

# University General Catalog

## Academic Year 2024-2025

### Professional and Undergraduate Programs

College of Dental Medicine

College of Medicine

College of Pharmacy

College of Psychology

College of Graduate Studies

College of Health Sciences



CALIFORNIA  
NORTHSTATE  
UNIVERSITY

# 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, page 255, 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 agreement.

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](http://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:

1747 North Market Blvd., Suite 225

Sacramento, CA 95834

or

P.O. Box 980818

West Sacramento, CA 95798-0818

Website: [www.bppe.ca.gov](http://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 Dental Medicine**

- Doctor of Dental Medicine (DMD)

#### **College of Medicine**

- Doctor of Medicine (MD)

#### **College of Pharmacy**

- Doctor of Pharmacy (PharmD)

#### **Pharmaceutical Sciences**

- Master of Science in Pharmaceutical Sciences (MPS)



### **CNU Rancho Cordova Campus**

2910 Prospect Park Drive  
Rancho Cordova, CA 95670  
Tel: 916-686-7300

#### **College of Psychology**

- Doctor of Psychology (PsyD)

#### **College of Health Science**

- Bachelor of Science in Health Sciences (BS)

- Pre-Medical Post-Baccalaureate (non-degree)

#### **Healthcare Administration**

- Master of Healthcare Administration (MHA)

# ABOUT THE UNIVERSITY

California Northstate University (CNU) is a mission-drive, for-profit, and private institution which was founded in 2006 by a visionary group of pharmacists, physicians, and other healthcare professionals in Northern California who were concerned about the shortage of healthcare providers and the relative lack of educational opportunities for students in health sciences in the local area.

California Northstate University consists of six colleges, each offering unique programs of study at the following degree levels:

**College of Pharmacy (COP)**

Doctor of Pharmacy (PharmD)

**College of Medicine (COM)**

Doctor of Medicine (MD)

**College of Psychology (CPSY)**

Doctor of Psychology (PsyD)

**College of Graduate Studies (CGS)**

Master of Pharmaceutical Sciences (MPS)

Master of Healthcare Administration (MHA)

**College of Dental Medicine (CDM)**

Doctor of Dental Medicine (DMD)

**College of Health Sciences (CHS)**

Bachelor of Science in Health Science (BS)

Pre-Medical Post-Baccalaureate non-degree program

CNU established its first program, the College of Pharmacy (COP), in the fall of 2006 and graduated its first class in 2012. CNUCOP is based on the principles of educational excellence, evidence-based healthcare, and innovative pedagogies. Building on the success of the College of Pharmacy, the College of Medicine, offering the MD degree, accepted its first class in fall of 2015. CNU's MD program utilizes a unique integrated, system-based curriculum combined with longitudinal small group active-learning pedagogy that reinforces not only academics, but our values of service, scholarship, and social accountability. The strength of our curriculum is evident in our students routinely scoring in the top quartile of the United States Medical Licensing Examination and our high residency match rates.

An undergraduate Bachelor of Science in Health Sciences was added in 2015, fulfilling the institutional vision of undergraduate-to-professional graduate education focusing on healthcare and healthcare delivery. This unique program fully prepares graduates for doctoral programs in the scientific fields of Pharmacy, Medicine, Dentistry, and related medical programs. By completing the curriculum and embedded experiences, students can meet the requirements for admission to most health professions programs.

The PsyD program was developed in 2017 to further CNU's mission and vision by addressing the overwhelming need--in California and beyond--for mental health professionals. The PsyD program teaches science-based interventions to treat diverse and complex mental health issues and provides hands-on clinical experience for students to work in private practice and within multidisciplinary treatment teams.

In 2018 the College of Graduate Studies (CGS) began with the Master's in Pharmaceutical Sciences program (MPS). The establishment of a graduate, research-focused program in biomedical sciences created an opportunity for CNU to expand its range of scholarly activities, providing development opportunities for existing faculty from other colleges to contribute their expertise. The program further prepares a new workforce for the fast-evolving healthcare sector, specifically in the areas of pharmaceutical discovery and development. CGS expanded in 2020 with a Master's in Healthcare Administration (MHA) Presently, the Sacramento region is underserved in this area as no other comparable programs exist in an in-person modality and in-person and online hybrid program. Moreover, the MHA provides an additional inter-professional education opportunity for CNU students.

In 2019, CNU added a program in dental medicine (DMD) and enrolled its first class in January 2022. This program provides a venue for integrating oral health into human health science education and practice. Dental medicine assists the other health professional programs in developing oral health as integral to primary care medicine, pharmacy practice and behavioral health. In addition, it expands the university's capacity to pursue integrated research opportunities.

Finally, CNU is currently in the initial stages of developing a teaching hospital, which will be located in the Natomas Area of Sacramento. The hospital is designed as a 250-bed facility covering 475,000 square feet. The hospital will serve the Greater Sacramento community while training future generations of physicians and pharmacists and delivering state-of-the-art medical care. By utilizing a collaborative approach to health care and education, the teaching hospital will optimize patient care and improve health outcomes.

California Northstate is located in the metropolitan area of Sacramento, the state capital of California, with campuses in the Elk Grove, Natomas, and Rancho Cordova areas. The Doctor of Pharmacy, Doctor of Dental Medicine, Doctor of Medicine, and Master of Pharmaceutical Sciences programs are offered at the Elk Grove campus. The Doctor of Psychology, Master of

Healthcare Administration, Bachelor of Health Science, and Pre-Medical Post-Baccalaureate programs are offered at the Rancho Cordova campus. The hospital will be built in the Natomas area of Sacramento.

### **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.

## **CNU Degree Programs**

### **Pharmacy (PharmD)**

CIF Code: 51.2001

A program that prepares individuals for the independent or employed practice of preparing and dispensing drugs and medications in consultation with prescribing physicians and other health care professionals, and for managing pharmacy practices and counseling patients. Includes instruction in mathematics, physics, chemistry, biochemistry, anatomy, physiology, pharmacology, pharmaceutical chemistry, pharmacognosy, pharmacy practice, pharmacy administration, applicable regulations, and professional standards and ethics.

### **Dentistry (DMD)**

CIF Code: 51.0401

A program that prepares individuals for the independent professional practice of dentistry/dental medicine, encompassing the evaluation, diagnosis, prevention, and treatment of diseases, disorders, and conditions of the oral cavity, maxillofacial area, and adjacent structures and their impact on the human body and health. Includes instruction in the basic biomedical sciences, occlusion, dental health and prevention, oral pathology, cariology, operative dentistry, oral radiology, principles of the various dental specialties, pain management, oral medicine, clinic and health care management, patient counseling, and professional standards and ethics

### **Medicine (MD)**

CIF Code: 51.1201

A program that prepares individuals for the independent professional practice of medicine, involving the prevention, diagnosis, and treatment of illnesses, injuries, and other disorders of the human body. Includes instruction in the basic medical sciences, clinical medicine, examination and diagnosis, patient communications, medical ethics and law, professional standards, and rotations in specialties such as internal medicine, surgery, pediatrics, obstetrics and gynecology, orthopedics, neurology, ophthalmology, radiology, clinical pathology, anesthesiology, family medicine, and psychiatry.

### **Clinical Psychology (PsyD)**

CIF Code: 42.2801

A program that prepares individuals for the independent professional practice of clinical psychology, involving the analysis, diagnosis, and clinical treatment of psychological disorders and behavioral pathologies. Includes instruction in clinical assessment and diagnosis, personality appraisal, psychopathology, clinical psychopharmacology, behavior modification, therapeutic

intervention skills, patient interviewing, personalized and group therapy, child and adolescent therapy, cognitive and behavioral therapy, supervised clinical practice, ethical standards, and applicable regulations.

### **Pharmaceutical Sciences (MPS)**

CIF Code: 51.2010

A program that focuses on the biomedical sciences that underlie drug discovery & development and that prepares individuals for further study and/or careers in pharmaceutical science and research, pharmaceutical administration and biotechnology, drug manufacturing, regulatory affairs, and related fields. Includes instruction in biology, medicinal chemistry, biostatistics, pharmaceuticals, immunology, clinical biochemistry, pharmacology and toxicology, dosage formulation, manufacturing, quality assurance, and regulations.

### **Health/Health Care Administration/Management (MHA)**

CIF Code: 51.0701

A program that prepares individuals to develop, plan, and manage health care operations and services within health care facilities and across health care systems.

### **Health Professions and Related Clinical Sciences, Other (BS)**

CIF Code: 51.9999

Any instructional program in the health professions and related clinical sciences.

### **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.

California Northstate University encourages students to first 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, 1747 North Market Blvd, Suite 225, Sacramento, CA 95834, Tel: 916-574-8900, 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](http://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 first 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 <https://medicine.cnsu.edu/about/accreditation-licensing.php>.

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](http://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 first 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 first seek internal resolution to any conflict.

## **Commission on Dental Accreditation (CODA)**

California Northstate College of Dental Medicine was granted "Initial Accreditation" by the Commission on Dental Accreditation, an arm of the US Department of Education. In accordance with the Commission Policies, once a program is granted "Initial Accreditation" status, an additional accreditation site visit will be scheduled in the Fall of 2023. Full accreditation status is considered for fully operational programs after the first-class graduates. The Commission on Dental Accreditation can be contacted at (312) 440-4653 or at 211 East Chicago Avenue, Chicago, IL 60611. The Commission's web address is: <https://coda.ada.org/en>.

## **Complaints Related to CODA Accreditation 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.

California Northstate University College of Dental Medicine encourages students to first seek internal resolution to any conflict.

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# COLLEGE OF DENTAL MEDICINE

## Mission Statement

To advance the art and science of health through education, service, scholarship, personal wellness and social accountability.

## Educational Philosophy

The foundation of the College of Dental Medicine curriculum is that this is a humanistic environment in which a deep level of learning takes place, preparing students to be competent practitioners at graduation. Creating this environment requires a deep level of mutual respect between learners, staff, faculty and patients. Learning to contribute to this environment begins in the first week with a strong emphasis on respectful communication skills. Ethics and professionalism are reviewed, role-modelled, emphasized and reflected upon throughout the program, with weekly guided questions. Self-directed, lifelong learning is a strong focus, and the first-year core foundation is repeated weekly in Grand Rounds, which will inspire further questioning and inquiry.

Clinical care takes place in a comprehensive care clinical model, which focuses both on the patient and learner journeys. Learners will engage in the provision of care in Community Based Clinics, serving populations in need, in their final year of the program. This is a rich experience where all the competency skills are utilized in this service to the community. Graduates of the four-year program will be competent and independent practitioners who have all the skills to improve the health of the local communities.

Detailed course descriptions are accessible to students online and in the syllabi provided prior to the start of each course.

## Learning Outcomes

Learning Outcomes used in the development of curriculum material and the development of assessments are in part based on competency statements. The Program Competency Statements of the College of Dental Medicine are mapped to the CODA Standards, in the Curriculum Map, which is maintained as a “living document”. The Course Learning Outcomes (or “Objectives”) are posted at the top of each syllabus.

## College of Dental Medicine Program Competencies

The CDM faculty will certify student as ready for graduation who are able to perform:

## 1 Patient Centered Care

- 1.1 Delivers safe, effective compassionate and efficient patient centered care, within the scope of a general dentist, to a diverse patient pool.
- 1.2 Demonstrates the ability to manage patient healthcare needs using human, financial, technological, and physical resources.
- 1.3 Demonstrates prevention, intervention, and educational strategies for individuals and participation in activities to manage chronic disease and improve oral health and wellness.
- 1.4 Demonstrates technical and procedural skills that are safe and effective preserving and restoring hard and soft tissue to support health, function and esthetics.

## 2 Ethics and Professionalism

- 2.1 Demonstrates behaviors and values that are consistent with the trust given to the profession by patients, other healthcare providers, and society.
- 2.2 Demonstrates the ability to represent the patient's best interests in the delivery of oral health care.

## 3 Communication and Interpersonal Skills

- 3.1 Demonstrates the ability to educate patients through effectively communicating information and assessing learning.
- 3.2 Demonstrates patient interaction addressing the patient's concerns and desires, historical and social context, and clinical conditions in an empathetic and culturally aware fashion.
- 3.3 Communicates and collaborates with the interprofessional healthcare team to promote oral and systemic health.

## 4 Evidence Based Care

- 4.1 Integrate patient information, assessments, evidence-based scientific knowledge, and other factors to make and carry out appropriate care recommendations.

## 5 Critical Thinking

- 5.1 Demonstrates critical thinking and problem solving applying foundational sciences and the best available evidence to decision making.
- 5.2 Demonstrates the ability to assess and use outcomes information to improve performance in patient centered care.

## 6 Practice Management and Oral Health Delivery

6.1 Applies legal and regulatory concepts related to the provision of oral healthcare services.

6.2 Demonstrates the principles of practice management, systems-based practice, and interdisciplinary collaboration in providing patient care.

6.3 Demonstrates an understanding of evolving health care systems and structures.

### Admission to the DMD Program

The Admissions Policy for the Predoctoral Dental Education Program offered at CNUCDM is published on the CNU web site and in its catalogue.

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.

Mission of the ADMISSIONS COMMITTEE: To assure increased access to high-quality oral health care in the United States, the Admissions Committee will strive to increase the selection and enrollment of dental students who will be highly qualified, diverse, and sensitive to the oral health needs of the northern California population.

A Holistic Review looking into the applicant as a whole person including metrics, experiences and attributes will take place. CNUCDM strives to identify applicants whose personality is in alignment with the vision, mission and values of the university and to determine who is potentially suitable to represent CNU in the dental profession.

While grades and DAT scores are important, evaluation of motivation, communication skills, cultural competency, emotional maturity and not the least, ethical standards, are of equal importance. Each applicant will be evaluated on his/her own merit during the interview process. The applicant's personal "road traveled" will be explored for life experiences, potential for service to underserved communities, and other attributes that indicate a high level of likelihood of successful completion of the Dental Medicine program and contributing to the oral health needs of the communities they will serve.

## Requirements

1. According to the United States Department of Education guidelines, all applicants deemed eligible to be admitted as regular students into the College of Dental Medicine must be: a) Persons who have a high school diploma or its recognized equivalent, or Persons beyond the age of compulsory school attendance in the State of CA, i.e. at least 18 years of age and pass a test that demonstrates the student's ability to benefit (ATB) from the educational program in which the student is enrolled.
2. At a minimum, applicants must report both a science and a cumulative GPA over 2.80 (although 3.20 or higher will be generally competitively necessary) on a 4.00 scale and a plan leading to a bachelor's degree prior to matriculation. Minimum science and cumulative GPAs of 2.80 on a 4.00 scale are required to receive a supplemental application.
3. To be competitive, applicants should complete a bachelor's degree at an accredited North American college or university or equivalent foreign institution prior to matriculation. Applicants participating in special affiliated programs with the College, such as the Pre-Health Pathways program at CNU's College of Health Sciences, and other exceptions to this policy will be considered on an individual basis.
4. All prerequisite coursework taken from non-US institutions (including Canada) must be submitted the World Education Services (WES), Inc. for an evaluation of coursework. WES evaluations should be sent directly to [CDMAadmissions@cnsu.edu](mailto:CDMAadmissions@cnsu.edu).
5. Applicants must complete the following prerequisite courses: Required Courses (with required labs)
  - Human Anatomy 1 semester/ 1 quarter
  - Biology with lab 2 semesters/3 quarters
  - General Chemistry with lab 2 semesters/3 quarters
  - Organic Chemistry with lab 2 semesters/3 quarters
  - Physics 2 semesters/3 quarters
  - Biochemistry 1 semester/1 quarter
  - English 2 semesters/3 quarters

\*Highly recommended courses include but are not limited to: Statistics, Human Anatomy Lab, Microbiology, Physiology, Immunology, Social Sciences, Behavior Sciences and Foreign Languages.

6. Applicants should submit competitive scores on the Dental Aptitude Test (DAT). An Academic Average score of 18 or higher and a Reading Comprehension score of 18 or higher is desired. The DAT must have been taken no more than three years prior to application.
7. Three letters of recommendation are required from people who can speak to the applicant's character and life experience. Letters written by immediate family members will not be accepted. The Office of Admissions does not accept letters submitted directly by students nor their evaluators.
8. Application to CNU CDM should be submitted via AADSAS.

9. Applicants must participate in the CASPer test. The CASPer test evaluates applicants in ten key skills that have been associated with ability to succeed in an academic environment. Those are: collaboration, communication, motivation, problem solving, professionalism, equity, empathy, resilience, ethics and self-awareness.
10. Applicants must demonstrate a sincere understanding of, and interest in, the humanitarian ethos of health care and particularly dental medicine.
11. Applicants should reflect on people and service orientation through community service or extracurricular activities.
12. Applicants should reflect proper motivation for and commitment to health care as demonstrated by previous salaried work, volunteer work, or other life experiences.
13. Applicants must possess the oral and written communication skills necessary to interact with patients and colleagues.
14. Applicants must pass a criminal background check.
15. Following the principals of holistic review process, the admissions process will be taking into account a variety of factors, in addition to an applicant's academic standing, including but not limited to applicant's experiences, attributes as well as the value the applicant will contribute to learning, practice and teaching.

## Application Process

### Interview and Selection Process

To be considered for an interview, applicants must meet the admissions requirements listed previously. They must also submit all of the materials necessary to complete their file. Applications that do not meet minimum criteria for GPAs, DAT or CASPer scores are rejected. After the College's Admissions Committee receives the files of eligible applicants, they review the files to determine whether applicants merit an interview based on established criteria.

When applicants accept an interview, they are interviewed by an interview team consisting of at least one Admissions Committee member. Team members evaluate applicants based on a standardized form assessing whether the applicant is in alignment with the Mission and Vision of CDM. The Committee may recommend to admit, deny, or to place the applicant on the alternate list for admission. Recommendations are then forwarded to the Dean for final approval. The Dean along with the Associate Dean of Admissions, notify applicants of their admissions status on December 1st of the year prior to matriculation.

The interview process typically begins in August or September and ends in March or April.

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 reviews the ranking formula and makes adjustments as required.

The Dean of Admissions in consultation with the University's Director of Admissions set the policy for the admissions process within the guidelines of the University. There are a variety of options for other administration members and faculty members to participate in modification of the admissions criteria and procedures. The annual review meeting of the Admissions Committee is open to anyone offering input to the process (including students, faculty, administration, and staff).

Additionally, admissions criteria and procedures are agenda items at each annual faculty retreat, which affords all attendees the opportunity for constructive input. Anyone offering input or feedback on criteria and procedures is also invited to send comments to the Admissions Committee Chair at any time. This option is communicated regularly at faculty and staff meetings. [All changes and notifications are continuously updated as needed and posted to the ADEA web site and to the CNU College of Dental Medicine web site under Admissions.]

In general, students who do not meet the program's admission criteria are not admitted to the dental degree program. Some applicants who may be at the lower end of academic acceptability may be admitted if their life experience would enhance the diversity of the class. In such cases it would be essential to provide academic support in any identifiable areas of weakness. This support would be provided by a combination of basic sciences and dental faculty.

The CNUCDM Student Performance Committee refers data on student performance and attrition rates to the CNUCDM Admissions Committee. The Admissions Committee actively monitors student progress and correlates student performance with admissions criteria. As progress is evaluated and students with academic problems are identified, they are directed to appropriate support services for help. The Admissions Committee members assess whether admissions criteria need to be modified based on student performance and attrition rate data. The CNU Catalog states: "CNU 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, sex, sexual orientation, religion, national or ethnic origin, citizenship status, disability, status as a veteran, age, or marital status." As mentioned previously, attempts are made by the Dean and the Admissions Committee to identify and assist disadvantaged students and students from minority groups to fulfill the Admissions mission of increasing the selection and enrollment of dental students who will be highly qualified, diverse and sensitive to the oral health needs of the population of Northern California.

However, all students must meet the admissions criteria and be competitive within the application pool to qualify for admission. Policies that address students with disabilities who are protected under Section 504 of the Americans with Disabilities Act of 1990 are described in the Student Handbook.



## Technical Standards

Candidates for admission must also have abilities and skills in five areas: I) Observation; II) Communication; III) Motor; IV) Conceptual, Integrative, and Quantitative; and V) Behavioral and Social. Technological compensation can be made for some limitation in certain of these areas, but candidates should be able to perform in a reasonably independent manner (Exhibit 2-4 – Technical Standards).

- I. Observation: The candidate must be able to accurately make observations at a distance and close at hand. Observation necessitates the functional use of the sense of vision and somatic sensation and is enhanced by the functional use of all of the other senses.
- II. Communication: The candidate must be able to communicate effectively, efficiently, and sensitively in both oral and written form and be able to perceive nonverbal communication.
- III. Motor: The candidate must be able to coordinate both gross and fine muscular movements, maintain equilibrium, and have functional use of the senses of touch and vision. The candidate must possess sufficient postural control, neuromuscular control, and eye-to-hand coordination to perform profession-specific skills and tasks.
- IV. Conceptual, Integrative, and Quantitative Abilities: The candidate must be able to problem solve, measure, calculate, reason, analyze, record, and synthesize large amounts of information in a timely manner. The candidate must be able to comprehend three-dimensional relationships and understand spatial relationships.
- V. Behavioral and Social Attributes: The candidate must possess the emotional health required for full utilization of his/her intellectual abilities, the exercise of good judgment, the consistent, prompt completion of all responsibilities, and the development of mature, sensitive, and effective relationships. The candidate must be able to tolerate physically, mentally, and emotionally taxing workloads and to function effectively under stress. The candidate must be able to adapt to changing environments, to display flexibility, and to learn to function in the face of uncertainties. Compassion, integrity, concern for others, effective interpersonal skills, willingness, and ability to function as an effective team player, and interest and motivation to learn are all personal qualities required during the educational process.

## Transferring from Other Institutions

CNUCDM does not admit transfer students from other dental programs. In addition, the Doctor of Dental Medicine program does not have any articulation or transfer agreements with any other college or university at this time.

## International Applicants

CNUCDM accepts applications from graduates of foreign institutions provided they hold either US citizenship or US Permanent Resident status at the time of application. CNUCDM accepts applications from international students provided they meet the same prerequisite requirements as U.S applicants. All prerequisite coursework taken from non- US institutions (including Canada) must be submitted to the World Education Services (WES), Inc. or Education Credential Evaluators (ECE) for an evaluation of coursework. WES/ECE evaluations should be sent directly to CDM.Admissions. CNUCDM does not accept students with advanced standing from international programs.

Applicants who receive their degree from a non-English speaking country or have not completed at least two years and at least 44 semester units (61 quarter units) at a US college or university may be required to submit scores from the TOEFL Examination. 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).

## 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 acknowledges 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 encouraged to visit the University and College website at [www.cnsu.edu](http://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 you have 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.

## Tuition & Fees

All tuition, fees, expenses, and policies listed in this publication are effective as of January 2024 and are subject to change without notice by California Northstate University. In the tables below, D1, D2, D3, D4 indicate the student's year in the program (e.g. D1 is a first-year student; D2 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 ten (10) 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 240 semester credit hours. Out of state 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.

### Cost of Attendance and Tuition and Fees for Incoming Students

The cost of attendance is an estimate of expected educational expenses for a period of enrollment. These educational expenses are calculated as described below and apply to all students enrolled in the Doctor of Dental Medicine program at California Northstate University:

#### Doctor of Dental Medicine - Tuition & Fees per Year for 2024-2028

Tuition & Fees	Year 1 - DM1	Year 2 - DM2	Year 3 - DM3	Year 4 - DM4
Tuition	\$86,304	\$90,620	\$95,151	\$99,909
Student Association/Support Fee	\$500	\$500	\$500	\$500
Student Disability/liability Coverage Fee	\$54	\$54	\$54	\$54
Technology Fee	\$700	\$700	\$700	\$700
Health Insurance (pass through fee) <sup>1</sup>	\$3,529	\$3,529	\$3,529	\$3,529
Background Check Fee	\$0	\$0	\$75	\$0
CPR Fee	\$75	\$0	\$75	\$0
Student Tuition Recovery Fee (STRF) <sup>6</sup>	\$0	\$0	\$0	\$0
Dental Kit & Education Software (pass through fee) <sup>2</sup>	\$8,500	\$5,475	\$5,152	\$4,652
Books	\$840	\$1,383	\$202	\$0
Use Fee (rental fee for instruments & expendable supplies & Sim Lab, software, etc.)	\$8,906	\$9,375	\$10,760	\$14,100
Optical Loupes (pass through fee)	\$1,500	\$0	\$0	\$0
Orientation Fee & White Coat Ceremony	\$150	\$0	\$0	\$0
Graduation Fee	\$0	\$0	\$0	\$300
<b>Total Estimated Tuition &amp; Fees per Year</b>	<b>\$111,058</b>	<b>\$111,636</b>	<b>\$116,198</b>	<b>\$123,744</b>

**Total Estimated Tuition & Fees for entire 4-year Dental Medicine program \$462,636.**

Estimated Other Optional Educational Related Costs <sup>3</sup>	Year 1 - DM1	Year 2 - DM2	Year 3 - DM3	Year 4 - DM4
Room and Board <sup>4</sup> (based on 12 months)	\$28,152	\$28,152	\$28,152	\$28,152
Transportation <sup>4</sup> (based on 12 months)	\$5,362	\$5,362	\$5,362	\$5,362
Laptop	\$1,100	\$0	\$0	\$0
<b>Total Estimated Cost per Year<sup>5</sup></b>	<b>\$145,672</b>	<b>\$145,150</b>	<b>\$149,712</b>	<b>\$157,258</b>

<sup>1</sup> Estimated and will vary based on number of insured

<sup>2</sup> Estimated amounts

<sup>3</sup> Costs and expenses a student may incur as part of the participation in the applicable year of the Dental Medicine program, whether or not paid directly to CNUCDM. These expenses include estimated out-of-pocket cost of living expenses for the year.

<sup>4</sup> Estimated amount of student's individual housing, transportation, and food costs, not operated or charged by CNUCDM.

<sup>5</sup> Includes tuition, fees, and other estimated educationally related costs.

<sup>6</sup> Effective April 1, 2024, the STRF assessment rate will change from two dollars and fifty cents (\$2.50) per one thousand dollars (\$1,000) of institutional charges to zero dollar (\$0.00) per one thousand dollars (\$1,000) of institutional charges.

