consistently correctly identifies the problem or issue being considered and all of the primary factors associated with this problem or issue that impact decision making. Articulates the importance of these factors. Identifies all appropriate resources. Demonstrates ability to correctly interpret information and data needed for appropriate decision making. Demonstrates awareness of importance of these data in decision-making process. Considers and evaluates possible solutions effectively and thoroughly. Evaluation leads to sound, logical, and “best” decision or

	decision	rationale for selected alternative or decision but does not build a solid position with supporting evidence. Is unable to defend decision or course of action.	most of the strengths, weaknesses, feasibility, effects, consequences, relevance, etc.). Provides rationale for selected alternative or decision which includes some solid supporting evidence. Is able to defend decision or course of action at a basic level.	course of action. <ul style="list-style-type: none"> Proposes a solution that is entirely appropriate to the situation at hand. Solutions chosen demonstrate consideration of all of the important and relevant strengths, weaknesses, feasibility, effects, consequences, etc.). Provides rationale for selected alternative or decision and builds a solid position with appropriate and relevant supporting evidence. Effectively defends decision or course of action.
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PLO 6: Ethics and Professionalism.

Demonstrating professionalism and ethical decision making

Indicators	Initial	Developing	Developed	Proficient
6.1. Professionalism. Demonstrates behaviors and values that are consistent with the trust given to the profession by patients, other healthcare providers, and society	<ul style="list-style-type: none"> Does not consistently demonstrate professional attitudes and behaviors (altruism, excellence, duty, accountability, honesty, and integrity) Demonstrates frequent lapses in accountability or quality of work 	<ul style="list-style-type: none"> Demonstrates some professional attitudes and behaviors yet there is inconsistency that may impede on the quality of work or treatment of patients and other healthcare team members (altruism, excellence, duty, accountability, honesty, and integrity) 	<ul style="list-style-type: none"> Generally, demonstrates most of the professional attitudes and behaviors (altruism, excellence, duty, accountability, honesty, and integrity) that are required in the profession Demonstrates ability to use these behaviors and values to improve healthcare 	<ul style="list-style-type: none"> Consistently demonstrates the professional attitudes and behaviors that uphold the integrity and competence of the work and the treatment of patients and other healthcare team professionals (altruism, excellence, duty, accountability, honesty, and integrity) Consistently uses these behaviors and values to improve healthcare
6.2. Ethics. Demonstrates the ability to make decisions consistent with the values of practitioners and scholars of oral healthcare.	<ul style="list-style-type: none"> Does not make ethical decisions consistent with the values of practitioners and scholars of oral healthcare. 	<ul style="list-style-type: none"> Demonstrates the ability to exercise ethical decision making, and a rudimentary knowledge of ethics within oral healthcare. 	<ul style="list-style-type: none"> Demonstrates the ability to exercise clear and ethical decision making, and a sufficient knowledge of ethics within oral healthcare. 	Demonstrates the ability to exercise clear and ethical decision making, and an advanced knowledge of ethics within oral healthcare.

PLO 7: Biomedical Sciences Knowledge.

Demonstrate an understanding of the fundamentals of biomedical sciences and apply them appropriately in oral healthcare

Indicators	Initial	Developing	Developed	Proficient
7.1. Diagnostic and pharmacologic. Demonstrates the ability to describe how to deliver patient assessments, knowledge of medicines, and delivering diagnoses.	<ul style="list-style-type: none"> Does not demonstrate the ability to describe diagnostic and pharmacologic knowledge related to oral health. 	<ul style="list-style-type: none"> Demonstrates a rudimentary ability to describe diagnostic and pharmacologic knowledge related to oral health. 	<ul style="list-style-type: none"> Demonstrates a sufficient ability to describe diagnostic and pharmacologic knowledge related to oral health. 	<ul style="list-style-type: none"> Demonstrates an advanced ability to describe diagnostic and pharmacologic knowledge related to oral health.
7.2. Orofacial pain/temporomandibular/ Sleep disorder. Demonstrates the ability to describe the anatomical, physiological, and neurological basis; classification, epidemiology, and etiology; and assessments and treatments of orofacial pain, temporomandibular joint disease, and sleep disorders.	<ul style="list-style-type: none"> Does not demonstrate the ability to describe scientific or assessment knowledge related to OFP/TMJ disease and sleep disorders. 	<ul style="list-style-type: none"> Demonstrates a rudimentary ability to describe scientific or assessment knowledge related to OFP/TMJ disease and sleep disorders. 	<ul style="list-style-type: none"> Demonstrates a sufficient ability to describe scientific or assessment knowledge related to OFP/TMJ disease and sleep disorders. 	<ul style="list-style-type: none"> Demonstrates an advanced ability to describe scientific or assessment knowledge related to OFP/TMJ disease and sleep disorders.
7.3. Maxillofacial pathology Demonstrates the ability to describe the scientific aspects of head and neck diseases, as well as knowledge of assessment and diagnosis.	<ul style="list-style-type: none"> Does not demonstrate the ability to describe the scientific or assessment knowledge related to head and neck diseases. 	<ul style="list-style-type: none"> Demonstrates a rudimentary ability to describe the scientific or assessment knowledge related to head and neck diseases. 	<ul style="list-style-type: none"> Demonstrates a sufficient ability to describe the scientific or assessment knowledge related to head and neck diseases. 	<ul style="list-style-type: none"> Demonstrates an advanced ability to describe the scientific or assessment knowledge related to head and neck diseases.

PLO 8: Practice Management.

Apply legal, regulatory, and business management concepts related to the provision of oral healthcare services

Indicators	Initial	Developing	Developed	Proficient
8.1. Legal aspects Applies legal and regulatory concepts related to the provision of oral healthcare services.	<ul style="list-style-type: none"> Does not demonstrate an understanding or the ability to apply legal and regulatory concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates a rudimentary understanding and ability to apply legal and regulatory concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates a sound understanding and ability to apply legal and regulatory concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates an advanced understanding and ability to apply legal and regulatory concepts related to the provision of oral healthcare sciences.
8.2. Business management Applies business management concepts to the provision of oral healthcare services.	<ul style="list-style-type: none"> Does not demonstrate an understanding or the ability to apply business management concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates a rudimentary understanding and ability to apply business management concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates a sound understanding and ability to apply business management concepts related to the provision of oral healthcare services. 	<ul style="list-style-type: none"> Demonstrates an advanced understanding and ability to apply business management concepts related to the provision of oral healthcare sciences.

Appendix B

California Northstate University Institutional Learning Objectives

ILO 1: Critical thinking: Exercise reasoned judgment to assess technical information and make well-informed decisions using evidence-based approaches

ILO 2: Written communication. Demonstrate the ability to write coherent, supported, and logically structured prose

ILO 3: Oral communication: Demonstrates oral communication skills

ILO 4: Professionalism. Interact with respect, empathy, diplomacy, and cultural competence

ILO 5: Quantitative reasoning: Demonstrate ability to use mathematics and statistics in problem solving

ILO 6: Information literacy: Identify and search relevant libraries of information and databases; synthesize information obtained from primary literature using properly referenced citations

DMD Institutional Learning Outcomes (ILOs) Proficiency Rubric

ILO 1: Critical thinking: Exercise reasoned judgment to assess technical information and make well-informed decisions using evidence-based approaches

Indicator	Initial	Developing	Developed	Proficient
1.1. Demonstrates identification of problem or issues	<ul style="list-style-type: none"> Does not correctly identify the problem or issue being considered Does not demonstrate understanding of the psychological factors that contribute to current patient state 	<ul style="list-style-type: none"> Identifies the problem or issue but does not demonstrate awareness of all the factors impacting decision making Demonstrates understanding of some possible psychological factors that contribute to current patient state 	<ul style="list-style-type: none"> Correctly identifies the problem or issue but does not demonstrate awareness of all factors impacting decision making Demonstrates understanding of most psychological factors that contribute to the current patient state 	<ul style="list-style-type: none"> Correctly identifies all of the primary factors associated with problem or issue impacting decision making Demonstrates thorough understanding of all possible psychological factors that contribute to the current patient state

Exhibit D

1.2. Demonstrates identification of resources	<ul style="list-style-type: none"> Does not identify appropriate resources 	<ul style="list-style-type: none"> Identifies a few resources needed 	<ul style="list-style-type: none"> Identifies most of the resources needed 	<ul style="list-style-type: none"> Correctly identifies all appropriate resources
1.3. Finds and interprets data needed for critical thinking and decision making	<ul style="list-style-type: none"> Does not demonstrate understanding of the data needed for critical thinking and decision making 	<ul style="list-style-type: none"> Demonstrates ability to interpret some data but not all 	<ul style="list-style-type: none"> Demonstrates ability to interpret most data 	<ul style="list-style-type: none"> Demonstrates ability to correctly interpret data needed for decision making
1.4. Demonstrates knowledge of alternatives when evaluating for possible solutions	<ul style="list-style-type: none"> Does not evaluate possible alternatives for treatment or diagnosis 	<ul style="list-style-type: none"> Does not effectively evaluate alternative treatment or diagnostic solutions 	<ul style="list-style-type: none"> Evaluates possible treatment and diagnostic solutions leading to a logical decision 	<ul style="list-style-type: none"> Effectively and thoroughly considers and evaluates possible diagnostic and treatment solutions
1.5. Proposes and selects appropriate solutions	<ul style="list-style-type: none"> Does not propose solutions to the client's needs 	<ul style="list-style-type: none"> Proposes solutions without consideration of alternatives 	<ul style="list-style-type: none"> Solutions chosen demonstrate consideration of most of the strengths, weaknesses, and consequences of the decision 	<ul style="list-style-type: none"> Proposes solutions that are appropriate to the situation and demonstrate consideration of all relevant strengths, weaknesses, and consequences
1.6. Presents rationale for course of action	<ul style="list-style-type: none"> Does not adequately provide rationale for treatment decision 	<ul style="list-style-type: none"> Provides rationale for decision but does not integrate into mental health treatment plan 	<ul style="list-style-type: none"> Provides rationale for decision with solid supporting evidence from available psychological literature and/or case factors 	<ul style="list-style-type: none"> Provides rationale for decision and with appropriate and relevant supporting case evidence and integrates findings into treatment plan

ILO 2: Written communication. Demonstrate the ability to write coherent, supported, and logically structured prose

Indicators	Initial	Developing	Developed	Proficient
2.1. Demonstrates knowledge and awareness of intended audience	<ul style="list-style-type: none"> Does not demonstrate knowledge or awareness of audience for which the document is intended 	<ul style="list-style-type: none"> Demonstrates some ability to craft a document appropriate for its audience 	<ul style="list-style-type: none"> Demonstrates ability to craft a document appropriate for its audience 	<ul style="list-style-type: none"> Consistently demonstrates ability to craft documents appropriate for the audience
2.2. Demonstrates clear and logical thought	<ul style="list-style-type: none"> Does not demonstrate clear or logical thought in their documentation 	<ul style="list-style-type: none"> Writing does not sufficiently conceptualize case variables or analyze subject under discussion 	<ul style="list-style-type: none"> Demonstrates general clear or logical thought in their documentation 	<ul style="list-style-type: none"> Research and clinical documentation demonstrates clear and focused thinking

Exhibit D

2.3. Demonstrates support for and development of ideas	<ul style="list-style-type: none"> Does not explain or develop ideas 	<ul style="list-style-type: none"> Demonstrates minimal support for ideas 	<ul style="list-style-type: none"> Writing contains examples that generally support ideas 	<ul style="list-style-type: none"> Supports ideas with relevant, clear, impactful examples
2.4. Demonstrates appropriate use of evidence to support arguments	<ul style="list-style-type: none"> Demonstrates an attempt to use proper citations to support ideas 	<ul style="list-style-type: none"> Uses credible and relevant sources to support ideas appropriate in the study of psychology 	<ul style="list-style-type: none"> Consistently uses credible and relevant sources to support ideas 	<ul style="list-style-type: none"> Demonstrates skillful use of credible and relevant sources to develop and support ideas
2.5. Demonstrates appropriate use of language, syntax, and mechanics	<ul style="list-style-type: none"> Has excessive or severe errors in language usage 	<ul style="list-style-type: none"> Generally, conveys meaning to readers with clarity, though writing may include some errors 	<ul style="list-style-type: none"> Language conveys meaning to readers and writing contains very few errors 	<ul style="list-style-type: none"> Uses language effectively and skillfully to communicate meaning to readers

ILO 3: Oral communication: Demonstrates oral communication skills

Indicators	Initial	Developing	Developed	Proficient
3.1. Demonstrates knowledge and awareness of intended audience	<ul style="list-style-type: none"> Does not demonstrate knowledge or awareness of audience for which the communication is intended 	<ul style="list-style-type: none"> Demonstrates some ability to communicate in a manner appropriate to the audience 	<ul style="list-style-type: none"> Demonstrates ability to communicate appropriate to the audience 	<ul style="list-style-type: none"> Consistently demonstrates ability to communicate in a manner appropriate to the audience
3.2. Demonstrates clear and logical thought	<ul style="list-style-type: none"> Does not demonstrate clear or logical thought in their communication 	<ul style="list-style-type: none"> Communication does not sufficiently conceptualize case variables or analyze subject under discussion 	<ul style="list-style-type: none"> Demonstrates general clear or logical thought in their communication 	<ul style="list-style-type: none"> Communication demonstrates clear and focused thinking
3.3. Demonstrates effective use of language in their communication	<ul style="list-style-type: none"> Does not know professional psychological language or uses jargon Does not know the proper technical language regarding mental health treatment 	<ul style="list-style-type: none"> Demonstrates inaccurate use of psychological language or uses jargon in professional communications Utilizes scientific language that is incomprehensible to patients 	<ul style="list-style-type: none"> Demonstrates appropriate use of professional language and minimal jargon Utilizes generalized language to interact with patients 	<ul style="list-style-type: none"> Demonstrates use of appropriate, professional language Utilizes generalized language to interact with patients
3.4. Demonstrates appropriate active listening techniques	<ul style="list-style-type: none"> Does not acknowledge other viewpoints 	<ul style="list-style-type: none"> Demonstrates little attempt to recognize other viewpoints 	<ul style="list-style-type: none"> Recognizes other viewpoints but has difficulty incorporating them 	<ul style="list-style-type: none"> Listens to questions with a consideration of alternative

Exhibit D

when addressing questions	<ul style="list-style-type: none"> • Has great difficulty answering questions 	<ul style="list-style-type: none"> • Answers are simplistic and lack intellectual depth 	into case conceptualization <ul style="list-style-type: none"> • Adequately answers patient questions 	viewpoints <ul style="list-style-type: none"> • Answers questions thoughtfully referencing evidence
3.5. Orally communicates meaning to audience	<ul style="list-style-type: none"> • Vocal delivery is too soft or too fast • Long, unintended silences and/or speech disruptions frequently distract audience • Speaker makes no attempt to engage audience 	<ul style="list-style-type: none"> • Vocal delivery is audible • Speech rate or volume disruptions occasionally distract from comprehension • Attempts to engage audience 	<ul style="list-style-type: none"> • Vocal delivery is varied and dynamic • Speech rate, volume, and tone enhance listener interest and facilitate understanding • Generally, engages audience 	<ul style="list-style-type: none"> • Vocal delivery is varied and dynamic • Speech rate, volume, and tone enhance listener interest and facilitate understanding • Thoroughly engages audience
3.6. Utilizes non-verbal means to enhance message	<ul style="list-style-type: none"> • Eye contact, body language, and facial expressions are inappropriate 	<ul style="list-style-type: none"> • Eye contact, body language, and facial expressions neither enhance nor hinder oral effectiveness 	<ul style="list-style-type: none"> • Use of eye contact, body language, and facial expressions are mostly consistent with the verbal message 	<ul style="list-style-type: none"> • Use of eye contact, body language, and facial expressions that are consistent with the verbal message

ILO 4: Professionalism. Interact with respect, empathy, diplomacy, and cultural competence

Indicators	Initial	Developing	Developed	Proficient
4.1. Demonstrates professional attitudes and behaviors	<ul style="list-style-type: none"> • Does not generally demonstrate professional attitudes or behaviors expected from a dentist 	<ul style="list-style-type: none"> • Demonstrates some attitudes and behaviors that may be characteristic of a dentist 	<ul style="list-style-type: none"> • Generally, demonstrates attitudes and behaviors expected from a dentist 	<ul style="list-style-type: none"> • Consistently demonstrates attitudes and behaviors expected from a dentist
4.2. Demonstrates personal responsibility and accountability	<ul style="list-style-type: none"> • Does not demonstrate personal accountability or responsibility for work completed 	<ul style="list-style-type: none"> • Demonstrates minimal personal accountability and responsibility for work completed 	<ul style="list-style-type: none"> • Demonstrates personal accountability and responsibility for the work completed 	<ul style="list-style-type: none"> • Consistently demonstrates personal accountability and responsibility for work completed
4.3. Demonstrates respectful and sensitive behaviors to the cultural and linguistic needs of diverse patients	<ul style="list-style-type: none"> • Does not demonstrate an awareness of patients' customs, beliefs, or perspectives • Does not demonstrate awareness of linguistic needs of patients 	<ul style="list-style-type: none"> • Demonstrates a minimal level of awareness of customs, beliefs, or perspectives of patients • Demonstrates minimal awareness of cultural and linguistic needs of patients 	<ul style="list-style-type: none"> • Demonstrates awareness of customs and beliefs • Demonstrates awareness of the cultural and linguistic needs of patients 	<ul style="list-style-type: none"> • Demonstrates awareness of customs, beliefs, or perspectives in patients • Demonstrates full awareness and responds to the cultural and linguistic needs of patients
4.4. Demonstrates professional	<ul style="list-style-type: none"> • Appears inattentive and impatient • Uses inappropriate 	<ul style="list-style-type: none"> • Appears unfocused and distracted • Uses acceptable 	<ul style="list-style-type: none"> • Appears composed and focused • Uses appropriate 	<ul style="list-style-type: none"> • Uses articulate, tactful, and diplomatic speech

Exhibit D

demeanor	body language • Dresses in attire that is inappropriate	body language • Dresses in attire that is not offensive	body language • Dresses in attire that is professional	• Uses professional body language • Dresses in attire that is professional, and well-suited for the environment
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Exhibit D

ILO 5: Quantitative reasoning: Demonstrate ability to use mathematics and statistics in problem solving