## Cost of Attendance and Tuition and Fees for Continuing Students

The cost of attendance is an estimate of expected educational expenses for a period of enrollment. These educational expenses are calculated as described below and apply to all students enrolled in the Doctor of Dental Medicine program at California Northstate University:

### Doctor of Dental Medicine - Tuition & Fees per Class for 2024-2025

Tuition & Fees	Year 2 - DM2 Class of 2027	Year 3 - DM3 Class of 2026	Year 4 - DM4 Class of 2025
Tuition	\$86,304	\$86,304	\$86,304
Student Association/Support Fee	\$500	\$500	\$500
Student Disability/liability Coverage Fee	\$54	\$54	\$54
Technology Fee	\$700	\$700	\$700
Health Insurance (pass through fee) <sup>1</sup>	\$3,529	\$3,529	\$3,529
Background Check Fee	\$0	\$75	\$0
CPR Fee	\$0	\$75	\$0
Student Tuition Recovery Fee (STRF) <sup>6</sup>	\$0	\$0	\$0
Dental Kit & Education Software (pass through fee) <sup>2</sup>	\$6,575	\$5,652	\$2,732
Books	\$0	\$0	\$0
Use Fee (rental fee for instruments & expendable supplies & Sim Lab, software, etc.)	\$9,375	\$10,760	\$14,100
Optical Loupes (pass through fee)	\$0	\$0	\$0
Orientation Fee & White Coat Ceremony	\$0	\$0	\$0
Graduation Fee	\$0	\$0	\$300
<b>Total Estimated Tuition &amp; Fees per Year</b>	<b>\$107,037</b>	<b>\$107,649</b>	<b>\$108,219</b>

Estimated Other Optional Educational Related Costs <sup>3</sup>	Year 2 - DM2 Class of 2027	Year 3 - DM3 Class of 2026	Year 4 - DM4 Class of 2025
Room and Board <sup>4</sup> (based on 12 months)	\$28,152	\$28,152	\$28,152
Transportation <sup>4</sup> (based on 12 months)	\$5,362	\$5,362	\$5,362
Laptop	\$0	\$0	\$0
<b>Total Estimated Cost per Year<sup>5</sup></b>	<b>\$140,551</b>	<b>\$141,163</b>	<b>\$141,733</b>

<sup>1</sup> Estimated and will vary based on number of insured

<sup>2</sup> Estimated amounts

<sup>3</sup> Costs and expenses a student may incur as part of the participation in the applicable year of the Dental Medicine program, whether or not paid directly to CNUCDM. These expenses include estimated out-of-pocket cost of living expenses for the year.

<sup>4</sup> Estimated amount of student's individual housing, transportation, and food costs, not operated or charged by CNUCDM.

<sup>5</sup> Includes tuition, fees, and other estimated educationally related costs.

<sup>6</sup> Effective April 1, 2024, the STRF assessment rate will change from two dollars and fifty cents (\$2.50) per one thousand dollars (\$1,000) of institutional charges to zero dollar (\$0.00) per one thousand dollars (\$1,000) of institutional charges.

## 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.
  - b. 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 up dates, 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 term 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 incompliant with institutional requirements or who have a hold on their student account at the time of registration are required to satisfy the requirement.

### **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 is required. Complete registration instructions, requirements and all relevant forms for licensure can be found at the Dental Board of California website: [https://www.dbc.ca.gov/applicants/become\\_licensed\\_dds.shtml](https://www.dbc.ca.gov/applicants/become_licensed_dds.shtml)

### **Licensure by Clinical Exam**

Dental Board (Board) of California for licensure after successful completion of the WREB examination eligibility requirements:

Be at least 18 years of age.

Provide satisfactory evidence of having graduated from a dental school approved by the Board or Commission on Dental Accreditation of the American Dental Association.

Provide satisfactory evidence of having passed the National Board Written Examinations.

Provide satisfactory evidence of having passed, within the five years prior to the date of submitting the license application, a clinical and written examination that is administered by the Western Regional Examining Board (WREB).

To satisfy the clinical and written examination requirement using the WREB examination, an applicant must take and pass the three required sections\* of the WREB examination as follows: for a license. The

WREB Dental examination consists of three required sections and two elective sections. The three required sections are:

- Comprehensive Treatment Planning (CTP), a written, computer-based authentic simulated clinical examination (ASCE)
- Operative, a clinical section; and
- Endodontics, also a clinical section.

Furnish a full set of classifiable fingerprints on fingerprint cards provided by the Board or electronically through a Live Scan service (only available in California).

Successfully completed the Law and Ethics examination.

**Dental Board (Board) of California for licensure after successful completion of the ADEX examination eligibility requirements:**

1. Be at least 18 years of age.
2. Provide satisfactory evidence of having graduated from a dental school approved by the Board or Commission on Dental Accreditation of the American Dental Association.
3. Provide satisfactory evidence of having passed the National Board Written Examinations. Original score card is required; photocopies are not acceptable.
4. Provide satisfactory evidence of having passed the following sections of the ADEX examination:
5. Diagnostic Skills Examination/Objective Structured Clinical Examination (DSE OSCE) (computer based)
6. Prosthodontic (manikin based)
7. Endodontic (manikin based)
8. Restorative (live patient or manikin based using CompeDont tooth)
9. Periodontal Scaling (live patient, or manikin based, or DSE OSCE)
10. Provide classifiable sets of fingerprints on fingerprint cards provided by the Board or on Standard FBI fingerprint cards.
11. Provide satisfactory evidence of having passed the California Restorative Technique (RT) examination if graduated from a recognized non-accredited dental school.
12. Successfully complete the Law and Ethics examination.

**Licensure by Residency**

Application for Licensure Based on Completion of General Practice Residency or Advanced Education in General Dentistry Program eligibility requirements:

1. Be at least 18 years of age
2. Provide satisfactory evidence of having graduated from a dental school approved by the Board or Commission on Dental Accreditation of the American Dental Association (CODA).

3. Provide satisfactory evidence of having passed the National Board Written Examinations. An original score card is required; photocopies are not acceptable.
4. Satisfactory evidence of having completed a clinically based advanced education program in general dentistry or an advanced education program in general practice residency that is, at minimum, one year in duration and is accredited by either CODA or a national accrediting body approved by the Board.
5. Completion of the program shall be within two years prior to the date of their application for a license under this section.
6. Provide a letter from WREB stating that the applicant has not failed the WREB examination within the last (5) years.
7. Provide satisfactory evidence of not failing the ADEX examination after November 15, 2019.
8. Provide classifiable sets of fingerprints on fingerprint cards provided by the Board or on standard FBI fingerprint cards.
9. Successfully completed the Law and Ethics examination.

### Address Where Instruction Will Be Provided

In-person class instruction sessions are conducted at the University campus located at 2200 X Street, Sacramento California, 95818. Occasionally 9650 West Taron Drive, Elk Grove, California 95757, may be used for instruction purposes. Clinical training rotations and service-learning activities are conducted at 2201 Broadway St, Sacramento, California, 95818 and 2400 Maritime Way, Elk Grove, CA 95757. Additional rotations will take place at assigned professional clinical locations and community sites as established by agreement among the College, the professional preceptor or community partner, and the student.

### Instruction/Course Delivery

A continuous series of didactic, small group learning, laboratory and clinical courses in human systems, odontology, oral and maxillofacial studies, and behavioral and social sciences.

### Policy on Stress & Fatigue Management

#### **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 Advisor, who, in turn, should discuss the possible reasons and opportunities for support.

The Advisor may recommend that the student meets with the Associate Dean 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 from the Student Performance Committee.

### **Student Responsibility**

Students who perceive they are manifesting excess fatigue and/or stress have the professional responsibility to immediately notify their attending faculty and Associate Dean of Student Affairs and Admission 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 Associate Dean of Student Affairs and Admission.

### **Student Mistreatment Policy**

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 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.

### **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 Advisor, Team Group Leaders, the Associate Dean of Student Affairs and Admissions, 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 Associate Dean of Student Affairs or Vice President of
- Institutional Effectiveness and Accreditation.
- 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 Associate Dean of Student Affairs and or Title IX Director. Alleged retaliation will be subject to investigation and may result in disciplinary action up to and including termination or expulsion.

## Academic Policies and Procedures

### Academic Calendar

The Academic Calendar is posted at the end of this document. Students will be engaged in a 172-week curriculum, or its academic equivalent, culminating in a DMD degree.

### Credit Hour Policy

For each course, the following credit hour assignments are used:

- 1 credit hour for every 15 lecture hours.
- 1 credit hour for every 15 simulation laboratory hours.
- 1 credit hour for every 30 clinical or clinical rotation hours.

### Grading Convention

H =	Honors	96-100%
P =	Pass	75 - < 96%
Y =	No Pass, Not Yet remediated	< 75%
F =	Fail	<75%
I =	Incomplete Provisional Grade	N/A
W =	Official Course Withdrawal	N/A

Each course is graded independently; there is no cumulative grading. Utilizing a competency-based grading system, all students must reach a threshold for clinical competency in knowledge and skill set at 75%. A score of 75% represents a passing grade. Structured remediation activities for each didactic course will ensure a higher level of knowledge for the cohort of students earning a Y, scoring, below 75%. Students earning below 75% post remediation receive an F requiring repeat of the course or further academic action. Students earning 96-100% will earn Honors. Clinical courses will be graded Pass/Fail. An academic warning is assigned in cases where a student has failed any mid-term or final exam. The academic warning is removed after the student passes that exam.

### Narrative

Where possible (e.g. small group activities), all grades should be accompanied by a narrative which is reviewed by the Student Performance Committee, but not forwarded to the Registrar's Office.

## Grade Appeal

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 may file an appeal if there is disagreement with a final course grade, using the Course Grade Appeal form. The steps are as follows:**

1. Within 3 business days of the grade being posted in Canvas, the student must submit a Course Grade Appeal form, with sections I and II completed, to the Associate Dean for Academic Affairs.
2. Within 5 business days, the Associate Dean for Academic Affairs will review the appeal and will forward this to the Student Performance Committee. The Student Performance Committee will complete section III of the Course Grade Appeal form.
3. If the appeal is approved, the Course Coordinator will forward one copy of the completed Course Grade Appeal form to the student, and a second copy to the Registrar's Office, accompanied by a completed Grade Change form.
4. If the appeal is denied and the student does not appeal the outcome, the process ends.
5. If the appeal is denied by the Student Performance Committee, and the student wishes to appeal this result, within 3 business days the student must complete section IV of the form and submit this to the Dean.
6. The Dean will render a decision within 5 business days of receipt of the formal appeal. The final Course Grade Appeal form will be submitted to the Registrar's Office.

## **Graduation Requirements**

Students at CNUCDM are approved to receive the Doctor of Dental Medicine degree by CDM Faculty and the Board of Trustees (BOT). Failure to meet these requirements will result in a review by the Student Performance Committee. Students must meet the following requirements:

1. Maximum of six years to complete the DMD is allowed without extenuating circumstances based upon the competency assessment model of clinical education
2. 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.
3. Students must pass the INBDE Mock examination prior to graduating.
4. Students take the Mock ADEX clinical exam in their final year. They are not required to pass the state sanctioned licensing examination as this is based upon residency and career plans.
5. Students must attain the knowledge and skills, and develop capacity and behaviors required of a competent general dentist, as defined in the CDM documents.
6. Students must attain a level of clinical judgment which warrants entrustment by the faculty as required for entry to residency or practice.
7. Students must demonstrate a sense of responsibility and social accountability to patients and the community.
8. Students must comply with the College's standards of conduct, professionalism, and academic integrity.
9. 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.
10. All academic requirements must be completed at least 10 days before the date of graduation. Failure to comply may lead to delayed graduation.
11. Only students in good academic standing are eligible for graduation. Students must have satisfied all conditions for resolution of probation before graduation.

## **Catalog Rights**

CNU CDM occasionally modifies graduation requirements. If the student has been in continuous attendance, they may choose to meet the CNU CDM campus graduation requirements in the CNU CDM general catalog that was in effect in any of the three following instances:

1. At the time you began continuous attendance at CNU CDM, or
2. At the time you transferred to CNU CDM, or
3. At the time you graduate from CNU CDM.

By maintaining continuous attendance and selecting option (1) or (2), a student can be assured that their CNU CDM graduation requirements will not change. A student having the right to choose one of these options is called “catalog rights.”

## **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.

An 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 Associate Dean of Student Affairs and Admission.

## **Exams**

The leadership team at CNUCDM, the staff and all faculty are strongly supportive of students completing their course work in the time allocated and graduating on time. The Office of Student Affairs has an open-door policy and is the umbrella for mentorship: Learners will be assigned Advisors throughout the program who will closely track progression.

### **1. Midterms and Finals Assessments**

Midterm and Final assessments dates are set in advance of the course starting. These dates must not be moved without the advance and formal approval of the Associate Dean of Academic Affairs. These exams contribute to the final course grades, as outlined by the Course Director in the individual Course Syllabus (see Canvas).

### **2. Daily Feedback and Formative Assessments**

These assessments are collected daily in some cases, so that faculty can track the progress of students. Where learners reach a threshold of scores on daily assessments, course director will be in contact with the learner to evaluate the need for additional resources.

### **3. Entrustable Professional Activities (EPAs) and Competency Assessments (CEs)**

These assessments provide the benchmarks towards competency and graduation. Failure to challenge and pass these assessments may result in a delay to graduation, or dismissal. EPAs must show progression toward independence. Any Competency Exams must be taken prior to Graduation. Students must meet the clinical prerequisites and review their progress with their clinical mentor (“Team Lead”). These assessments are listed in your clinical syllabi.

## **Integrated National Board of Dentistry Examination (INBDE)**

The mock INBDE must be taken and passed on the designated date.

These are important national examinations, and CDM is committed to taking steps to encourage all learners to pass and excel in these national examinations. Online resources and review of material will be provided to assist the learners.

## **Mock WREB or NERB Examinations**

Mock ADEX examinations will be provided for learners in their fourth year. Students can only challenge the mock examinations at the scheduled time. CDM is committed to assist students who would like to challenge ADEX examinations, and the current plan is to provide these examinations on site at the CDM clinics.

## **Academic Progression Policy**

Academic Progression of each student is reviewed three times each academic year by the Student Performance Committee. Information is obtained from assessments, completion of course work, and any applicable professionalism reports.

## **Consequences of Fail Grades and Fail**

### **Remediations:**

1. Any course failed with a score of <75% must be remediated; until the remediation is successfully assigned, the student is assigned a grade of “Y”.
2. If the remediation is passed, with a 75% or greater score, the student is assigned a “P” grade.
3. If the remediation is failed, a grade of “F” is assigned, and the student progression will need to be evaluated by the Student Performance Committee (SPC) who will decide if the student will be permitted to re-take the academic year.
4. If the student fails more than one course in an academic year, and fails at least one of the remediation examinations, the Student Performance Committee will decide if the student will be dismissed.
5. There is a limit on the length of the program of 6 years.
6. Students receiving a professional misconduct report will not receive an honors grade.

### **Repeating a Course or Courses**

The SPC may determine that a student must repeat a year in the following circumstances:

Multiple failed courses, Failed remediation, & Professionalism misconduct.

## **Student Performance Committee (SPC)**

The purpose of Student Performance Committee is to review the academic performance of students in the California Northstate College of Dental Medicine and to keep the students informed of their progress. This committee will make the final decision on academic probation, course repetition, and academic year repetition. There will be separate Student Performance Committees (SPC) for each graduating class, SPC1-

4. Each Committee consists of:

Chair: Voted by the members of the Committee Members: DS1-DS4 Course Directors; Representatives, one from each academic year. Non- Voting: Associate Deans for Clinical Affairs and Academic Affairs  
Staff support is provided by the Director of Curriculum Instruction and Assessment.

Quorum: A quorum is three Course Directors or their alternates.

SPC meetings will take place immediately following finals examinations, three times per academic year.  
The performance of all students for that academic year will be reviewed at each meeting.

### **Assignment of Academic Standing by the SPC Academic Warning**

Students will receive an academic warning if they receive a failing grade in any course prior to remediation. Academic Warning will be removed once the student successfully completes the course remediation.

### **Academic Probation**

#### **A student may be placed on academic probation if:**

- A student achieves a grade of less than 75%, and the student subsequently receives a score of less than 75% on their remediation examination and is assigned an F grade.
- A student fails to complete a course.
- A student receives a single egregious, or multiple less serious, professionalism misconduct report/s.

Academic probation may be proposed by the Associate Dean for Student Affairs and Admissions. If there is a serious professionalism issue, this may be by emergency meeting depending on the level of misconduct.

Appeal against Academic Probation can be made using the Complaint and Grievance process. Academic Probation may result in the need for a student to retake courses and/or to extend the length of time they are in the DMD program.

### **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 Performance Committee where several options will be addressed, including the possibility of dismissal from the College of Dental Medicine.

### **Professional Misconduct**

A student who has been identified as potentially causing harm to a patient, themselves or others, may be placed on immediate clinic and class suspension: This temporary decision is made by the Associate Dean for Student Affairs and Admissions, pending review by the SPC. The Dean or their designee will determine the remediation plan for a student who has received a professionalism misconduct report.

## **Dismissal**

After careful and holistic review of the student, where the final decision has been made to dismiss a student a notification of dismissal from the Chair of the relevant SPC will be sent to the student and copied to the Dean. The SPC may determine that a student must be dismissed from the program for reasons that include:

- A significant and egregious professional lapse
- Multiple instances of less serious, but repeated professional lapses
- The total length of the program extending to more than 6 years
- Failing to meet any terms of remediation or academic probation
- Failing the same course and associated remediations twice.
- Failing to attend classes/clinics without an approved leave of absence.

## **Appeal of Dismissal**

A dismissal can only be appealed one (1) time. Students who have been dismissed from the college may appeal the decision with the Dean of the College within ten (10) business days of the notification. The Dean of the College will render a decision in writing within three (3) business days of the receipt of the formal appeal. The Dean's decision is final.

## **Attendance Policy**

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, or Associate Dean 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.

## **Excused Absence Policy**

The College of Dental Medicine expects students to attend and participate in all classes, simulation and clinical sessions.

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.

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.



To protect confidentiality of students, all formally excused absence requests must be initiated in writing and submitted through the Office of Student Affairs. To avoid chronic absenteeism, a maximum of 4 excused absence events may be granted to a student per semester/term. An excused absence cannot be granted for a period equal to or greater than 5 instructional 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 Student Affairs.

Special circumstances may be eligible for an excused absence but must be approved by the Associate Dean of Student Affairs and Admissions at their discretion. Please refer to the Absence Form and Policy for instructions.

Unexcused absences may result in a Professional Concern report and can impact academic progress. Requests for absences from clinical activities must comply with the excused absences limitations for each clerkship or clinical rotation.

### **Professional Meetings**

The 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 Associate Dean of Student Affairs and Admissions. Any student on academic probation will not be allowed to attend.

### **Leave of Absence**

CNUCDM grants approved leaves of absence (LOA) to dental students for academic 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 Advisor in addition to the Associate Dean of Student Affairs and Admissions 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 Advisor and also immediately contact the appropriate course director(s) or Associate Dean of Student Affairs and Admissions. After consultation with the Advisor, an official LOA request must be submitted that specifically states the reason for the request prior to being submitted to the Associate Dean of Student Affairs and Admissions. The Associate Dean of Student Affairs and Admissions will review the academic standing of the student in determining whether a LOA will be granted. The LOA request must also be signed by the Manager of Financial Aid and Business Office prior being submitted to the Office of the Registrar. Leave of Absences are only official until after being processed by the Registrar.

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 Associate Dean of Student Affairs and Admissions 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. The Leave of Absence Form can be found on CNU's website.

### **Return from Leave of Absence**

A student may submit an Intent to Return if they have been on Leave of Absence (LOA) 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 Associate Dean of Student Affairs and Admissions 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.

## **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 CNUCDM, 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, the Dean, and Office of the Registrar.

A student who officially withdraws from the University/College is able to apply for readmission.

## **Readmission to the College/University**

If a student has failed to return from leave of absences, dismissed, or 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/Grievance Policies. 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 learners 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 appropriate form.

### **Academic Grievance**

To file an academic grievance, follow the steps outlined in the Complaint and Grievance Policy.

### **Non-Academic Grievance**

The Associate 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 Associate Dean of Student Affairs and Admissions’ office. All aspects of student complaints shall be treated as confidential.

### **Purpose**

The purpose of this policy is to establish a non-academic student complaint/grievance procedure.

## **Scope/Coverage**

This policy applies to all current students of California Northstate University College of Dental Medicine.

## **Policy Statement**

California Northstate University College of Dental Medicine is committed to a policy of fair treatment of its students in their relationships with the administration, faculty, staff and fellow students.

## **Procedure**

1. The student shall file a written complaint using the Student Complaint/Grievance Form within fourteen (14) days of the occurrence.
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 and Admissions will handle the complaint in accordance with the policies of the California Northstate University College of Dental 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 and Admissions within fifteen (15) days of receipt of the complaint, excluding holidays/university breaks.
5. If the complaint relates to the Associate Dean of Student Affairs and Admissions, the matter will be handled by the Dean following the same procedure.
6. Students may appeal decisions by filing an appeal with the Associate Dean of Student Affairs and Admissions within five (5) days of receipt of written recommendation provided by the Associate Dean of Student Affairs and Admissions.
7. In the case of an appeal, the matter will be referred to an ad hoc committee, formed on a case-by-case basis, and appointed by the Associate Dean of Student Affairs and Admissions. The committee will be composed of 3- 5 CNU faculty and staff, one of whom must have legal expertise. Investigations will be completed within fifteen (15) business days from the formation of the ad hoc committee.
8. At the conclusion of the investigation, a report shall be provided to the Associate Dean of Student Affairs and Admissions stating the findings and Recommendations.
9. The appeal will be answered in writing by the Associate Dean of Student Affairs and Admissions within seven (7) business days from the conclusion of the investigation.
10. Students may appeal decisions of the ad hoc committee by filing an appeal with the Dean within five (5) days of receipt of written recommendation provided by the Associate of Student Affairs and Admissions.
11. The Dean will provide a written final decision to the complainant within fifteen (15) business days from the receipt of the request. 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.

### **Student Grievance to the Commission on Dental Accreditation**

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.

### **CDM Course Descriptions**

#### **Behavioral and Social Sciences (BSS) BSS 501 Orientation (1 cr)**

In this course students will be introduced to CNU and CDM Student Services. Areas covered include Information Technology (IT and LMS), Registrar's Office (FERPA and HIPAA), Business Office (financial responsibility, student health insurance), library and facilities, career overview (Health Services Collegiate Programs, job pathways), Mental Health Services, overview of the CDM Student Handbook (policies and procedures), Honor Code review, mandatory training (Alcohol, Drug and Sexual Violence Prevention), curriculum overview and preview of dental organizations.

#### **BSS 511 Managing Student Life (1.5 cr)**

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 well-being.

#### **BSS 521 Introduction to Health Systems (1.5cr)**

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 the direction that dental care and dental practice is likely to take in the next several decades.

#### **BSS 633 Foundations of Ethics and Professionalism (1.5 cr)**

Foundations of ethics will introduce concepts of ethical decision making and review laws, regulations and standards that affect decision-making in oral health care.

#### **BSS 701 Dental Public Health (2 cr)**

This course continues the fundamentals of public health dentistry and the importance of dentistry in the community. In this course students will further develop their understanding of community dentistry by engaging with concepts of Dental Public Health (DPH) including social determinants of health, epidemiology and research design in DPH, oral health education and the population, and DPH policy and advocacy. Students will also be introduced and orientated to the Community Rotations Program during this course.

#### **BSS 721 Practice Management 1 (2 cr)**

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.

### **BSS 822 Practice Management 2 (2 cr)**

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.

### **BSS 861 Clinical Clerkship: Community-Based Education 1 (4 cr)**

Affiliated health systems-based practices will accept CNU dental students into their care teams where senior students will provide clinical care under the supervision of Volunteer Community-Based Faculty in those sites. 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 interprofessional care team.

### **BSS 862 Clinical Clerkship: Community-Based Education 2 (6.5 cr)**

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 communities and clinical care entities and provide a reflective essay on their community care experience.

### **BSS 871 Dental Public Health Practicum (2 cr)**

In this project-based course, students will apply foundational dental public health concepts to develop, implement, and evaluate a dental health program in a community setting. By the end of this course, students will have gained practical experience in addressing oral health disparities and inequities in access to care.

### **BSS 872 Senior Elective Clinical Clerkship (2 cr)**

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).

### **Human Systems (HS) HS 501 Foundations of Medical Science (1.5 cr)**

Foundation of medical sciences is an introductory course that provides students with essential foundational knowledge in multiple disciplines including cell biology, biochemistry and epidemiology. Upon completion, all students will have a robust basic science knowledge essential for success in subsequent courses.

### **HS 511 Student Portfolio (1 cr)**

Students will engage in guided reflections: noticing, interpreting, responding, and reflecting, and will learn to improve decision-making skills and develop as clinicians. In the Fall trimester of the first year, students receive a rationale for this process, as well as guidance in the portfolio process (in the course “BSS 511- Managing Student Life”). At the end of each trimester, students will provide an overall reflection on the trimester and will set goals for the next trimester.

### **HS 512 Student Portfolio (1 cr)**

Students will engage in guided reflections: noticing, interpreting, responding, and reflecting, and will learn to improve decision-making skills and develop as clinicians. At the end of each trimester, students will provide an overall reflection on the trimester and will set goals for the next trimester. This course will encourage and

support the development of ethics and professionalism, self-reflection and self-assessment, and concrete evidence of achievement of benchmarks towards competency.

### **HS 513 Student Portfolio (1 cr)**

Students will engage in guided reflections: noticing, interpreting, responding, and reflecting, and will learn to improve decision-making skills and develop as clinicians. At the end of each trimester, students will provide an overall reflection on the trimester and will set goals for the next trimester. This course will encourage and support the development of ethics and professionalism, self-reflection and self-assessment, and concrete evidence of achievement of benchmarks towards competency.

### **HS 521 Grand Rounds (1 cr)**

This course will provide students with high-level review of basic sciences and didactic course materials they have been exposed to previously in correlation with real-life scenarios and clinical application of those concepts. This course includes case presentations by faculty, guest speakers and students with active student and faculty engagement in each session.

### **HS 522 Grand Rounds (1 cr)**

This course will provide students with high-level review of basic sciences and didactic course materials they have been exposed to previously in correlation with real-life scenarios and clinical application of those concepts. This course includes case presentations by faculty, guest speakers and students with active student and faculty engagement in each session.

### **HS 523 Grand Rounds (1 cr)**

This course will provide students with high-level review of basic sciences and didactic course materials they have been exposed to previously in correlation with real-life scenarios and clinical application of those concepts. This course includes case presentations by faculty, guest speakers and students with active student and faculty engagement in each session.

### **HS 532 Evidenced Based Dentistry (2 cr)**

This course introduces students to the fundamental concepts and skills needed to interpret and critique professional literature. Study areas include types of research, research methods and design, and statistical analysis. The course includes a review of evidence-based practices that will improve clinical decision making in comprehensive patient care and will provide core skills in critical thinking, problem solving, scientific inquiry and research methodology.

### **HS 551 Introduction to Oral Pathology (2 cr)**

This introductory course will build on prior knowledge of head and neck screenings. Students will learn to recognize normal, variations of normal, and pathological changes in soft and hard tissues of the orofacial complex. Students will also be introduced to the process of formulating differential diagnoses. There will be a review of the ADA Guidelines on the need for and timing of biopsies. The referral process will be reviewed, and students will learn the skills of clear referral writing.

### **HS 582 Pharmacology 1 (3 cr)**

General Pharmacology will provide knowledge on the processes of drug absorption, distribution, metabolism, and excretion. It will also review basic pharmacodynamic and pharmacotherapeutic knowledge. Covered topics will include central nervous system pharmacology, cardiovascular and pulmonary pharmacology, renal pharmacology, gastrointestinal pharmacology, and pharmacology of antihyperglycemic agents. This course will be delivered concurrent with the integrated biomedical science curriculum, discussing physiology and pathophysiology of various organ-systems. Upon completion, students should be able to place major drugs into correct therapeutic categories with improved judgment for health risk assessment.

### **HS 611 Student Portfolio (1 cr)**

Students will engage in guided reflections: noticing, interpreting, responding, and reflecting, and will learn to improve decision-making skills and develop as clinicians. At the end of each semester, students will provide an overall reflection on the semester and will set goals for the next semester. This course will encourage and support the development of ethics and professionalism, self-reflection and self-assessment, and concrete evidence of achievement of benchmarks towards competency.

### **HS 612 Student Portfolio (1 cr)**

Students will engage in guided reflections: noticing, interpreting, responding, and reflecting, and will learn to improve decision-making skills and develop as clinicians. At the end of each semester, students will provide an overall reflection on the semester and will set goals for the next semester. This course will encourage and support the development of ethics and professionalism, self-reflection and self-assessment, and concrete evidence of achievement of benchmarks towards competency.

### **HS 613 Student Portfolio (1 cr)**

Students will engage in guided reflections: noticing, interpreting, responding, and reflecting, and will learn to improve decision-making skills and develop as clinicians. At the end of each semester, students will provide an overall reflection on the semester and will set goals for the next semester. This course will encourage and support the development of ethics and professionalism, self-reflection and self-assessment, and concrete evidence of achievement of benchmarks towards competency.

### **HS 621 Grand Rounds (1 cr)**

This course will provide students with high-level review of basic sciences and didactic course materials they have been exposed to previously in correlation with real-life scenarios and clinical application of those concepts. This course includes case presentations by faculty, guest speakers and students with active student and faculty engagement in each session.

### **HS 622 Grand Rounds (1 cr)**

This course will provide students with high-level review of basic sciences and didactic course materials they have been exposed to previously in correlation with real-life scenarios and clinical application of those concepts. This course includes case presentations by faculty, guest speakers and students with active student and faculty engagement in each session.

### **HS 623 Grand Rounds (1 cr)**

This course will provide students with high-level review of basic sciences and didactic course materials they have been exposed to previously in correlation with real-life scenarios and clinical application of those concepts. This course includes case presentations by faculty, guest speakers and students with active student and faculty engagement in each session.

### **HS 652 Special Needs (2 cr)**

This course integrates basic disease processes, epidemiology, demographics, treatment planning, and principles of providing dental treatment for individuals with a wide variety of conditions including medical and developmental disabilities, psychological problems, including phobias, and problems associated with aging.

### **HS 682 Pharmacology 2 (3 cr)**

Clinical Pharmacology will address the main pharmacologic groups prescribed by dentists. This course will cover anti-infective agents that include antibiotics, antifungals, antivirals; central analgesics (opioids) and sedatives as well as nonsteroidal anti-inflammatory agents, and corticosteroids. Rules and regulations of safe prescribing will be taught along each of the above-mentioned topics. Upon completion, students should have



a good understanding of effective prescribing rules, identify indications, drug-drug interactions, and adverse effects for various drug groups.

### **HS 711 Student Portfolio (1 cr)**

Students will engage in guided reflections: noticing, interpreting, responding, and reflecting, and will learn to improve decision-making skills and develop as clinicians. At the end of each semester, students will provide an overall reflection on the semester and will set goals for the next semester. This course will encourage and support the development of ethics and professionalism, self-reflection and self-assessment, and concrete evidence of achievement of benchmarks towards competency.

### **HS 712 Student Portfolio (1 cr)**

Students will engage in guided reflections: noticing, interpreting, responding, and reflecting, and will learn to improve decision-making skills and develop as clinicians. At the end of each semester, students will provide an overall reflection on the semester and will set goals for the next semester. This course will encourage and support the development of ethics and professionalism, self-reflection and self-assessment, and concrete evidence of achievement of benchmarks towards competency.

### **HS 713 Student Portfolio (1 cr)**

Students will engage in guided reflections: noticing, interpreting, responding, and reflecting, and will learn to improve decision-making skills and develop as clinicians. At the end of each semester, students will provide an overall reflection on the semester and will set goals for the next semester. This course will encourage and support the development of ethics and professionalism, self-reflection and self-assessment, and concrete evidence of achievement of benchmarks towards competency.

### **HS 721 Grand Rounds (1 cr)**

This course will provide students with high-level review of basic sciences and didactic course materials they have been exposed to previously in correlation with real-life scenarios and clinical application of those concepts. This course includes case presentations by faculty, guest speakers and students with active student and faculty engagement in each session.

### **HS 722 Grand Rounds (1 cr)**

This course will provide students with high-level review of basic sciences and didactic course materials they have been exposed to previously in correlation with real-life scenarios and clinical application of those concepts. This course includes case presentations by faculty, guest speakers and students with active student and faculty engagement in each session.

### **HS 723 Grand Rounds (1 cr)**

This course will provide students with high-level review of basic sciences and didactic course materials they have been exposed to previously in correlation with real-life scenarios and clinical application of those concepts. This course includes case presentations by faculty, guest speakers and students with active student and faculty engagement in each session.

### **HS 731 Board Review (2 cr)**

The course provides a review of the dental curriculum in preparation for the Integrated National Dental Board Examination (INDBE). Coursework includes study and testing strategies, as well as a comprehensive review of dental courses completed throughout the program. This course culminates in a mock INBDE experience intended to inform students of the testing conditions of the license examination.

### **HS 811 Student Portfolio (1 cr)**

Students will engage in guided reflections: noticing, interpreting, responding, and reflecting, and will learn to improve decision-making skills and develop as clinicians. At the end of each semester, students will provide an overall reflection on the semester and will set goals for the next semester. This course will encourage and support the development of ethics and professionalism, self-reflection and self-assessment, and concrete evidence of achievement of benchmarks towards competency.

### **HS 812 Student Portfolio (1 cr)**

Students will engage in guided reflections: noticing, interpreting, responding, and reflecting, and will learn to improve decision-making skills and develop as clinicians. At the end of each semester, students will provide an overall reflection on the semester and will set goals for the next semester.

This course will encourage and support the development of ethics and professionalism, self-reflection and self-assessment, and concrete evidence of achievement of benchmarks towards competency.

### **HS 813 Student Portfolio (1 cr)**

Students will engage in guided reflections: noticing, interpreting, responding, and reflecting, and will learn to improve decision-making skills and develop as clinicians. At the end of each semester, students will provide an overall reflection on the semester and will set goals for the next semester. This course will encourage and support the development of ethics and professionalism, self-reflection and self-assessment, and concrete evidence of achievement of benchmarks towards competency.

### **HS 821 Grand Rounds (1 cr)**

This course will provide students with high-level review of basic sciences and didactic course materials they have been exposed to previously in correlation with real-life scenarios and clinical application of those concepts. This course includes case presentations by faculty, guest speakers and students with active student and faculty engagement in each session.

### **HS 822 Grand Rounds (1 cr)**

This course will provide students with high-level review of basic sciences and didactic course materials they have been exposed to previously in correlation with real-life scenarios and clinical application of those concepts. This course includes case presentations by faculty, guest speakers and students with active student and faculty engagement in each session.

### **HS 823 Grand Rounds (1 cr)**

This course will provide students with high-level review of basic sciences and didactic course materials they have been exposed to previously in correlation with real-life scenarios and clinical application of those concepts. This course includes case presentations by faculty, guest speakers and students with active student and faculty engagement in each session.

## **Odontology**

### **ODON 501 Clinical Foundations (4 cr)**

This course introduces students to the general dentistry clinical process of care, including principles underlying the phases of patient assessment, problem identification, preventive education, record keeping and interprofessional communication. Topics include infection control, medical history intake, vital signs, ergonomics, caries risk assessment and CAMBRA, examination and charting of

extraoral and intraoral findings, and oral hygiene instruction. The student will apply the principles taught in this course through clinical simulations with student partners.

Successful completion of this course is a prerequisite to matriculation into year 2.

### **ODON 502 – Periodontal Instrumentation (2 cr)**

Students will learn the theory of basic periodontal instrumentation and techniques of instrument sharpening. Students will apply instrumentation techniques in a laboratory setting with emphasis on development of basic instrumentation skills.

### **ODON 504 – Foundations of Comprehensive Care (4 cr)**

Students continue to develop their patient care skills, integrating their knowledge, skills, and values from previous terms. As a clinical preparation course, students will follow standards of care driven by electronic health record workflows and provide direct clinic patient care to their classmate patients. Successful completion of this course is a prerequisite to matriculation into ODON 673.

### **ODON 511 Operative Dentistry 1 (8 cr)**

This introductory course will provide foundational knowledge of operative dentistry in an integrated manner. Students will apply basic concepts from other courses such as cariology, radiology, dental anatomy, and dental materials to develop this foundation. Students will also learn proper use of Personal Protective Equipment (PPE), ergonomics, proper use of a fulcrum, use of a dental handpiece, application of rubber dam materials, cavity design preparation, and restoration techniques. Students will learn beginning operative skills to prepare themselves for the next course, ODON 512.

### **ODON 512 Operative Dentistry 2 (7.5 cr)**

This course builds on the foundational knowledge and skills attained in ODON 511. The course will delve into the diagnosis and treatment planning of anterior and posterior approximal carious lesions and the techniques to restore both. This course will also discuss shade selection, bleaching, removal of decay and management of the pulp. Students will continue to improve their skills and operative knowledge. Focus on correct PPE use, ergonomics and the use of a proper fulcrum will continue in each session.

### **ODON 513 Operative Dentistry 3 (7.5 cr)**

This course builds on the foundational knowledge and skills attained in ODON 511 and 512. This course will delve into complex dental restorations, quadrant dentistry, as well as management of indirect intracorneal restorations. This course will prepare the students for the fixed prosthetics course. Students will continue to improve their skills and operative knowledge. Focus on correct PPE use, ergonomics, and the use of a proper fulcrum will continue in each session.

### **ODON 521 Dental Anatomy (4 cr)**

The three-dimensional anatomy of the teeth is presented enabling students to identify teeth from photographs, models, and descriptions. Concepts of occlusion are covered. Students will have the opportunity to recreate dental anatomy and gain the necessary hand skills and knowledge for future courses.

### **ODON 522 Dental Materials (2 cr)**

This course serves as an introductory course to dental materials. Topics include basic properties, material selection, issues of biocompatibility, and safety.

### **ODON 532 Introduction to Orthodontics (2 cr)**

The introduction to Orthodontics course provides students with an overview of orthodontics, including when to refer to an orthodontic specialist. Simple tooth movement and basic orthodontic concepts are covered. Additionally, this course introduces clear aligner therapy.

### **ODON 541.01 Cariology (1.5 cr)**

This course introduces the dental student to the etiology, classification, and progression of dental caries. Caries management protocols will be covered. Students will be able to identify, classify, and describe the progression of caries lesions in preparation for treating patients. Students will continue to develop their skills in communication and patient management via motivational interviewing. By the end of this course, students will have a basic understanding of how to diagnose and manage dental caries, including writing appropriate prescriptions based on caries risk.

### **ODON 611 Fixed Tooth Replacement: Tooth-Supported (7.5 cr)**

The course will focus on fixed indirect full coverage restorations, covering proper preparation techniques, crown materials, impression techniques, scanning, laboratory process and communication. Students will practice skills in restoring esthetics for porcelain crowns or ceramic veneers. Students will be introduced to presenting a patient's medical history in reference to daily care and how to clinically chart daily care.

### **ODON 612 Fixed Tooth Replacement: Tooth-Supported (7.5 cr)**

The course will focus on tooth replacement using multi-unit fixed dental prostheses. The students will prepare typodont teeth for a fixed dental prosthesis and practice indirect and direct temporary restoration techniques. Students will also practice laboratory procedures including mounting casts, analyzing occlusion, and fabricating temporary crown stents. The course will cover restorability of teeth with fixed dental prostheses, placement of posts in endodontically treated teeth, and complete final build-up prior to indirect restoration fabrication. Students will practice the skills of presenting medical histories, clinical findings, and practice clinical treatment charting.

### **ODON 621 Periodontology 1 (3 cr)**

The student will be prepared to assess and diagnose periodontal health and disease as part of a comprehensive treatment planning process, including the prognosis of the dentition and learn how to obtain informed consent. The student will also learn how to prevent disease, provide periodontal therapy, recognize oral mucosal and osseous disorders, and identify severe/complex periodontal disease and refer the patient to a specialist for an overall treatment strategy.

### **ODON 623 Periodontology 2 (3 cr)**

The student will develop an understanding in treatment planning for advanced periodontal disease and gain knowledge in periodontal surgical therapy techniques.

### **ODON 642 Endodontics (5.5 cr)**

This course consists of lectures, demonstrations, and laboratory procedures. The course is designed to develop basic biological and mechanical concepts for successful endodontic treatment. The lectures will present all phases of endodontic knowledge that will form the foundation for future development in advanced endodontic courses and Clinical Care. The simulation laboratory will provide experience in performing endodontic treatment on numerous plastic or natural teeth mounted in blocks.

### **ODON 651 Tooth Replacement: Complete Dentures (7.5 cr)**

Students will learn the components and concepts underlying treatment planning for complete dentures. Students will learn the anatomy, steps, and materials involved in the process of fabricating complete dentures and practice skills associated, including making adequate impressions.

### **ODON 652 Removable Tooth Replacement: Removable Partial Dentures (7.5 cr)**

Students will review treatment planning options for replacing missing teeth, and will learn the risks, benefits, and alternatives of utilizing removable partial dentures. They will learn designs for tooth-borne and tooth-tissue borne prostheses.

### **ODON 653 Prosthodontics and Implant Dentistry: Fixed and Removable Prosthodontics (4 cr)**

Students will be introduced to single and multiple tooth replacement with implants. They will gain basic understanding of implant systems, treatment planning and surgical and restorative considerations for edentulous areas. Students will gain hands-on experience with placing implants into artificial models, obtain final impressions, utilize previsualization techniques, and deliver single unit implant crowns on models. Students will be introduced to treatment planning for multi-unit fixed and removable implant-supported prostheses.

### **ODON 663 Oral Diagnosis and Treatment Planning (7.5 cr)**

In this course, students will learn and implement the clinical steps necessary to diagnose, record, and develop a phased, sequential, and comprehensive treatment plan. Students will work through real-life clinical cases to develop their skills in the art of treatment planning. The students will also practice the skills of presenting medical histories, clinical findings, diagnosing dental conditions, and performing the proposed treatment in a simulated clinical environment on a simulated dental patient. This will facilitate their understanding of real-life clinical care. The students will also learn the principles of 4-handed dentistry and practice them while assisting each other during simulated patient care.

### **ODON 673 Comprehensive Care Family Dentistry (4 cr)**

In this course, students begin their transition to provide comprehensive general dentistry to adults with diverse ethnic, linguistic, socioeconomic backgrounds, and patient-specific oral health needs. Patients may be healthy or have complex chronic medical conditions. Students will participate by supporting their upper-class people through four-handed dentistry, developing awareness of clinic policies and procedures, contributing to the diagnosis, and providing preventive care in a care team-based delivery model.

### **ODON 771 Comprehensive Care Family Dentistry 1 (13 cr)**

In this course, students begin to provide comprehensive general dentistry to adults with diverse ethnic, linguistic, socioeconomic backgrounds, and patient-specific unique oral health needs. Patients may be healthy or have complex chronic medical conditions. Students will participate in case presentations, conduct oral evaluations, derive diagnoses, formulate comprehensive treatment plans, and perform general dentistry in a care team-based delivery model.

### **ODON 772 Comprehensive Care Family Dentistry 2 (13 cr)**

In this course, students will focus on developing their family of patients in conjunction with other members of their care team as lead by the faculty team leader as they provide comprehensive general dentistry to adults with diverse ethnic, linguistic, socioeconomic backgrounds, and patient-specific unique oral health needs. Students will continue to participate in case presentations, conduct oral evaluations, derive diagnoses, formulate comprehensive treatment plans, and perform general dentistry in a care team-based delivery model. There will be emphasis on diagnosis and treatment planning, completion of initial urgent procedures, and further develop the completion of Phase 1 therapy, disease control mitigation of risk, and initiation of preventive care in the patient family.

### **ODON 773 Comprehensive Care Family Dentistry 3 (13 cr)**

In this course, students continue to provide comprehensive general dentistry to adults with diverse ethnic, linguistic, socioeconomic backgrounds, and patient-specific unique oral health needs in a care team-based model. Patients may be healthy or have complex chronic medical conditions. Students will continue to participate in case presentations, conduct oral evaluations, derive diagnoses, formulate comprehensive treatment plans, and perform general dentistry in a care team-based delivery model. By the end of the course, students are expected to demonstrate a high-level independence for addressing the patients with simple oral health needs.

### **ODON 871 Comprehensive Care Family Dentistry 4 (10 cr)**

In this course, students continue to provide comprehensive general dentistry to adults with diverse ethnic, linguistic, socioeconomic backgrounds, and patient-specific unique oral health needs in a care team-based model. There will be emphasis on daily clinical activities of a practicing dentist including all intake, comprehensive care, case management issue extant under the leadership of the team leader and working with patients with moderate to high complexity of oral health needs. The DS4 will also demonstrate leadership of the oral healthcare team including DS2 and DS3 students and the dental assisting and dental hygiene staff through cooperation and assessment of outcomes of care.

### **ODON 872 Comprehensive Care Family Dentistry 5 (9 cr)**

In this course, students continue to provide comprehensive general dentistry to adults with diverse ethnic, linguistic, socioeconomic backgrounds, and patient-specific unique oral health needs in a care team-based model. There will be continued emphasis on daily clinical activities of a practicing dentist including all intake, comprehensive care, case management issue extant under the leadership of the team leader and working with patients with moderate to high complexity of oral health needs. The DS4 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.

### **ODON 873 Comprehensive Care Family Dentistry 6 (10 cr)**

The final trimester of comprehensive care family dentistry will focus on the completion of phase 3 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 humility among others. By the end of the course, students are expected to demonstrate a high-level independence for addressing patients with oral health needs of any complexity.

## **Oral and Maxillofacial Studies (OMFS)**

### **OMFS 512 Integrated Biomedical and Clinical Sciences 1 (7.5 cr)**

This is an introductory course to the physiology and its clinical significance of all major body systems. Neurology introduces basic anatomy, physiology, and pathophysiology of the central and peripheral nervous systems. Hematology is presented as it applies to dentistry. Oxygen transport mechanisms, hemostasis, and thrombosis will be covered. The cardiovascular, pulmonary, gastrointestinal, and urinary systems are introduced covering the physiology and pathophysiology of the cardiovascular, pulmonary, gastrointestinal, and urinary systems. The dental significance of systemic diseases is presented as it correlates to common diseases encountered in dental practice. This part of the course is designed to provide clinical significance of underlying health conditions and their impact on treatment plans.

### **OMFS 513 Integrated Biomedical and Clinical Sciences 2 (7.5cr)**

This course is designed to help students continue to study the connection between the biomedical sciences and their impact on systemic diseases. Microbiology, immunology, and cancer biology will be introduced. The clinical portion of the course will discuss the impact of disease transmission in clinical practices, autoimmune disorders, and introduce clinical manifestations of head and neck cancer. In addition, the physiology and pathophysiology of the musculoskeletal and endocrine systems will be addressed. Students must apply knowledge gained in the previous integrated biomedical and clinical science course. The clinical cases will integrate the didactic course material with skills in motivational interviewing and social/behavioral aspects to dental care.

### **OMFS 522 Applied General Anatomy (3 cr)**

Students will learn general anatomy as it applies to general dentistry. Some elements of histology and physiology will be covered, and these will be repeated in the Integrated Biomedical and Clinical Sciences course.

### **OMFS 532 Medical Emergencies (1.5 cr)**

In this introductory course, management of medical emergencies in the dental office will be addressed and their clinical significance reviewed.

### **OMFS 542 Applied Anatomy of the Head and Neck (3 cr)**

Students will learn the anatomy of the head and neck, and concurrently understand the dental significance. This course will be taught utilizing tools such as (3D Anatomy, complete anatomy, and Osmosis).

### **OMFS 553 Oral Radiology (3 cr)**

This oral radiology course introduces students to the fundamental principles of radiographic image formation and their biological effects. The course covers the clinical significance, risks, and benefits of dental radiographs, along with relevant guidelines and regulations for safe and effective use. Students will gain foundational knowledge in radiographic anatomy and interpretation, developing skills to identify and analyze oral pathologies on radiographs. Laboratory sessions provide hands-on experience with intraoral radiograph acquisition using a Dexter Simulator, reinforcing understanding of image acquisition and normal oral anatomy as seen on radiographs. By the end of the course, students will have a strong understanding of radiation biology, common head and neck lesions, and the practical skills for taking intraoral radiographs.

### **OMFS 562 Growth and Development (2 cr)**

This course will introduce students to concepts of craniofacial growth and tooth development, and the impact of disease and altered development on anatomy and function.

### **OMFS 642 Oral Pathology/Oral Medicine (2cr)**

This oral pathology/oral medicine course will concentrate on the diagnosis, risk assessment and management of lesions of the head and neck (including the oral mucosa). Utilizing small group learning and case-based formats, there will be a review of the fundamental pathology of different conditions affecting the head and neck. Students must apply previous knowledge gained in BMS, anatomy, introduction to oral pathology as well as motivational interviewing and behavioral dentistry in their small group learning.

### **OMFS 652 Dental Anesthesiology 1: Local Anesthesia (8 cr)**

Students will learn to apply their understanding on core BMS material, bringing together their knowledge of applied head and neck and dental anatomy, with knowledge of pharmacology and neuroanatomy. Students will learn how to evaluate a patient for local anesthesia, including informed consent, and management of phobic patients, and they will learn some of the standard techniques using a typodont. Students have the option to provide local anesthesia to peers by agreement.

### **OMFS 653 Dental Anesthesiology 2: Local Anesthesia Pain and Anxiety Control (4 cr)**

In this course, students will apply their knowledge of anatomy, pain management and pharmacology to clinical dental practice. Medical risk assessment will be repeated, and students will use simulated patients to evaluate the risk of providing dental care in a dental setting. Students will learn when and how to use nitrous oxide sedation to treat anxious or phobic patients.

### **OMFS 711 Principles of Oral Surgery (2 cr)**

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. Periprosthetic surgical technique and minor soft tissue surgery including biopsy is presented.

### **OMFS 721 Pediatric Dentistry (2 cr)**

Students will be introduced to pediatric dental care and the differences between adult and pediatric treatment will be highlighted. 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 reviewed. Caries diagnosis, treatment and prevention in the deciduous dentition is shown. Considerations for public health and policy concerns discussed. Common pediatric dental procedures practiced in simulation exercises.

### **OMFS 731 Clinical Clerkship: Pediatric Dentistry (2 cr)**

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.

### **OMFS 772 Advanced Topics in Oral and Maxillofacial Surgery (2 cr)**

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.

### **OMFS 773 Clinical Clerkship: Oral and Maxillofacial Surgery (2 cr)**

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

### **OMFS 882 Clinical Clerkship: Orthodontics (1 cr)**

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.

### **OMFS 743 Interdisciplinary Interprofessional Seminar 1 (2 cr)**

This course is designed to introduce and promote the concept of interdisciplinary/interprofessional collaboration. Students will engage in case presentations and connect all disciplines within dental medicine. Students will learn to prepare a clinical case for presentation, discussion, and the education of the entire health care team.

### **OMFS 841 Interdisciplinary Interprofessional Seminar 2 (2 cr)**

This course is designed to introduce and promote the concept of interdisciplinary/interprofessional collaboration. Students will engage in case presentations and connect all disciplines within dental medicine. Students will learn to prepare a clinical case for presentation, discussion, and the education of the entire health care team.



**OMFS 842 Interdisciplinary Interprofessional Seminar 3 (2 cr)**

This course is designed to introduce and promote the concept of interdisciplinary/interprofessional collaboration. Students will engage in case presentations and connect all disciplines within dental medicine. Students will learn to prepare a clinical case for presentation, discussion, and the education of the entire health care team.

**OMFS 843 Interdisciplinary Interprofessional Seminar 4 (2 cr)**

This course is designed to introduce and promote the concept of interdisciplinary/interprofessional collaboration. Students will engage in case presentations and connect all disciplines within dental medicine. Students will learn to prepare a clinical case for presentation, discussion, and the education of the entire health care team.



**California Northstate University College of Dental Medicine  
Academic Calendar 2024-2025**

**FALL**

<b>Fall: 07/08/2024 – 11/01/2024</b>		
<b>Event</b>	<b>Start Date</b>	<b>End Date</b>
[Orientation Week (New Students)]	[ 07/01/2024 – Monday]	[ 07/05/2024 – Friday]
Instructional Period	07/08/2024 - Monday	10/18/2024 - Friday
Midterm Exams	08/19/2024 - Monday	
Final Exams	10/21/2024 - Monday	10/25/2024 - Friday
Remediation Exam Period	10/28/2024 - Monday	11/01/2024 - Friday
Final Grades Due	11/01/2024 - Monday	

**WINTER**

<b>Winter: 11/04/2024 – 03/14/2025</b>		
<b>Event</b>	<b>Start Date</b>	<b>End Date</b>
Instructional Period	11/04/2024 - Monday	02/28/2025 - Friday
Midterm Exams	01/06/2025 - Monday	
Final Exams	03/03/2025 - Monday	03/07/2025 - Friday
Remediation Exam Period	03/10/2025 - Monday	03/14/2025 - Friday
Winter Break	12/23/2024 - Monday	01/03/2025 - Friday
Final Grades Due	03/14/2025 - Friday	

**SPRING**

<b>Spring: 03/17/2025 – 06/27/2025</b>		
<b>Event</b>	<b>Start Date</b>	<b>End Date</b>
Instructional Period	03/17/2025 - Monday	06/13/2025 - Friday
Midterm Exams	04/21/2025 - Monday	
Final Exams	06/16/2025 - Monday	06/20/2025 - Friday
Remediation Exam Period	06/23/2025 - Monday	06/27/2025 - Friday
Break (Orientation Week – New Students) Final	06/30/2025 - Monday	07/03/2025 - Thursday
Grades Due	06/27/2025 - Friday	

**UNIVERSITY HOLIDAY**

<b>Holiday</b>	<b>Date</b>	<b>Holiday</b>	<b>Date</b>
Independence Day	07/04/2024	New Year's Day	01/01/2025
Labor Day	09/02/2024	Martin Luther King Jr. Day	01/20/2025
Thanksgiving	11/28/2024-11/29/2024	President's Day	02/17/2025
Christmas	12/25/2024	Memorial Day	05/26/2025
		Juneteenth	06/19/2025

# COLLEGE OF MEDICINE

## **Mission, Vision, and Values**

Mission: To advance the science and art of healthcare through education, service, research, personal wellness, 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 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 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 Phase B, carry the clinical presentation curriculum through to completion.