Indicators	Initial	Developing	Developed	Proficient
5.1. Demonstrates ability to perform calculations and apply mathematical principles to solve problems	<ul style="list-style-type: none"> Does not demonstrate ability to apply statistical or psychometric principles 	<ul style="list-style-type: none"> Demonstrates ability to perform basic statistical calculations but does not know how to apply psychometric principles to solve problems 	<ul style="list-style-type: none"> Demonstrates ability to perform most statistical calculations accurately and to apply psychometric principles to solve problems 	<ul style="list-style-type: none"> Consistently demonstrates ability to perform statistical calculations accurately and to appropriately apply psychometric principles to solve problems
5.2. Demonstrates understanding of experimental designs and methodology	<ul style="list-style-type: none"> Displays difficulty proposing a basic experiment or research project 	<ul style="list-style-type: none"> Comprehends basic experiments designed by others 	<ul style="list-style-type: none"> Evaluates research, method, and protocol to review valid and reliable research 	<ul style="list-style-type: none"> Proposes appropriate and innovative designs to address a new hypothesis and research question
5.3. Demonstrates logical and appropriate interpretation of data	<ul style="list-style-type: none"> Demonstrates a limited ability to interpret scientific data 	<ul style="list-style-type: none"> Attempts to interpret scientific data 	<ul style="list-style-type: none"> Demonstrates the ability to interpret scientific data 	<ul style="list-style-type: none"> Interprets data in the context of current scientific knowledge
5.4. Demonstrates logical thought patterns in generating conclusions	<ul style="list-style-type: none"> Does not generate conclusions based on current scientific data and statistics 	<ul style="list-style-type: none"> Generates conclusions that may be based on current scientific data and statistics 	<ul style="list-style-type: none"> Generates conclusions using scientific and statistical data 	<ul style="list-style-type: none"> Accurately generates conclusions using appropriate scientific and mathematical data

ILO 6: Information literacy: Identify and search relevant libraries of information and databases; synthesize information obtained from primary literature using properly referenced citations

Indicators	Initial	Developing	Developed	Proficient
6.1. Demonstrates appropriate ability search and acquire resources	<ul style="list-style-type: none"> Does not identify or solicit help in obtaining external resources to support topic 	<ul style="list-style-type: none"> Identified resources may not be sufficient in quality and infrequently solicits guidance from library personnel 	<ul style="list-style-type: none"> Identifies resources appropriate for scientific inquiry and solicits guidance from library personnel 	<ul style="list-style-type: none"> Identifies a variety of relevant sources and regularly seeks guidance from library personnel
6.2. Demonstrates appropriate incorporation of references	<ul style="list-style-type: none"> Does not incorporate references 	<ul style="list-style-type: none"> Incorporates references from psychological sources that do not clearly support 	<ul style="list-style-type: none"> Incorporates relevant references that generally supports ideas 	<ul style="list-style-type: none"> Incorporates relevant references from respected psychological sources

Exhibit D

		ideas		
6.3. Demonstrates appropriate citation of references	<ul style="list-style-type: none">• Does not use citations	<ul style="list-style-type: none">• Uses citations but they are not formatted in APA style	<ul style="list-style-type: none">• Demonstrates use of appropriate citations in context	<ul style="list-style-type: none">• Uses properly cited references and includes all necessary information in reference list



California Northstate University College of Dental Medicine

**OMFS 851
Oral Radiology Seminar**

This case-based seminar will present findings using all methods in OMFS 641 and OMFS 751 to demonstrate through active learning the radiographic findings in key diseases of the oral and maxillofacial region.

During this seminar the student will discuss the role of radiology and imaging on numerous relevant conditions of the head and neck. Emphasis will be placed on the selection of appropriate diagnostic imaging and management. Topics will include:

Temporomandibular joint
Salivary gland diseases
Radio-osteonecrosis of the jaws
Medicine related osteonecrosis of the jaws
Craniofacial abnormalities such as cleft palate
Dento-alveolar trauma
Implant planning and 3D work flow
Orthodontics
Cysts, tumors and malignancies
Fibro-osseous conditions
Infections and osteomyelitis

Calendar of Important Dates:

Date	
	First day of instruction
	Midterm exam
	Final examination

Students will have two exams and a final paper based on one of the seminars citing current literature review.

Exhibit D

Exams	
Midterm Exam	30%
Final Exam	50%
Seminar paper	20%

Percent	Letter Grade/Action
90.0 – 100%	A
80.0 – 89.9%	B
75.0 – 79.9%	C - Pass
60.0 – 74.9%	D – Requiring remediation (successful remediation recorded as C, unsuccessful remediation recorded as F)
Below 60.0%	F – Fail (course must be repeated)
Incomplete	I

Exhibit E

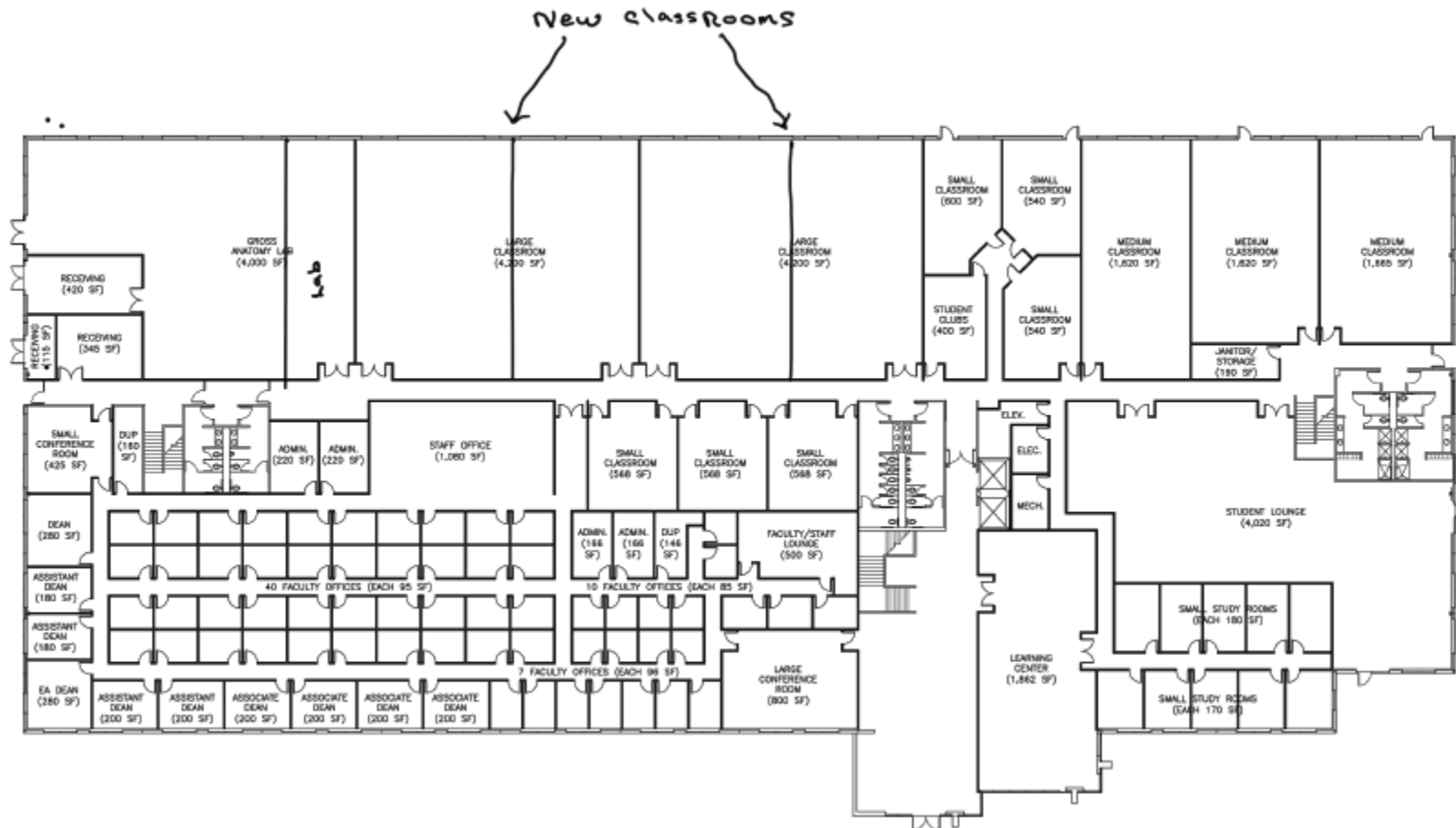


Exhibit F



CALIFORNIA
NORTHSTATE
UNIVERSITY

CALIFORNIA NORTHSTATE UNIVERSITY EVACUATION MAP - 1ST FLOOR

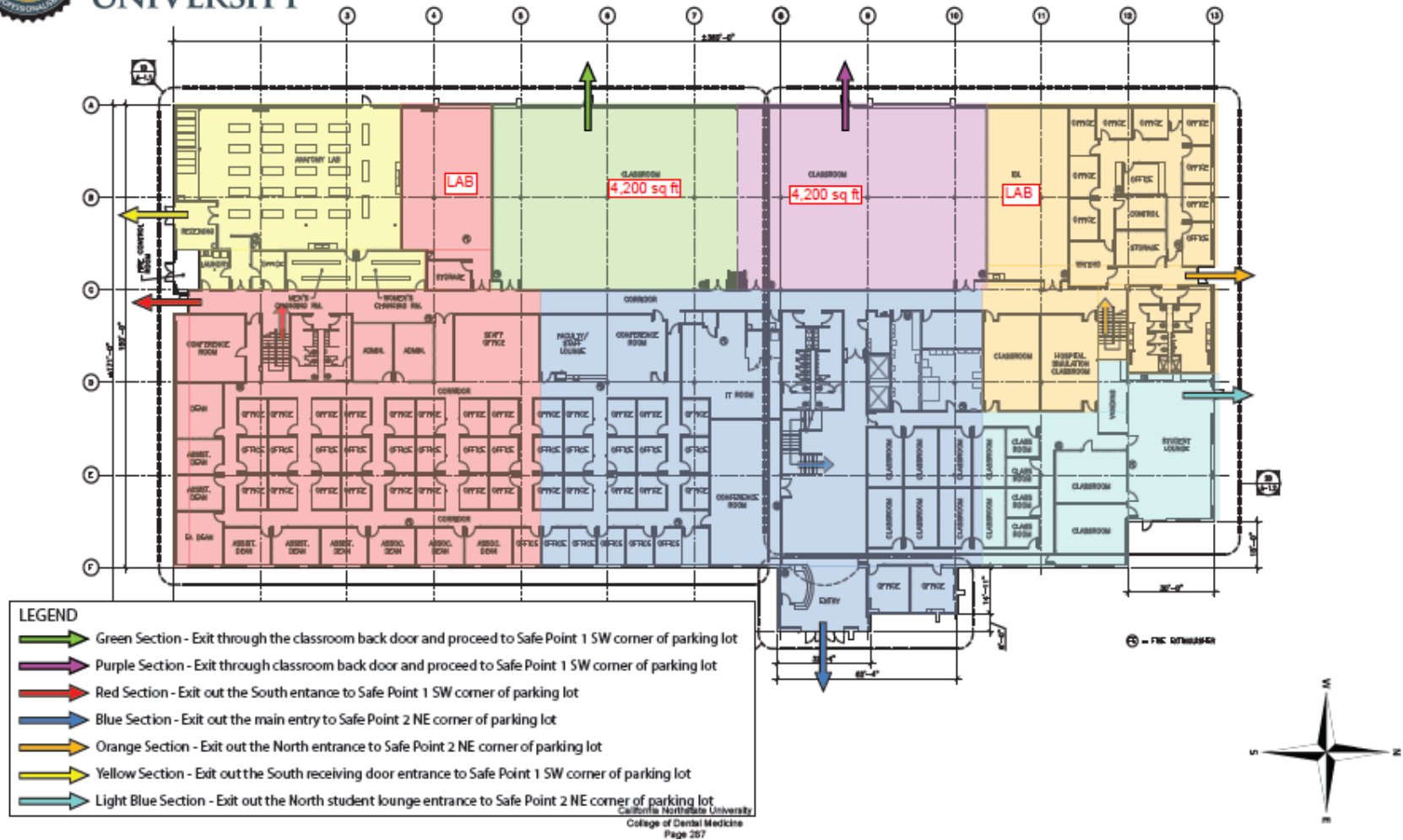


Exhibit G



CALIFORNIA
NORTHSTATE
UNIVERSITY

Projected Classroom Split
- Spring 2020

CALIFORNIA NORTHSTATE UNIVERSITY EVACUATION MAP - 1ST FLOOR

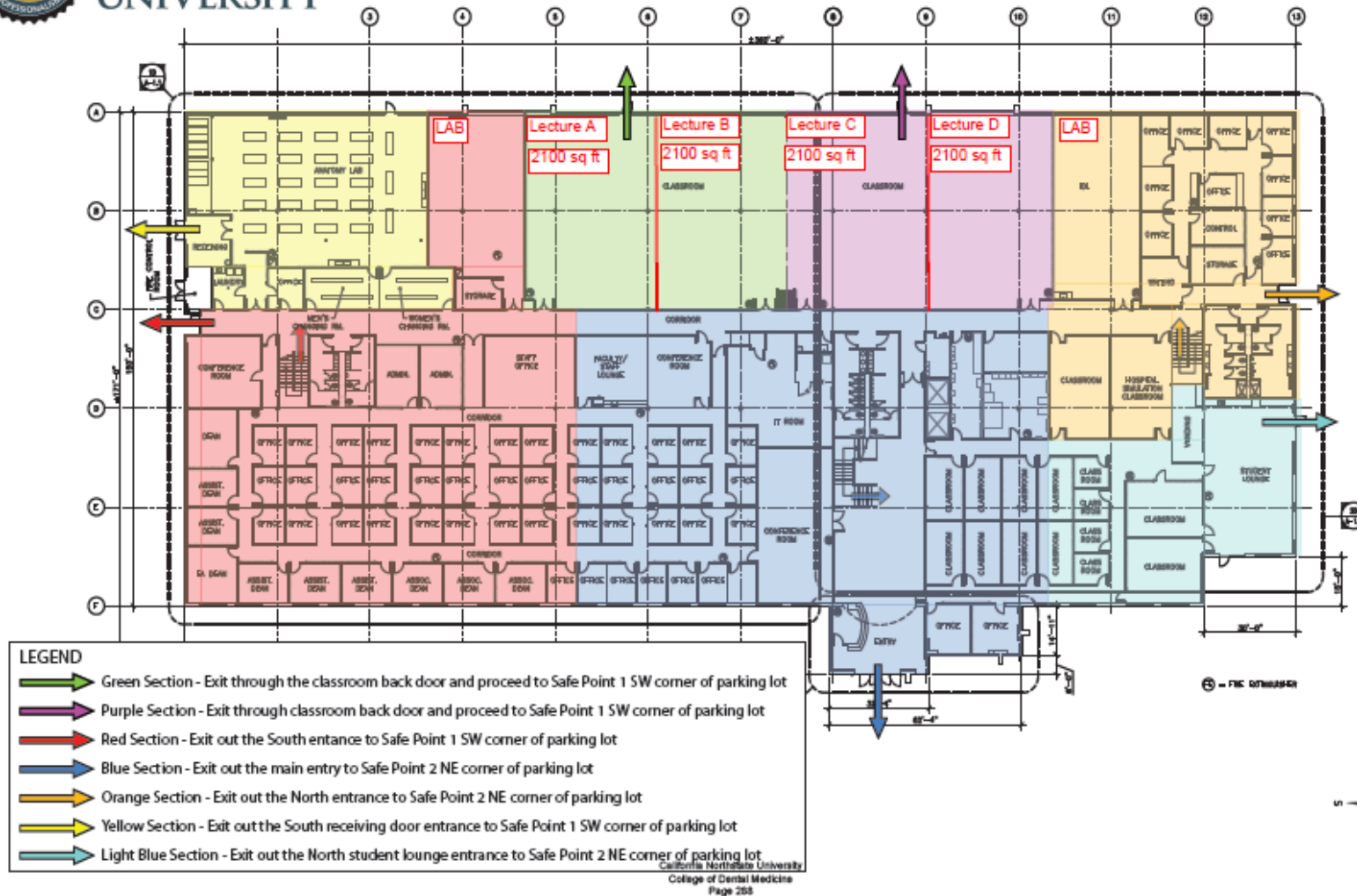
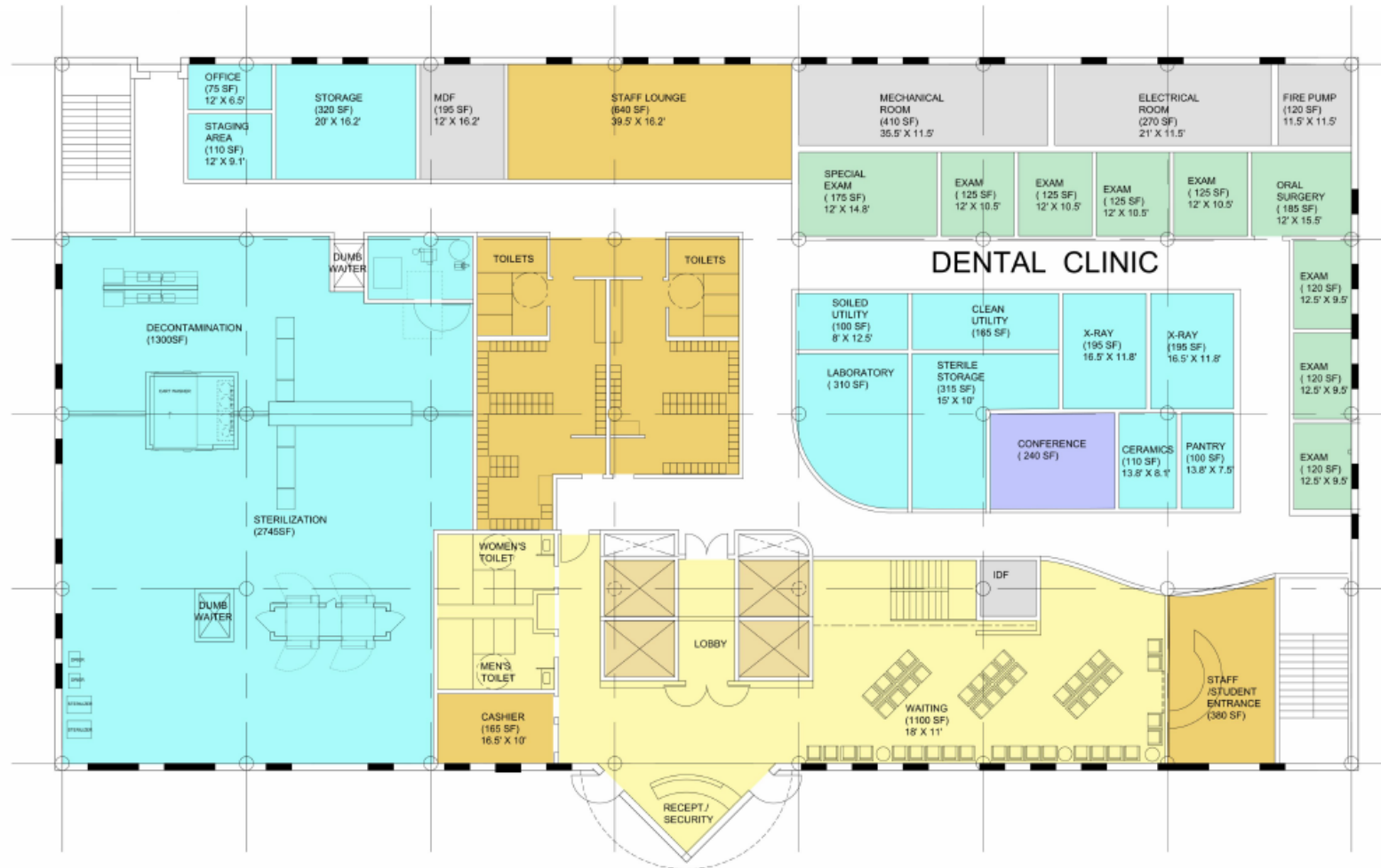