### **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 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.

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 (PLOs). 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.

## 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 <a href="#">(1.2)</a>	<ul style="list-style-type: none"> <li>• Faculty feedback in pre-clerkship settings including Clinical Cases Sessions and Medical Skills courses</li> <li>• Faculty and resident direct observation and evaluations during clinical clerkships OSCE</li> </ul>
	Able to identify alternative sources and or intuitively fill in the history gaps <a href="#">(1.2)</a>	<ul style="list-style-type: none"> <li>• Faculty feedback in pre-clerkship settings including Clinical Cases Sessions and Medical Skills courses</li> <li>• Faculty and resident direct observation and evaluations during clinical clerkships OSCE</li> <li>• USMLE Step 2 Clinical knowledge Exam</li> </ul>
	Shares knowledge in topics of disease prevention with patient <a href="#">(1.7,1.9)</a>	
	Documents how psychological/social/cultural situations have impacted the health, disease, care-seeking, care compliance, and barriers to and attitudes toward care <a href="#">(1.2, 2.5)</a>	
	Demonstrates ability to inquire (non-judgmentally) about alternative medical practices being utilized by the patient at the time of presentation <a href="#">(1.2)</a>	

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 <b>(1.1, 1.2)</b>	<ul style="list-style-type: none"> <li>• Faculty feedback in pre-clerkship settings including Clinical Cases Sessions and Medical Skills courses.</li> <li>• Faculty and resident direct observation and evaluations during clinical clerkships OSCE</li> <li>• USMLE Step 2 Clinical knowledge Exam.</li> </ul>
	Can perform a complete, full mental and functional assessment of an elderly patient <b>(1.1, 1.2)</b>	
	Can fully assess a pediatric patient for developmental delay and genetic abnormalities <b>(1.2)</b>	
	Can identify pertinent positives and negatives in the exam to accurately determine stage of medical condition <b>(1.2)</b>	
	Can utilize clinical findings to prioritize additional anatomic or physiologic testing <b>(1.3, 1.5)</b>	
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 <b>(1.2, 4.5)</b>	<ul style="list-style-type: none"> <li>• Faculty feedback in pre-clerkship settings including Clinical Cases Sessions and Medical Skills courses.</li> <li>• Faculty and resident direct observation and evaluations during clinical clerkships OSCE</li> </ul>
	Can complete a SOAP note using CP clinical algorithms to assist in developing a problem list <b>(1.2, 4.2)</b>	
	Can utilize the problem list to develop a well thought out plan for ongoing treatment. <b>(1.6)</b>	
	Integrates periodic evaluation of the care plan to re-evaluate the efficacy of the plan to ensure treatment success <b>(1.2, 1.3, 1.5, 1.6, 2.1)</b>	<ul style="list-style-type: none"> <li>• USMLE Step 2 Clinical knowledge Exam</li> </ul>
PC4: Oral Presentations	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” <b>(1.2, 4.2)</b>	<ul style="list-style-type: none"> <li>• Faculty feedback in pre-clerkship settings including Masters Colloquium, Clinical Cases Sessions, and Medical Skills courses OSCE</li> <li>• Self-assessment and peer assessment Faculty and resident direct observation and evaluations during clinical clerkships</li> </ul>
	Includes a differential or problem list with treatment updates <b>(1.2, 1.5, 1.6)</b>	
	Includes accurate assessments with prioritized diagnosis or problem list using relevant CP clinical algorithms <b>(1.6)</b>	
	Can participate in a discussion of prioritized diagnostic approaches and is able to identify where patient teams and consultants are needed <b>(1.3, 1.4, 1.5, 1.6, 1.8, 4.2, 4.3)</b>	
PC5: Medical Skills	Perform all medical, diagnostic, and surgical procedures considered essential for the area of practice <b>(1.1)</b>	<ul style="list-style-type: none"> <li>• Faculty feedback in pre-clerkship settings including Medical Skills Courses</li> <li>• Medical Skills Lab: Standardized patient, simulation exercises OSCE</li> <li>• Passing BLS and ACLS certification exam Faculty and resident direct observation and evaluations during clinical clerkships.</li> <li>• USMLE Step 2 Clinical knowledge Exam</li> </ul>
	Can describe and practice the basic principles of universal precautions in all settings <b>(1.3)</b>	
	Has achieved certification in BLS <b>(1.1, 6.6)</b>	
	Has achieved certification in ACLS <b>(1.1, 6.6)</b>	

PC6: Patient Care Teams	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 <a href="#">(1.3, 1.5, 1.8, 1.6 4.2, 6.1)</a>	<ul style="list-style-type: none"> <li>• Faculty feedback in pre-clerkship settings including Medical Skills Courses</li> <li>• Faculty and resident direct observation and evaluations during clinical clerkships</li> </ul>
	Make appropriate patient referral decisions and follow up the care outcome to ensure continuity of care while the patient moves between different providers/settings. <a href="#">(1.8)</a>	
PC7: Patient Management	Can describe a well thought out plan of management of all patients with acute and chronic illnesses in the adult population <a href="#">(1.5, 1.6)</a>	<ul style="list-style-type: none"> <li>• Faculty feedback in pre-clerkship settings including Clinical Cases sessions and Medical Skills courses.</li> <li>• Faculty and resident direct observation and evaluations during clinical clerkships OSCE</li> </ul>
	With appropriate supervision, participate in counselling & education of patients and their families enabling them to share in decision making and the care plan. <a href="#">(1.7)</a>	
	With appropriate supervision, participate in providing preventive and health maintenance services. <a href="#">(1.9)</a>	
	With appropriate supervision can construct a detailed patient management plan utilizing appropriate PCT members <a href="#">(1.6, 6.2)</a>	
PC8: Cost Effective Comparison in Treatment	Is able to recognize that there are differences in the cost of treatment options <a href="#">(1.3, 1.5, 1.6, 6.3)</a>	<ul style="list-style-type: none"> <li>• Faculty feedback in pre-clerkship settings including Masters Colloquium, Clinical Cases Sessions, and Medical Skills courses.</li> <li>• Faculty and resident direct observation and evaluations during clinical clerkships</li> </ul>
	Can discuss treatment costs in the context of efficacy, social and cultural factors <a href="#">(1.3, 1.5, 1.6, 6.3)</a>	
	Can use the cost effectiveness information to recommend a stepped approach to the treatment of common medical conditions in the adult patient <a href="#">(1.3, 1.5, 1.6, 6.3)</a>	

## 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 presentation.
- 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 ( <a href="#">2.1</a> , <a href="#">2.2</a> , <a href="#">2.3</a> , <a href="#">2.4</a> )	<ul style="list-style-type: none"> <li>• Institutionally developed written examinations in system based courses and clinical clerkships NBME shelf exams</li> <li>• Faculty feedback in pre-clerkship settings including Clinical Cases, Master Colloquium, and Medical Skills courses</li> <li>• Faculty and resident evaluations during clinical clerkships OSCE</li> <li>• Peer assessment and self-assessment USMLE Step 1 and Step 2</li> </ul>
	Can explain how the organ system pathophysiology is reflected in the CP clinical algorithms and can relate this information to a clinical team ( <a href="#">2.1</a> , <a href="#">2.2</a> , <a href="#">2.3</a> , <a href="#">2.4</a> )	
	Apply clinical reasoning to construct CP clinical algorithms to propose differential diagnosis ( <a href="#">2.1</a> , <a href="#">2.3</a> , <a href="#">1.2</a> , <a href="#">1.3</a> , <a href="#">1.4</a> )	<ul style="list-style-type: none"> <li>• Faculty feedback in pre-clerkship settings including Clinical Cases, and Medical Skills courses</li> <li>• Faculty and resident evaluations during clinical clerkships OSCE</li> <li>• USMLE Step 2</li> </ul>
	Can explain the anticipated clinical response to correctly selected medications for a specific number of medical conditions to patients, family members and team members ( <a href="#">2.1</a> , <a href="#">2.3</a> , <a href="#">1.3</a> , <a href="#">1.4</a> , <a href="#">1.7</a> , <a href="#">4.1</a> )	<ul style="list-style-type: none"> <li>• Faculty feedback in pre-clerkship settings including Clinical Cases, Master Colloquium, and Medical Skills courses OSCE</li> <li>• Faculty and resident evaluations during clinical clerkships</li> </ul>
	Recognizes the most common drug interactions and their likely signs of presentation in the elderly and can explain them to patient and family ( <a href="#">2.1</a> , <a href="#">2.2</a> , <a href="#">2.3</a> , <a href="#">1.2</a> , <a href="#">1.3</a> , <a href="#">1.4</a> , <a href="#">1.7</a> , <a href="#">4.1</a> )	<ul style="list-style-type: none"> <li>• Institutionally developed written examinations in system-based courses and clinical clerkships</li> <li>• Faculty feedback in pre-clerkship settings including Clinical Cases, Master Colloquium, and Medical Skills courses. OSCE</li> <li>• Faculty and resident evaluations during clinical clerkships USMLE Step 1 and Step 2</li> </ul>
Effectively utilizes ongoing diagnostic tests to modify recommended therapeutic strategies( <a href="#">2.1</a> , <a href="#">2.3</a> , <a href="#">1.4</a> , <a href="#">1.5</a> , <a href="#">1.6</a> )	<ul style="list-style-type: none"> <li>• Faculty feedback in pre-clerkship settings including Clinical Cases, and Medical Skills courses.</li> <li>• Faculty and resident evaluations during clinical clerkships</li> </ul>	

		<p>OSCE</p> <ul style="list-style-type: none"> <li>Peer assessment and self-assessment</li> </ul>
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 <a href="#">(2.1, 2.2, 2.3, 3.6)</a>	<ul style="list-style-type: none"> <li>Successful completion of a scholarly project</li> <li>Faculty feed back in pre-clerkship settings including Clinical Cases and Masters Colloquium</li> <li>Faculty and resident evaluations during clinical clerkships</li> </ul>
	Routinely reads medical journals <a href="#">(2.1, 3.3, 3.7)</a>	
	Organizes a self-educating approach for life-long learning through observation, research, and analysis <a href="#">(2.1, 2.6, 3.1, 3.2, 3.3, 3.5, 3.6, 3.7, 3.10)</a>	<ul style="list-style-type: none"> <li>Successful completion of a scholarly project</li> <li>Faculty feedback in pre-clerkship settings including Clinical Cases and Masters Colloquium</li> <li>Faculty and resident evaluations during clinical clerkships</li> <li>Peer assessment and self-assessment</li> </ul>
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 <a href="#">(2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 3.8)</a>	<ul style="list-style-type: none"> <li>Successful completion of a scholarly project</li> <li>Faculty feedback in pre-clerkship settings including Clinical Cases and Masters Colloquium</li> <li>Faculty and resident evaluations during clinical clerkships</li> <li>OSCE</li> <li>Peer assessment and self-assessment</li> </ul>
	Recognizes what types of medical knowledge is required for each individual members of the PCT (patient care team) <a href="#">(2.1, 2.3, 6.1, 6.2)</a>	<ul style="list-style-type: none"> <li>Faculty feedback in pre-clerkship settings including Clinical Cases, and Medical Skills courses.</li> <li>Faculty and resident evaluations during clinical clerkships</li> <li>OSCE</li> <li>Peer assessment and self-assessment</li> <li>USMLE Step 1 and Step 2</li> </ul>
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 <a href="#">(2.1, 2.3, 1.2, 1.3)</a>	<ul style="list-style-type: none"> <li>Institutionally developed written examinations in system-based courses and clinical clerkships</li> <li>NBME shelf exams</li> <li>Faculty feedback in pre-clerkship settings including Clinical Cases, and Medical Skills courses</li> <li>Faculty and resident evaluations during clinical clerkships</li> </ul>
	Recognizes and is able to explain both typical as well as atypical presentations for commonly seen clinical conditions in clerkships <a href="#">(2.1, 2.3, 1.2, 2.1, 2.3)</a>	
	Can construct comprehensive problem lists categorized as both acute versus chronic conditions and prioritize therapeutic interventions	

	(2.1, 2.3, 2.4, 1.5, 1.6)	OSCE
	Can order appropriate diagnostic tests needed to facilitate both diagnosis and evaluate response to therapy in a cost and time effective manner (2.1, 2.3, 1.2, 1.4, 1.5)	<ul style="list-style-type: none"> <li>Peer assessment and self-assessment USMLE Step 1 and Step 2</li> </ul>
	Can analyze and evaluate diagnostic tests in regards to sensitivity/specificity (2.1, 2.3, 1.2, 1.4)	<ul style="list-style-type: none"> <li>Institutionally developed written examinations system-based courses and clinical clerkships</li> <li>NBME shelf exams USMLE Step 1 and Step 2</li> </ul>
MSK3: Medical Treatment	Can identify preventive, curative, and palliative therapeutic strategies (2.12.2,2.3,2.4,2.5, 2.6, 1.5, 1.6)	<ul style="list-style-type: none"> <li>Institutionally developed written examinations in system-based courses and clinical clerkships</li> <li>NBME shelf exams</li> <li>Faculty feedback in pre-clerkship settings including Clinical Cases, and Medical Skills courses</li> <li>Faculty and resident evaluations during clinical clerkships OSCE</li> <li>USMLE Step 1 and Step 2</li> </ul>
	Can identify and judge, from direct observation/experience, how cost and social/cultural issues affect the selection of therapeutic interventions (2.1, 2.3, 2.4, 2.5, 1.3, 1.5, 6.3)	<ul style="list-style-type: none"> <li>Institutionally developed written examinations in system-based courses and clinical clerkships</li> <li>Faculty feedback in pre-clerkship settings including Clinical Cases, Masters Colloquium, and Medical Skills courses</li> <li>NBME shelf exams</li> <li>Faculty and resident evaluations during clinical clerkships OSCE</li> <li>USMLE Step 1 and Step 2</li> </ul>
	Can select and defend basic therapeutic recommendations for preventive, curative and palliative therapies seen in the clerkships (2.1, 2.2, 2.3, 2.4, 2.5, 1.5,1.6, 3.4, 3.5, 3.6)	<ul style="list-style-type: none"> <li>Institutionally developed written examinations in system-based courses and clinical clerkships</li> <li>NBME shelf exams</li> <li>Faculty feedback in pre-clerkship settings including Clinical Cases, and Medical Skills courses. Faculty and resident evaluations during clinical clerkships OSCE</li> </ul>

### 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
- 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)	<ul style="list-style-type: none"> <li>• Faculty feedback in pre-clerkship settings including Clinical Cases, Medical Skills, and Masters Colloquium</li> <li>• Faculty and resident evaluations during clinical clerkships</li> </ul>
	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)	<ul style="list-style-type: none"> <li>• Peer assessment and self-assessment</li> </ul>
	Effectively uses health coaching strategies (3.8, 4.1)	
	Can effectively communicate medical errors to patients (4.6)	
C2: Communication with family members	Utilizes effective communication strategies involving nonverbal, verbal and written skills to communicate with patient’s family members (4.1)	<ul style="list-style-type: none"> <li>• Faculty feedback in pre-clerkship settings including Clinical Cases, Medical Skills, and Masters Colloquium</li> <li>• Faculty and resident evaluations during clinical clerkships OSCE</li> </ul>
	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"> <li>Peer assessment and self-assessment</li> </ul>
C3: Communication with Medical Team	Can effectively communicate a H&P and SOAP note in both written and oral format (4.2, 4.3)	<ul style="list-style-type: none"> <li>Faculty feedback in pre-clerkship settings including Medical Skills</li> <li>Faculty and resident evaluations during clinical clerkships OSCE</li> <li>Peer assessment and self-assessment</li> </ul>
	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)	
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)	<ul style="list-style-type: none"> <li>Faculty and resident evaluations during clinical clerkships</li> <li>Faculty feedback in pre-clerkship settings including Medical Skills OSCE</li> <li>Peer assessment and self-assessment</li> </ul>
	Can discuss personal ethical/social or cultural issues with faculty members to resolve any personal conflicts that may arise in the management or treatment decisions made for the benefit of the patient (4.2, 4.3, 4.7, 7.1)	
C5: Communication with Community	Can communicate medical knowledge to the community at large in a professional manner (4.1, 3.8)	<ul style="list-style-type: none"> <li>Faculty and resident evaluations during clinical clerkships</li> <li>Faculty feedback in pre-clerkship settings including Medical Skills OSCE</li> <li>Peer assessment and self-assessment</li> </ul>

#### 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	<p>Demonstrates respect, compassion and honesty in his/her approach to all patients and family members <a href="#">(5.1)</a></p> <p>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 <a href="#">(5.4, 5.6, 4.6)</a></p> <p>Always displays professional attire and behavior <a href="#">(1.10)</a></p> <p>Demonstrates the ability to maintain professional behavior in encounters with quarrelsome, hostile, abusive, arrogant or dismissive patients, family members or clinical staff <a href="#">(5.6, 4.7, 7.1)</a></p> <p>Uses clinical hygiene for the prevention of nosocomial infection transmission <a href="#">(5.4, 5.5, 3.10, 1.3)</a></p>	<ul style="list-style-type: none"> <li>• Faculty feedback in pre-clerkship settings including Clinical Cases, Masters Colloquium, and Medical Skills courses.</li> <li>• Faculty and resident direct observation and evaluations during clinical clerkships</li> <li>• Presentation of clinical information Completion of HIPAA training OSCE</li> <li>• Praise/concern professionalism incident reports.</li> <li>• Peer &amp; self-assessment</li> </ul>
P2: Ethical Responsibility	<p>Obtains patient consent for all therapies and/or procedures in which s/he is involved <a href="#">(5.6)</a></p> <p>Can identify and relate full disclosure of the risks and benefits of a therapy or procedure <a href="#">(5.6, 1.5)</a></p> <p>Can discuss alternative therapies/procedures with their relevant risks and benefits <a href="#">(5.1, 5.6)</a></p>	<ul style="list-style-type: none"> <li>• Faculty feedback in pre-clerkship settings including Clinical Cases, Masters Colloquium, and Medical Skills</li> <li>• Faculty and resident direct observation and evaluations during clinical clerkships</li> <li>• Presentation of clinical information Completion of HIPAA training Standardized patient evaluations Simulation and inter-professional exercises OSCE</li> <li>• USMLE Step 2 Clinical Skills Exam</li> <li>• Masters Colloquium on professionalism</li> <li>• Faculty and resident direct observation and evaluations during clinical clerkships Presentation of clinical information</li> <li>• Completion of HIPAA training</li> <li>• Standardized patient evaluations simulation and inter-professional exercises OSCE</li> <li>• USMLE Step 2 Clinical Skills Exam</li> </ul>
		<ul style="list-style-type: none"> <li>• Institutionally developed written examinations in system-based courses and clinical clerkships</li> <li>• NBME shelf exams</li> </ul>

	Can identify and adhere to institutional standards involved in patient care <a href="#">(5.6, 6.1)</a>	<ul style="list-style-type: none"> <li>• Faculty and resident direct observation and evaluations during clinical clerkships Presentation of clinical information</li> <li>• Standardized patient evaluations Simulation and inter-professional exercises OSCE</li> </ul>
P3: Ethical Principles and Boundaries	Recognize his/her role as the patient's advocate for clinical care <a href="#">(5.2, 5.4, 7.2)</a>	<ul style="list-style-type: none"> <li>• Faculty and resident direct observation and evaluations during clinical clerkships Presentation of clinical information, standardized patient evaluations simulation and inter-professional exercises OSCE</li> </ul>
	Demonstrates evidence of maintaining patient privacy <a href="#">(5.3)</a>	<ul style="list-style-type: none"> <li>• Faculty feedback in pre-clerkship settings including Clinical Cases, Masters Colloquium, and Medical Skills</li> <li>• Faculty and resident direct observation and evaluations during clinical clerkships</li> <li>• Presentation of clinical information Completion of HIPAA training Standardized patient evaluations Simulation and inter-professional exercises OSCE</li> </ul>
	Demonstrates ability to treat all patients with dignity even when the approach is not reciprocated <a href="#">(5.1, 5.5)</a>	<ul style="list-style-type: none"> <li>• Faculty feedback in pre-clerkship settings including Clinical Cases, Masters Colloquium, and Medical Skills</li> <li>• Faculty and resident direct observation and evaluations during clinical clerkships</li> <li>• Presentation of clinical information Standardized patient evaluations Simulation and inter-professional exercises OSCE</li> <li>• Masters Colloquium on professionalism</li> </ul>
	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 <a href="#">(5.6)</a>	<ul style="list-style-type: none"> <li>• Faculty and resident direct observation and evaluations during clinical clerkships.</li> <li>• Presentation of clinical information</li> </ul>

		<ul style="list-style-type: none"> <li>Standardized patient evaluations</li> <li>Simulation and inter-professional exercises</li> <li>OSCE</li> </ul>
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"> <li>Faculty feedback in pre-clerkship settings including Clinical Cases, Masters Colloquium, and Medical Skills.</li> <li>Faculty and resident direct observation and evaluations during clinical clerkships.</li> </ul>
	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"> <li>Faculty feedback in pre-clerkship settings including Clinical Cases, Masters Colloquium, and Medical Skills</li> <li>Faculty and resident direct observation and evaluations during clinical clerkships</li> <li>Presentation of clinical information</li> <li>Standardized patient evaluations</li> <li>Simulation and inter-professional exercises OSCE</li> <li>Institutionally developed written examinations in system-based courses and clinical clerkships</li> <li>Faculty and resident direct observation and evaluations during clinical clerkships</li> <li>Presentation of clinical information</li> <li>Standardized patient evaluations</li> <li>Simulation and inter-professional exercises</li> <li>OSCE</li> <li>Institutionally developed written examinations in system-based courses and clinical clerkships</li> <li>NBME shelf exams</li> </ul>

### 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)
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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"> <li>• Faculty feedback in pre-clerkship settings including Clinical Cases, Masters Colloquium, and Medical Skills</li> <li>• Faculty and resident direct observations and evaluations during clinical clerkships</li> <li>• Standardized patient evaluations, simulation center evaluations OSCE</li> <li>• NBME shelf exams</li> <li>• Faculty and resident direct observations and evaluations during clinical clerkships Patient case logs</li> <li>• Presentation of written and oral clinical information</li> <li>• Standardized patient evaluations, simulation center evaluations</li> <li>• Faculty and resident direct observations and evaluations during clinical clerkships</li> <li>• Peer assessment, Self-assessment</li> <li>• 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</li> <li>• Standardized patient evaluations, simulation center evaluations OSCE</li> </ul>
	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)	
	Can identify major monetary investment and legal needs in designing a student-run free clinic (6.3)	
	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)	
	Recognizes the importance of current models of medical practice performance evaluation (6.6, 3.5)	
HC2: Delivery Systems Improvement	Recognizes the importance of quality assessment and benchmarking in practice improvement (6.6, 3.1, 3.2, 3.3, 3.5, 3.10)	<ul style="list-style-type: none"> <li>• Faculty feedback in pre-clerkship settings including Clinical Cases, Masters Colloquium, and Medical Skills</li> <li>• Faculty and resident direct observations and evaluations during clinical clerkships</li> <li>• Patient case logs</li> <li>• Presentation of written and oral clinical information</li> <li>• Standardized patient evaluations, simulation center evaluations OSCE</li> </ul>

	Uses system approaches to prevent common medical errors and hazards <a href="#">(6.1, 6.4)</a>	<ul style="list-style-type: none"> <li>• Faculty feedback in pre-clerkship settings including Clinical Cases, Masters Colloquium, and Medical Skills</li> <li>• Faculty and resident direct observations and evaluations during clinical clerkships</li> <li>• Patient case logs</li> <li>• Presentation of written and oral clinical information</li> <li>• Standardized patient evaluations, simulation center evaluations OSCE</li> <li>• Peer assessment, Self-assessment</li> </ul>
	Participates in Phase B clinic rotation quality assessment for education performance improvement <a href="#">(6.6, 3.1, 3.2, 3.3, 3.4, 3.5)</a>	<ul style="list-style-type: none"> <li>• Faculty and resident direct observations and evaluations during clinical clerkships</li> <li>• Presentation of written and oral clinical information</li> <li>• Standardized patient evaluations, simulation center evaluations OSCE</li> </ul>

## 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-motivation, 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 <a href="#">(3.5, 8.1)</a>	<ul style="list-style-type: none"> <li>• Self-assessment Evaluation by team members and peers in small group activities/clinical teams</li> <li>• Faculty feedback in pre-clerkship settings including Clinical Cases Sessions, Masters Colloquium and Medical Skills</li> <li>• Faculty and resident evaluations during clinical clerkships OSCE</li> </ul>
		<ul style="list-style-type: none"> <li>• Self-assessment</li> </ul>

	Demonstrates the use of self-assessment and reflection skills for growth and development <a href="#">(3.1, 3.2, 3.3, 8.1)</a>	<ul style="list-style-type: none"> <li>• Evaluation by team members and peers in small group activities/clinical teams</li> <li>• Faculty feedback in pre-clerkship settings including Clinical Cases</li> </ul>
		<ul style="list-style-type: none"> <li>• Sessions, Masters Colloquium and Medical Skills</li> <li>• Faculty and resident evaluations during clinical clerkships</li> </ul>
	Uses self-assessment to identify gaps in knowledge and skill sets and finds an approach to fill such gaps <a href="#">(3.1, 3.2, 3.3, 8.1)</a>	<ul style="list-style-type: none"> <li>• Self-assessment</li> <li>• Patient case logs/journal</li> <li>• Evaluation by team members and peers in small group activities/clinical teams</li> <li>• Faculty feedback in pre-clerkship settings including Clinical Cases</li> <li>• Sessions, Masters Colloquium and Medical Skills</li> <li>• Faculty and resident evaluations during clinical clerkships</li> </ul>
	Can give a balanced description of personal performance in a confident and skillful manner <a href="#">(3.1, 3.3, 8.1)</a>	<ul style="list-style-type: none"> <li>• Self-assessment</li> <li>• Evaluation by team members and peers in small group activities/clinical teams</li> <li>• Faculty feedback in pre-clerkship settings including Clinical Cases</li> <li>• Sessions, Masters Colloquium and Medical Skills</li> <li>• Faculty and resident evaluations during clinical clerkships</li> </ul>
RP2: Time Management	Can develop realistic plans and timelines to achieve desired outcomes <a href="#">(3.2, 3.3)</a>	<ul style="list-style-type: none"> <li>• Evaluation by team members and peers in small group activities/clinical teams</li> <li>• Faculty feedback in pre-clerkship settings including Clinical Cases</li> <li>• Sessions, Masters Colloquium and Medical Skills</li> <li>• Faculty and resident evaluations during clinical clerkships</li> </ul>
	Can refine and implement correction to timelines when appropriate <a href="#">(3.5, 3.10)</a>	
	Can implement corrective actions/changes to correct deficiencies and/or promote personal growth <a href="#">(3.5, 8.1, 8.4)</a>	
RP3: Stress/Wellness Management	Works to identify a passion within the field of medical practice <a href="#">(8.1)</a>	<ul style="list-style-type: none"> <li>• Self-assessment</li> <li>• Evaluation by team members and peers in small group activities/clinical teams</li> <li>• Faculty feedback in pre-clerkship settings including Clinical Cases</li> <li>• Sessions, Masters Colloquium and Medical Skills</li> <li>• Faculty and resident evaluations during clinical clerkships</li> </ul>
	Able to identify an outlet for personal stress and anxiety <a href="#">(8.2)</a>	
	Is able to identify the signs, symptoms and triggers of personal stress and anxiety <a href="#">(8.1, 8.2)</a>	
	Capable of developing a personalized program for physical/mental health <a href="#">(8.2, 8.4)</a>	
	Can recognize and identify when to seek help <a href="#">(8.1)</a>	
	Demonstrates open-mindedness to the opinions and approaches of others <a href="#">(8.3, 8.4)</a>	

RP4: Conflict Resolution	Can articulate opinions in a non-confrontational manner <a href="#">(8.3, 8.6)</a>	<ul style="list-style-type: none"> <li>• Faculty feedback in pre-clerkship settings including Clinical Cases Sessions, Masters Colloquium and Medical Skills OSCE</li> <li>• Patient case logs/journal</li> <li>• Evaluation by team members and peers in small group activities/clinical teams</li> <li>• Faculty and resident evaluations during clinical clerkships</li> </ul>
	Can formulate strategies to diffuse confrontational situations between team members and/or patient/family members and the patient care team <a href="#">(8.3, 8.6, 8.7)</a>	
	Can effectively negotiate with patients/family members to gain cooperation in the medical plan of treatment <a href="#">(1.7, 3.8, 4.1, 8.6)</a>	

## 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](http://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/ 2 quarters/ minimum of 8 units of

Inorganic (General) Chemistry with Laboratory1

- 2 semesters/ 2 quarters/ minimum of 8 units 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: 3.50
  - New MCAT2: 511
- Minimum MCAT & GPA requirements acceptable
  - GPA: 2.80
  - New MCAT2: 497

1 IB or AP credits are not accepted.

Only 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 before the primary application deadline. All pre-requisite coursework must be completed within 9 years.

#### 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).

All applicants deemed eligible to be admitted as regular students into College of Medicine must be:

- a) Persons who have a high school diploma or its recognized equivalent, or
- b) Persons are beyond the age of compulsory school attendance in the State of CA, i.e. at least 18 years of age and pass a test that demonstrates the student's ability to benefit (ATB) from the educational program in which the student is enrolled

#### 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, 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.

The AMCAS application deadline for the 24-25 Admissions Cycle is December 15, 2024.

### 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 by the primary application deadline

### Letters of Recommendation

Applicants are required to submit a minimum of three and a maximum of four letters of recommendation.

2 Letters from a Science professor teaching the BCPM course (Required).

1 Letter from Other (e.g., Research advisor, Non-Science Professor, Community leaders, Employer Superior (Required)).

Submit all letters of recommendation to the AMCAS letter service only. Letters dated prior to January 2021 will not be accepted. If you have been out of school for more than 5 years, in lieu of the BCPM course letters, you may provide additional letters from the other category.

### Supplemental Application

Upon receipt of the AMCAS application packet, the material will be reviewed by the Office Admissions and the Admissions Committee. 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 the virtual interview day. Invitations are made on the basis of a complete, holistic review of an application and completion of any other supporting documentation. Applicants will receive their invitation to Interview Day via e-mail. Only applicants who have completed the virtual interview day are offered admission to the College of Medicine.

The interview process includes a case question and traditional interviews with faculty member from California Northstate University. The process includes a morning check-in session and two individual interview sessions.

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 Interview Day (cnsu.edu).

Notification of the decision of the Admissions Committee continues until the class is filled. To secure a place in the incoming class, all accepted applicants are required to fulfill all admissions paperwork and documentation obligations by the deadline specified in the admissions letter. Additionally, a non-refundable \$100 deposit must be submitted to the business office (non-refundable after April 30, 2025, for the 24-25 Admissions Cycle).

### Deferred Matriculation

CNUCOM does not offer options of deferred matriculation.

### Early Decision Program

CNUCOM does not participate in the Early Decision Program.

### **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.

## Student Enrollment Agreement

The Student Enrollment Agreement together with the other admissions documents must be completed and submitted to the college of medicine admissions office 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 acknowledges 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.

### Website

Before signing the Student Enrollment Agreement, the prospective student is strongly encouraged to visit the University and College website at [www.cnsu.edu](http://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 you have signed the Enrollment Agreement, whichever is later.

Cancellation shall occur when you give written notice of cancellation to the Director of the Admission Office shown on 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. When withdrawing from the college/university, please complete the Official College Withdrawal form available from the Registrar's request form website: Registrar Forms (cnsu.edu). 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 section of this catalog.

## Tuition & Fees

All tuition, fees, expenses, and policies listed in this publication are effective as of June 2024 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. Tuition and fees are due to be paid in full by 10 business days before the start of each semester, with the exception of M1s (who should refer to the EA).

Out of state 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 219).

## Scholarships

Information regarding various scholarships can be found the College of Medicine’s website,

<http://www.cnsu.edu/financial-aid/com> *Financial Aid, Types of Assistance, Grants and Scholarships* as well as within the Grants and Scholarships section of this catalog

## Cost of Attendance and Tuition and Fees for Incoming Students

The cost of attendance is an estimate of expected educational expenses for a period of enrollment. These educational expenses are calculated as described below and apply to all students enrolled in the Doctor of Medicine program at California Northstate University:

### Doctor of Medicine - Tuition & Fees per Year for 2024-2028

Tuition & Fees	Year 1 - M1	Year 2 - M2	Year 3 - M3	Year 4 - M4
Tuition	\$72,521	\$76,148	\$79,955	\$83,953
Student Disability/Liability Coverage Fee	\$91	\$91	\$91	\$91
Student Association/Support Fee	\$500	\$500	\$500	\$500
Technology Fee	\$100	\$100	\$100	\$100
Medical Lab Fee (Anatomy, Medical Skills, and Research)	\$500	\$500	\$0	\$0
USMLE Step 1 Preparation Package Fee	\$239	\$239	\$0	\$0
CPR Fee	\$90	\$0	\$90	\$0
Scholarly Research Projects Fee	\$125	\$125	\$0	\$0
Orientation Fee	\$75	\$0	\$0	\$0
Medicine Kit Fee <sup>1</sup>	\$115	\$0	\$0	\$0
Student Tuition Recovery Fund Fee <sup>6</sup>	\$0	\$0	\$0	\$0
Enrollment Agreement Fee	\$100	\$0	\$0	\$0
Kaplan Preparation Package Fee	\$0	\$725	\$0	\$0
CBSE Exams x2 Fee	\$0	\$118	\$0	\$0
UWorld Programs Fee	\$0	\$429	\$0	\$0
OnlineMedEd Package	\$0	\$0	\$300	\$0
Board Vitals Exam Prep Tool	\$0	\$0	\$250	\$250
CCSE Exam x1 Fee	\$0	\$0	\$59	\$0
Background Check Fee	\$0	\$0	\$75	\$0
Clerkship (Bootcamp) Orientation Fee	\$0	\$0	\$40	\$0
Graduation Fee	\$0	\$0	\$0	\$300
<b>Total Tuition &amp; Fees per Year</b>	<b>\$74,456</b>	<b>\$78,975</b>	<b>\$81,460</b>	<b>\$85,194</b>

### Total Tuition & Fees for entire 4-year Doctor of Medicine program \$320,085.

Estimated Other Optional Educational Related Costs <sup>2</sup>	Year 1 - M1	Year 2 - M2	Year 3 - M3	Year 4 - M4
Health Insurance Premium <sup>3</sup>	\$3,529	\$3,529	\$3,529	\$3,529
Room and Board <sup>5</sup> (based on 12 months)	\$28,152	\$28,152	\$28,152	\$28,152
Transportation <sup>5</sup> (based on 12 months)	\$5,362	\$5,362	\$5,362	\$5,362
Books and Supplies	\$1,000	\$1,000	\$1,000	\$0
Remediation Fee	\$300	\$300	\$0	\$0
Residency Application/Travel Fee <sup>4</sup>	\$0	\$0	\$3,500	\$3,500
Laptop	\$1,100	\$0	\$0	\$0
USMLE - Step 1 <sup>4</sup>	\$0	\$645	\$0	\$0
USMLE - Step 2 CK <sup>4</sup>	\$0	\$0	\$645	\$0
UWorld Programs Fee <sup>4</sup>	\$0	\$0	\$495	\$0
USMLE - Step 2 CS <sup>4</sup>	\$0	\$0	\$0	\$1,300
<b>Total Estimated Cost per Year<sup>5</sup></b>	<b>\$113,899</b>	<b>\$117,963</b>	<b>\$124,143</b>	<b>\$127,037</b>

- 1 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.
- 2 Estimated costs and expenses a student may incur as part of participation in the applicable year of the MD program, whether or not paid directly to CNUCOM. These expenses include estimated out-of-pocket cost of living expenses for the year.
- 3 Optional, estimated, and will vary based on number of insured members.
- 4 Estimated, based on the 2022 fee schedule for the USMLE
- 5 Includes tuition, fees, and other estimated educationally related costs.
- 6 Effective April 1, 2024, the STRF assessment rate will change from two dollars and fifty cents (\$2.50) per one thousand dollars (\$1,000) of institutional charges to zero dollar (\$0.00) per one thousand dollars (\$1,000) of institutional charges.

### Cost of Attendance and Tuition and Fees for Continuing Students

The cost of attendance is an estimate of expected educational expenses for a period of enrollment. These educational expenses are calculated as described below and apply to all students enrolled in the Doctor of Medicine program at California Northstate University:

### Doctor of Medicine - Tuition & Fees per Class for 2024-2025

Tuition & Fees	Year 2 - M2 Class of 2027	Year 3 - M3 Class of 2026	Year 4 - M4 Class of 2025
Tuition - Year 1	\$72,521	\$72,521	\$72,521
Student Disability/Liability Coverage Fee	\$91	\$91	\$91
Student Association/Support Fee	\$500	\$500	\$500
Technology Fee	\$100	\$100	\$100
Medical Lab Fee (Anatomy, Medical Skills, and Research)	\$500	\$0	\$0
USMLE Step 1 Preparation Package Fee	\$239	\$0	\$0
CPR Fee	\$0	\$90	\$0
Scholarly Research Projects Fee	\$125	\$0	\$0
Orientation Fee	\$0	\$0	\$0
Medicine Kit Fee <sup>1</sup>	\$0	\$0	\$0
Student Tuition Recovery Fund Fee <sup>6</sup>	\$0	\$0	\$0
Enrollment Agreement Fee	\$0	\$0	\$0
Kaplan Preparation Package Fee	\$725	\$0	\$0
CBSE Exams x2 Fee	\$118	\$0	\$0
UWorld Programs Fee	\$429	\$0	\$0
OnlineMedEd Package	\$0	\$300	\$0
Board Vitals Exam Prep Tool	\$0	\$250	\$250
CCSE Exam x1 Fee	\$0	\$59	\$0
Background Check Fee	\$0	\$75	\$0
Clerkship (Bootcamp) Orientation Fee	\$0	\$40	\$0
Graduation Fee	\$0	\$0	\$300
<b>Total Tuition &amp; Fees per Class</b>	<b>\$75,348</b>	<b>\$74,026</b>	<b>\$73,762</b>

Estimated Other Optional Educational Related Costs <sup>2</sup>	Year 2 - M2 Class of 2027	Year 3 - M3 Class of 2026	Year 4 - M4 Class of 2025
Health Insurance Premium <sup>3</sup>	\$3,529	\$3,529	\$3,529
Room and Board <sup>5</sup> (based on 12 months)	\$28,152	\$28,152	\$28,152
Transportation <sup>5</sup> (based on 12 months)	\$5,362	\$5,362	\$5,362
Books and Supplies	\$1,000	\$1,000	\$0
Remediation Fee	\$300	\$0	\$0
Residency Application/Travel Fee <sup>4</sup>	\$0	\$3,500	\$3,500
Laptop	\$0	\$0	\$0
USMLE - Step 1 <sup>4</sup>	\$645	\$0	\$0
USMLE - Step 2 CK <sup>4</sup>	\$0	\$645	\$0
UWorld Programs Fee <sup>4</sup>	\$0	\$495	\$0
USMLE - Step 2 CS <sup>4</sup>	\$0	\$0	\$1,300
<b>Total Estimated Cost per Class<sup>5</sup></b>	<b>\$114,336</b>	<b>\$116,709</b>	<b>\$115,605</b>

- <sup>1</sup> 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.
- <sup>2</sup> Estimated costs and expenses a student may incur as part of participation in the applicable year of the MD program, whether or not paid directly to CNUCOM. These expenses include estimated out-of-pocket cost of living expenses for the year.
- <sup>3</sup> Optional, estimated, and will vary based on number of insured members.
- <sup>4</sup> Estimated, based on the 2022 fee schedule for the USMLE
- <sup>5</sup> Includes tuition, fees, and other estimated educationally related costs.
- <sup>6</sup> Effective April 1, 2024, the STRF assessment rate will change from two dollars and fifty cents (\$2.50) per one thousand dollars (\$1,000) of institutional charges to zero dollar (\$0.00) per one thousand dollars (\$1,000) of institutional charges.

## 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 and related forms, a clear 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: Admissions Steps ([cnsu.edu](http://cnsu.edu)).
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 noncompliant 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.

### License Eligibility

Information regarding the Medical Board of California Physician Licensure eligibility can be found at:

<http://www.mbc.ca.gov/Applicants/PhysiciansandSurgeons>

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 applying, please refer to the Board's website to verify that 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 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. English language services are not provided.

### Awards: Non-Academic

During the academic year, students are notified in class, by CNSU 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 the selection of recipients of the College of Medicine honors, scholarships and awards. The Office of Student Affairs 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 to student stress and fatigue. 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 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 Mentor may recommend that the student meets with the Associate 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 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 Assistant Dean 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. The Student and Faculty Handbooks, which contain the mistreatment 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, staff, nurses, administrators).
2. Students should use this mistreatment policy to identify and 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 in a manner 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 and Admissions, or the clerkship/course/sequence director.
2. REPORT it (utilizing one of three options below and to 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 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. 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 and Admissions and/or the Assistant Dean of Faculty Affairs and Development 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 and Admissions 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 and Admissions. 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](http://medicine.cnsu.edu), and click on ‘Students,’ then ‘policies and handbooks,’ to view all 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) 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 prior to the next academic year. Students remediating a “Y” grade are not eligible for Honors (H).

Course grades are determined by performance on the following:

- A. Summative Exam
- B. Written assignments
- C. Professionalism
- D. 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.

<b>Code</b>	<b>Course Type</b>
AL	Active Learning
LAL	Lecture & Active

During the Progression of the course, faculty use course.

#### Learning Course

<b>Code</b>	<b>Course Type</b>
EL	Experiential Learning
LAB	Laboratory Course
LEC	Lecture Course

#### Grading Convention

<b>H</b>	90-100% Passing with Honors
<b>HP</b>	80-89% High Pass (Phase A & B)
<b>I</b>	Incomplete, but work of passing quality (temporary grade)
<b>Y</b>	Provisional, requiring remediation (temporary grade)

#### Narrative

When possible (e.g small group activities) all grades should be accompanied by narrative

<b>P</b>	70-89% Pass
<b>F</b>	<70% Fail
<b>W</b>	Official Withdrawal
<b>HP</b>	High Pass – Grade is issued for only Phase A (effective 07/22/2021) and Phase B (effective 09/01/2017) courses

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. 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", "HP", or "H" grade and to receive course credit provided he/she satisfactorily completes the work.

### Grade Appeal

Students can file an appeal if they believe and can demonstrate that the grade they received inaccurately reflects their performance in a course, clerkship, or elective. A student can file an appeal if there is a disagreement with a final course grade. General guidelines are outlined below:

#### Appeal Deadlines

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 Director. The Grade Appeal Form is located on the CNUCOM website. The student must initiate a formal grade appeal within ten (10) business days of receiving official notification from the University of the final grade for the course. Likewise, the Course Director must respond in writing to the student's appeal within ten (10) business days.

#### Resolution Process

If the appeal cannot be resolved, the student has two (2) business days to appeal in writing to the appropriate Department Chair. They will consult with the Course Director(s) and M3 and/or M4

Director to render a written decision with ten (10) business days of receipt of the student's formal appeal. If the Course Director is the Department Chair, then the student may appeal the decision directly to the Assistant Dean of Medical Education within two days in writing. He or she will render a decision in writing within ten 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 Assistant Dean of Medical Education. He or she will consult with a three-member ad hoc committee of faculty not involved in teaching the course. The committee will render a decision in writing within ten (10) business days of receipt of the formal appeal.

If the Assistant Dean of Medical Education and ad hoc committee cannot resolve the appeal, the student has two (2) business days to submit an appeal in writing to the Dean of the College of Medicine. 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 Assistant Dean of Medical Education for final approval. The form must then be submitted to the Registrar so that the grade can be changed on the transcript.

### Graduation Requirements

Failure to meet the following requirements will necessitate meeting with the Student Promotions Committee, and may adversely impact participation in the Match, and/or delay in conferral of the MD degree:

1. 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 Sub-I and electives.  
\* Note: All students may take more than the required number of elective credits. \*
2. No more than 27 credit hours of electives can count towards the 150 credit hours for graduation.
3. Phase A, which includes passing USMLE Step 1, must be completed within a maximum of four (4) years.
4. Phase B, which includes passing USMLE Step 2 CK, must be completed within a maximum of three (3) years.
5. Total time from matriculation to graduation cannot exceed 7 years.
6. Students must pass the following USMLE Exams to qualify for graduation:  
USMLE Step 1  
USMLE Step 2 Clinical Knowledge (CK)
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 meets or exceeds the entrust of the Professional Activities set forth by the AAMC, and as required by the faculty.
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 as found in the Student Handbook and online.
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 ten (10) business days before the date of graduation. Failure to comply may lead to delayed graduation.  
All students may take more than the required number of elective credits.

## Catalog Rights

CNUCOM occasionally modifies graduation requirements, such as by changes to the General Catalog or to policies that indirectly affect graduation eligibility (exam retake policies, remediation policies, grading policies, etc). If the student has been in continuous attendance, they may choose to meet the CNUCOM campus graduation requirements in the CNUCOM general catalog (and policies) that was in effect at the time they 1) began continuous attendance at CNUCOM, or 2) graduated from CNUCOM. A student having the right to choose one of these options is called “catalog rights.” By maintaining continuous attendance and selecting options one or two above, a student can be assured that their CNUCOM graduation requirements will not change.”

## Exit Interview

Exit interviews will be conducted during the last academic year. COM does not issue grades or grant degrees until all financial obligations have been met and all University property has been returned.

## Commencement

Every student is encouraged 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 and Admissions.

## **Academic Progression Policy**

This policy can be found in its entirety on our website [medicine.cnsu.edu](http://medicine.cnsu.edu) under the “Current Students” tab.

The purpose of this policy is to ensure students reach benchmarks, maintain a high standard of learning and reach recommended competency levels. Students must demonstrate they have achieved the CNUCOM program learning objectives related to patient care, medical and scientific knowledge, communication and interpersonal skills, professionalism, health care systems, and reflective practice and personal development. Students are required to pass all courses for the Medical Doctor (MD) degree.

## Scope/Coverage

This progression policy applies to all medical students. This policy will be reviewed at least every three (3) years.

## Policy

Good Academic Standing

A student who is advancing in the program as planned, is considered in Good Academic Standing. For students in good academic standing a standard (template) letter may be issued for verification purposes (academic and on-academic needs).

### Serving in Elective or Appointed Positions

A student must be in a good academic standing to hold elected office at the class or the college level, to serve on college or university committees, or to represent the college to outside organizations, either on or off campus. Before a student can assume an elected or appointed position, the Assistant Dean of Student Affairs must determine student suitability, based on the student's documented history of academic performance and professional behavior. If assuming such responsibilities would be in the best interest of both the student and the college, the Assistant Dean of Student Affairs may approve the student's appointment.

If probationary or dismissal procedures occur during a term when the individual is active, the student will be dismissed from committee service; voluntary resignation will be accepted.

### Medical Student Performance Evaluation (MSPE)

MSPE is the student's academic identity card. It is completed before October 1 of Phase B (Year Fou) 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, gaps or Leave of Absence, and other disciplinary actions
- Grades and, when appropriate, narratives for completed courses/clerkships in Phases A and B at the time of issuance comments regarding professionalism.
- 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).

### Changes to the MSPE

Students may review their MSPE with their faculty advisor and may request minor corrections such as grammar, spelling, etc. To request a change, students must submit an MSPE Appeal form to the Office of Student Affairs. The Associate Dean of Academic and Career Advising, in consultation with the faculty advisor, will respond in writing within ten business days after receipt of the formal appeal. If the student disagrees with his or her decision, he or she may submit an appeal to the Associate Dean of Medical Education, who will consult with an ad hoc committee not involved in the MSPE process to render a decision within ten business days of receipt of the formal appeal. Any disagreements with the Associate Dean's decision can be appealed to the Dean of the CNUCOM within two



business days of receipt of notification from the Office of Medical Education. The Dean's decision is final and will be rendered in ten business days. Any recommended changes to the MSPE will be made prior to release into the ERAs.

### Academic Notification

#### a. Academic Alert

Academic alerts are issued to students in good academic standing that may have failed one or more formative assignments or mid-course summative exams. 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. Academic Alert is not considered an adverse action.

#### b. Academic Warning

This is an academic status which is not considered a disciplinary action for which the student is not in good standing. It is also not mentioned in the MSPE. However, it indicates there will be close follow up by the student's advisor and the Office of Academic and Career Advising (OACA). Course Directors are notified of this status and interim evaluations are sought by the

SPC and reported to the OME. Students who are not in good standing are not allowed to take extramural/away electives. Students receive this designation by the SPC for the following:

- Fail 3 or 4 cumulative mid-term or final summative exams or SHELF examinations
- 2 courses/clerkships with a non-passing, transitional (Y) grade
- Failure to pass the CBSE exam or its equivalent prior to the beginning of the M3 year or not passing the Step 1 exam by Block 3 of the M3 year
- 1 or 2 failures of USMLE exams
- 2 PCRs
- A violation of the honor code or professional conduct deemed by SPC to warrant this designation. After the academic deficiency is remediated and/or professionalism issue is corrected, the student will be redesignated to be in Good Standing.

#### c. Professionalism Concern Report

If a student fails to maintain expected standards of professionalism, a Professionalism Concern Report (PCR) may be completed. This report is filed with the Office of Student Affairs and reviewed by the Assistant Dean of Student Affairs. Further information, documentation, and a meeting with the student, course/clerkship director may be

required. The PCR will be kept in the student's file. If there are no other PCRs filed during the student's medical school career, the form is destroyed at graduation and there will not be a permanent record of the incident. If the student receives one (1) PCR, the student may receive an Academic Alert. If the student accumulates two or more PCRs, then the student may be referred to the Student Promotions Committee (SPC). Any egregious or significant breach or pattern of lapses in professionalism will require referral to the SPC immediately. The SPC will review and provide a recommendation to the Office of Medical Education. The recommendation may include, but are not limited to, referral for counseling, remediation, placement on academic probation, inclusion in the professionalism section of the MSPE, suspension, or withdrawal/dismissal.

Breaches in Professionalism or violations of the Honor Code may instead be directly reported to the Honor Council for investigation then adjudication.

#### d. Exam Failures and Academic Standing

1. The total number of summative examinations failed by the student will count towards Academic Status designation.
2. As Foundation Course is the first Phase A course, mid-term examination failure in Foundations Course will not count in the total number of summative failed. Thereafter for all other courses, a failed mid-term and final summative exams will count towards the total.
3. Re-Take Exams a. Phase A
  - a. In the Foundations Course, one (1) retake is allowed after failure of final summative examination. Thereafter, no re-takes are allowed after failure of final summative exam.
  - b. Student who fails a course final summative or achieves a final course score of < 70% will be assigned a Y grade and needs to develop a remediation plan with the advisor/course director and then meet with SPC. b. Phase B:
  - c. Student who fails the SHELF (final summative clerkship exam) exam will be assigned a Y grade and the Clerkship Director will determine if the remediation plan will include repeating the entire clinical rotation portion thereof, before the post-remediation re-test can be taken.
  - d. Clerkship Directors recommendation will be reviewed and final decision for Re-take SHELF exam will be at the discretion of the SPC.
  - e. No retakes are allowed after a failed remediation examination and as such will result in a F grade.

#### Provisional Grades and Remediation

The incomplete (I) grade is a temporary transcript grade and is assigned only when the student's work is of passing quality but is incomplete for good cause.

The student is entitled to replace the "I" with a "P", "HP", or "H" grade.

The Y grade is a temporary transcript grade and can be replaced by a passing grade (P) according to the Grading Policy. A student who fails a pre-clerkship final summative or clerkship final summative (“SHELF”) exam is not allowed a retest and will be assigned a Y grade. If a student fails any of the required components of the course/clerkship, a grade of Y will be recorded on the transcript. The timeline for remediation of a provisional “Y” grade, whether for academic or behavior-related deficiencies, will be designated by the course/clerkship director). For Phase A, remediation may take place during the winter or summer break.