Exhibit H
January 2020

Interdisciplinary Lab

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
Dec 29	30	31	Jan 1, 20	2	3	4
5	6	7 8:00am M2 Med Skills; COM interdisciplinary lab; COM Interdisciplinary Lab	8	9 12:00pm CNU SIGN LP Workshop; IDL; COM interdisciplinary Lab	10 12:00pm CNUCOP Interview day; COM OSCE Rooms; COM simulation lab; COM Interdisciplinary Lab	11
12	13 12:00pm Phlebotomy Practice sessions; COM interdisciplinary lab; COM Interdisciplinary Lab	14 8:00am M2 Med Skills; COM interdisciplinary lab; COM Interdisciplinary Lab	15	16 12:00pm CNU SIGN LP Workshop; IDL; COM interdisciplinary Lab	17 12:00pm Phlebotomy Practice Sessions; IDL; COM Interdisciplinary Lab	18
19	20	21 8:00am M2 Med Skills; COM interdisciplinary lab; COM Interdisciplinary Lab	22	23 8:00am M1 Med Skills; IDL; COM Interdisciplinary Lab	24 12:00pm CNUCOP Interview Day; COM OSCE Rooms; IDL, Simulation lab; COM Interdisciplinary Lab	25
26	27 12:00pm Phlebotomy Practice Sessions; IDL; COM Interdisciplinary Lab	28 8:00am M2 Med Skills; COM interdisciplinary lab; COM Interdisciplinary Lab	29 California Northstate University College of Dental Medicine Page 289	30	31	Feb 1

Exhibit I



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|---|---|--|
| CLASSROOM AND COMMON | ADMINISTRATION | SERVICE |
| CONFERENCE | STAFF/STUDENT | PUBLIC |
| OPEN CHAIR AND EXAM | SUPPORT | |

Exhibit I

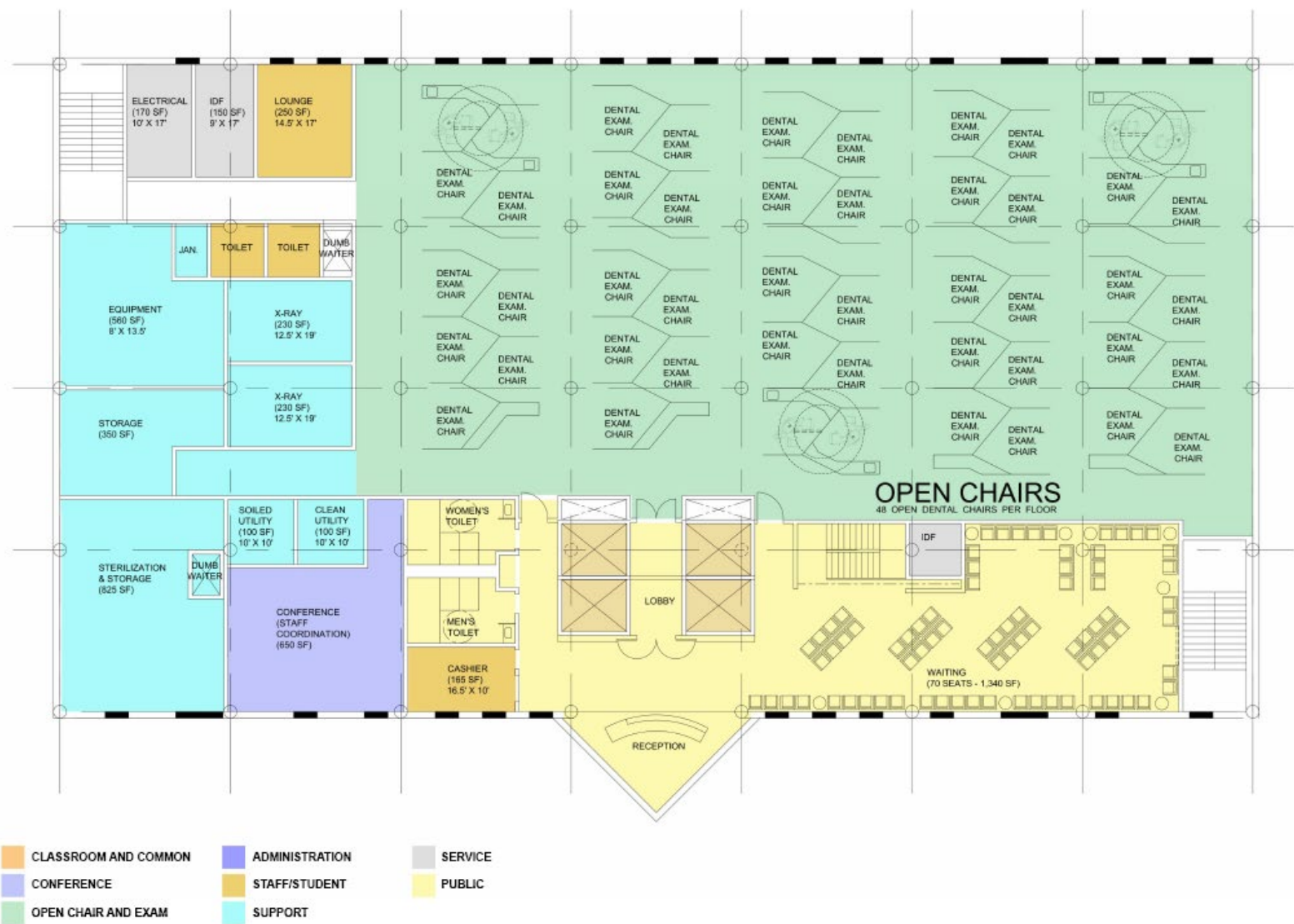
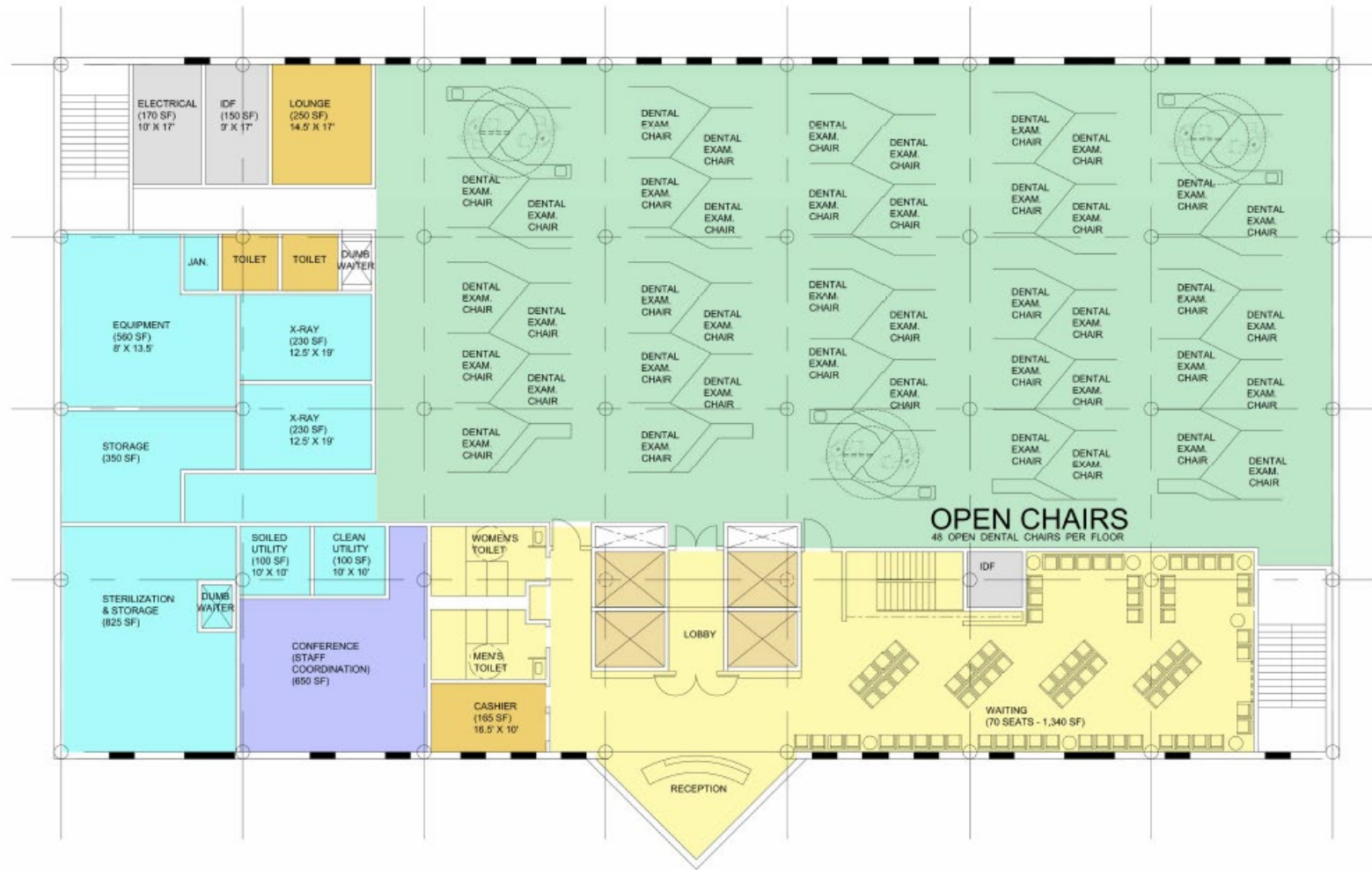


Exhibit I



CLASSROOM AND COMMON	ADMINISTRATION	SERVICE
CONFERENCE	STAFF/STUDENT	PUBLIC
OPEN CHAIR AND EXAM	SUPPORT	

Exhibit I

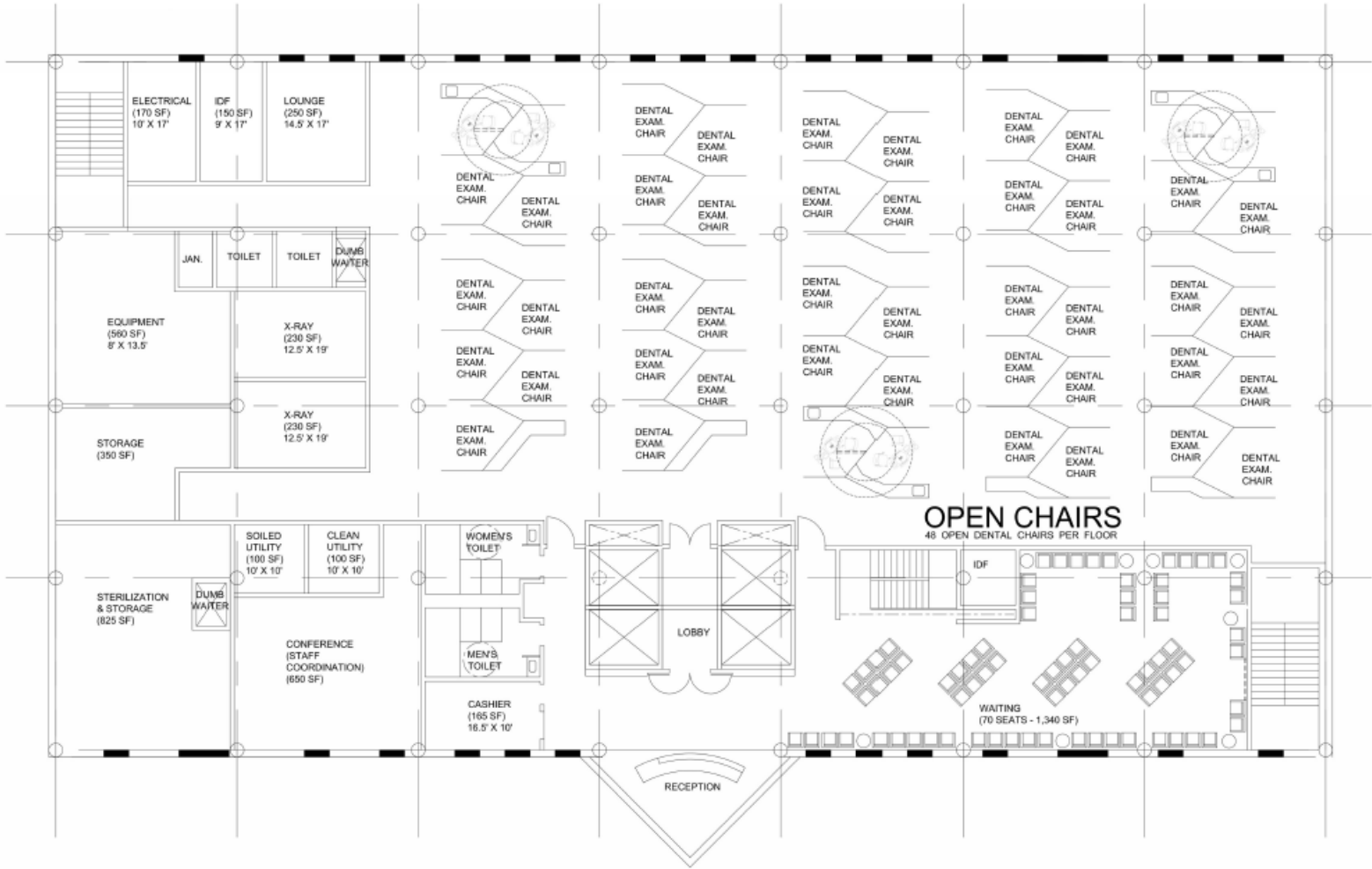
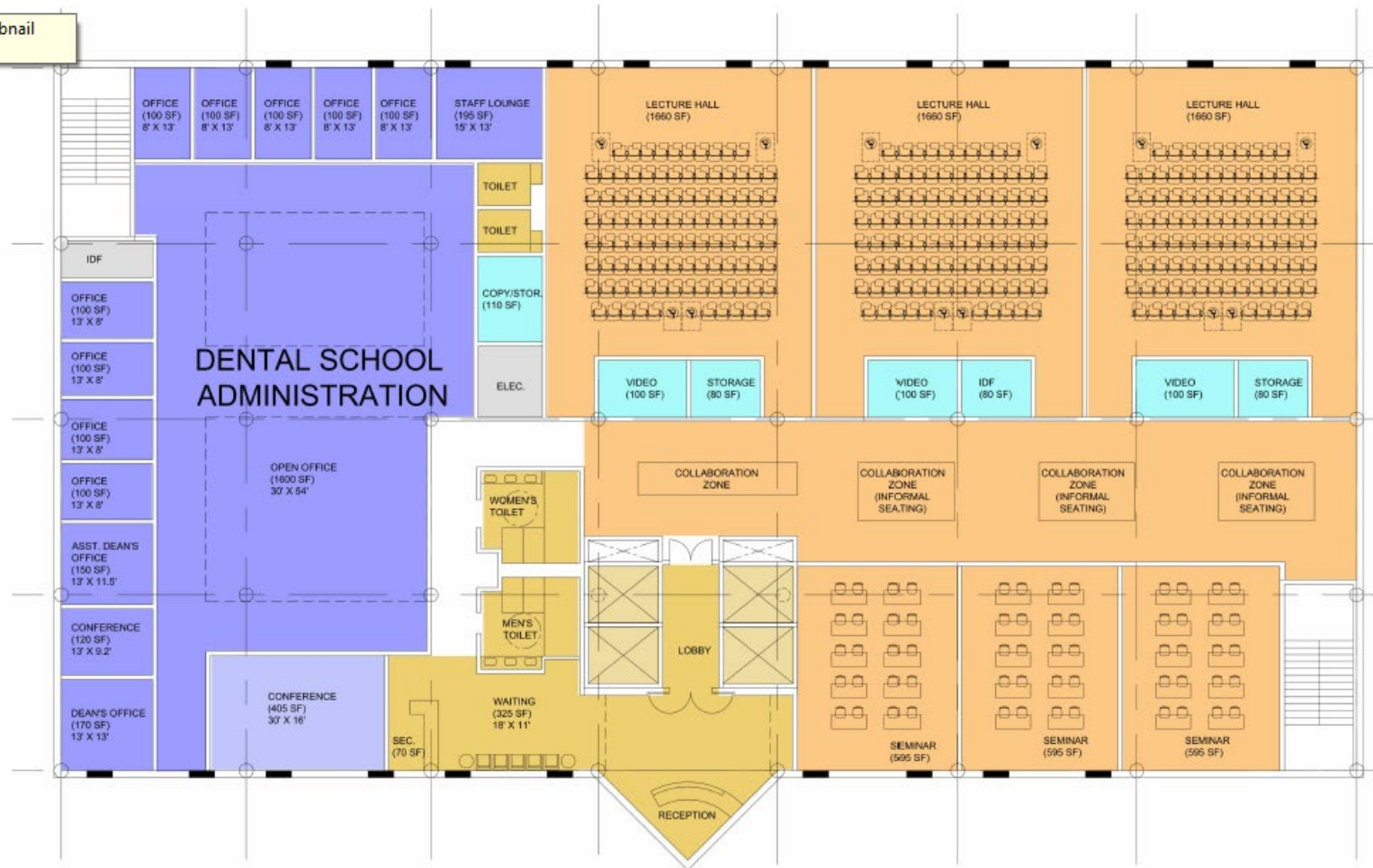


Exhibit I

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| CLASSROOM AND COMMON | ADMINISTRATION | SERVICE |
| CONFERENCE | STAFF/STUDENT | PUBLIC |
| OPEN CHAIR AND EXAM | SUPPORT | |