Remediation of a course must be completed prior to the start of the next academic year. One (1) Y grade can be remediated between the fall and spring semesters (i.e. winter break) and two (2) Y grades can be remediated after the spring semester (i.e. summer break). It is the responsibility of the course or clerkship director to notify the student of the recording of a deficiency grade (“Y” or “F”) in writing. This notification should outline what will be expected to remediate the

deficiency. The remediation plan should include at least instructional approaches, learning assistance/support and structured advising.

Upon the recording of a provisional grade of Y, the student will be required to appear before the Student Promotions Committee (SPC). The student’s academic record and proposed academic plan will be reviewed by the SPC. The final academic plan is devised by the student and course/clerkship director and will be submitted to the Chair of the SPC. The academic plan is initially reviewed and approved by the SPC and then submitted to the Office of Medical Education. Student will have a mandatory meeting with the Associate Dean of Medical Education prior to final approval of the academic plan.

Please refer to the Grading Policy for details regarding the recording of grades. Upon successful completion of the remediation plan and the post-remediation examination within 1 attempt, a passing grade will be recorded (Y/P) and reported to the SPC. If the remediation is not successful, the grade will be recorded as a Fail (F). The student will be required to repeat the academic year. In Phase A, students are not permitted a Leave of Absence for remediation or repetition of failed courses. SPC may also consider withdrawal or dismissal, students will be permitted only two (2) Y grades per academic year. Course and clerkship directors will be required to submit a list of students retaking exam(s) to the SPC at the end of each course. Student receiving a third Y grade in the same academic year, will meet with SPC and required to repeat the academic year; this recommendation will be forwarded to the Office of Medical Education. SPC may also consider withdrawal or dismissal.

### Probationary Academic Status (Academic Probation)

A student may be placed on probation due to academic and/or non-academic conditions such as but not limited to:

- a. Cumulative of three (3) courses or clerkships with non-passing (Y) grades within the same academic year, OR
- b. One Course or Clerkship F grade, OR
- c. Three (3) failures of USMLE (Step 1, 2CK) exam, OR
- d. Two or more violations of the CNUCOM Honor Code, Student Conduct Code, OR
- e. Professional conduct deemed by SPC to warrant this designation, OR
- f. A cumulative of Three (3)
- g. Professionalism Concern Reports (PCR)

Probationary status is reported to the student and the Office of Medical Education by the Office of Student Affairs.

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. If a student is on probation, they may not continue to serve on COM or University Committees.

Students on Probation must appear in front of the Student Promotions Committee. The student must submit a written probationary action plan to resolve the probationary status to the SPC. This must include specific timelines in accordance with the requirements to meet graduation deadlines. The probationary plan may include but is not limited to repeating the failed course(s), repeating an academic year or taking a leave of absence (LOA) for 1 semester. Initial LOA is for one (1) semester with an option to extend to one additional semester pending approval by SPC. This ensures that the committee has the ability to address each student differently, given the individual issues that arise. Alternatively, if deemed appropriate, the committee may recommend withdrawal or dismissal in which case the Dismissal Process is strictly followed.

Other options may be considered at the discretion of the Office of Medical Education. The probationary action plan may not extend the maximum time allowed for graduation from the program, i.e. students must graduate within seven (7) years from matriculation (including all remediation). The plan, additional recommendations made by the SPC, and accompanying documentation must be forwarded for approval to the Office of Medical Education.

Students who are on academic probation must maintain acceptable academic progress in all subsequent coursework. Notation of probation status will remain permanently in the student transcript. After the academic deficiency is remediated and/or professionalism issue is corrected, student will be redesignated to be in Good Standing based on recommendation by the SPC.

## Repeating Courses

A student may repeat an individual course/clerkship (not as a part of a repeated year) only once. No remediation is allowed for failed or repeated courses/clerkships. Repetition of the entire curricular year is recommended by the SPC when there is concern that the student has not mastered the academic skills of that phase. This includes receiving three (3) non-passing Y grades in an academic year or two (2) F grades in an academic year. If a student fails the final summative exam of the repeated course, no remediation is allowed, and a F grade is entered. Students will meet with SPC where several options will be addressed, including withdrawal or dismissal from the College of Medicine.

## USMLE Step Examinations

Students are required to pass Step 1 and Step 2, Clinical Knowledge (CK) 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.

### USMLE Step 1

Students must pass the CBSE by the beginning of their M3 year. Students must document a passing Step 1 score by the end of block 3 of their M3 year. Once the date of their Step examination is scheduled, the student must inform the Office of Assessment and Evaluation who will verify the student has documented a passing CBSE score, as established by the Office of Medical Education.

A passing CBSE score is required to sit for the USMLE Step 1. Students who do not achieve a qualifying score for the CBSE before this deadline cannot progress into the M3 year and will be referred to the SPC for case review of which the outcome can include an LOA to pass CBSE and/or USMLE Step 1. Students will receive an Academic Warning status for not passing the CBSE prior to the beginning of M3 year or not passing Step 1 by the end of block 3 of the M3 year.

Inability to pass exams will also require the student to submit a detailed remediation plan developed with their advisor for review and approval by SPC and OME. Progress during LOA will be monitored by the SPC and the OME. During the academic LOA, students are required to meet with their advisor at least once per month.

Students will need to develop a progress report and remediation plan if they plan to request for an additional one (1) semester LOA extension. Extension beyond a total of 12-months academic LOA is not permitted. If the student has not met the requirements stipulated in the Academic Plan associated with the LOA, the SPC will consider suspension, withdrawal, or dismissal.

## USMLE Step 2 CK

Students must document a passing CCSE score to be eligible to sit for USMLE Step 2 CK. The passing threshold is determined by the Office of Medical Education. Students are required to pass Step 2 CK before degree conferral and graduation during their final semester. Delay in achieving a passing score for Step 2 CK by graduation will delay degree conferral and therefore may affect the start of residency. Students unable to achieve a passing score prior to degree conferral and graduation will be referred to the SPC.

## Implications if Examination is Failed

If a student fails Step 1, he/she should contact the Chair of the Student Promotion Committee 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 the student 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.

If either USMLE Step 1 or Step 2 CK is failed four times, the Student Promotions Committee will consider dismissal.

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 the 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 YYY 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 Student Promotions Committee in order to proceed. SPC 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, including failure of any summative exams and/or courses during the period of probation or any egregious, significant breach, or pattern of lapses in professionalism. 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:

1. If a student is unable to remediate the performance deficiencies which led to Probation, dismissal may be considered by the SPC.
2. Students are recommended for dismissal if any of the following occur:
  - a. Failing the USMLE Step 1 or 2 exams four times
  - b. Receiving two (2) F grades in an academic year
  - c. Failure to meet terms of remediation for a failed course or clerkship
  - d. Failure to follow United States Medical Licensing Exam (USMLE) policy
  - e. Violation of the CNUCOM Honor Code or Student Conduct Code, and/or unprofessional conduct deemed severe and egregious in nature as deemed by the SPC
  - f. Failure to successfully complete the M.D. program within the 7-year time- to degree requirement.

Recommendations for dismissal are made by SPC to the Faculty Executive Council (FEC), which makes a recommendation to the Office of Medical Education (OME). Students may appear before the FEC to present their case before the FEC submits its decision to the OME. The Associate Dean of Medical Education will relay the OME’s decision to the Dean and notify the student of the FEC’s recommendation.

## Appeal

The student may appeal against all actions of the Student Promotions Committee to the Assistant Dean of Medical Education, in writing, within fourteen (14) days of notification of the action. This includes probation, suspension, and dismissal. The Dean of Medical Education renders a decision in writing within fourteen (14) days of the receipt of the formal written appeal. A final appeal may be made to the Dean of the College, in writing, within ten (10) days of the notice from the Associate Dean of Medical Education. The Dean of the College will decide to implement the recommendation for dismissal or to reinstate the student into the academic program of the medical school after ten (10) days or after hearing the student's appeal. The Dean's decision is final.

## Attendance

Regular class attendance is expected of all students for all class sessions. Students are required to attend all mandatory sessions. Mandatory sessions are those in which a student must be physically present to maximize necessary learning (such as Medical Skills dissections and Master's Colloquium group discussions). The college recognizes that circumstances may cause a student to miss an occasional class. The student may make up for the missed work, providing that it is an excused absence. If a student has an unexcused absence for more than one (1) mandatory session, they will meet with the assigned College Master and/or the Assistant Dean of Student Affairs to discuss the situation. If more than two (2) mandatory sessions are missed with unexcused absences, the student will meet with the Student Promotions Committee to discuss the situation. The student may be referred to an Academic Counselor, and/or to tutoring. If too many sessions are missed, the Student Progressions Committee may require the student to 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.

## Excused Absence Policy

A student may request an excused absence from mandatory sessions (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 and Admissions (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 Forms (cnsu.edu). 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 and Admissions (College of Medicine) for approval. Once approved, faculty and students are expected to communicate to make reasonable accommodations for make-up exams and assignments. 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 and Admissions (College of Medicine) in writing for resolution.

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 and Professional Meetings

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 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 Assistant Dean of Student Affairs or the Chair of Clinical Education, determines student eligibility and which conferences qualify. 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 Student Affairs 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 Assistant Dean of Student Affairs. A request to attend an off-campus professional conference must be made by submitting a Request for an Excused Absence form to the Office of Student Affairs, while a request for funding must be made by submitting a Travel Request form to the Office of Research. Both forms must be filled out completely, including all required signatures, and submitted 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 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.

## 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.

To request a planned absence, students should first contact their individual Advisor, discuss it with the Assistant Dean of Student Affairs, and immediately contact the appropriate course director(s) or clerkship director(s). After consultation, an official LOA request form must be submitted that specifically states the last date of attendance, the anticipated return date, and the reason for leave of absence. The LOA request must also be signed by both the Director of Student Financial Aid and the Business Office prior to being submitted to the Assistant Dean of Student Affairs. She/he will review the academic standing of the student and forward the documents to SPC to determine whether an LOA will be granted. Final approval of a LOA is granted by the Office 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.

In general, a student is eligible for one LOA for one academic year during their tenure at CNUCOM with the possibility of an extension for one more semester depending on when the LOA occurs in the curriculum and why it was initially granted. 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. It is the student's responsibility to review the LOA policy prior to requesting an LOA. LOAs requested for academic deficiency

during Phase A will initially be for one semester and may be extended at the discretion of the SPC by another semester. LOAs requested during Phases B and C will initially be for one semester coinciding with preset blocks at the discretion of the Phase B Directors and may be extended by another semester at the discretion of SPC. Extensions beyond 1 year during any Phases are not permitted except under extenuating circumstances.

### Academic LOA

If the student is experiencing academic difficulties such as failed remediation of a Y or F grade in a course or clerkship, the student will be placed on probation. The Student Promotions Committee (SPC) may recommend one of the following actions: repeating the failed course, repeating the academic year or taking a leave of absence (LOA) for one semester with the possibility of an extension for one additional semester. Extensions beyond one year are not permitted except under extenuating circumstances. Students will work with their advisor, course/clerkship director and the SPC to create an academic plan, which will initially be reviewed and approved by the SPC and then submitted to the Office of Medical Education. The student will need a mandatory meeting with the Associate Dean of Medical Education prior to final approval. Upon approval of the LOA, the registrar is notified, and the student will be placed on probation. Please review the academic progression and remediation policies for more information on this procedure.

To promote student wellness and success, OSA will communicate with students on academic LOA bimonthly. Advisors are responsible for academic supervision and to provide interval reports to the SPC. Students are expected to develop an academic plan with their advisor and course/clerkship director, meet with the SPC and the Associate Dean of Medical Education to seek approval of the academic LOA, meet with the advisor at least once per month during the LOA, and submit a formal academic progress report in writing to the SPC four weeks prior to the end date of the LOA.

If a student is granted an LOA that interrupts a course or clerkship, a grade of W (withdrawal) will be entered on the transcript, designating uncompleted coursework. If/when the student is re-enrolled, the SPC in consultation with the course/clerkship director will determine how much of the interrupted course/clerkship will need to be repeated and/or completed. The grade of W will remain on the transcript along with any grade subsequently.

### Student Initiated

A student in good academic standing may, at any time, request a leave of absence for a specified period not to exceed one year. These include the following:

1. Research and Educational Enrichment LOA

An approved Leave of Absence can be generated by the student to pursue research endeavors, an additional degree, such as MHA, MPS, Ph.D., either at CNU or another institution.

2. Military Obligation LOA:

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 complete a Leave of Absence Form and provide a copy of their military 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 penalties from the University for fulfilling their military obligations.

**48. Medical LOA:**

An approved Medical Leave of Absence may be initiated by the student and must be accompanied by documentation from the student's personal health care provider and/or an independent examiner must attest to the student's inability to participate in the curriculum due to a medical condition.

**48. Personal LOA:**

An approved Personal Leave of Absence is initiated by the student to attend to family, financial, or other personal factors that affect the student's ability to participate in the curriculum. Examples of reasons for a Personal Leave of Absence include but are not limited to:

- a. Death in the family.
- b. Caregiving for family members.
- c. Other personal situations prevent participation in the curriculum.

**Administrative LOA**

An Administrative Leave of Absence may be initiated by SPC, Associate Dean for Medical Education and the Dean's Office for reasons such:

- a. Noncompliance with health clearance or other compliance requirements.
- b. Nonpayment of registration fees leading to repeated business holds.

**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. The 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 the Assistant Dean of Student Affairs and Admissions at least 30 days prior to the first day of class to review course and performance expectations for the upcoming 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, the Dean, 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, see page 10 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
  - a. the COM Office of Student Affairs in a sealed envelope, or by email.
3. The Assistant Dean of Student Affairs and Admissions will handle the complaint in accordance with the policies of CNUCOM, will review the facts surrounding the issue, and will attempt to resolve the complaint.
4. If the complaint is not anonymous the complaint will be answered in writing by the Assistant Dean of Student Affairs and Admissions within four weeks of receipt of the complaint, excluding holidays/university breaks.
5. If the complaint relates to the Assistant Dean of Student Affairs and Admissions, the matter will be handled by 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 consist of CNU faculty and staff.

6. If the ad hoc committee cannot resolve the complaint satisfactorily, the matter will be transferred to the College Dean for appropriate action.
7. Students may appeal decisions by filing an Appeal with the College 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 Assistant Dean of Student Affairs and Admission office. All aspects of student complaints shall be treated as confidential.

## COM Course Descriptions

### **Department of Medical Education**

#### COM 501 Foundations of Clinical Medicine (8 cr)

Foundations of Clinical Medicine is an integrated course that provides students with a solid foundation in multiple disciplines within the basic sciences, including Biochemistry, Cell Biology, Embryology, Immunology, Genetics, Microbiology, Pathology, Pharmacology/Toxicology, and Physiology. A firm understanding of the basic science material presented in this course is essential to success in subsequent system-based courses. The course will introduce the practice of using clinical presentations (CPs) and Clinical Cases (CCs) to provide a conceptual framework for integrating the basic and clinical sciences. The CPs will include clinical algorithms and will focus on common situations and presentations that a primary care physician will experience. Clinical faculty will walk the students through the clinical algorithm(s) emphasizing critical decision points while also teaching the students the art of developing a differential diagnosis. To facilitate the logical integration of diverse disciplines, the course schedule is organized into "mini-blocks," with a heavy focus on particular sciences that correspond with the CPs. Students will also participate in the longitudinal Medical Skills, Masters Colloquium and Self-Directed Student Scholarly Project courses that run concurrently with the Foundations in Clinical Medicine course.

#### COM 511 Integumentary and Musculoskeletal Systems (7 cr)

The Integumentary and Musculoskeletal Systems course is structured around weekly 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 the normal structure, function and pathologic dysfunction of the two systems.

Each week starts with a clinical presentation that is accompanied by clinical algorithms, clinical reasoning guides, and detailed objectives lists. Faculty then led t h e students through the clinical algorithms emphasizing critical decision points and setting the framework for the integration of the basic and clinical sciences. Over the course of the week, faculty present fundamental principles from the traditional basic sciences (anatomy, histology, embryology, biochemistry, immunology, microbiology, nutrition, pathology, pharmacology, and physiology) to provide students with the knowledge and skills required to arrive at a correct diagnosis. These basic science lectures highlight the normal structure and function of the systems, followed by presentations of various disease states, and include management and treatment options. In addition to the lectures, library resources, and other learning concurrent hands- on anatomy lab dissections on human donors reinforce the learning of musculoskeletal structures and their relationships. Traditional X-rays, CT scans and MRIs which illustrate normal and abnormal structures are reviewed. At the end of each week, students participate in clinical case discussion sessions in small groups with faculty. During each week, they also take part in a Medical Skills course that runs concurrently and supports the course content. A set of clinical case-based learning sessions in one week of the course helps students develop their self- directed learning skills.

### COM 521 Gastrointestinal System (6 cr)

This course will cover the structure and function of the gastrointestinal tract (hollow muscular organs, liver and pancreas) in normal health and in a variety of gastrointestinal, hepatic, and metabolic disorders. Each week will begin with a clinical presentation (CP) focusing on a practical approach to a common gastrointestinal problem (difficulty swallowing, constipation, diarrhea, jaundice, abdominal pain, and gastrointestinal bleeding) and will end with a small group clinical case discussion relating to the topic of the week.

Sessions during the week will integrate basic and clinical sciences including anatomy (with cadaveric dissection lab), cell and molecular biology, genetics, physiology, histology, pathology, microbiology, and pharmacology. Medical Skills sessions throughout the course will integrate bedside evaluation and management of patients with gastrointestinal complaints.

### COM 526 Hematology (4 cr)

This Hematology 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. Mandatory microscopy lab sessions provide students with the opportunity to practice their skills at reviewing and identify normal and abnormal blood smears. 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 diseases 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 with clinical algorithms and reasoning guides. Following the clinical presentation, faculty will present fundamental principles from the basic sciences (e.g., biochemistry, cell biology, genetics, immunology, microbiology, nutrition, pathology, pharmacology, and physiology). These learning activities will provide the knowledge and skills required to evaluate a patient encounter and develop the necessary analytical skills needed in a physician. At the end of each week, students will actively participate in clinical cases, applying the knowledge and skills they have learned.

### COM 531 Cardiovascular and Pulmonary Systems (10 cr)

The Cardiovascular and Pulmonary (CVP) Systems course deals with components of Cardiovascular and Pulmonary systems, which include 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 the molecular, cellular, tissue and organ levels, both in health and disease as well as their treatment and prophylactic strategies. The course consists of 9 clinical presentations (CPs) spread over 9 weeks, which were selected based on the clinical importance and the frequency at which they are presented to a health care system. They include syncope and arrhythmias, murmurs and abnormal heart sounds, chest pain, hypertension, cardiac arrest, shock, shortness of breath, cough, and acute dyspnea. Students will be exposed to one clinical presentation every week, followed by didactic lectures and active learning sessions (such as small group discussions, TBL and flipped classes) relevant to the clinical presentations demonstrated that week. The clinical faculty with relevant expertise will be responsible for conducting CPs sessions by demonstrating a logical approach to arriving at a clinical diagnosis using clinical algorithms and clinical reasoning guides developed based on clinical information and probabilities of signs and symptoms for a particular disease condition. Students will also undergo relevant training in the concurrent 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, and will be asked to apply their skills/knowledge to their CVP course learning. In all but two course weeks, students will also be exposed to 2 hours of clinical case examples, where they are presented with virtual clinical cases containing the 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 weeks without a clinical case, students will work in medium-sized groups with their peers to solve an evolving, challenging patient case using the clinical case-based learning (CCBL) format.

It should also be noted that the Masters Colloquium course runs concurrently with CVP and Medical Skills and will be integrated with CVP content as appropriate and relevant, particularly as it applies to socioeconomic, community and global health issues. The students will be evaluated using 2 formative examinations and 2 summative exams.

#### 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 kidney injury and chronic kidney disease, 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 (10 cr)

The Neuroscience course spans nine weeks and contains fifteen 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, physiology, and pathologic dysfunction of the nervous system and special senses. Depending on the week, 1 to 3 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 presentation 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, skills required to arrive at a correct diagnosis. These basic science lectures will highlight the normal and physiology) to ensure adequate knowledge and 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 and clinical case-based learning sessions with faculty to understand and learn from illustrative cases related to the clinical presentation topics of the week. Students take part in the Medical Skills course that runs concurrently and supports content covered, emphasizing the skills including history taking, physical examination, critical reasoning skills and presentation skills that the students need to acquire to diagnose and for the management of different clinical cases.

#### COM 561 Behavioral Medicine (3 cr)

Behavioral Medicine is a course covering the broad scope of Psychiatry and Behavioral Science. It is a multifaceted approach which addresses the psychological, biological, and social factors involved in mental health. The course covers the etiology, diagnosis, and treatment of the major psychiatric disorders and incorporates the contributions of basic sciences as well as the psychological sciences in understanding and treating mental health disorders. Clinical presentations (CPs) within the Behavioral Medicine course will focus on common situations and presentations that a primary care physician will experience. There will be clinical presentations which are accompanied by clinical



algorithms, and reasoning guides which address course learning objectives. Clinical Cases (CC) are sessions done specifically in the college classroom in which students are given a case example. The clinical faculty will guide the students through each case emphasizing critical decision points and setting the framework for the integration of the basic and clinical sciences. Students will participate in the Medical Skills course that runs concurrently with the behavior medicine course and which emphasizes learning how to evaluate a patient for a psychiatric condition or illness.

### 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 The Reproductive Systems course is designed to teach medical students the medical and scientific knowledge pertinent to the male and female human reproductive systems in both health and disease. The course consists of twenty clinical presentations dispersed over the course of six 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 pertinent basic science content, students will collaborate in clinical case example sessions. Clinical case examples consist of clinical vignettes pertinent to a given clinical presentation. Students will assemble in small groups and will be mentored by their college masters preceptors and a clinical faculty member. Five clinical vignettes, usually based on real patient cases, will be provided to the students each week. Students will be initially presented only with patient demographic and chief complaint and a brief history with limited physical exam and lab data.

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 pathology/surgical findings. Each group will then present to the class their case discussions. Clinical case examples will provide students with an opportunity to employ clinical algorithms and clinical reasoning guides to arrive at a diagnosis and provide practice in collegial discussion and oral presentations. 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. A CCBL (collaborative case-based learning) session will be included in three sessions of small group discussion of a detailed case. The students will develop and research specific learning objectives and then present these topics to each other in the group sessions with a faculty preceptor. Each student group will have a leader, a researcher, and a scribe. All students will present their learning objectives to the other members of their group and faculty advisor. Masters Colloquium topics scheduled during the reproductive course include the following:

- 1) Sexual assault and domestic violence
- 2) Reproductive Choice, including abortion and contraceptive access

- 3) Ethical Issues in Reproduction, including maternal/fetal conflicts, cultural issues, and gender inequities. 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 also 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. Standardized live patients and simulated models will be used to practice history and physical exam skills, including labor and delivery, pelvic and rectal exams, and breast exams.

#### COM 601-604 Medical Skills (1 credit per semester/4 semesters total = 4 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 3<sup>rd</sup> and 4<sup>th</sup> year clerkships, and 3) objectively identify areas that need improvement.

#### COM 611-614 Masters Colloquium (1 credit per semester/ 4 semesters total = 4 cr)

The purpose of the Masters Colloquium is to prepare student physicians for the complex multidisciplinary challenges in the profession of medicine with an intention to give the tools necessary for a student to develop into a compassionate, integrated and well-informed physician operating with a high level of integrity and altruism. Sessions cover the following areas: Communication, Ethics, Healthcare Systems, Global and Public Health, Physician Development, Patient Diversity and Community Service.

Masters Colloquium Curriculum Content topics include, but are not limited to professionalism, hot topics in public health, bias/barriers to care, preserving patient dignity, difficult encounters, and introduction to U.S. Healthcare. A comprehensive topic list adapted from the course syllabus is listed below. \*\*The Masters Colloquium course is a series of 2-hour seminars presented throughout each semester to medical students in Years 1 and 2. Some sessions will be conducted in a large classroom, some in the COM Colleges\*\*, and some will involve both settings.

The colloquia take place within lecture and discussion sessions or a workshop format, and encourage experiential learning as well as student directed learning. The course covers complex and multidisciplinary aspects of professional development. Some sessions are conducted by COM faculty and others by invited community experts. College Masters play an integral role in facilitating discussions and supporting students' learning. At the end of each semester, Masters Colloquium sessions will be evaluated by the students via an anonymous survey. Feedback from these surveys will be reviewed by Course Directors with an interest in critically evaluating course content and style.

\* Example of a four-semester syllabus outline follows:

### Physician Development

Professionalism  
Time Management  
Myers Briggs assessment  
Purpose in career  
Self-Care  
Service Learning  
Resiliency  
Doctor as Patient  
Foundations of Leadership

### Public Health

Public Health Intro/Overview  
Introduction to Global Medicine (natural disasters, programs, doctor's role)  
Advocacy and Politics in Medicine  
Tobacco Program (state level)  
Public health in Pandemics (COVID-19) Hot Topics in Public Health  
Maternal Infant Health  
Human Trafficking

### Patient Diversity

Chronic Disease Panel  
Bias/Barriers to Care)  
Disabilities – Awareness and Realities  
Providing Culturally Competent Care  
Health Literacy with Highlight of Immunizations  
Caring and Culture of LGBTQ+ Community  
Integrative Medicine  
Aging Experience

## Communication Communication Skills I Communication Skills II

Communications Skills (Motivating Conversations) Placebo Power of language

Communication (Difficult Encounters) Virtual Communication and Social Media

## Ethics

Confidentiality

Preserving Patient Dignity

Medical Errors Conflict of interest Medicolegal Reproductive Medicine

Decision Making Capacity / Informed Consent

End of Life Care / Brain Death

## Healthcare Systems

Introduction to US Health Care (Insurance/Medicare/Medicaid/ ACA) Structure and Practice of Healthcare Quality and Safety

Medical Errors and Ethics

\*\* At the beginning of Year 1, students will be divided into groups of 20-25 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.\*

## Office of Research

The required Self-Directed Student Scholarly Project (hereafter referred to as the Scholarly Project) is an eighteen-month research-based program to be completed during fall and spring semester of the first year and fall semester of the second year of medical school. It is subdivided in COM 622, 623 and 624. Details of each section are described below.

### COM 622 Self-Directed Student Scholarly Project (1 cr)

During COM 622 students will be required to attend didactics and group activities relating to biostatistics, research design and methodology and complete assignments.