SCHOOL OF DENTISTRY
CALIFORNIA NORTHSTATE UNIVERSITY

PRELIMINARY 5TH FLOOR PLAN
FONG AND CHAN ARCHITECTS

05/11/2014 10:00 AM
FONG AND CHAN ARCHITECTS

Exhibit J

Dental School	Program			Actual		
	Area	Qty	Total Area	Area	Qty	Total Area
Administration						
Dean Office	175	1	175	170	1	170
Professor Office	100	10	1,000	100	9	900
Copy/Mail	100	1	100	110	1	110
Asst Dean Office	150	1	150	150	1	150
Admin Support	1,000	1	1,000	1,415	1	1,415
Waiting	300	1	300	325	1	325
Conference Room	400	1	400	405	1	405
Small Conference	120	1	120	120	1	120
Staff Lounge	175	1	175	195	1	195
Toilets ADA	50	2	100	50	2	100
All Gender	60	1	60	50	2	100
Circulation (Factor .40)			1,432			1,640
Subtotal			5,012			5,630
Open Dental Chairs						
Waiting	1,000	2	2,000	1,340	2	2,680
Reception	500	2	1,000	525	2	1,050
Public Toilets	160	4	640	160	4	640
Cashier	150	2	300	165	2	330
Dental Chairs	120	96	11,520	90	96	8,640
Lounge	250	2	500	250	2	500
Conference	600	2	1,200	650	2	1,300
Sterile Storage	800	2	1,600	825	2	1,650
Mechanical - Dental Equipment	550	2	1,100	560	2	1,120
Soiled Utility	100	2	200	100	2	200
Clean Utility	100	2	200	100	2	200
Decontamination	1,200	1	1,200	1,300	1	1,300
Sterile Processing	2,500	1	2,500	2,745	1	2,745
Water Treatment	130	1	130	130	1	130
Xray Rooms	165	2	330	230	2	460
Xray Room - Full Panel	165	2	330	230	2	460
Storage	300	2	600	350	2	700
Toilets ADA	200	2	400	150	2	300
All Gender	60	4	240	65	4	260
Housekeeping	40	2	80	40	2	80
Circulation (Factor .60)			15,642	10,000	2	20,000
Subtotal			41,712			44,745

Dental School	Program			Actual		
	Area	Qty	Total Area	Area	Qty	Total Area
Private Dental Clinic						
Reception/Security	500	1	500	500	1	500
Cashier	165	1	165	165	1	165
Waiting	1,000	1	1,000	1,090	1	1,090
Public Toilet	150	2	300	160	2	320
Private Dental Exam	120	7	840	125	7	875
Special Needs Dental	144	1	144	175	1	175
Surgery	180	1	180	185	1	185
Sterile Storage	315	1	315	315	1	315
Soiled Utility	100	1	100	100	1	100
Clean Utility	100	1	100	165	1	165
Conference	150	1	150	240	1	240
Xray Rooms	165	1	165	195	1	195
Xray Room - Full Panel	165	1	165	195	1	195
Laboratory - General	280	1	280	310	1	310
Laboratory - Porcelain/Ceramics	120	1	120	110	1	110
Pantry	100	1	100	100	1	100
Circulation (Factor .40)			1,850			1,510
Subtotal			6,474			6,550
School						
Seminar Rooms	550	3	1,650	595	3	1,785
Common/Collaboration Area	1,500	1	1,500	2,140	1	2,140
Lecture Hall	1,800	3	5,400	1,660	3	4,980
Video	100	3	300	100	3	300
Toilets	160	2	320	170	2	340
All Gender	60	1	60	0	0	0
Storage	300	1	300	80	2	160
Circulation (Factor .20)			1,906	329	1	329
Subtotal			11,436			10,034
Building Systems						
Electrical	300	1	300	270	1	270
Fire Pump	120	1	120	120	1	120
MDF	200	2	400	195	1	195
Mechanical	350	1	350	410	1	410
Material Management Office	75	1	75	75	1	75
IDF - Satellites	70	5	350	70	5	350
Electrical - Upper Floors	170	3	510	170	3	510
IDF - Upper Floors	150	3	450	150	3	450
Staging Area	100	1	100	110	1	110
Circulation (Factor .40)			1,062			1,395
Subtotal			3,717			3,885
Total			68,351			70,844

Quote

Dr. Leon Assael
leon.assael@cnsu.edu

cc: Brian Kline
Bryan Wright

Dear Dr. Assael:

At the request of Brian Kline, I am pleased to provide you with the following revised *budget quote* for California Northstate University.

Please note that manikins and typodonts are not included.

Line#	Item #	Description	QTY	Retail Price (EA/USD)	Price (USD)	Extended (USD)
1	41L	41L - 41L Mobile Simulator 2	81	\$18,127.00	\$8,244.25	\$667,784.47
	0211702	Configuration Identification				
	V0313.9999	PriceBook Current				
	41L	Model 41L Mobile Simulator				
	V0074.0002	Voltage 120 Volts				
	V0009.0002	Base Color White				
	V0195.0086	Foundation Price 41L Simulator		\$11,005.00		
	V0161.0002	Work Surface Material Solid Surface				
	V0162.0143	Work Surface Color Solid Surface Color To Follow				
	V0334.0091	Countertop Price Gibraltar Price				
	V0023.0002	Water Source Self-Contained Water				
	V0024.0001	Vacuum Source AVS		\$790.00		
	V0327.0050	Packaging Blanket Wrap With Pallet		(\$180.00)		
	V0036.0008	Doctor's Touchpad Deluxe Touchpad		\$680.00		
	V0086.0005	Intraoral Light Source Quad Volt Intraoral Light Source		\$350.00		
	V0330.0002	Handpiece Tubing Style Silicone Handpiece Tubing				
	V0267.0002	Position 1 4-Hole Tubing		\$130.00		



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Customer Name: California Northstate University
Reference: Simulation - Dr. Leon Assael
Quote #: WQBLH000248-4



Line#	Item #	Description	QTY	Retail Price (EA/USD)	Price (USD)	Extended (USD)
	V0267.0001	Position 2 6-Pin Tubing		\$195.00		
	V0267.0049	Position 3 EA-53LED Electric Motor		\$2,120.00		
	V0267.0025	Position 4 None				
	V0101.0003	Additional Block Position No Additional Block Position (3 position control block)				
	V0407.0003	Air Electric Switches Required Three Air Electric Switches Required		\$122.00		
	V0053.0007	MC-2.0 I Control Module		\$1,525.00		
	V0460.0033	Assistants Position1 Autoclavable Syringe				
	V0460.0055	Assistants Position2 Saliva Ejector (SE)		\$115.00		
	V0460.0057	Assistants Position3 High Volume Evacuator (HVE)				
	V0077.0003	Manikin Adapter Frasco II Adapter; Includes Adapter and Mask Drain. Manikin Head Not Included.		\$315.00		
	V0078.0001	Storage Bins Storage Bins				
	V0103.0001	Storage Bin Locks Storage Bin Locks				
	V0104.0002	Third Hand Third Hand		\$415.00		
	V0034.0003	Light (for power supply requirements) No Light				
	V0060.0006	300W 120V Power Supply		\$545.00		
2	Component-ETO-Core	Component-ETO-Core - Component-ETO-Core	20	\$775.00	\$342.63	\$6,852.63
	N57D.088 4-Posn Air Manifold					
	0211703	Configuration Identification				
	V0313.9999	PriceBook Current				
	Component-ETO-Core	Model Component-ETO-Core				
	TS Upcharge	Tailored Solutions N57D.088 Air Manifold, 4-Posn		\$775.00		
3	026.062.00	026.062.00 - Shutoff V,1/2 Compression X 3/8 Compr	1	\$20.00	\$8.84	\$8.84
	Instructor Sim					
		Configuration Identification				
4	578L	578L - A-dec 578L LED Dental Light, Simulator Mt	81	\$4,935.00	\$2,025.95	\$164,101.74



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Line#	Item #	Description	QTY	Retail Price (EA/USD)	Price (USD)	Extended (USD)
	0211704	Configuration Identification				
	V0313.9999	PriceBook Current				
	578L	Model A-dec 578L LED Dental Lt, Simulator Mt				
	V0009.0002	Base Color White				
	V0055.0021	Mounting Style In-Bench Mount		\$360.00		
	V0074.0002	Voltage 120 Volts				
	V0195.0215	Foundation Price 578 LED Light		\$4,565.00		
	V0327.0004	Packaging Standard (Boxed)				
	TS Upcharge	Tailored Solutions Palletized for shipment.		\$10.00		
5	381	381 - A-dec Monitor MT,381	81	\$1,080.00	\$443.37	\$35,912.84
	0211705	Configuration Identification				
	V0313.9999	PriceBook Current				
	381	Model 381 Radius Monitor Mount				
	V0009.0002	Base Color White				
	V0300.0002	Handle		\$230.00		
	V0034.0003	Dental Light No Light				
	V0055.0060	Mounting Style Monitor Mount - 300 Support Center				
	V0195.0079	Foundation Price 381 Monitor Mount – Light Post Mount		\$850.00		
	V0118.0007	No Post Required				
	V0327.0004	Packaging Standard (Boxed)				
6	521	521 - A-dec 521 Doctor's Stool	81	\$1,410.00	\$578.84	\$46,886.21

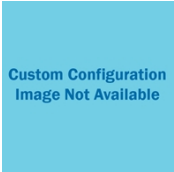


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Line#	Item #	Description	QTY	Retail Price (EA/USD)	Price (USD)	Extended (USD)
	0211706	Configuration Identification				
	V0313.9999	PriceBook Current				
	521	Model 521 Doctor's Stool				
	V0195.0246	Foundation Price 521 Doctors Stool		\$1,410.00		
	V0009.0002	Base Color White				
	V0032.0003	Cylinder Type Tall				
	V0083.0005	Armrest Options No Armrests				
	V0075.0009	Upholstery Type Sewn				
	V0072.9998	Upholstery Color To Follow				
	V0327.0010	Packaging Blanket Wrap With Pallet				
7	591	591 - Inspire Treatment Console	30	\$29,939.00	\$15,127.07	\$453,812.21
	B-1 Dbl-Sd Sim Bnch					
	0211707	Configuration Identification				
	V0313.9999	PriceBook Current				
	591	Model 591- Inspire Twelve O'clock Console				
	V0452.0001	Product Version A				
	V0335.0002	Starting Point 42" Lower Only		\$5,605.00		
	V0336.0002	Delivery System No Delivery				
	V0357.0002	X-Ray Attenuation No X-Ray Attenuation				
	V0344.0004	Base Module Width 42"				
	V0341.0389	Base Module Name SB1001-- 42" Base Without a Delivery System				
	V0344.0001	Lower Position 1 Module Width 14"				
	V0413.0007	Lower Position 1 Module Option 1 Shelf				
	V0341.0365	Lower Position 1 Module Name DR1201-- Door Storage, 1 Shelf				
	V0339.0002	Lower Position 1 Hinge Location Left Hinge				
	V0344.0001	Lower Position 2 Module Width 14"				
	V0413.0007	Lower Position 2 Module Option 1 Shelf				
	V0341.0365	Lower Position 2 Module Name DR1201-- Door Storage, 1 Shelf				
	V0339.0002	Lower Position 2 Hinge Location Left Hinge				
	V0344.0001	Lower Position 3 Module Width 14"				
	V0413.0006	Lower Position 3 Module Option 5"-- 5"-- 5"-- 7.5" Drawer Module				
	V0341.0367	Lower Position 3 Module Name DB1101-- 5"-- 5"-- 5"-- 7.5" Drawers		\$805.00		



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Line#	Item #	Description	QTY	Retail Price (EA/USD)	Price (USD)	Extended (USD)
	V0344.0004	Countertop Module Width 42"				
	V0352.0002	Countertop Material Solid Surface				
	V0341.0060	Countertop Module Name CS1001-- 42" Solid Surface Countertop				
	V0344.0004	Power Panel Module Width 42"				
	V0350.0001	Power Panel Option None				
	V0341.0381	Power Panel Module Name WA1007-- Wall, Lower Only				
	V0473.0143	Countertop Color Solid Surface Color To Follow				
	V0466.0144	Cabinet Laminate Color Laminate Color To Follow				
	V0468.0144	Interior Wall Laminate Color Laminate Color To Follow				
	V0470.0144	Exterior Wall Laminate Color Laminate Color To Follow				
	V0421.0002	Air/Water Quick Disconnects None				
	V0422.0002	Packaging Blanket Wrap With Pallet				
	TS Upcharge	Tailored Solutions B-1 Double-sided simulation bench with divider. Includes dust collection, air gun, and task light per side. Locks will be field installed to match locks on simulator bins/benches.		\$23,529.00		
8	591	591 - Inspire Treatment Console	10	\$33,285.00	\$16,817.68	\$168,176.84
	B-2 Dbl-Sd Sim Bnch					
	End					
	0211708	Configuration Identification				
	V0313.9999	PriceBook Current				
	591	Model 591- Inspire Twelve O'clock Console				
	V0452.0001	Product Version A				
	V0335.0002	Starting Point 42" Lower Only		\$5,605.00		
	V0336.0002	Delivery System No Delivery				
	V0357.0002	X-Ray Attenuation No X-Ray Attenuation				
	V0344.0004	Base Module Width 42"				
	V0341.0389	Base Module Name SB1001-- 42" Base Without a Delivery System				
	V0344.0001	Lower Position 1 Module Width 14"				
	V0413.0007	Lower Position 1 Module Option 1 Shelf				
	V0341.0365	Lower Position 1 Module Name DR1201-- Door Storage, 1 Shelf				
	V0339.0002	Lower Position 1 Hinge Location Left Hinge				
	V0344.0001	Lower Position 2 Module Width 14"				
	V0413.0007	Lower Position 2 Module Option 1 Shelf				
	V0341.0365	Lower Position 2 Module Name DR1201-- Door Storage, 1 Shelf				
	V0339.0002	Lower Position 2 Hinge Location Left Hinge				

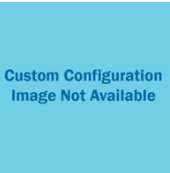
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Line#	Item #	Description	QTY	Retail Price (EA/USD)	Price (USD)	Extended (USD)
	V0344.0001	Lower Position 3 Module Width 14"				
	V0413.0006	Lower Position 3 Module Option 5"-- 5"-- 5"-- 7.5" Drawer Module				
	V0341.0367	Lower Position 3 Module Name DB1101-- 5"-- 5"-- 5"-- 7.5" Drawers		\$805.00		
	V0344.0004	Countertop Module Width 42"				
	V0352.0002	Countertop Material Solid Surface				
	V0341.0060	Countertop Module Name CS1001-- 42" Solid Surface Countertop				
	V0344.0004	Power Panel Module Width 42"				
	V0350.0001	Power Panel Option None				
	V0341.0381	Power Panel Module Name WA1007-- Wall, Lower Only				
	V0473.0143	Countertop Color Solid Surface Color To Follow				
	V0466.0144	Cabinet Laminate Color Laminate Color To Follow				
	V0468.0144	Interior Wall Laminate Color Laminate Color To Follow				
	V0470.0144	Exterior Wall Laminate Color Laminate Color To Follow				
	V0421.0002	Air/Water Quick Disconnects None				
	V0422.0002	Packaging Blanket Wrap With Pallet				
	TS Upcharge	Tailored Solutions B-2 Double-sided simulation bench with end panel. Includes dust collection, air gun, and task light per side. Locks will be field installed to match locks on simulator bins/benches.		\$26,875.00		
9	593	593 - Inspire Side Console	10	\$13,483.00	\$6,471.84	\$64,718.40
	S-1 Sink Console					
	0211709	Configuration Identification				
	V0313.9999	PriceBook Current				
	593	Model 593- Inspire Side Support				
	V0452.0001	Product Version A				
	V0335.0015	Starting Point 70" Lower Only		\$4,830.00		
	V0204.0191	Left Endcap Curved Left Endcap				
	V0366.0190	Right Endcap Curved Right Endcap				
	V0346.0001	Cabinet Depth 19"				
	V0345.0001	Countertop Height 34"				
	V0340.0002	Sink Module Location Right				
	V0336.0002	Delivery System No Delivery				
	V0420.0002	Soap And Sanitizer Option Soap Dispenser		\$100.00		
	V0344.0007	Base Module Width 70"				
	V0341.0409	Base Module Name SB3000-- Base				
	V0344.0001	Lower Position 1 Module Width 14"				



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Line#	Item #	Description	QTY	Retail Price (EA/USD)	Price (USD)	Extended (USD)
	V0413.0007	Lower Position 1 Module Option 1 Shelf				
	V0341.0398	Lower Position 1 Module Name DR3201-- Door Storage, 1 Shelf				
	V0339.0002	Lower Position 1 Hinge Location Left Hinge				
	V0344.0003	Lower Position 2 Module Width 28"				
	V0413.0057	Lower Position 2 Module Option Waste Drop				
	V0341.0481	Lower Position 2 Module Name DR3206-- Dual Door, Waste Drop		\$60.00		
	V0048.0002	Waste Drop Location Left				
	V0344.0003	Lower Position 3 Module Width 28"				
	V0355.0002	Plumbing Location Wall				
	V0341.0218	Lower Position 3 Module Name SK3001-- Sink Module				
	V0344.0007	Countertop Module Width 70"				
	V0352.0002	Countertop Material Solid Surface				
	V0351.0003	Sink Package Undermount Stainless Steel				
	V0341.0080	Countertop Module Name CS3016-- 70" Solid Surface Countertop, Under Mount SS		\$1,565.00		
	V0473.0143	Countertop Color Solid Surface Color To Follow				
	V0466.0144	Cabinet Laminate Color Laminate Color To Follow				
	V0421.0002	Air/Water Quick Disconnects None				
	V0422.0002	Packaging Blanket Wrap With Pallet				
	TS Upcharge	Tailored Solutions Lab Sink Console		\$6,928.00		
10	591	591 - Inspire Treatment Console	1	\$21,838.00	\$11,033.94	\$11,033.94
	T-1 Teaching					
	0211711	Configuration Identification				
	V0313.9999	PriceBook Current				
	591	Model 591- Inspire Twelve O'clock Console				
	V0452.0001	Product Version A				
	V0335.0002	Starting Point 42" Lower Only		\$5,605.00		
	V0336.0002	Delivery System No Delivery				
	V0357.0002	X-Ray Attenuation No X-Ray Attenuation				
	V0344.0004	Base Module Width 42"				
	V0341.0389	Base Module Name SB1001-- 42" Base Without a Delivery System				
	V0344.0001	Lower Position 1 Module Width 14"				
	V0413.0007	Lower Position 1 Module Option 1 Shelf				
	V0341.0365	Lower Position 1 Module Name DR1201-- Door Storage, 1 Shelf				

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Line#	Item #	Description	QTY	Retail Price (EA/USD)	Price (USD)	Extended (USD)
	V0339.0002	Lower Position 1 Hinge Location Left Hinge				
	V0344.0001	Lower Position 2 Module Width 14"				
	V0413.0006	Lower Position 2 Module Option 5"-- 5"-- 5"-- 7.5" Drawer Module				
	V0341.0367	Lower Position 2 Module Name DB1101-- 5"-- 5"-- 5"-- 7.5" Drawers		\$805.00		
	V0344.0001	Lower Position 3 Module Width 14"				
	V0413.0006	Lower Position 3 Module Option 5"-- 5"-- 5"-- 7.5" Drawer Module				
	V0341.0367	Lower Position 3 Module Name DB1101-- 5"-- 5"-- 5"-- 7.5" Drawers		\$805.00		
	V0344.0004	Countertop Module Width 42"				
	V0352.0002	Countertop Material Solid Surface				
	V0341.0060	Countertop Module Name CS1001-- 42" Solid Surface Countertop				
	V0344.0004	Power Panel Module Width 42"				
	V0350.0001	Power Panel Option None				
	V0341.0381	Power Panel Module Name WA1007-- Wall, Lower Only				
	V0473.0143	Countertop Color Solid Surface Color To Follow				
	V0466.0144	Cabinet Laminate Color Laminate Color To Follow				
	V0468.0144	Interior Wall Laminate Color Laminate Color To Follow				
	V0470.0144	Exterior Wall Laminate Color Laminate Color To Follow				
	V0421.0002	Air/Water Quick Disconnects None				
	V0422.0002	Packaging Blanket Wrap With Pallet				
	TS Upcharge	Tailored Solutions T-1 Teaching station. Includes dust collection, air gun, and task light. Locks will be field installed. All teaching station locks to be keyed alike.		\$14,623.00		
11	511	511 - A-dec 511 Chair	1	\$14,805.00	\$6,077.84	\$6,077.84
	Demo Pkg					
	0211713	Configuration Identification				
	V0313.9999	PriceBook Current				
	511	Model 511 Patient Chair				
	V0452.0002	Product Version B				
	V0074.0002	Voltage 120 Volts				
	V0009.0002	Base Color White				
	V0195.0264	Foundation Price 511 B Chair		\$12,060.00		
	V0075.0014	Upholstery Type Formed/Seamless		\$1,590.00		
	V0073.0004	Upholstery Style Formed F02				
	V0072.9998	Upholstery Color To Follow				
	TextInput	Upholstery Color NA				



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Line#	Item #	Description	QTY	Retail Price (EA/USD)	Price (USD)	Extended (USD)
	TextInput	Upholstery Color NA				
	V0040.0001	Contoured Floor Box		\$425.00		
	V0037.0002	Duplex Outlet Duplex and QDs		\$730.00		
	V0327.0010	Packaging Blanket Wrap With Pallet				
12	532	532 - A-dec 532 TRAD Delivery System	1	\$22,215.00	\$10,024.11	\$10,024.11
	Demo Pkg					
	0211714	Configuration Identification				
	V0313.9999	PriceBook Current				
	532	Model 532 Radius Traditional Delivery System				
	V0452.0002	Product Version B				
	V0009.0002	Base Color White				
	V0195.0266	Foundation Price 532B Radius Mount with Deluxe Plus Touchpad		\$12,045.00		
	V0070.0016	Standard Side Mount Tray Holder		\$430.00		
	V0041.0008	Disc Foot Control				
	V0071.0011	Umbilical 1.5' Umbilical				
	V0327.0010	Packaging Blanket Wrap With Pallet				
	V0330.0002	Handpiece Tubing Style Silicone Handpiece Tubing				
	V0267.0005	Position 1 Autoclavable QD Syringe				
	V0267.0003	Position 2 No Tubing				
	V0267.0049	Position 3 EA-53LED Electric Motor		\$2,120.00		
	V0267.0049	Position 4 EA-53LED Electric Motor		\$2,120.00		
	V0267.0001	Position 5 6-Pin Tubing		\$195.00		
	V0267.0072	Position 6 Satelec Newtron Slim Ultrasonic Module		\$2,345.00		
	V0158.0004	Add Ultrasonic Instrument Handpiece Satelec Newtron Slim B.LED		\$945.00		
	V0196.0001	Ultrasonic Tip Starter Kit Satelec Ultrasonic Tip Kit		\$490.00		
	V0053.0007	MC-2.0 I Control Module		\$1,525.00		
	V0504.0002	No Powered USB Hub				
13	551	551 - A-dec 551 ASST Instrumentation	1	\$2,620.00	\$1,075.58	\$1,075.58

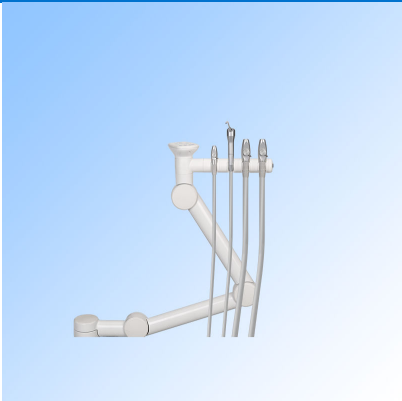


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Line#	Item #	Description	QTY	Retail Price (EA/USD)	Price (USD)	Extended (USD)
Demo Pkg		0211715 Configuration Identification				
		V0313.9999 PriceBook Current				
		551 Model 551 Assistant's Instrumentation				
		V0009.0002 Base Color White				
		V0195.0146 Foundation Price 551 Assistant's Instrumentation		\$1,820.00		
		V0055.0036 Mounting Style A-dec 511 Chair				
		V0030.0004 Arm Length Long Arm		\$130.00		
		V0327.0010 Packaging Blanket Wrap With Pallet				
		V0105.0005 Autoclavable QD Syringe				
		V0004.0023 No Curing Light				
		V0462.0002 Assistant's Curing Light Holder None				
		V0403.0002 No Dual Turret				
		V0200.0005 HVE Standard 11mm HVE				
		V0087.0003 Additional HVE		\$180.00		
		V0500.0004 Vacuum Tubing Style EasyFlex Tubing				
		V0090.0001 Support Link 500 Support Link		\$490.00		
14	572L	572L - A-dec 572L LED Dental Light, Radius Mt	1	\$4,565.00	\$1,874.05	\$1,874.05
Demo Pkg		0211716 Configuration Identification				
		V0313.9999 PriceBook Current				
		572L Model A-dec 572L LED Dental Lt, Radius Mt				
		V0009.0002 Base Color White				
		V0055.0056 Mounting Style Dual Mount - 500B Delivery System				
		V0096.0026 Chair Style 511B Dental Chair				
		V0195.0186 Foundation Price 572 LED Light, Radius Mount		\$4,565.00		
		V0327.0010 Packaging Blanket Wrap With Pallet				
15	521	521 - A-dec 521 Doctor's Stool	1	\$1,410.00	\$578.84	\$578.84



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Customer Name: California Northstate University
Reference: Simulation - Dr. Leon Assael
Quote #: WQBLH000248-4



Line#	Item #	Description	QTY	Retail Price (EA/USD)	Price (USD)	Extended (USD)	
Demo Pkg							
0211717 Configuration Identification							
V0313.9999 PriceBook Current							
521 Model 521 Doctor's Stool							
V0195.0246 Foundation Price 521 Doctors Stool							\$1,410.00
V0009.0002 Base Color White							
V0032.0003 Cylinder Type Tall							
V0083.0005 Armrest Options No Armrests							
V0075.0009 Upholstery Type Sewn							
V0072.9998 Upholstery Color To Follow							
V0327.0010 Packaging Blanket Wrap With Pallet							
16	522	522 - A-dec 522 Asst Stool	1	\$1,555.00	\$638.37	\$638.37	
Demo Pkg							
0211718 Configuration Identification							
V0313.9999 PriceBook Current							
522 Model 522 Assistant's Stool							
V0195.0247 Foundation Price 522 Assistant's Stool							\$1,555.00
V0009.0002 Base Color White							
V0474.0002 Backrest No Backrest							
V0475.0002 FootSupport Foot Ring							
V0075.0009 Upholstery Type Sewn							
V0072.9998 Upholstery Color To Follow							
V0327.0010 Packaging Blanket Wrap With Pallet							
17	Component-ETO-DF	Component-ETO-DF - Component-ETO-DF	246	\$0.00	\$0.00	\$0.00	
Locks- Field Installed							
0211712 Configuration Identification							
V0313.9999 PriceBook Current							
Component- ETO-DF Model Component-ETO-DF							
TS Upcharge Tailored Solutions Locks for Simulator Bench and Simulator. Price for lock plugs included in cabinet.							

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Line#	Item #	Description	QTY	Retail Price (EA/USD)	Price (USD)	Extended (USD)
		Lock to match top simulator bin/top two bench drawers; bottom simulator bin/bottom two bench drawers.				
18	BLANKETWRAP	BLANKETWRAP - Blanket Wrap Service	1	\$94,736.84	\$94,736.84	\$94,736.84
	TBD	Configuration Identification				
19	INSTALLATION	INSTALLATION - Charges For Install Labor	1	\$139,315.79	\$139,315.79	\$139,315.79
	S&S Services	Configuration Identification				
				A-dec Products Retail Price:	\$3,508,387.37	
				A-dec School Discount:	<u>\$1,868,830.46</u>	
				School Total Price:	\$1,639,556.91	
				Installation:	\$94,736.84	
				Freight:	<u>\$139,315.79</u>	
				Grand Total School Price:	\$1,873,609.54	

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Budget prices simulate 2020 pricing. Prices should be requested prior to ordering.

Changes in quantity or configuration may affect pricing.

Color to be selected from A-dec's standard color choices. Selection other than standard will result in additional charges.

Please note: A signed copy of the Sales Terms and Conditions will need to accompany your purchase order.

Please feel free to contact me with any questions or concerns.

Anja Shreeve
A-dec School Account Coordinator
anja.shreeve@a-dec.com
(800) 547-1883, x4427

EXPLANATION OF TERMS

Please note: A signed copy of the Sales Terms and Conditions (see below), must accompany your order.

Credit Card Payment: Net 30 days. Credit card transactions which are greater than \$5,000 will only be accepted if the customer agrees to pay an additional 3% transaction fee per credit card transaction.

Warranty: Parts only, covering defects in material and workmanship.*
5 Years for Dental Chairs, Stools, Lights, Delivery Systems, Monitor Mounts, and Dental Furniture.
2 Years for A-dec EA-53 Electric Motor, Tubing and Control Modules and A-dec/W&H Synea, Proxeo, Endea, Air Motors, and Assistina Products.
1 Year for Clinical Products.

**See official warranty statement for terms and conditions*

Delivery date: Based on factory lead times upon receipt of P.O. Extended delivery dates and split shipments are available. Note that split shipments will need to be requested during the quote process.

Lead times vary: For preliminary planning please allow for the following estimated lead times:
Equipment: 6-8 weeks
Standard Cabinets: 12-16 weeks
Custom Cabinets/Equipment: 20-24 weeks

Boxed Deliveries: Client is responsible for receiving boxed equipment deliveries, inclusive of offloading, handling and storage requirements and movement of goods to site if installation is provided. Undeliverable freight shipments may result in additional storage and handling costs at the client's expense. Client is responsible for disposal of all crating or packing materials with boxed deliveries unless specified in the quote.

Blanket-Wrapped Service: An additional service offered by A-dec (not included in VA Contract V797D-70087). With this service the equipment will be pre-assembled at the factory, blanket-wrapped, and delivered to the clinic. Upon delivery, movers will remove the wrapping and physically place the equipment into each operator.

Project Delays: In the event that project delays beyond A-dec's control impact the agreed upon delivery or installation date, the client must notify A-dec prior to 21 days of the scheduled delivery date to modify logistics and scheduling. In an effort to meet customer needs, A-dec will collaborate with the client to identify alternate delivery arrangements or offsite storage at client's expense. Deliveries and installations cancelled in less than 21 days are subject to additional charges associated with temporary storage/handling and mobilization expenses for the installation team. Site conditions that impede the scheduled installation (i.e., unfinished construction, incomplete utilities or safety issues) may necessitate installation delays or cancellation, resulting in additional charges to compensate for mobilization expenses.

Technical Training: Technical Service Training is held at A-dec in Newberg, Oregon and is offered as a service at no additional cost to those agencies that procure A-dec equipment. Please contact your A-dec Territory Manager for details.

Installation (requires use of A-dec Authorized Installer):

Includes:

- Placement of all items into specified location.
- Padded Van deliveries will be delivered and coordinated at the same time as the installation. Equipment will be placed by a private moving company
- Boxed deliveries will be delivered prior to installation and will need to be offloaded and stored at customer expense.
- Customer is responsible for delivering the equipment within close proximity to the dental treatment room prior to installation team's arrival.
- Assembly of all items per factory specifications and agency requirements.
- Anchoring of all items per factory specifications and agency requirements.
- Final air and vacuum connections.
- Calibration and function testing of equipment.
- Trash Removal
 - For Padded Van deliveries a majority of trash and all bulk items will be taken by the moving company, small amounts of trash will need to be disposed of at an on-site dumpster provided by customer.
 - For Boxed deliveries the installation team will dispose of all trash at an on-site dumpster provided by the customer.
- Walk-through with the owner and/or contractor will be completed noting any punch-list items.
- A "Customer Acceptance" sign-off letter will be requested upon completion.

Does not include:

- Final plumbing connection
- Final electrical connection
- Removing old equipment unless specified in the P.O.
- Transporting stored equipment to the clinic unless specified in the P.O.
- Caulking (filling and/or sealing of joints) between contractor provided structure and A-dec Manufactured freestanding Dental Cabinets

Installation labor charge is for a single scheduled trip unless otherwise specified. Installation performed by A-dec Authorized Installer.

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Quote #: WQBLH000248-4



SALES TERMS AND CONDITIONS

- 1. Scope/Binding Effect. THESE TERMS AND CONDITIONS OF SALE APPLY TO ALL QUOTATIONS AND OFFERS MADE BY AND PURCHASE ORDERS ACCEPTED BY A-DEC ("A-dec"). TO THE EXTENT THAT THESE TERMS AND CONDITIONS CONFLICT WITH OR ARE DIFFERENT FROM THOSE CONTAINED IN ANY BUYER PURCHASE ORDER OR OTHER PROCUREMENT DOCUMENTS, THESE TERMS AND CONDITIONS WILL CONTROL AND ANY ADDITIONAL OR INCONSISTENT TERMS ARE REJECTED BY A-DEC. BUYER'S ACCEPTANCE OF OR PAYMENT FOR THE GOODS SHALL CONCLUSIVELY CONFIRM ASSENT TO THESE TERMS.
- 2. Prices/Payment. Prices are those in effect at the time of acceptance of an order. All prices are in U.S. dollars and, unless otherwise agreed, payment terms are net 30 days from the date of invoice. Amounts not paid when due will bear a late payment charge of 1 1/2 percent per month or the maximum legal rate, whichever is less.
- 3. Taxes. All prices are exclusive of any sales, revenue, or excise tax, duties, or other similar charges, all of which will be paid by Buyer.
- 4. Delivery. Unless otherwise agreed to by the parties, delivery in the United States is FOB Buyer's place of business. For international sales, delivery is Ex Works, A-dec's plant, unless otherwise agreed. A-dec will follow Buyer's shipping instructions; absent such instructions from Buyer, A-dec will ship by the method it deems most advantageous. Delivery dates are estimates only. A-dec will make commercially reasonable efforts to meet specified delivery dates, but will otherwise not be responsible for delayed deliveries.
- 5. Acceptance. Buyer will accept or reject products within ten (10) days of delivery. Failure to notify A-dec in writing of nonconforming products within such period shall be deemed an unqualified acceptance. Any use of the products by Buyer that is not related to acceptance testing shall constitute acceptance.
- 6. Credit Sales. Prior credit approval and nondelinquent status are necessary before A-dec will ship on an open account basis. A-dec may at any time, at its sole discretion, require cash in advance, COD, letter of credit, or wire transfer prior to shipment. Shipment is subject to being withheld, or at the option of A-dec, canceled, if any amounts are not paid when due or if the financial condition of Buyer is such as to give A-dec, in its judgment, reasonable grounds for insecurity concerning the Buyer's ability to perform its obligations.
- 7. Security Interest. With respect to any credit sale, Buyer grants to A-dec a purchase money security interest in the products sold, and any proceeds thereof, as security for Buyer's obligation to pay the purchase price and Buyer agrees to execute any financing statement or other instrument required to perfect such a security interest.
- 8. Warranty. Products are warranted to conform to A-dec's standard warranty for the subject products, as may be in effect from time to time. A-dec will repair or replace, at its option, any product found to be defective or nonconforming, provided that: (i) Buyer gives prompt written notice of the defect or nonconformity; (ii) A-dec has provided written return authorization to Buyer and Buyer has returned the nonconforming product to A-dec, freight prepaid; (iii) A-dec has determined in its sole discretion that Buyer has not improperly handled a product, or subjected the product to misuse, misapplication, accident, alteration, neglect, improper or inadequate maintenance, installation, or repair. THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES OR OBLIGATIONS EXPRESS OR IMPLIED. A-DEC EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.
- 9. Export Restrictions. A-dec products are of U.S. origin unless otherwise specified and, as such, are subject to export licensing and other restrictions under U.S. law. Buyer acknowledges this and will comply with all applicable restrictions on export or reexports, including obtaining any required U.S. government license, authorization, or approval.
- 10. Limitation of Liability. IN NO EVENT WILL A-DEC BE LIABLE FOR INDIRECT, SPECIAL, INCIDENTAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES OF ANY KIND SUSTAINED FROM ANY CAUSE OR ARISING OUT OF ANY LEGAL THEORY, WHETHER CONTRACT, NEGLIGENCE, STRICT TORT LIABILITY, OR OTHERWISE. IN NO EVENT SHALL A-DEC BE LIABLE TO BUYER IN AN AMOUNT EXCEEDING THE PURCHASE PRICE OF THE SUBJECT PRODUCT. THESE LIMITATIONS INCLUDE ANY LIABILITY THAT MAY ARISE OUT OF THIRD-PARTY CLAIMS, AND BUYER AGREES TO PROCURE SUCH INSURANCE, IF ANY, AS IT DEEMS APPROPRIATE TO COVER SUCH CLAIMS. ANY LAWSUIT BY BUYER AGAINST A-DEC SHALL BE FILED WITHIN ONE YEAR FROM DELIVERY OF THE SUBJECT PRODUCT BY A-DEC. THESE LIMITATIONS SHALL APPLY NOTWITHSTANDING ANY FAILURE OF ESSENTIAL PURPOSE OR OF ANY LIMITED REMEDY PROVIDED HEREIN.
- 11. Infringement Indemnity. A-dec will defend or settle any claim or action brought against Buyer to the extent that it is based upon a claim that products provided by A-dec to Buyer infringe any United States patent of any third party, and A-dec will pay all costs, damages and attorneys' fees finally awarded against Buyer in any such action; but such defense, settlements, and payments are expressly conditioned on the following: that A-dec is promptly notified in writing by Buyer of any such claim; that A-dec is granted in writing sole control of the defense of any such claim and of all negotiations for settlement or compromise; that Buyer cooperates with A-dec in a reasonable way to facilitate the settlement or defense of the claim; that the claim does not arise from modifications not authorized in writing by A-Dec, from use or combination of products provided by A-dec with items provided by Buyer or others, or from, in the case of custom-made products, compliance with Buyer's specifications. Should products become, or in A-dec's opinion be likely to become, the subject of such a claim of infringement, then Buyer will permit A-dec, at A-dec's option and expense: to procure for Buyer the right to continue using the products, or to replace or modify the product so that it becomes non-infringing and substantially equivalent in function, or to refund to the Buyer the purchase price of the product, less a charge for use by Buyer based on straight-line depreciation, assuming a useful life of five years. THE FOREGOING IS A-DEC'S EXCLUSIVE OBLIGATION WITH RESPECT TO INFRINGEMENT OF INTELLECTUAL PROPERTY RIGHTS.
- 12. Force Majeure. A-dec will not be responsible for delays caused by acts of God, fires, floods, strikes, accidents, delays by suppliers of material or shortages of material, inability to obtain necessary labor or manufacturing facilities, or other causes beyond its reasonable control.
- 13. Confidentiality. Proposals, drawings, specifications and technical data furnished to Buyer by A-dec will:
 - 1. be retained in confidence; (ii) remain the exclusive property of A-dec;
 - 2. not be disclosed by Buyer to third parties or used in any manner not authorized by A-dec;
 - 3. be returned to A-dec upon request.
- 14. Disputes. The rights and liabilities of the parties arising out of or relating to this agreement will be governed by the laws of the state of Oregon; venue in any lawsuit between the parties will lie exclusively in state or federal courts in Portland, Oregon, USA, excluding choice of law rules and excluding the U.N. Convention on International Sales of Goods; and the prevailing party in such litigation will be entitled to recover all reasonable attorneys' fees and other expenses (in addition to statutory "costs" of litigation), including attorneys' fees and expenses in connection with any trial, appeal, or petition for review.
- 15. ENTIRE AGREEMENT. THIS IS THE ENTIRE AGREEMENT BETWEEN THE PARTIES. IT SUPERSEDES ALL PRIOR OR CONTEMPORANEOUS AGREEMENTS, UNDERSTANDINGS, OR REPRESENTATIONS WITH RESPECT TO THE SUBJECT MATTER HEREOF. THIS AGREEMENT MAY NOT BE MODIFIED OR AMENDED EXCEPT IN WRITING SIGNED BY BOTH PARTIES.