### COM 623 Self-Directed Student Scholarly Project (1 cr)

During COM 623, students will assemble in groups 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 scholarly 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 as well as periodic lectures as well as a Research Mixer with faculty. Students are encouraged to find an area of interest that they wish to pursue further and to identify faculty and other students that have similar research/scholarly interests. The following are examples of broader categories that are 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 spring semester of their first year of 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. Fundamental Ethical Principles covered in the following areas: 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 must complete certain 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 the second half of a one year, research-based program to be completed during the fall semester of the second year of medical school. Students will continue working together on the project and collect and analyze data in order to address their question/hypothesis proposed during COM 623. Students will then compile their findings into a final abstract and present these findings as either a poster or oral presentation during our annual SDSSP Research Day, typically held in December of each year.

### M3 Clerkships

#### COM 701 Family Medicine Clerkship (6 cr)

Each student will spend six weeks in a family medicine clerkship working directly with one or more family medicine physicians in the settings of either a county hospital, HMO outpatient clinic or a community private practice outpatient office. In each of these settings, the students will have the opportunity to participate in the treatment of a variety of common conditions that are present in a typical community setting. Students will hone their skills in communication, medical history taking, clinical examination, medical knowledge, and professionalism. There will be exposure to healthcare systems where students will gain insight into barriers to care and means to optimize systems that deliver care. Special emphasis will be placed on learning preventative care, end of life issues, and health screening programs. Students' exposure to a wide variety of illnesses and performance of commonly used procedures will be tracked electronically.

#### COM 711 Internal Medicine Clerkship (8 cr)

The internal medicine clerkship is split into a 6-week portion and a 2-week portion, 6 weeks of "core" IM clerkship experience and 2 weeks of a "selective" portion where the student may self-direct their study either into an IM subspecialty area or may do 2 additional weeks of core IM practice. This 2-week selective is required, but it can be done during flex time in the M3 year or during rotations in the M4 year. During the six weeks of core internal medicine clerkship, students have an opportunity to learn from inpatient and outpatient clinical experiences. Students are supervised by internal medicine attending and resident physicians. In these settings, students learn to hone their skills in patient care, medical knowledge, communication, professionalism, healthcare systems and personal development in the context of adult primary and inpatient care.

Special emphasis is placed on providing opportunities to participate in the common medical conditions seen by internal medicine physicians.

Students also participate in small groups, weekly didactic sessions that focus on topics in general internal medicine, cardiology, gastroenterology, infectious diseases, hematology/oncology, pulmonology, nephrology, rheumatology, and endocrinology. During the didactic sessions, students also have an opportunity to present interesting patients from rotations and discuss physical exam findings, review ECG and read chest radiographs. To ensure adequate exposure, each student will be required to log each required patient encounter and procedure completed in the online database the university maintains. These logs will be routinely shared with the Clerkship Director to better determine the adequacy of the learning environment.

#### COM 721 Neurology Clerkship (4 cr)

Each student will spend four weeks at one or more of the institutions listed affiliated sites working directly with a neurologist in both inpatient and outpatient settings. 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, each student will be required to log each required patient encounter and procedure completed in the online database the university maintains. These logs will be routinely shared with the Clerkship Director to better determine the adequacy of the learning environment. Didactic sessions and virtual learning are included and designed to enhance the clinical learning experience as well.

#### 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 labor 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 six weeks on a pediatric clinical rotation. It is possible to spend three weeks working directly with a pediatrician attending one of CNUCOM's affiliated hospital and ambulatory (outpatient) sites. Alternatively, the student may spend the entire six weeks in an outpatient setting. In these settings, students will have the opportunity to hone their skills in patient care, medical knowledge, communication, professionalism, healthcare 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 on 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 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.

#### 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.

#### COM 771 Emergency Medicine Clerkship (4 cr)

Each student will spend four weeks on an Emergency Medicine Rotation at one of CNUCOM's affiliated hospital sites. In this setting the students will have the opportunity to hone and develop their skills in patient care, medical knowledge, communication, professionalism, health care systems, personal development, and emergency procedures in the context of evaluating and managing patient who present with medical and surgical emergencies. Special emphasis will be placed on expedient and focused history/physical examinations, developing an appropriate and a logical differential diagnosis and identifying emergent and 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 is directed to log required clinical encounter cases, unique to EM. They are also directed to log required procedures completed in the online database the university maintains. These required procedures may span across different clerkships, so do not all need to be logged in the context of EM Clerkship alone.

Mandatory emergency didactic sessions will be held once a week for the duration of the course. During these sessions, the Clerkship Director and students will practice common procedures, share, and critique case reports students are required to submit each week, and review management of common emergency type scenarios. Generally, students will also present cases during didactics. These presentations serve as a springboard to discussion, but they are also designed to be formative, helping students learn how to present in an organized and persuasive manner.

#### COM 781 Extended Clinical Experience Course (2 cr)

This required two-week course will be offered in the M3 year and will complement and expand on the clinical experiences the students experience throughout their M3 clerkships. The course will include a variety of topics including review of radiology concepts in plain radiography, computed tomography and ultrasounds, an overview of Advanced Cardiac Life Support concepts and protocols as well as time spent in the simulation lab practicing various procedures, which may include lumbar puncture, central line placement, and thoracotomy. Students will also complete their required M3 OSCE in this course.

#### M4 Sub-Internships

A sub-internship also known as acting internship is a M4 clinical experience completed at CNUCOM-affiliated hospital systems or through VSLO in which the medical student is expected to demonstrate the knowledge, skills,

and attitudes expected of a first-year resident. Students completing a sub-internship or acting internship must meet the following requirements:

- Sub-Internships can be completed at an “away” site.
- Minimum number of Sub- Internship required to graduate = 1 (4 week minimum).
- Maximum number of Sub- Internship = 3 (A specialty limit of 12 weeks, including Electives and Sub- Internships).

For the following Sub-Internships, please see the specialty area within the section M4 Electives.

**Sub-Internships = 1 credit units per week)**

EME 802 – Emergency Medicine

Sub-Internship

INT 802 – Internal Medicine Sub-Internship

CAR 802 – Cardiology Sub-Internship

PNE 802 – Pediatric Neurology Sub-Internship

NEU 802 – Neurology Sub-Internship

NSG 802 – Neurosurgery Sub-Internship

OBG 802 – Gyn/Onc Sub-Internship

ORT 802 – Orthopedic Surgery Sub-Internship

OTO 802 – Otolaryngology Sub-Internship

PIC 802 – PICU Sub-Internship

PLS 802 – Plastic Surgery Sub-Internship

PSY 802 – Psychiatry Sub-Internship

REN 802 – Nephrology Sub-Internship

SUR 802 – SICU Sub-Internship

TSU 802 – Thoracic Surgery Sub-Internship

CSU 802 – Cardiac Surgery Sub-Internship

URO 802 – Urology Sub-Internship

PED 802 – Pediatric Sub-Internship

PUL 802 – Pulmonary & Critical

Care Medicine Sub-Internship

OBG 802 – OB/GYN Sub-Internship

SUR 802 – Surgery Sub-Internship

FAM 802 – Family Medicine Sub- Internship

M4 Electives

Elective course credit = 1 credit unit per week.

- Maximum of 12 weeks per specialty (Clinical) can be applied toward degree requirements.
- Maximum of 8 weeks (non-clinical) can be applied toward degree requirements.



## AWAY ROTATIONS

Students apply independently for placement typically through VSLO or by separate application.

### **ALLERGY/IMMUNOLOGY (AAI)**

#### **AAI 801 – Allergy, Asthma, Immunology Elective**

##### **(2- or 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.

### **ANESTHESIA (ANE)**

#### **ANE 801 – Anesthesia Elective (2- or 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, and perform peripheral venous, cannulation, bag and mask airway management, and endotracheal intubation.

### **CARDIOLOGY (CAR)**

#### **CAR 801 – Cardiology Elective**

##### **(2- or 4-week rotation)**

Students will work with faculty attending to evaluate and manage cardiac patients in both an outpatient and inpatient setting. Students will be introduced to reading EKG's, echo, and observe cardiac cauterizations and transesophageal echo. Students are expected to demonstrate interpersonal and communication skills that enable them to establish and maintain professional relationships with patients, families, and other members of health care teams.

## **PEDIATRIC CARDIOLOGY/PCA 801 – Pediatric Cardiology Elective I**

(2- or 4-week rotation)

Develop understanding of cardiovascular physiology and pathophysiology of both congenital and acquired heart disease in outpatient and inpatient environments. Gain exposure to both noninvasive and invasive methods used in diagnosing and treating congenital and acquired heart disease in the pediatric population. Develop skills in obtaining a history and performing a physical examination focused on the cardiovascular system. During the pediatric cardiology rotation, students will be under the direct supervision of pediatric cardiologists in both the outpatient and inpatient setting. Students will attend either morning or afternoon clinic, participate in obtaining a history and perform a in the 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 observe cardiac catheterization or diagnostic and interventional procedures as well as observe pediatric electrophysiology studies and catheter ablations of rhythm disorders. Students will also 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.

## **CARDIOTHORACIC SURGERY**

CSU 801- Cardiovascular Surgery

(2 or 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 diseases and conditions they see. Students are expected to attend and participate in all scheduled educational activities at the host institution.

## **DERMATOLOGY (DER)**

DER 801 – Dermatology Elective

(2 or 4 week rotation)

This elective is customized to the specific interests of the fourth-year medical student interested in learning more about medical surgical dermatology. The student will be exposed to medical dermatology encounters with patients having primary skin disease, including 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.

## **EMERGENCY MEDICINE (EME)**

### **EME 802 – Emergency Medicine Sub-Internship**

(4-week rotation)

To provide an opportunity for students who have an interest in pursuing a career in emergency medicine or a related specialty. To function at a higher level than a clerkship student. This should be considered as an opportunity to function as an intern-like capacity in the emergency department (ED). Develop a systematic approach to an undifferentiated patient. Formulate rapid approach to common illnesses that are present in emergency department. Recognize the needs for and appropriateness of consultation and/or specialty referral. Demonstrate knowledge of the initial steps of BCLS and ACLS in the pulseless patient. Demonstrate the primary and secondary survey in the trauma patient. Perform and become familiar with common procedures such as suturing, chest tube insertion, bedside ultrasound, lumbar puncture, intubation, thoracentesis, and paracentesis. Understand informed consent for treatment, procedures, and refusal of treatment. Learn to differentiate between tests which must be obtained immediately as an inpatient versus those which must be performed later in an out-patient setting. Demonstrate knowledge of patient safety codes of practice: universal protocol for procedures, when to transfer a patient to a higher-level facility and EMTALA law. Develop a knowledge of the common quality initiatives including ED throughput measures; ED clinical process (AMI, stroke, sepsis), and patient safety protocols.

### **EME 801 – Emergency Medicine Elective (2- or 4- week rotation)**

### **ULT 801 – Emergency Medicine Ultrasound Elective (2- or 4-week rotation)**

### **WME 801 – Wilderness Medicine Elective (20 or 40week rotation)**

## **FAMILY MEDICINE (FAM)**

### **FAM 802 – Family Medicine Sub- Internship**

(4 week rotation)

Students will be given responsibilities similar to a PGY-1 on the following rotations: Labor and Delivery, Newborn Nursery, Inpatient Medicine, Ambulatory Medicine, GYN clinic, and

Procedure Clinic. The program will determine the mix of inpatient and ambulatory experiences within the parameters noted in the proposed calendar. Adjustments may be made to accommodate for missed days (may include weekend shifts).

Students will be expected to travel to the different sites and must review the map of all of our sites prior to applying to this rotation.

### **FAM 801 – Family Medicine Elective**

(2-week or 4-week rotation)

Demonstrate an effective approach to the wellness visit for a patient of any age or gender. Develop the skills to acquire historical information, perform a physical examination, and to communicate such findings with clinical reasoning skills. Demonstrate an effective approach to the hospitalized patient. Demonstrate an effective approach

to the patient presenting to the emergency department. Discuss the principles of family medicine and its role in the healthcare system. Demonstrate an effective approach to the evaluation and initial management of acute and chronic illness commonly seen in an outpatient office setting. Gather information, formulate reasonable, differential diagnoses, and plan for initial evaluation and management of common presentation encountered in the outpatient office setting. Manage follow-up visits for patient presenting with one or more chronic illnesses. Demonstrate competency in the elicitation of history and performance of the physical examination. Demonstrate competency in understanding evidence-based health promotion/disease prevention plans for patients of any age and gender. Discuss the role of family medicine physicians within any healthcare system. (Prerequisite: COM 701)

### **FMP 801 - Combined Family Medicine / Psychiatry Elective**

(4-week rotation)

Develop a broad view of the patient as an inseparable combination of mind, body, and soul. List the challenges of extending medical care to the person with mental illness. See how medical care must be adapted to meet the person with mental illness depending on where she lives: Board and Care, Mentally Health Recovery Center, Psychiatric Health Facility, and Med-Psych Unit. Describe the legal boundaries created by licensing in each of these care settings. Med- Psych care in the mainstream care environment: clinic, general medical ward, critical care unit.

### **FMI 801 Integrative Medicine Elective**

(2- week or 4-week rotation) or Sub-Internship 802-4

Identify the primary healthcare goals using the approach of Integrative Medicine. Compare similarities and differences of diagnosis and treatment plans in conventional and integrative medicine. Demonstrate knowledge of complementary treatment modalities and their application to individual patient care plans. Prepare a comprehensive patient history with the Integrative Medicine approach. Apply Integrative Medicine approach to patient evaluation and treatment plan. Clinical experiences with multiple practitioners including MDs and complementary medicine practitioners. Didactics sessions will be offered during rotation schedule varying on month of rotation.

### **GASTROENTEROLGOY (GST)**

GST 801 – Gastroenterology Elective

(2- or 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. The student should read specifically about GI bleeding, pancreatitis, alcoholic liver disease and biliary disease including cholecystitis and common bile duct stones.

## **HEMATOLOGY & ONCOLOGY (HEM)**

HEM 801 – Hematology and Oncology Elective

(2- or 4-week rotation)

Approach to a patient with Hematology/Oncology 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 predominately revolve around seeing patients.

## **INFECTIOUS DISEASE (INF)**

IDE 801 – Infectious Diseases

(2- or 4week rotation)

Learn about 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, and fungal infections. Infer how to diagnose and treat various orthopedic/bone infections, neutropenic fevers, and bacteremia. 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.

## **INTERNAL MEDICINE (INT)**

INT 802 – Internal Medicine Sub– Internship

(4-week rotation)

Students will serve as a sub-intern on an inpatient internal medicine wards team. Each team will also consist of a senior resident, two interns, a third- year medical student, and an attending physician. As a sub-intern, the student will be responsible for managing about 3-5 patients at a time. Clinical responsibilities include interviewing and examining their patients both on the day of admission and on subsequent days (pre-rounding), writing a daily progress (SOAP) note for their patients, presenting their patients to the team on morning rounds, and executing patient-care related tasks pertinent to their patients. In addition, the student will be expected to participate in sign-out at 6pm to hand off their patients to the overnight physician. Sub-interns will work 6 days/week and will have one day off per week that they will arrange beforehand with the senior resident on their team. They are expected to be present during all admitting (call) and post-call days. Sub-interns are not expected to take overnight call.

### **INT 801 – Internal Medicine Elective**

(2- or 4- week rotation)

The major goal of the Internal Medicine elective is to construct the clinical environment for the senior student to develop inpatient case management responsibilities in the broad field of internal medicine, which will allow confident transition to resident level responsibilities in all disciplines. The student will be

directly supervised by faculty attending. Procedures required by the patient will be performed by the student depending on experience and safety. Students will be required to keep a log of their patients, listing dates seen and diagnoses.

### **PCM 801 – Palliative Medicine Elective**

(2- or 4-week rotation)

Palliative Medicine is an essential component of medical care for patients with a life limiting illness. This course provides medical students and residents with a framework in which to effectively acquire Palliative Care knowledge and skill sets necessary to care for seriously ill patients and their families. Students will learn about inpatient and outpatient palliative care experiences, pain management, disclosing serious news, offering prognostic information, disease trajectory, addressing goals of care, conducting family conference, and home visits (optional).

During the first week of the rotation, the preceptor

will deliver a mandatory Palliative Care didactic lecture. Each student is required to give a presentation on a Palliative Care topic of his/her choice (can be in a form of a topic or journal club presentation)

### **NEUROLOGY (NEU)**

NEU 801 – Neurology Elective

(2- or 4-week rotation)

Improve the understanding of neurology in the clinical setting, inpatient and/or ambulatory. Deepen and expand Neurology skills and knowledge acquired in 3<sup>rd</sup> year clerkship. Apply knowledge of basic and clinical sciences into medical practice. Obtain and deliver a complete clear, concise, and thorough oral and written presentation of a patient's history and examination in a more advanced setting. Distinguish normal from abnormal findings and the ability to localize the likely sites of lesion in the nervous system from available clinical information. Utilize and interpret common tests used in diagnosing neurologic disease. Formulate a differential diagnosis based on clinical information, lesion localization, and relevant historical and demographic features. Demonstrate an awareness of the principles underlying a systematic approach to the management of common neurologic diseases and prepare organized management plan. Demonstrate professionalism in all aspects of patient care. Differentiate between Neurologic Subspecialties and their applications. Operate as contributing team member in management of neurologic disorders. Clinical Neurology is experienced in both inpatient and outpatient settings. Different areas of neurology will be offered including general and subspecialty opportunities in adult Neurology. Schedule will be customized by student request in available general and subspecialty areas. Regular meeting with the preceptor to discuss learning and teaching activities. Regular rounding and follow-up of patients in different clinical settings.

## **NEUROSURGERY (NSG)**

NSG 801 – Neurosurgery Elective

(4-week rotation)

The student will be exposed to the breadth of neurosurgery pathologies such as brain tumors, vascular lesions, pain syndromes, spinal deformities, and trauma of the brain or spine. The student will have the opportunity to work in the clinic and to assist with neurosurgical operations in the operating room. It is recommended that the student has a strong interest in the surgical specialties for this rotation. Apply knowledge of neuroanatomy to describe etiopathogenesis and management of neurosurgical disorders. Apply knowledge of neuroanatomy to interpret neuro- radiological findings. Explain the mechanisms of traumatic brain injuries and outline their management. Outline the clinical course including management of common neurosurgical problems including tumors, stroke, and spinal disease. Clinical experiences include Assist in surgery, round in the hospitals, evaluate patient in the clinic.

## **OBSTETRICS GYNECOLOGY (OBG)**

OBG 802 – Obstetrics and Gynecology Sub-internship

(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, gynecological services, and ambulatory clinics. There will be one call day. This rotation is designed to prime and prepare the student for an ob/gyn internship. Medical students interested in an ob/gyn residency are encouraged to experience this course.

## **OBG 801 – Clinical OB/GYN Elective**

(4-week rotation)

Improve the understanding of Ob-Gyn in the clinical setting, inpatient and/or ambulatory. Deepen and expand Ob-Gyn skills and knowledge obtained during their 3<sup>rd</sup> year clerkship.

Explore selected subspecialties in Ob-Gyn (Oncology, MFM, Infertility, UroGyn, and Family Planning) in greater depth. Continue to refine such areas as professionalism, communication, and collaboration. Acquire skills in patient management as part of the Ob-Gyn team under supervision by the preceptor. Regular meeting with the preceptor to review the clinical presentation and the clinical management, and, if appropriate, be involved with Residents in morning rounds, follow- up of patients and the discharge process.

## **ORTHOPEDIC (ORT)**

ORT 802 – Orthopedic Surgery

Sub-I (4-week rotation)

Students will see patients in the outpatient clinic and inpatient hospital floor and perform history and physical exam. They will learn diagnosis and treatment of common orthopedic conditions. Students will assist in various surgical procedures and will learn management of patients with musculoskeletal injuries as part of a multidisciplinary team. Correlate history and exam findings with imaging studies. Differentiate between isolated

injury and polytrauma and learn implications on treatment. Daily didactic sessions include lectures on orthopedic topics, fracture conference and weekly journal club.

### **ORT 801 – Orthopedic Surgery Elective**

(2- or 4-week rotation)

Students will provide a thorough overview of common musculoskeletal and spinal conditions commonly seen in the outpatient setting.

Understanding the steps to diagnose these common problems, the relevant anatomy involved in these disease processes and understanding general treatment principles for common MSK/spinal diseases.

### **OTOLARYNGOLOGY-ENT (OTO)**

OTO 801 – Otolaryngology Elective

(2 or 4-week rotation)

The objective of this course is to broadly expose students to the clinical and surgical aspects of otolaryngology. Students will become acquainted with the experience of outpatient office, operating room, 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 develop a 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. Define a focused Head and Neck history. Take part in a comprehensive head and neck exam including otoscopy/microscopy, anterior rhinoscopy, oral/throat, and neck exam. Test for differential diagnosis and management plan of common ENT disorders including otalgia, nasal obstruction, neck mass, and hoarseness. Identify the basics of head and neck anatomy. Be able to identify and distinguish pediatric obstructive sleep apnea, otitis media, sinusitis, hoarseness, and thyroid disorders. Demonstrate basic surgical techniques including suturing and knot tying. Outpatient clinic, outpatient clinic procedures, operating room, audiology, lunch sessions, interdepartmental monthly meetings (Head and Neck surgery, audiology, and speech therapy)

### **PED ELECTIVES 801-2 AND PED 801-4 OR SUB-INETRNSHIP**

PED 802-4

Course Description: The student rotating on this elective will become proficient in providing total care for the hospitalized pediatric patient. The student will gain experience in caring for kids with chronic medical conditions and complex care. Emphasis will be placed on delivering patient and family centered care and working in a team. The student assumes primary responsibility for initial evaluations, diagnostic procedures, and ongoing management of patients. Students are assigned patient workups, participate in teamwork, and attend conferences. This rotation offers a unique clinical learning environment with a strong emphasis on interprofessional education, supporting a



diverse, underserved patient population. Students will be exposed to common pediatric inpatient diagnoses such as the following: a. Infectious diseases: pneumonia, urinary tract infections, meningitis, bone, and soft tissue infections. b. respiratory diseases: asthma, bronchiolitis, croup. c. Renal disorders: dehydration, electrolyte disturbances, acute and chronic renal insufficiency. D. GI disorders: gastroenteritis, failure to thrive, inflammatory bowel disease, short bowel syndrome. E. Neurological disorders: seizures, movement disorders, neuromuscular disorders. F. Immunologic/Rheumatologic disorders: Kawasaki Disease, systemic lupus erythematosus, immunodeficiencies, vasculitis. G. Mental health/psychosocial: Sequelae of depression/anxiety and adverse childhood experiences, somatic symptom disorders. H. Other: failure to thrive, suspected child abuse and neglect, acetaminophen, and salicylate overdose and other common toxidromes.

### **PIC 801 – Pediatric Intensive and Inpatient Care**

(4-week rotation)

Provide students with broad exposure and experience in managing or participating in the care of hospitalized pediatric patients in both pediatric critical care and/or inpatient units at an accredited Children’s Hospital. Students will be assigned to PICU at Sutter Medical Center’s Women and Children’s Center during their 4-week rotation. Students will attend, participate, and learn at the discretion of their preceptor present at grand rounds and all meetings conducted by the PICU team at SMC.

### **PSYCHIATRY (PSY-M)**

#### **PSY 801 – Psychiatry Elective**

(2- or 4-week rotation)

This course is designed for 4<sup>th</sup> year medical students who would like to have additional exposure to the practice of Psychiatry, such as those who are considering applying for Psychiatry Residency. The goal is to have more in-depth knowledge and experience with aspects of psychiatric practice, including patient care, consultation, and administration. Clinical experiences include interviewing psychiatric patients for initial assessment and follow-up; treatment planning with clinical preceptor; discussion of cases with other mental health clinicians; and observing consultation with other medical providers.

#### **PSY 802 – Psychiatry Sub- Internship**

(4-week rotation)

The focus of this elective will be on interviewing skills and documentation. Specifically for the fourth year, the focus would be on independence and autonomy. This would include researching unique aspects of the student’s patient’s presentation and presenting/utilizing that information directly for patient care. There would be more of an expectation for independent treatment planning, as well as independent interactions with case management and patient’s families.

## **PULMONARY CRITICAL CARE (PUL)**

### **PUL 802 – Pulmonary & Critical Care Medicine Sub-Internship**

(2 or 4-week rotation)

This rotation offers an opportunity for a 4<sup>th</sup>-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 801 – Pulmonary Medicine Elective**

(2 or 4-week rotation)

Understand the pathophysiology of interstitial lung disease, its workup and management. Understanding of immunology and pathophysiology of interstitial lung disease and lung malignancies. Develop skill to interpret normal and abnormal chest radiographs. Understand the objective findings of high-resolution chest CT scan for interstitial lung disease and lung malignancy screening. Clinic experience in pulmonary immunology. Clinic experience in Lung Cancer diagnosis and therapies. Clinic experience in general pulmonary medicine. Students will be required to read several articles specifically targeted for medical students interested in pulmonary medicine. Students are expected to read through most of the fifty articles.

## **RADIOLOGY (RAD)**

### **RAD 801 – Radiology Elective**

(2- or 4-week rotation)

Students will gain experience and knowledge about the specialty of Radiology, 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 examination and interpretation of common diseases-pathologies; 2. Explain the basic principles of computed tomography (CT) and magnetic resonance imaging (MRI), to conduct daily routine clinical examinations, including appropriate indications, basic cross-sectional anatomy, and 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 as its daily routine clinical examination and interpretation; and 5. Explain the basic principles of interventional radiography and its daily routine clinical examinations and procedures.

### **IRA 801 – Interventional Radiology**

(2- or 4-week rotation)

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. Understand the clinical principles of interventional radiography as applied to disease processes and importance of active patient management. Develop mastery of arterial and venous anatomy. Demonstrate familiarity with use of ultrasound and ultrasound guided needle access. Develop mastery of Seldinger technique. Demonstrate familiarity with use of guide wires, catheters, and microcatheter systems. Demonstrate familiarity with angioplasty equipment, stents, and embolic agents. Demonstrate understanding of clinical role of IR in caring for the critically ill patient. Develop advanced understanding of interventional oncology especially in treatment of hepatocellular carcinoma. Demonstrate familiarity with venous and arterial interventions. Develop understanding of clinical role of IR in caring for patients in the outpatient setting. Students will work with other residents/fellows.

### **RAV 801 – In-house Radiology Elective Virtual**

(2 or 4-week rotation)

Students will understand the basics and important normal and abnormal imaging findings in X-ray, CT, MRI and other imaging modalities. Imaging case discussions and presentations. Different imaging modalities and their basic principles. Imaging findings in common and

important pathological entities. Extend the appreciation for the fundamental role and value of imaging to provide timely, accurate, and actionable diagnostic information regarding a patient's medical condition.