Buyer
(Name of
Entity): _____
Address: _____

Printed Name
of Signatory: _____

Title: _____

Date: _____

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Reference: Simulation - Dr. Leon Assael
Quote #: WQBLH000248-4



Visual Document

Line	Item	Label
14	572L	Demo Pkg

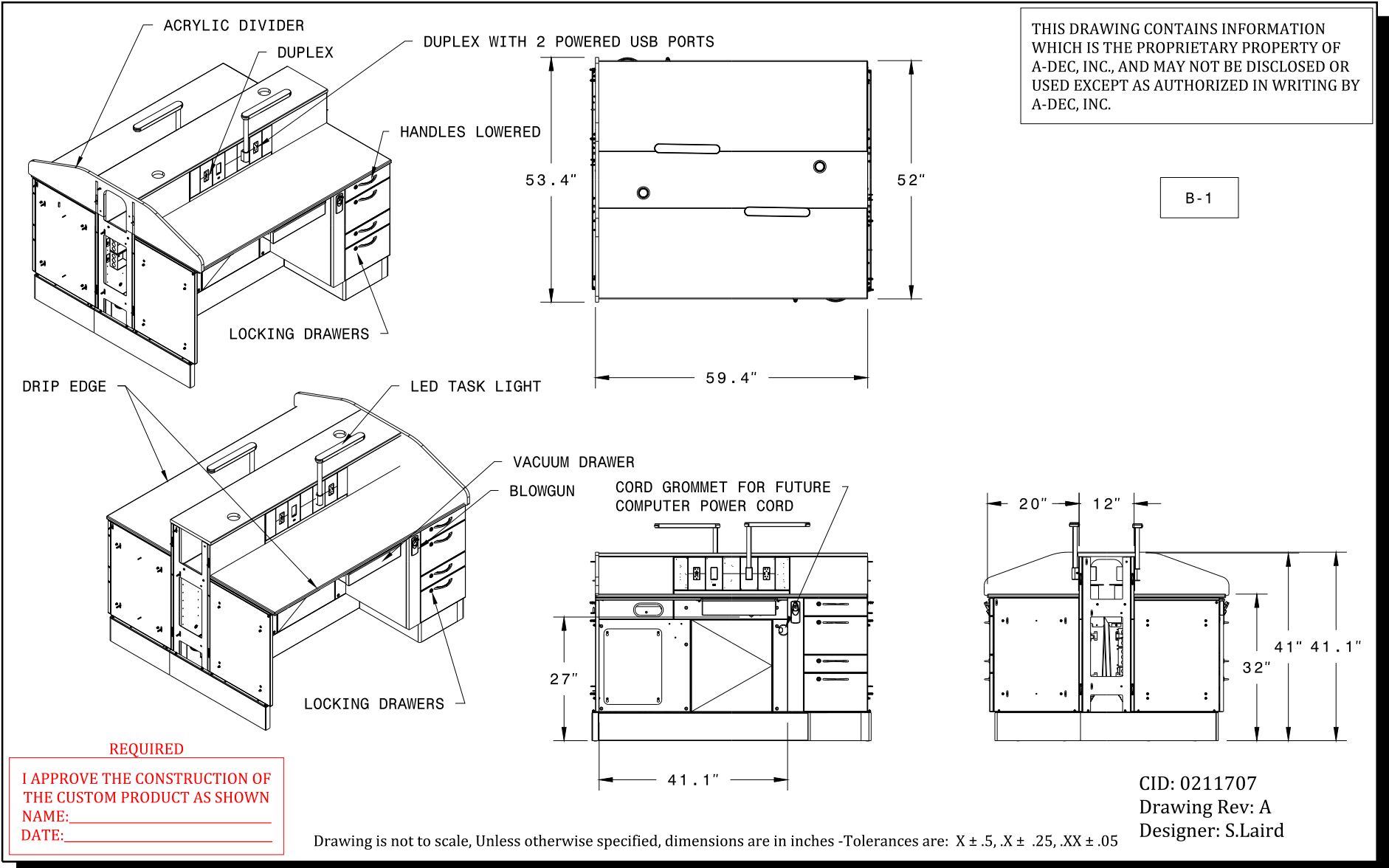


Standard Features

- White color with Gray accents
- Long-life bright wide LEDs
- Light head includes third axis diagonal adjustment
- High quality optically balanced LED array
- Long-life bright wide LEDs
- Light head includes third axis diagonal adjustment
- High quality optically balanced LED array

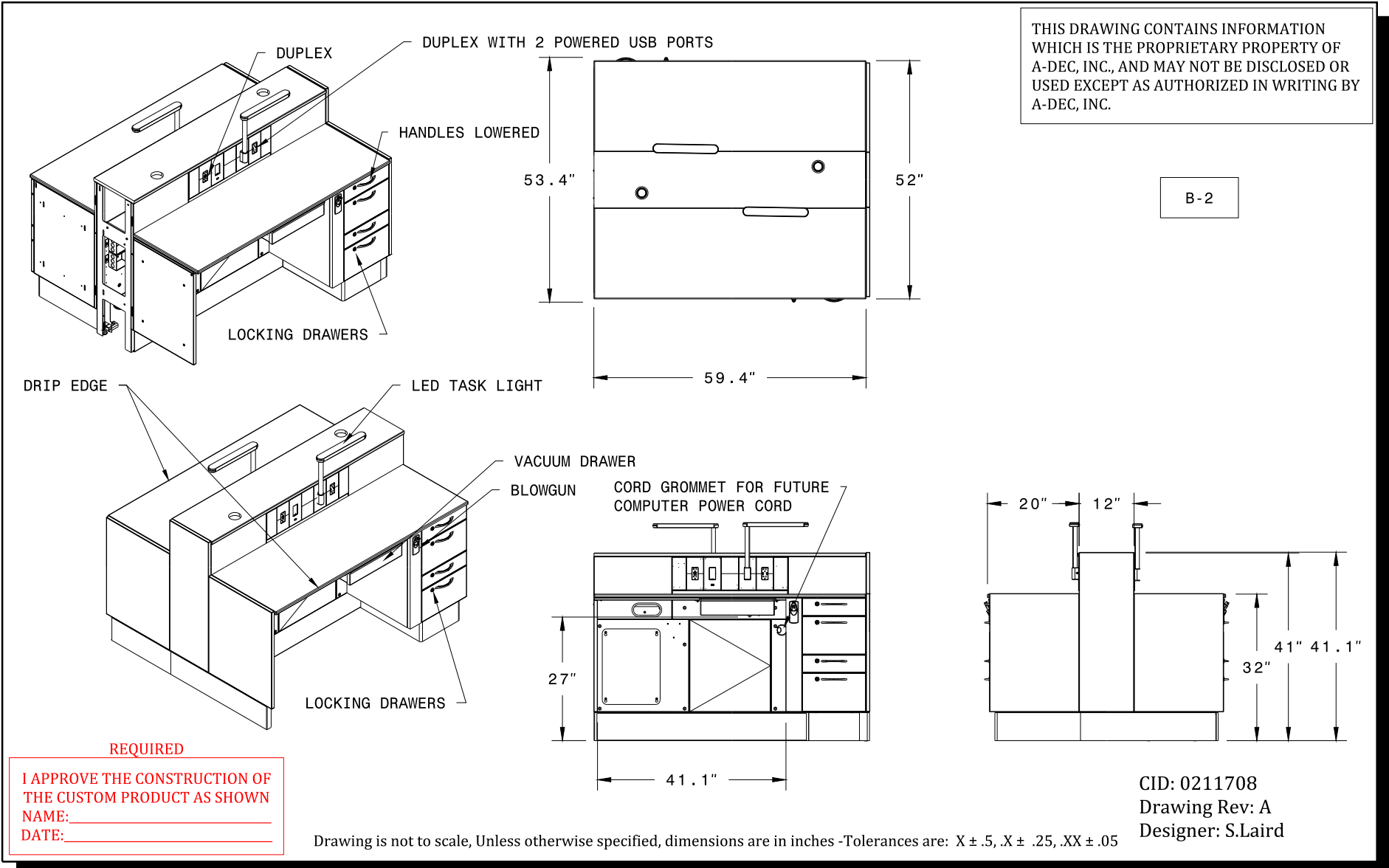
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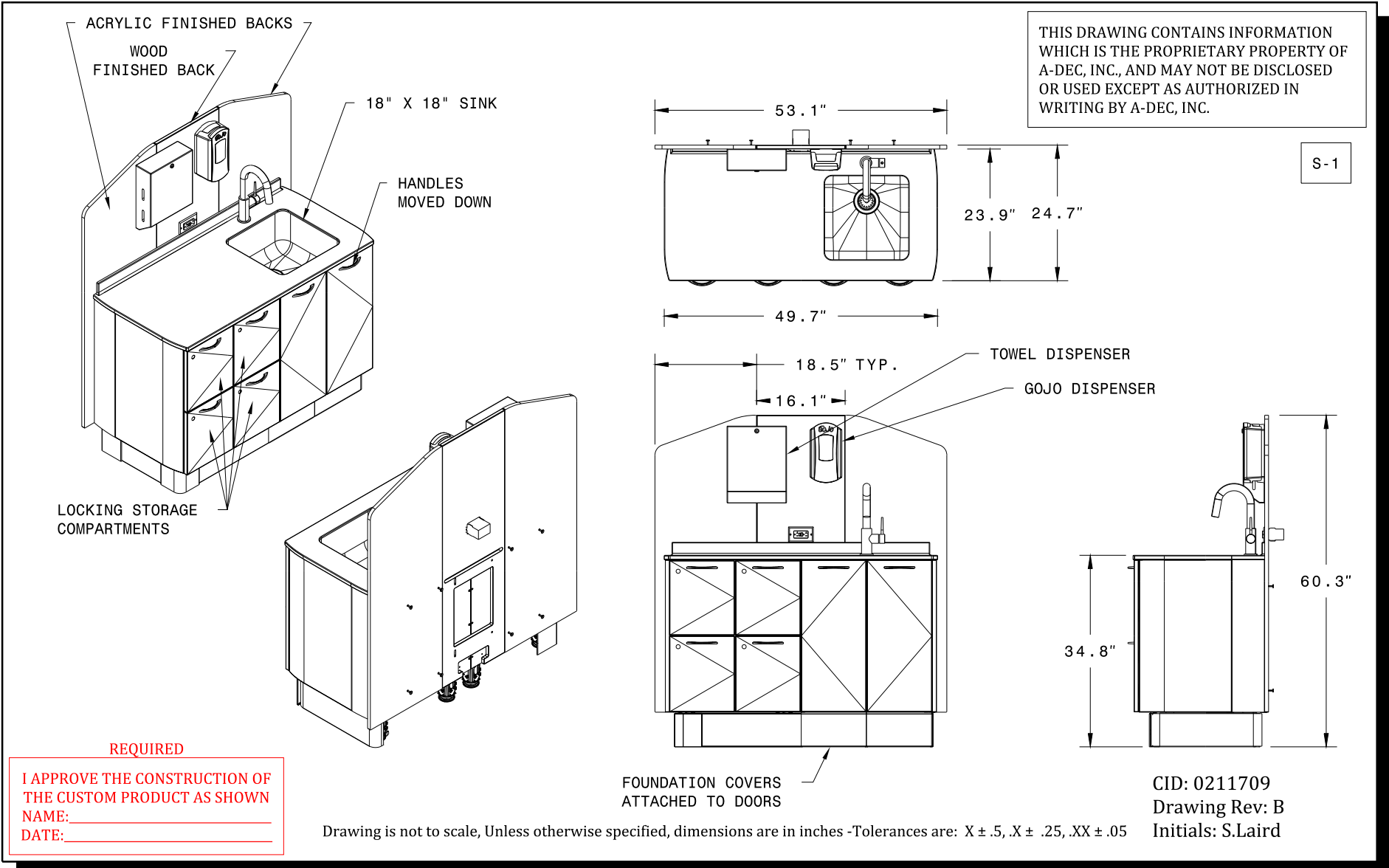
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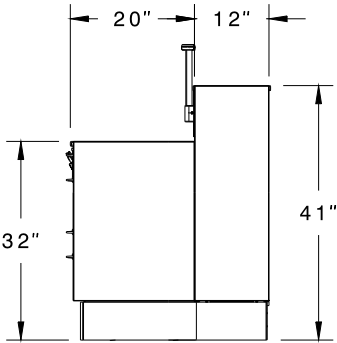
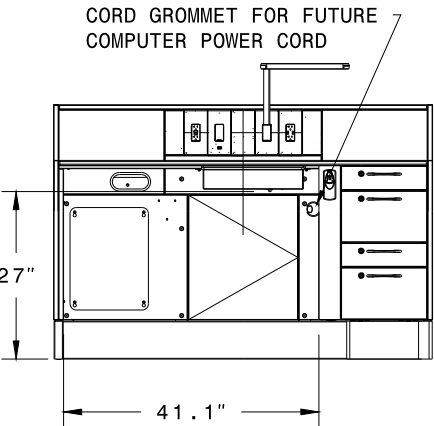
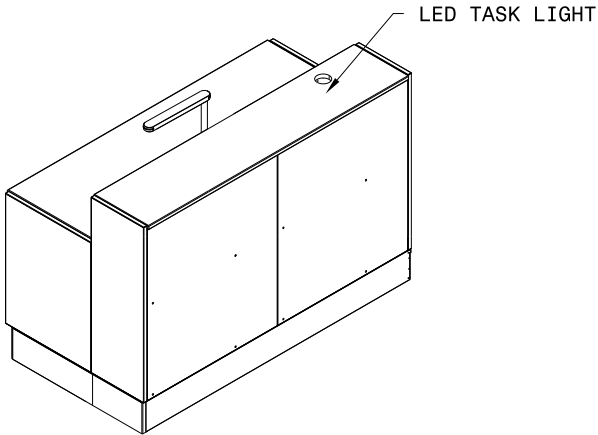
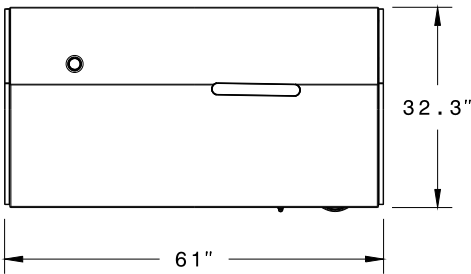
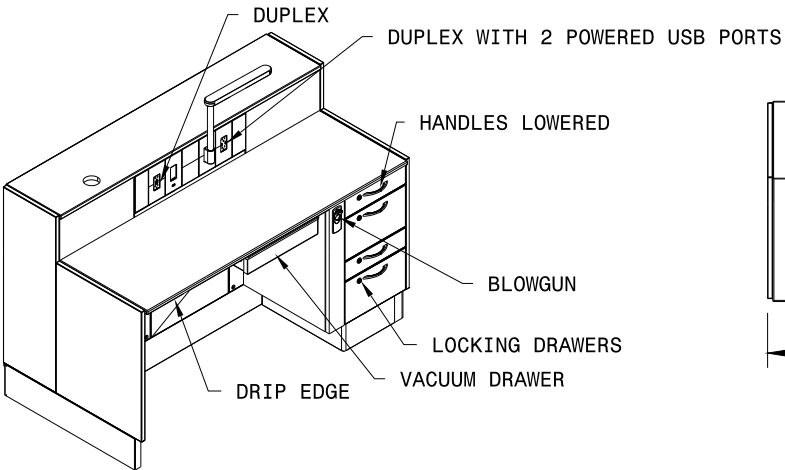
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T - 1



REQUIRED

I APPROVE THE CONSTRUCTION OF THE CUSTOM PRODUCT AS SHOWN
NAME: _____
DATE: _____

Drawing is not to scale, Unless otherwise specified, dimensions are in inches -Tolerances are: X ± .5, .X ± .25, .XX ± .05

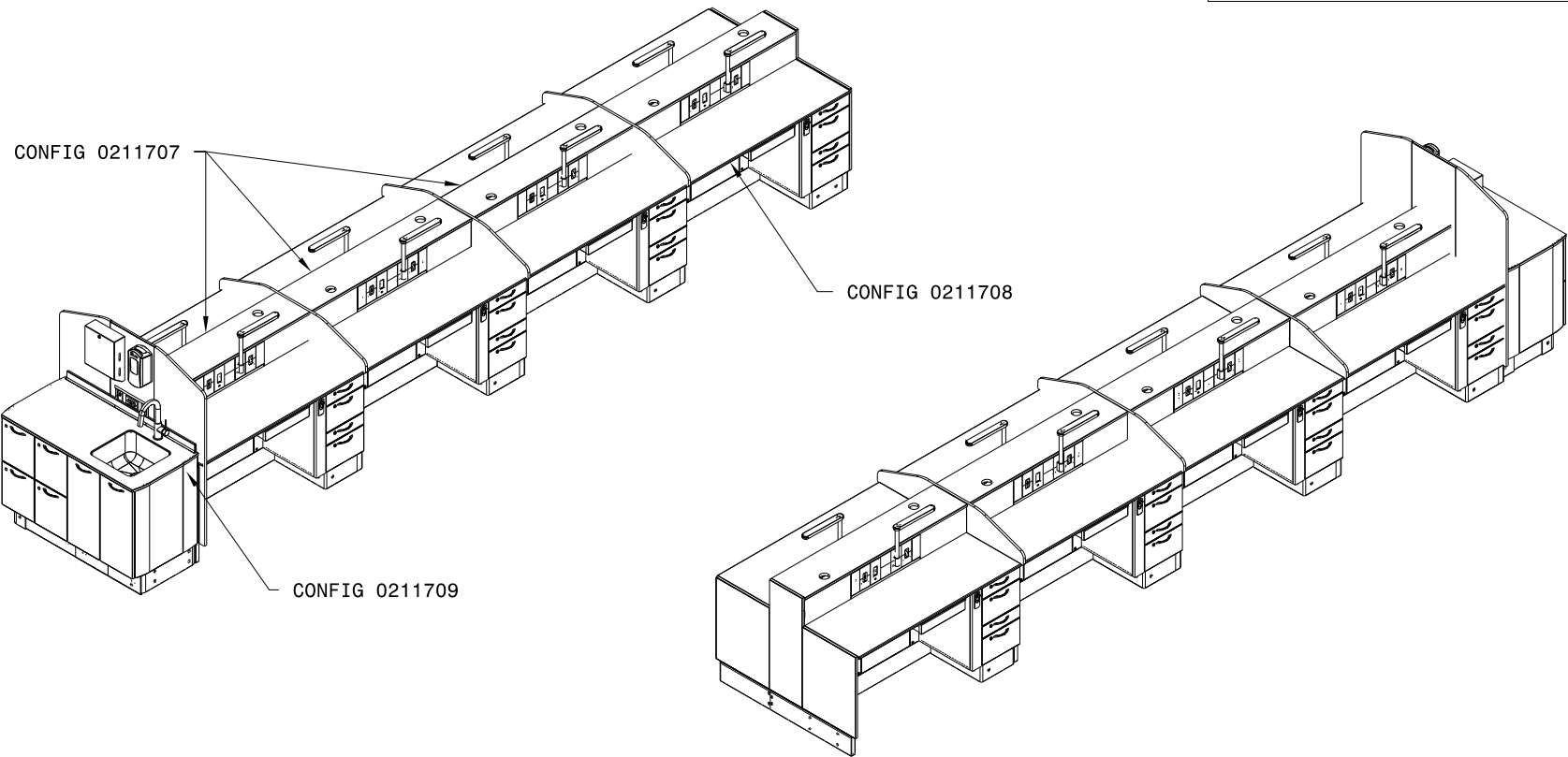
CID: 0211711
Drawing Rev: A
Designer: S.Laird

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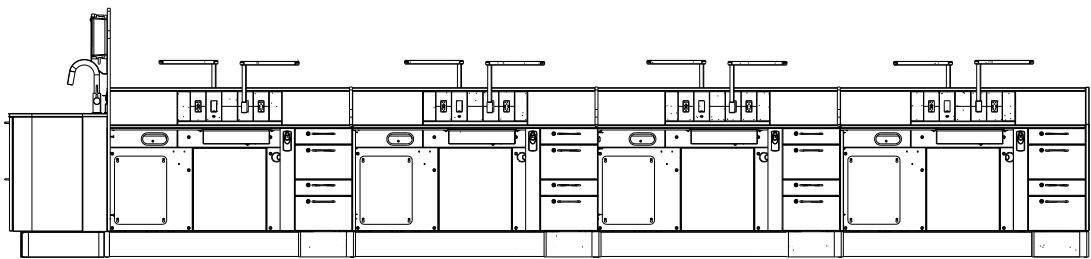
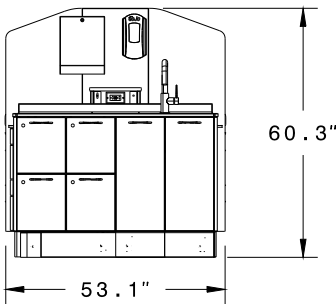
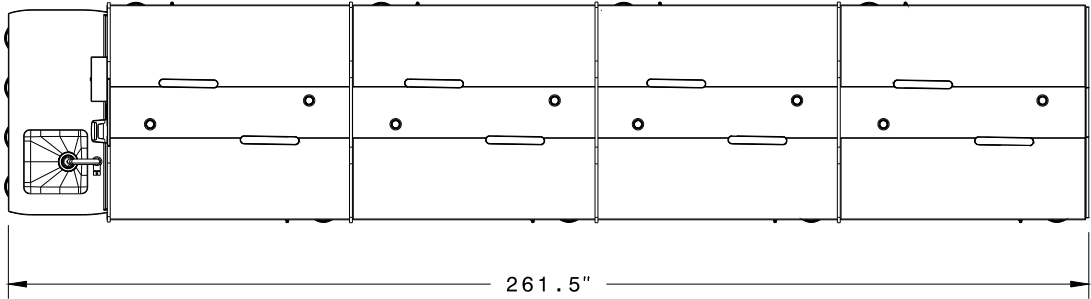
CID: VARIOUS
Drawing Rev: A

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REQUIRED

I APPROVE THE CONSTRUCTION OF THE CUSTOM PRODUCT AS SHOWN
NAME: _____
DATE: _____

Drawing is not to scale, Unless otherwise specified, dimensions are in inches -Tolerances are: X ± .5, .X ± .25, .XX ± .05 Designer: S.Laird

CID: VARIOUS
Drawing Rev: A

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Exhibit L

Customer Name: California Northstate University
Reference: Simulation - Dr. Leon Assael
Quote #: WQBLH000248-4



Line#	Item #	Description	QTY	Retail Price (EA/USD)	Price (USD)	Extended (USD)
		<i>Lock to match top simulator bin/top two bench drawers; bottom simulator bin/bottom two bench drawers.</i>				
18	BLANKETWRAP	BLANKETWRAP - Blanket Wrap Service	1	\$94,736.84	\$94,736.84	\$94,736.84
	TBD	Configuration Identification				
19	INSTALLATION	INSTALLATION - Charges For Install Labor	1	\$139,315.79	\$139,315.79	\$139,315.79
	S&S Services	Configuration Identification				

A-dec Products Retail Price:	\$3,508,387.37
A-dec School Discount:	<u>\$1,868,830.46</u>
School Total Price:	\$1,639,556.91
Installation:	\$94,736.84
Freight:	<u>\$139,315.79</u>
Grand Total School Price:	\$1,873,609.54

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Customer Name: California Northstate University
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Quote #: WQBLH000248-4



Budget prices simulate 2020 pricing. Prices should be requested prior to ordering.

Changes in quantity or configuration may affect pricing.

Color to be selected from A-dec's standard color choices. Selection other than standard will result in additional charges.

Please note: A signed copy of the Sales Terms and Conditions will need to accompany your purchase order.

Please feel free to contact me with any questions or concerns.

Anja Shreeve
A-dec School Account Coordinator
anja.shreeve@a-dec.com
(800) 547-1883, x4427

EXPLANATION OF TERMS

Please note: A signed copy of the Sales Terms and Conditions (see below), must accompany your order.

Credit Card Payment: Net 30 days. Credit card transactions which are greater than \$5,000 will only be accepted if the customer agrees to pay an additional 3% transaction fee per credit card transaction.

Warranty: Parts only, covering defects in material and workmanship.*

- 5 Years for Dental Chairs, Stools, Lights, Delivery Systems, Monitor Mounts, and Dental Furniture.
- 2 Years for A-dec EA-53 Electric Motor, Tubing and Control Modules and A-dec/W&H Synea, Proxeo, Endea, Air Motors, and Assisting Products.
- 1 Year for Clinical Products.

*See official warranty statement for terms and conditions

Delivery date: Based on factory lead times upon receipt of P.O. Extended delivery dates and split shipments are available. Note that split shipments will need to be requested during the quote process.

Lead times vary: For preliminary planning please allow for the following estimated lead times:

- Equipment: 6-8 weeks
- Standard Cabinets: 12-16 weeks
- Custom Cabinets/Equipment: 20-24 weeks

Boxed Deliveries: Client is responsible for receiving boxed equipment deliveries, inclusive of offloading, handling and storage requirements and movement of goods to site if installation is provided. Undeliverable freight shipments may result in additional storage and handling costs at the client's expense. Client is responsible for disposal of all crating or packing materials with boxed deliveries unless specified in the quote.

Blanket-Wrapped Service: An additional service offered by A-dec (not included in VA Contract V797D-70087). With this service the equipment will be pre-assembled at the factory, blanket-wrapped, and delivered to the clinic. Upon delivery, movers will remove the wrapping and physically place the equipment into each operatory.

Project Delays: In the event that project delays beyond A-dec's control impact the agreed upon delivery or installation date, the client must notify A-dec prior to 21 days of the scheduled delivery date to modify logistics and scheduling. In an effort to meet customer needs, A-dec will collaborate with the client to identify alternate delivery arrangements or offsite storage at client's expense. Deliveries and installations cancelled in less than 21 days are subject to additional charges associated with temporary storage/handling and mobilization expenses for the installation team. Site conditions that impede the scheduled installation (i.e., unfinished construction, incomplete utilities or safety issues) may necessitate installation delays or cancellation, resulting in additional charges to compensate for mobilization expenses.

Technical Training: Technical Service Training is held at A-dec in Newberg, Oregon and is offered as a service at no additional cost to those agencies that procure A-dec equipment. Please contact your A-dec Territory Manager for details.

Installation (requires use of A-dec Authorized Installer):

Includes:

- Placement of all items into specified location.
- Padded Van deliveries will be delivered and coordinated at the same time as the installation. Equipment will be placed by a private moving company
- Boxed deliveries will be delivered prior to installation and will need to be offloaded and stored at customer expense. Customer is responsible for delivering the equipment within close proximity to the dental treatment room prior to installation team's arrival.
- Assembly of all items per factory specifications and agency requirements.
- Anchoring of all items per factory specifications and agency requirements.
- Final air and vacuum connections.
- Calibration and function testing of equipment.
- Trash Removal
 - For Padded Van deliveries a majority of trash and all bulk items will be taken by the moving company, small amounts of trash will need to be disposed of at an on-site dumpster provided by customer.
 - For Boxed deliveries the installation team will dispose of all trash at an on-site dumpster provided by the customer.
- Walk-through with the owner and/or contractor will be completed noting any punch-list items.
- A "Customer Acceptance" sign-off letter will be requested upon completion.

Does not include:

- Final plumbing connection
- Final electrical connection
- Removing old equipment unless specified in the P.O.
- Transporting stored equipment to the clinic unless specified in the P.O.
- Caulking (filling and/or sealing of joints) between contractor provided structure and A-dec Manufactured freestanding Dental Cabinets

Installation labor charge is for a single scheduled trip unless otherwise specified. Installation performed by A-dec Authorized Installer.

The written material is not intended to be, and should not be, used as a substitute for the compliance with local, state, federal code and Americans with Disabilities Act. It is the responsibility of the user to integrate the A-dec equipment specifications presented herein with the regulations and codes overseen by local planning and inspection authorities. A-dec Inc. shall not be held liable for any errors contained herein or any consequential or other damages concerning the furnishing, performance or use of this material. The information in this document is subject to change without notice. If you find any problems with this document, please report them to us in writing.

Customer Name: California Northstate University
Reference: Simulation - Dr. Leon Assael
Quote #: WQBLH000248-4



SALES TERMS AND CONDITIONS

1. Scope/Binding Effect. THESE TERMS AND CONDITIONS OF SALE APPLY TO ALL QUOTATIONS AND OFFERS MADE BY AND PURCHASE ORDERS ACCEPTED BY A-DEC ("A-dec"). TO THE EXTENT THAT THESE TERMS AND CONDITIONS CONFLICT WITH OR ARE DIFFERENT FROM THOSE CONTAINED IN ANY BUYER PURCHASE ORDER OR OTHER PROCUREMENT DOCUMENTS, THESE TERMS AND CONDITIONS WILL CONTROL AND ANY ADDITIONAL OR INCONSISTENT TERMS ARE REJECTED BY A-DEC. BUYER'S ACCEPTANCE OF OR PAYMENT FOR THE GOODS SHALL CONCLUSIVELY CONFIRM ASSENT TO THESE TERMS.
2. Prices/Payment. Prices are those in effect at the time of acceptance of an order. All prices are in U.S. dollars and, unless otherwise agreed, payment terms are net 30 days from the date of invoice. Amounts not paid when due will bear a late payment charge of 1 1/2 percent per month or the maximum legal rate, whichever is less.
3. Taxes. All prices are exclusive of any sales, revenue, or excise tax, duties, or other similar charges, all of which will be paid by Buyer.
4. Delivery. Unless otherwise agreed to by the parties, delivery in the United States is FOB Buyer's place of business. For international sales, delivery is Ex Works, A-dec's plant, unless otherwise agreed. A-dec will follow Buyer's shipping instructions; absent such instructions from Buyer, A-dec will ship by the method it deems most advantageous. Delivery dates are estimates only. A-dec will make commercially reasonable efforts to meet specified delivery dates, but will otherwise not be responsible for delayed deliveries.
5. Acceptance. Buyer will accept or reject products within ten (10) days of delivery. Failure to notify A-dec in writing of nonconforming products within such period shall be deemed an unqualified acceptance. Any use of the products by Buyer that is not related to acceptance testing shall constitute acceptance.
6. Credit Sales. Prior credit approval and nondelinquent status are necessary before A-dec will ship on an open account basis. A-dec may at any time, at its sole discretion, require cash in advance, COD, letter of credit, or wire transfer prior to shipment. Shipment is subject to being withheld, or at the option of A-dec, canceled, if any amounts are not paid when due or if the financial condition of Buyer is such as to give A-dec, in its judgment, reasonable grounds for insecurity concerning the Buyer's ability to perform its obligations.
7. Security Interest. With respect to any credit sale, Buyer grants to A-dec a purchase money security interest in the products sold, and any proceeds thereof, as security for Buyer's obligation to pay the purchase price and Buyer agrees to execute any financing statement or other instrument required to perfect such a security interest.
8. Warranty. Products are warranted to conform to A-dec's standard warranty for the subject products, as may be in effect from time to time. A-dec will repair or replace, at its option, any product found to be defective or nonconforming, provided that: (i) Buyer gives prompt written notice of the defect or nonconformity; (ii) A-dec has provided written return authorization to Buyer and Buyer has returned the nonconforming product to A-dec, freight prepaid; (iii) A-dec has determined in its sole discretion that Buyer has not improperly handled a product, or subjected the product to misuse, misapplication, accident, alteration, neglect, improper or inadequate maintenance, installation, or repair. THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES OR OBLIGATIONS EXPRESS OR IMPLIED. A-DEC EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.
9. Export Restrictions. A-dec products are of U.S. origin unless otherwise specified and, as such, are subject to export licensing and other restrictions under U.S. law. Buyer acknowledges this and will comply with all applicable restrictions on export or reexports, including obtaining any required U.S. government license, authorization, or approval.
10. Limitation of Liability. IN NO EVENT WILL A-DEC BE LIABLE FOR INDIRECT, SPECIAL, INCIDENTAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES OF ANY KIND SUSTAINED FROM ANY CAUSE OR ARISING OUT OF ANY LEGAL THEORY, WHETHER CONTRACT, NEGLIGENCE, STRICT TORT LIABILITY, OR OTHERWISE. IN NO EVENT SHALL A-DEC BE LIABLE TO BUYER IN AN AMOUNT EXCEEDING THE PURCHASE PRICE OF THE SUBJECT PRODUCT. THESE LIMITATIONS INCLUDE ANY LIABILITY THAT MAY ARISE OUT OF THIRD-PARTY CLAIMS, AND BUYER AGREES TO PROCURE SUCH INSURANCE, IF ANY, AS IT DEEMS APPROPRIATE TO COVER SUCH CLAIMS. ANY LAWSUIT BY BUYER AGAINST A-DEC SHALL BE FILED WITHIN ONE YEAR FROM DELIVERY OF THE SUBJECT PRODUCT BY A-DEC. THESE LIMITATIONS SHALL APPLY NOTWITHSTANDING ANY FAILURE OF ESSENTIAL PURPOSE OR OF ANY LIMITED REMEDY PROVIDED HEREIN.
11. Infringement Indemnity. A-dec will defend or settle any claim or action brought against Buyer to the extent that it is based upon a claim that products provided by A-dec to Buyer infringe any United States patent of any third party, and A-dec will pay all costs, damages and attorneys' fees finally awarded against Buyer in any such action; but such defense, settlements, and payments are expressly conditioned on the following: that A-dec is promptly notified in writing by Buyer of any such claim; that A-dec is granted in writing sole control of the defense of any such claim and of all negotiations for settlement or compromise; that Buyer cooperates with A-dec in a reasonable way to facilitate the settlement or defense of the claim; that the claim does not arise from modifications not authorized in writing by A-dec, from use or combination of products provided by A-dec with items provided by Buyer or others, or from, in the case of custom-made products, compliance with Buyer's specifications. Should products become, or in A-dec's opinion be likely to become, the subject of such a claim of infringement, then Buyer will permit A-dec, at A-dec's option and expense: to procure for Buyer the right to continue using the products, or to replace or modify the product so that it becomes non-infringing and substantially equivalent in function, or to refund to the Buyer the purchase price of the product, less a charge for use by Buyer based on straight-line depreciation, assuming a useful life of five years. THE FOREGOING IS A-DEC'S EXCLUSIVE OBLIGATION WITH RESPECT TO INFRINGEMENT OF INTELLECTUAL PROPERTY RIGHTS.
12. Force Majeure. A-dec will not be responsible for delays caused by acts of God, fires, floods, strikes, accidents, delays by suppliers of material or shortages of material, inability to obtain necessary labor or manufacturing facilities, or other causes beyond its reasonable control.
13. Confidentiality. Proposals, drawings, specifications and technical data furnished to Buyer by A-dec will:
 1. be retained in confidence; (ii) remain the exclusive property of A-dec;
 2. not be disclosed by Buyer to third parties or used in any manner not authorized by A-dec;
 3. be returned to A-dec upon request.
14. Disputes. The rights and liabilities of the parties arising out of or relating to this agreement will be governed by the laws of the state of Oregon; venue in any lawsuit between the parties will lie exclusively in state or federal courts in Portland, Oregon, USA, excluding choice of law rules and excluding the U.N. Convention on International Sales of Goods; and the prevailing party in such litigation will be entitled to recover all reasonable attorneys' fees and other expenses (in addition to statutory "costs" of litigation), including attorneys' fees and expenses in connection with any trial, appeal, or petition for review.
15. ENTIRE AGREEMENT. THIS IS THE ENTIRE AGREEMENT BETWEEN THE PARTIES. IT SUPERSEDES ALL PRIOR OR CONTEMPORANEOUS AGREEMENTS, UNDERSTANDINGS, OR REPRESENTATIONS WITH RESPECT TO THE SUBJECT MATTER HEREOF. THIS AGREEMENT MAY NOT BE MODIFIED OR AMENDED EXCEPT IN WRITING SIGNED BY BOTH PARTIES.

Buyer
 (Name of
 Entity):
 Address:

Printed Name
 of Signatory:

Title:

Date:

Alvin Cheung
 President/CEO
 4/2/2020

Customer Name: California Northstate University
Reference: Simulation - Dr. Leon Assael
Quote #: WQLH000248-4



Visual Document

Line	Item	Label
14	572L	Demo Pkg



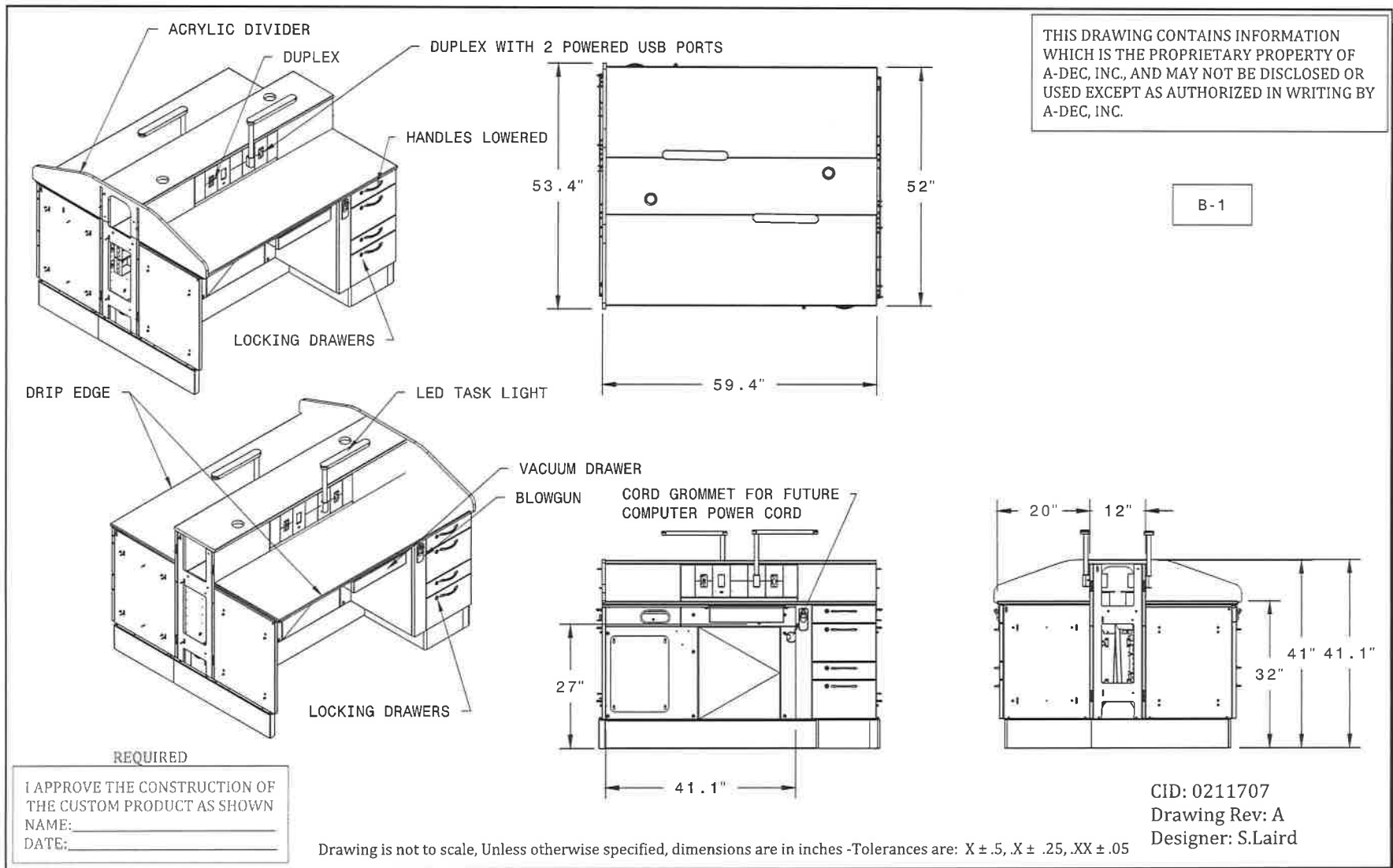
Standard Features

- White color with Gray accents
- Long-life bright wide LEDs
- Light head includes third axis diagonal adjustment
- High quality optically balanced LED array
- Long-life bright wide LEDs
- Light head includes third axis diagonal adjustment
- High quality optically balanced LED array

The written material is not intended to be, and should not be, used as a substitute for the compliance with local, state, federal code and Americans with Disabilities Act. It is the responsibility of the user to integrate the A-dec equipment specifications presented herein with the regulations and codes overseen by local planning and inspection authorities. A-dec Inc. shall not be held liable for any errors contained herein or any consequential or other damages concerning the furnishing, performance or use of this material. The information in this document is subject to change without notice. If you find any problems with this document, please report them to us in writing.

Exhibit L

Customer Name: California Northstate University
Reference: Simulation - Dr. Leon Assael
Quote #: WQBLH000248-4



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II. Management of Regulated Medical Waste

This dental practice does not have recognizable human anatomical remains other than teeth. This dental practice does not mix hazardous or radiological material with medical waste. This dental practice does not generate chemotherapeutic wastes. Medical waste is not stored for longer than indicated below unless written approval has been obtained from the enforcement agency.

Check appropriate boxes and fill in the blanks.

A. Biohazardous and pathology waste

This dental practice ☒ does ☐ does not generate biohazardous waste.

This dental practice ☒ does ☐ does not generate pathology waste.

The estimated average quantity of this waste generated monthly is 25 lbs _____.

Biohazardous and pathology waste are placed in "biohazardous bags" that are impervious to moisture and impact resistant. Biohazardous waste is placed in **red** biohazardous bags and pathology waste is placed in **white** biohazardous bags. These bags are placed in containers located:

The containers that hold the biohazardous bags are:

- Leak-resistant
- Rigid
- Disposable, reusable, or recyclable (with approval of enforcement agency)
- Are any color
- Kept clean and in good repair
- Labeled "Biohazardous Waste" or "Biohazard" on lid and sides; no specific color required for the container itself. The container that holds pathology waste shall be labeled "Pathology Waste," "PATH," or other label approved by the department on the lids and sides.
- Closeable with tight-fitting lid
- Picked up by a CDPH registered waste hauler or shipped out of the office using a U.S. Postal Service-approved mail back system every (*check the appropriate box*):
 - ☒ 7 days (>20 lbs. biohazardous waste generated/month)
 - ☐ 30 days (<20 lbs. biohazardous waste generated/month, stored above 0°)
 - ☐ 90 days (<20 lbs. biohazardous waste generated/month, stored below 0°)

Before disposal, stored biohazardous bags are tied to prevent leakage or expulsion of contents during storage, handling, or transport

B. Pharmaceutical waste (does not include controlled substances)

This dental practice ☐ does ☒ does not generate pharmaceutical waste.

The estimated average quantity of this waste generated monthly is _____.

Pharmaceutical waste is placed in containers located: _____

The containers are:

- Leak-resistant.
- Closeable with tight-fitting lids,
- Labeled with the words "HIGH HEAT OR INCINERATION ONLY," or with another label approved by the enforcement agency, on the lid and sides, so as to be visible from any lateral direction
- Picked up by a CDPH registered waste hauler or shipped out of the office using a U.S. Postal Service-approved mail back system (check appropriate box):
 - ☐ no later than 7 days when the container of combined pharmaceutical and sharps waste is ready for disposal
 - ☐ within 30 days if pharmaceutical waste is placed with biohazardous waste in a common container
 - ☐ no later than 90 days when the container of only pharmaceutical waste is ready for disposal (the container is emptied at least once per year unless prior written approval is given by the local enforcement agency)

Disposal of expired controlled substances is through the use of a DEA-registered reverse distributor. *(Local DEA offices can provide the names of reverse distributors.)*

C. Sharps waste

This dental practice ☒ does ☐ does not generate sharps waste.

The estimated average quantity of this waste generated monthly is 100 lbs _____ .

Sharps waste is placed in containers easily accessible and located in the immediate areas where sharps are used: Patient treatment areas and preclinical laboratories.

Sharp containers used in this dental practice are:

- Cleared by FDA as sharps containers.
- Not overfilled and maintained upright.
- When ready for disposal, taped closed or lid tightly closed.
- Labeled with the words "Biohazard" and the international biohazard symbol, or "Sharps Waste."
- Picked up by a CDPH registered waste hauler or shipped out of the office using a U.S. Postal Service-approved mail back system *(check appropriate box)* :

☒ within 30 days of filling (3/4 full or at fill line of container).

☐ every 30 days if sharps container is placed with biohazardous waste in a common container

Handling of Sharps Waste: Handle all sharps in a manner to prevent accidental punctures and personal contamination. Needles should never be bent or cut during disposal. Never put hands into a container for contaminated sharps.

D. Consolidating Waste in a Common Container

This dental practice ☐ does ☒ does not consolidate sharps waste and pharmaceutical waste into a common container.

If a common container is used, it is labeled with the biohazardous waste symbol and the words "HIGH HEAT OR INCINERATION ONLY," or with another label approved by the enforcement agency, on the lid and sides, so as to be visible from any lateral direction.

E. Decontamination of Reusable Containers

This dental practice ☒ does ☐ does not use reusable rigid containers for medical waste.

These containers are thoroughly washed and decontaminated as required by the MWMA using a method approved by the enforcement agency each time they are emptied, unless the surfaces of the containers have been completely protected from contamination by disposable liners, bags, or other devices removed with the waste. These containers are maintained in a clean and sanitary manner. Methods of decontamination include, but are not limited to, agitation to remove visible soil combined with one of the following procedures:

- (a) Exposure to hot water of at least 82 degrees Centigrade (180 degrees Fahrenheit) for a minimum of 15 seconds.
- (b) Exposure to chemical sanitizer by rinsing with, or immersion in, one of the following for a minimum of three minutes:
 - (1) Hypochlorite solution (500 ppm available chlorine).
 - (2) Phenolic solution (500 ppm active agent).
 - (3) Iodoform solution (100 ppm available iodine).
 - (4) Quaternary ammonium solution (400 ppm active agent).

This dental practice does not use reusable pails, drums, dumpsters, or bins used for medical waste for the containment of solid waste, or for other purposes, except after being decontaminated as described above and removing all medical waste labels.

III. Disposal of Regulated Medical Waste

In this dental practice the disposal of regulated medical waste is by: *(check appropriate boxes and complete information)*

☐ CDPH-registered medical waste transporter

Company name _____

Company address _____

Company telephone number _____

Type of waste disposed: ☐ biohazardous/pathology ☐ pharmaceutical ☐ sharps

☐ U.S. Postal Service-approved mail back system

Company name _____

Company address _____

Company telephone number _____

Type of waste disposed: ☐ biohazardous/pathology ☐ pharmaceutical ☐ sharps

☐ **On-site treatment and disposal**

Regulated medical waste may be rendered non-infectious using CDPH-approved treatment methods or using sterilization. The practice must register with the local enforcement agency **unless** the treatment methodology is designated as "permit-exempt."

Type of waste treated and disposed: ☐ biohazardous/pathology ☐ sharps

Please check applicable box(es):

- ☐ Isolysers Sharps Management System for sharps disposal is used (state permit exempt).
After treatment by this method, sharps are (*check appropriate box*):

☐ destroyed ☐ stored in a manner that prevents public access until disposal

- ☐ Other CDPH-approved method is used (*permit required; describe method; see MWMA §118215 et seq for requirements*):

Disinfection with a disinfectant, followed by encasement in dental stone is NOT a legal method of medical waste treatment in California.

Back-up Plan: If the treatment system is not operating, the dental practice will utilize the medical waste transporter indicated above.

Closure Plan: The dental practice, upon closure or sale of the practice, will ensure containers used for medical waste treatment are properly disposed or sanitized.

Emergency Action Plan: This dental practice will develop this plan upon development of regulations by the state Department of Public Health.

☐ **Self-hauling/Materials of Trade**

Under the U.S. Department of Transportation materials of trade exemption regulation, the dental practice owner or designated staff may transport medical waste in their own vehicle to a permitted medical waste treatment facility, a transfer station, or other health care facility for the purpose of consolidation before treatment and disposal, without a permit or registration under the following conditions:

- Combination packaging must consist of one or more inner packagings, each of which may not contain more than 4 kg (8.8 lbs) or 4 L (1 gallon), and an outer packaging containing

not more than 16 kg (35.2 lbs) or 16 L (4.2 gallons). The entire package must be secured in the vehicle as to prevent shifting during the motor vehicle's operation.

- Hazard communication. The individual transporting the medical waste must be informed of its presence and of the requirements of this section.
- The individual transporting the medical waste shall provide a form to the receiving facility. The form shall contain:
 - The name of the person transporting the medical waste
 - The number of containers of medical waste transported
 - The date the medical waste was transported.

Type of waste disposed: ☐ biohazardous/pathology ☐ pharmaceutical ☐ sharps

IV. Special Storage Consideration for Regulated Medical Waste

A. Common Storage Facility *(check applicable box)*

- ☒ This office does not use a common storage facility for its medical waste.
- ☐ A common storage facility is used by this office and other dental and medical offices in this building.
 - ☐ The permit for this common storage facility is held by *(name, address and telephone number of dental or medical office, registered hazardous waste transporter, property owner, or property management firm)*:
 - ☐ This office holds the permit for a common medical waste storage facility. A separate Medical Waste Management Plan has been prepared for the facility. The permit, plan and a list of the small quantity waste generators who use the storage facility are filed at this dental practice. *(The list of small quantity generators includes their suite number, telephone number, and name of the contact person.)*

B. Accumulation/Interim Storage Area *(check applicable box)*

- ☐ This office does not use an accumulation/interim storage area for its medical waste.
- ☒ This office uses an area to accumulate and store medical waste containers prior to pick-up or transportation for disposal. The area is *(choose one)* ☐ locked ☐ under supervision or surveillance or otherwise secured to deny access to unauthorized individuals. The area has warning signs in English, "CAUTION—BIOHAZARDOUS WASTE STORAGE AREA—UNAUTHORIZED PERSONS KEEP OUT," and in Spanish, "CUIDADO—ZONA DE RESIDUOS—BIOLOGICOS." An outdoor enclosure or designated accumulation area is protected from animals and natural elements and will not provide a breeding place or a food source for insects or rodents.

V. Spills of Medical Waste

If biohazardous waste is dropped or spilled onto the floor or counter in the practice, trained personnel wearing personnel protective equipment will place waste in biohazardous container and will disinfect the area of the spill.

VII. Temporary Event Registration

When the dental practice/practice owner is to participate in a temporary event that results in the generation of medical waste (e.g., health fairs, veteran stand downs), the dental practice/practice owner will either (1) obtain documentation from the event sponsor that the sponsor has notified the local enforcement agency of the event, or (2) notify the local enforcement agency of intended participation in the event at least 72 hours before the event.

VIII. Prohibited Actions

Use of compactors is prohibited except as allowed in the Medical Waste Management Act.

Transportation of other generators' medical waste is prohibited except if this dental practice is registered as a waste transporter.

Use of trash chutes for medical waste is prohibited.

Removing waste from containers or biohazardous bags while in the facility is prohibited.

IX. Documentation

Shipping and tracking documentation and, if waste is treated on-site, a log of treatment and disposal are retained for a minimum of three years. Documents may be electronically archived. These documents are located:

Checklist for Medical Waste Disposal

Equipment

- x Appropriate bags for biohazardous waste and containers to hold the bags.
- x Appropriate container for pharmaceutical wastes.
- x FDA-approved sharps container.
- x If used, a CDPH-approved sharps treatment system.
- ☐ If used, a CDPH-approved mail-back system.

Employee Training Checklist

- x Informed of the person responsible for medical waste management in the office.
- x Instructed on labeling and use of containers for regulated medical waste.
- x Instructed that the term “sharps waste” includes needles, syringes, blades, and anesthetic carpules contaminated with blood or other bodily fluids.
- x Instructed that “pharmaceutical waste” does not include controlled substances.
- x Instructed that “biohazardous waste” includes disposable absorbent material that drips blood or saliva.
- x Instructed on how to clean up spills of biohazardous waste.
- x Instructed not to place recognizable human tissues into solid waste containers.
- x Instructed not to place extracted teeth with amalgam fillings, hazardous wastes, universal wastes, or recyclable metals into medical waste containers.
- x Informed on how the practice disposes and/or treats medical waste. Provide additional training as needed.

[Year]

[Practice Name]

[illegible]

PHARMACEUTICAL

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Medical Waste Management and Disposal Plan

Individual Training Documentation

California Northstate University College of Dental Medicine
9700 West Taron Drive, Elk Grove, CA

Name of Trainer: _____

Training Subject: Medical Waste Management and Disposal Plan

Training Materials Used: _____

Name of Employee: _____

Date of Hire/Assignment: _____

I, _____ [print employee name] hereby certify that I received training as described above.

I understand this training and agree to comply with the safety procedures for my work area.

 Employee Signature

 Date

Copy this blank page for each employee who will be trained. Make additional copies for future employees. Place a completed copy in employee personnel file or other appropriate employee file.