### **RAN 801 – Neuroradiology Elective**

(4-week rotation)

Understand and learn neuroradiology as an extension of general radiology. Apply and understand neuroanatomy through neuroimaging. Apply and understand theories and practice of different neuroradiological entities. Apply and understand neuropathology through neuroimaging. Analyze cost-effectiveness of different neuroimaging entities. Regular learning and interaction on clinical sites with the preceptors.

## **RENAL**

### **REN 801 – Nephrology Elective**

(2- or 4-week rotation)

Basics of Renal disease, Acute Kidney Injury, Chronic Kidney Disease, Hypertension, Electrolyte abnormalities and introduction to dialysis and kidney transplant. Make use of above topics to achieve a sound knowledge in renal physiology. Clinical experiences include Office and Hospital patients. Didactic sessions will be 2-3 per week during noon meetings.

## **SPORTS MEDICINE (SPM)**

### **SPM 801 – Sports Medicine**

(2- or 4-week rotation)

Learn and apply skills to perform basic musculoskeletal joint examination in the shoulder, hip and knee. Apply acquired skills of clinical exposure to most common acute sports injuries, initial evaluation, and management. Apply acquired skills of clinical exposure to appropriate X-ray and MRI evaluation and interpretation. Learn and apply basic musculoskeletal ultrasound scanning techniques, particularly of the hip, knee, and shoulder. Learn and apply skills to perform common musculoskeletal injections without guidance, particularly of the knee joint, shoulder joint and subacromial bursa.

## **SURGERY (SUR)**

### **SUR 802 – Surgery Sub- Internship**

(4-week rotation)

The student will participate as a sub- intern in the care of the general surgical patient, primarily in the inpatient setting at SJGH. The student will work with colorectal, GI/oncology, and trauma-critical care services pending availability. The student will function as a sub-intern and will be assigned an overall patient load like that of a PGY-1 resident; he/she has primary responsibility for taking care of said panel of patients. Required in-house call one night in four, including weekends. He/she will describe and outline the treatment and diagnosis of patients who have colorectal diseases, anorectal disorders, GI tract emergencies, and traumatic injuries. Responsibilities include managing patients with lower GI surgical diseases and traumatic injuries, including patients in clinic and on the ward, and discussing management with staff. He/she will observe and assist in patient surgery in the Operating Room, assist with minor procedures on the ward, and attend teaching conferences, morbidity and Mortality Conferences, Tumor Board, etc.

### **SUR 801 – Surgery Elective**

(2 or 4-week rotation)

Overreaching goals will be to provide fundamental principles education in surgery with an emphasis in thoracic surgery. Expectations of knowledge and OR skills will be at a basic introductory level with an intent to acquaint students with surgical services through the lens of thoracic surgery. Become familiar with recognizing, working up and treating common thoracic pathology. Specifically, this includes pleural space infections, lung nodules, mediastinal masses, lung/esophageal cancer, GERD and paraoesophageal hernia. Pre-operative assessment and post-operative management of thoracic surgical patients. Discussing and helping patients judge risk and expected outcomes. Clinical experiences include pre-operative work-up, surgical risk assessment, post-op guidance and surveillance in the clinic setting, while hospital experiences include surgery (ideally with patients seen in clinic), navigating thoracoscope, recognizing anatomy, identifying procedural steps, basic suturing skills, reading of radiology images (plain films, fluoroscopy and cross-sectional imaging and manometry inpatient consultations).

## **TCU 802 – Trauma-Critical Care- SICU Surgery Sub–Internship**

(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 familiarity with physiology, management, and outcome of multiple organ dysfunctions. They will gain exposure to procedures such as central access, chest tube placement, wound debridement's, tracheostomies, laceration repairs, etc. Students will be exposed to complex and difficult decision making involving the injured patient. They will participate in the team caring for patients in floor and ICU rounds, OR cases, ER evaluations, and ER/ICU/ward procedures.

## **TSU 801 – Thoracic Surgery**

(2- or 4-week rotation)

Overreaching goals will be to provide fundamental principles education in in surgery with an emphasis on thoracic surgery. Expectations of knowledge and OR skills will be at a basic introductory level with an intent to acquaint students with surgical services through the lens of thoracic surgery. Become familiar with recognizing, working up and treating common thoracic pathology. Specifically, this includes pleural space infections, lung nodules, mediastinal masses, lung/esophageal cancer, GERD and paraoesophageal hernia. Pre-operative assessment and post-operative management of thoracic surgical patients. Discussing and helping patients judge risk and expected outcomes. Clinical experiences in the clinic include pre- operative work-up, surgical risk assessment, post-op guidance and surveillance, while hospital experiences include surgery, ideally with patients seen in the clinic, navigating thoracoscope, recognizing anatomy, identifying procedural steps, basic suturing skills, reading of radiology images (plain films, fluoroscopy, and cross-sectional imaging), and manometry inpatient consultations.

## **UROLOGY (URL)**

### **URO 801 – Urology**

(2- or 4-week rotation)

Obtain informed consent for urological procedures. Demonstrate a working knowledge of the preoperative preparation and postoperative management of urological patients, including discharge planning. Demonstrate knowledge of various urological procedures, including their indications, non-surgical alternatives, risks, benefits, and their expected outcomes. Demonstrate an advanced understanding of the performance of common urological procedures and participate actively in their performance. Demonstrate a working knowledge of basic surgical techniques, including patient positioning, suturing and assisting. Develop a knowledge of the common quality initiatives (i.e., deep vein thrombosis, infection that promotes improved patient outcomes, and patient safety protocols)

Non-Clinical Electives

- Maximum of 4 credits can be applied toward the degree requirements for a Research Elective.
- Maximum of 4 credits can be applied toward the degree requirements for a Teaching Assistant Elective.

### **MRE 801 – Medical Research**

(1-4 credits)

Prerequisite Course: COM623 – Course Director: Valerie Gerriets,

PhD Students must have a minimum of one faculty advisor, who must be a COM faculty, and can also have a non-COM faculty/community physician supervisor with whom the research is conducted. The supervisor should be familiar with research in the relevant discipline(s), to ensure that the direction and monitoring of the student's progress is informed by up-to-date subject knowledge and research developments. Breadth of experience and knowledge of the supervisor will mean that the student always has access to someone with experience of supporting research student(s) through to successful completion of their scholarly project. The students are responsible for taking the CITI courses (a basic course for all students, and a more oriented course for those students that need IRB approval). The students are responsible for other aspects of the project, including enlisting the aid of any required supervisor, coordinating communication with the supervisor and the Course Director, helping the supervisor in obtaining the necessary protocol approvals (IRB, IACUCC, IBC) if needed, developing the hypothesis of work, performing the planned study, preparing a document with the results, data analysis, and conclusions, and preparing the poster for the Research Day.

(Prerequisite: M1 or M2 in good standing)

The course will be offered 1-2 times per year in the fall and/or spring semester. 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 topic 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 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.

## **COM 908 – Cardiovascular & Pulmonary TA**

(2 or 4-week rotation)

Assist with CVP teaching, Clinical Case Based Learning (CCBL) facilitation, and Team Based Learning facilitation during M1 spring CVP Course. Reinforcement of CVP M1 course content, particularly the relevant basic biomedical sciences, through participation in teaching, CCBL and TBL sessions, and peer- led review sessions. Improve teaching skills through the planning and delivery of mini-lectures and focused review of specific topics. Oversee development of Impact of CVP Disease Project. Assist with integration of online resources to enhance student learning. Understand and apply different teaching pedagogies. Students will serve as facilitators for at least three TBL sessions (2 hours each). This involves assisting students during the team-based learning sessions. If the elective occurs during the latter half of the course, then the student can participate in the CCBL sessions. This involves guiding M1s through case analysis (if they are stalled) as well as directing M1s to choose optimal CCBL learning objectives. Students will aid in the preparation and presentation of all review sessions (2 hours each), including formative quiz review sessions. Students will assist with review sessions by practice question selection and by helping present answers as well as selected review topics. Students will help coordinate TBL learning exercises with students and faculty. Students may attend all regular course lectures. Students must complete facilitator training for three days (2 hours each day).

## **TAB 810 – Behavioral Medicine TA**

(4-week rotation)

Specialty: Psychiatry – Locations: CNUCOM

Course Director: Martin Rubin, MD Offered as: 4-week rotation Participate in behavioral medicine teaching and creation of clinical cases and CCBLs for teaching purposes. Re-exposure to M2 course content through participation in course lectures and review sessions. Exposure to different teaching pedagogies. Provide a platform in which there is senior student input into second year Behavioral medicine content and curriculum materials. Develop and strengthen various teaching skills. Identify students' own educational blind spots as teachers and learners. Recognize various learning styles as established by adults and transformational principles of teaching and learning. Outline the basic principles of instructional design and curriculum development. Demonstrate skills in the following domains: confidence building, written communication, oral communication, mentoring, facilitation and leadership, pedagogy, and collaboration.

**HLT 810 – Wellness** – Leadership, Healers Art, Mindfulness and Compassionate Conversations Locations: CNUCOM

Course Director: Valerie Gerriets, PhD, Martin Rubin MD

Offered as: 4-weeks rotation in Block 10 (usually in February – March)

The Wisdom of Leadership (Rubin), Healers Art (Frank), Mindfulness and Meditation (Gerriets) and several noon Wellness talks. During this the elective, you will also be part of a program in Narrative Writing in which you will

receive a certificate. The components of the elective are intentionally symbiotic and will allow for each of you to expand your capacity for self-care, self-reflection, and clarity, intention and integrity in your being and actions as leaders for yourself, your family, and friends, and in your career. Skills introduced in the course will also provide you with ways to maintain compassion for yourself and patients throughout your career. There will be some assignments to enhance the value of the course content including some reflective writing, some mindfulness practices, and a Leadership Project. Your leadership project is an opportunity to access, discover and share wisdom. You will create your personal oath, guidelines or prayer which reflects the wisdom and values you have determined to be the most important to you in leading yourself and others.

zPhase A: M1		
Courses	CR	Term
501 Foundations of Clinical Medicine	8	Fa
526 Hematology	4	Fa
511 Integumentary Musculoskeletal System	7	Fa
551 Neuroscience	10	Sp
541 Urinary (Renal)	5	Sp
531 Cardiovascular	5	Sp
601 & 602 Medical Skills	2	Fa/Sp
611 & 612 Masters Colloquium	2	Fa/Sp
622 & 623 Self-Directed Scholarly Project	1	Fa/Sp
<b>M1 Total Required Credit Units</b>	<b>44</b>	
Phase A: M2		
Courses	CR	Term
531 P: Pulmonary	5	Fa
521: Gastrointestinal Systems	6	Fa
571 Endocrine System	5	Fa
561 Behavioral Medicine	3	Fa
581 Reproductive System	6	Sp
603 & 604 Medical Skills	2	Fa/Sp
613 & 614 Masters Colloquium	2	Fa/Sp
624 Self-Directed Scholarly Project	1	Fa/Sp
<b>M2 Total Required Credit Units</b>	<b>30</b>	

Phase B: M4 Electives and Sub-Internships		
Courses	CR (Min)	Cr (Max)
Core Sub-Internships	4	
Inpatient Rotations (Including Sub-Internships)	8	
Non-Clinical Rotations		8
“Specialty of Interest”* Rotations		12**
“Non-Specialty of Interest” Rotations	8	
<b>Phase B: M3-M4 Required Electives and Sub-Internship Units</b>	<b>28</b>	



Phase B: M3-M4 Clerkships	
Courses	CR
701 Family Medicine Clerkship	6
711 Internal Medicine Clerkship	8
721 Neurology Clerkship	4
731 OB/GYN Clerkship	6
741 Pediatrics Clerkship	6
751 Psychiatry Clerkship	4
761 Surgery Clerkship	8
771 Emergency Medicine Clerkship	4
781 Extended Clinical Experience Course	2
<b>Phase B: M3-M4 Required Clerkship Units</b>	<b>48</b>

Total Overall Credits Required for MD degree: 150

\* “Specialty of Interest” represents the specific medical discipline the student wishes to pursue for their residency application (e.g., Internal medicine, surgery, orthopedics, dermatology)

\*\* Students may enroll in more than 12 credits within their specialty of choice, provided they fulfill all other requirements. This will facilitate a well-rounded experience during the M4 year.

## AAMC MEDICAL SPECIALTIES

### **AAI: ALLERGY AND IMMUNOLOGY**

CLINICAL & LABORATORY IMMUNOLOGY

### **ANE: ANESTHESIOLOGY**

ADULT CARDIOTHORACIC ANESTHESIOLOGY CRITICAL CARE MEDICINE

OBSTETRIC ANESTHESIOLOGY PAIN MEDICINE

PEDIATRIC ANESTHESIOLOGY PALLIATIVE MEDICINE

### **DER: DERMATOLOGY**

DERMATOPATHOLOGY PROCEDURAL DERMATOLOGY

### **EME: EMERGENCY MEDICINE**

MEDICAL TOXICOLOGY

PEDIATRIC EMERGENCY MEDICINE SPORTS MEDICINE

PALLIATIVE MEDICINE

**FAM: FAMILY MEDICINE**

GERIATRIC MEDICINE SPORTS MEDICINE FAMILY PRACTICE GERIATRIC MEDICINE PALLIATIVE MEDICINE

**INT: INTERNAL MEDICINE**

ADVANCED HEART FAILURE & TRANSPLANT CARDIOLOGY  
CARDIOVASCULAR DISEASE  
CLINICAL CARDIAC ELECTROPHYSIOLOGY CRITICAL CARE MEDICINE  
ENDOCRINOLOGY, DIABETES & METABOLISM GASTROENTEROLOGY  
GERIATRIC MEDICINE  
HEMATOLOGY  
HEMATOLOGY & ONCOLOGY  
INFECTIOUS DISEASE INTERVENTIONAL CARDIOLOGY  
NEPHROLOGY ONCOLOGY  
PULMONARY DISEASE  
PULMONARY DISEASE & CRITICAL CARE MEDICINE  
RHEUMATOLOGY SPORTS MEDICINE  
TRANSPLANT HEPATOLOGY INTERNAL MEDICINE-PEDIATRICS  
PALLIATIVE MEDICINE

**MEG: MEDICAL GENETICS**

BIOCHEMICAL GENETICS MOLECULAR GENETIC PATHOLOGY

**NSG: NEUROSURGERY**

ENDOVASCULAR SURGICAL NEURORADIOLOGY

**NEU: NEUROLOGY**

CHILD NEUROLOGY  
CLINICAL NEUROPHYSIOLOGY  
ENDOVASCULAR SURGICAL NEURORADIOLOGY  
NEUROMUSCULAR MEDICINE PAIN MEDICINE  
SLEEP MEDICINE PALLIATIVE MEDICINE

**OBG: OBSTETRICS & GYNECOLOGY**

FEMALE PELVIC MEDICINE & RECONSTRUCTIVE SURGERY

OPHTH: OPHTHALMOLOGY

OPHTHALMIC PLASTIC & RECONSTRUCTIVE SURGERY PALLIATIVE MEDICINE

**ORTH: ORTHOPEDIC SURGERY ADULT RECONSTRUCTIVE ORTHOPEDICS FOOT & ANKLE  
ORTHOPEDICS**

HAND SURGERY MUSCULOSKELETAL ONCOLOGY

ORTHOPEDIC SPORTS MEDICINE ORTHOPEDIC SURGERY OF THE SPINE ORTHOPEDIC TRAUMA

PEDIATRIC ORTHOPEDICS

OTO: OTOLARYNGOLOGY OTOLOGY – NEUROTOLOGY PEDIATRIC OTOLARYNGOLOGY HEAD AND  
NECK SURGERY

**PATH: PATHOLOGY**

ANATOMIC & CLINICAL

BLOOD BANKING – TRANSFUSION MEDICINE CHEMICAL PATHOLOGY

CYTOPATHOLOGY FORENSIC PATHOLOGY HEMATOLOGY

MEDICAL MICROBIOLOGY

NEUROPATHOLOGY

PEDIATRIC PATHOLOGY

**PED: PEDIATRICS**

ADOLESCENT MEDICINE CHILD ABUSE PEDIATRICS

DEVELOPMENTAL-BEHAVIORAL PEDIATRICS

NEONATAL-PERINATAL MEDICINE PEDIATRIC CARDIOLOGY

PEDIATRIC CRITICAL CARE MEDICINE PEDIATRIC EMERGENCY MEDICINE

PEDIATRIC ENDOCRINOLOGY PEDIATRIC GASTROENTEROLOGY

PEDIATRIC HEMATOLOGY-ONCOLOGY PEDIATRIC INFECTIOUS DISEASES

PEDIATRIC NEPHROLOGY PEDIATRIC PULMONOLOGY

PEDIATRIC RHEUMATOLOGY PEDIATRIC SPORTS MEDICINE

PEDIATRIC TRANSPLANT HEPATOLOGY PALLIATIVE MEDICINE

PMR: PHYSICAL MEDICINE & REHABILITATION NEUROMUSCULAR MEDICINE

PAIN MEDICINE

SPINAL CORD INJURY MEDICINE

SPORTS MEDICINE PALLIATIVE MEDICINE

PLS: PLASTIC SURGERY

CRANIOFACIAL SURGERY HAND SURGERY

PSY: PSYCHIATRY

ADDICTION PSYCHIATRY

CHILD & ADOLESCENT PSYCHIATRY

FORENSIC PSYCHIATRY

**RAD: RADIOLOGY**

ABDOMINAL RADIOLOGY CARDIOTHORACIC RADIOLOGY

ENDOVASCULAR SURGICAL NEURORADIOLOGY MUSCOSKELETAL RADIOLOGY  
NEURORADIOLOGY

NUCLEAR RADIOLOGY PEDIATRIC RADIOLOGY

VASCULAR & INTERVENTIONAL RADIOLOGY NUCLEAR MEDICINE

PALLIATIVE MEDICINE

**SUR: SURGERY**

COLON & RECTAL SURGERY HAND SURGERY

PEDIATRIC SURGERY SURGICAL CRITICAL CARE

VASCULAR SURGERY CARDIOTHORACIC SURGERY THORACIC SURGERY

PEDIATRIC CARDIOTHORACIC SURGERY

SURGICAL ONCOLOGY

TRANSPLANT SURGERY

TRAUMA SURGERY SURGICAL CRITICAL CARE ACUTE CARE SURGERY

PALLIATIVE MEDICINE

**URO: UROLOGY**

PEDIATRIC UROLOGY

## ACADEMIC CALENDAR FOR ACADEMIC YEAR 2024 – 2025

### MS1 – Phase A

Event	Start Date	End Date
Orientation – M1	07/25/2024	07/26/2024
White Coat Ceremony – M1	08/24/2024	08/24/2024
<b>Fall Semester: 07/29/2024 – 12/20/2024</b>		
Course	Start Date	End Date
COM 501: Foundations of Clinical Medicine	07/29/2024	09/20/2024
COM 526: Hematology	09/23/2024	10/25/2024
COM 511: Integumentary and Musculoskeletal Systems	10/28/2024	12/20/2024
<b>Spring Semester: 01/06/2025 – 5/30/2025</b>		
COM 551: Neuroscience	01/06/2025	03/12/2025
COM 541: Renal System	03/19/2025	04/21/2025
COM 531 CV: Cardiovascular	04/23/2025	05/30/2025

### MS2 – Phase A

Event	Start Date	End Date
M2 Refresher Orientation	07/29/2024	07/29/2024
<b>Fall Semester: 07/29/2024 – 12/20/2024</b>		
Course	Start Date	End Date
COM 531 P: Pulmonary	07/29/2024	09/03/2024
COM 521: Gastrointestinal System	09/04/2024	10/21/2024
COM 571: Endocrine System	10/23/2024	11/27/2024
COM 561: Behavioral Medicine	12/02/2024	12/20/2024
<b>Spring Semester: 01/06/2025 – 5/30/2025</b>		
Preparing for Residency ( <i>Required</i> )	01/06/2025	05/30/2025
COM 581: Reproductive System	01/06/2025	02/21/2025

### Longitudinal Courses – M1 & M2

#### FALL 2024

#### SPRING 2025

Course	Start Date	End Date	Start Date	End Date
Medical Skills – M1	07/29/2024	12/20/2024	01/06/2025	05/30/2025
Medical Skills – M2	07/29/2024	12/20/2024	01/06/2025	05/30/2025
Clerkship Symposium	-----	-----	TBD	TBD
Masters Colloquium – M1	07/29/2024	12/20/2024	01/06/2025	05/30/2025
Masters Colloquium – M2	07/29/2024	12/20/2024	01/06/2025	02/21/2025
<b>SDSSP – will start in Fall Semester for M1 students and continues to the end of the M2 year.</b>				

### MS3 – Phase B – Clinical Clerkships

<b>Fall Semester: 06/03/2024 – 12/31/2024</b>		
<b>Event</b>	<b>Start Date</b>	<b>End Date</b>
Pathway to Residency <i>(Required)</i>	06/03/2024	12/31/2024
Clerkship Orientation – M3	05/20/2024	05/31/2024
Clinical Clerkships – M3	06/03/2024	12/31/2024
<b>Spring Semester: 01/01/2025 – 5/30/2025</b>		
Preparing for Residency <i>(Required)</i>	01/01/2025	05/30/2025
Clinical Clerkships – M3	01/01/2025	05/30/2025

### MS4 – Phase C – Elective Rotations

<b>Fall Semester: 06/03/2024 – 12/31/2024</b>		
<b>Event</b>	<b>Start Date</b>	<b>End Date</b>
Pathway to Residency <i>(Required)</i>	06/03/2024	12/31/2024
Elective Rotations – M4	06/03/2024	12/31/2024
<b>Spring Semester: 01/01/2025 – 05/16/2025</b>		
*Elective Rotations -M4	01/01/2025	05/16/2025
Graduation Clearance Day – M4	05/16/2025	
Graduation Ceremony – M4	05/17/2025	

\*Add/Drop deadline for Elective courses is 5 days from the start of instruction.

### Exams/Review/Research Day Schedule

<b>Event</b>	<b>Start Date</b>	<b>End Date</b>	<b>EXAMS</b>	<b>Start Date</b>
CNU Research Day	(Tentative) 02/21/2025	--	CBSE #1	02/26/2025
			CBSE #2	TBD
Kaplan Review Course	03/03/2025	03/07/2025	CBSE #3:	TBD
Kaplan Assessment Exam	TBD		CCSE – M3	05/20/2025

### University Holidays

<b>Holiday</b>	<b>Date</b>	<b>Holiday</b>	<b>Date</b>
Independence Day	07/04/2024	New Year's Day	01/01/2025
Labor Day	09/02/2024	Martin Luther King	01/20/2025
Thanksgiving	11/28 – 11/29/2024	President's Day	02/17/2025
Christmas	12/25/2024	Memorial Day	05/26/2025
		Juneteenth	06/19/2025

## COLLEGE OF MEDICINE

### **COM Administration**

For a current listing of people, official titles and contact information, please visit:

<https://medicine.cnsu.edu/directory/administration.php>

<http://medicine.cnsu.edu/directory/>

#### **Richard S. Isaacs**

Dean; Vice President of Medical and Academic Affairs; Professor  
MD, Wayne State University School of Medicine

#### **Gordon Wong**

Senior Associate Dean of Clinical Medicine; Professor  
MD, UCLA School of Medicine

#### **Lester Pan**

Associate Dean of Global Health Medical Education Development  
MD, Sun Yat-Sen University of Medical Science  
MD, PhD, University of California, Davis

#### **Rajendra Ramsamooj**

Assistant Dean of Curriculum; Professor  
MD, University of Minnesota

#### **Christine Deere**

Assistant Dean of Student Affairs and Admissions.  
PhD, University of California Davis Assistant Professor

#### **Michael S. Wong**

Associate Dean of Academic and Career Advising.  
Professor of Surgery-Plastic Surgery MD,  
Tufts University, Boston, Massachusetts

#### **Yinka Davies**

Assistant Dean of Diversity and Inclusion;  
Associate Professor of Gastroenterology MD,  
Finch University of Health Sciences, Chicago

#### **Ed Lee**

Chair of Clinical Education; Director of Clinical Informatics; Assistant Professor of Internal Medicine  
MD, MPH, Tufts University School of Medicine

#### **James Martel**

Associate Dean, Department of Graduate Medical Education; Professor  
MD, Harvard University

**Islam Mohamed**

Assistant Dean of Faculty Affairs & Development; Associate Professor of Pharmacology  
PhD, B. Pharm, University of Georgia

**Eldo Frezza**

Assistant Dean of Research, Professor of Surgery  
MD, University of Padua School of Medicine, Italy

**Ghalib Alkhatib**

Chair of Basic Science; Professor of Microbiology; Chair of Basic Science  
PhD, McGill University, Montreal, Quebec, Canada

**Thamir Essayyad**

Chair of Clinical Science; Assistant Professor of Emergency Medicine  
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**Department of Basic Sciences****Ghalib Alkhatib**

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**Mohamed Ahmed**

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MBChB, Cairo University

**John Cusick**

Professor  
PhD, University of Colorado School of Medicine

**Elena Dedkova**

Associate Professor  
DVM, Moscow State Academy  
PhD, Russian Academy of Sciences

**Alan Ernst**

Assistant Professor  
PhD, University of Minnesota

**Valerie Gerriets**

Associate Professor  
PhD, Duke University

**Eslam Mohamed**

Assistant Professor  
PhD, Medical College of Georgia  
PharmBS, Cairo University

**Islam Mohamed**

Associate Professor  
PhD, B. Pharm, University of Georgia

**Jose Puglisi**

Assistant Professor  
PhD, Universidade Estadual de Campinas, Brazil

**Anura Ratnasiri**

Associate Professor  
PhD, MSc, The University of Queensland

**Shiv Sudhakar**

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**Han-Rong Weng**

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MD, Sun Yat-sen University of Medical Sciences,  
China  
Department of Clinical Science

**Catherine Yang**

Professor of Clinical Biochemistry and Oncology  
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## **Department of Clinical Science**

### **Thamir Essayyad**

Chair, Assistant Professor  
MD, George Washington University

### **John Bissell**

Professor  
MD, Harvard Medical School

### **Evan Bloom**

Assistant Professor  
MD, UCSF School of Medicine, CA

### **Howard Capon**

Assistant Clinical Professor  
MD, California Northstate University

### **John Chuck**

Professor; Chief & Wellness Officer  
MD, UCLA School of Medicine

### **Carol Lynne Conrad-Forrest**

Assistant Professor  
MD University of Nevada College of Medicine

### **Floyd Culler**

Professor  
MD, University of Tennessee

### **Yinka Davies**

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MD, Finch University of Health Sciences, Illinois

### **Guy DiSibio**

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### **Wala Fadol**

Assistant Professor  
MD, Al-Zaiem Al-Azhari University, Sudan

### **John Fitzgibbon**

Associate Professor  
MD, Rush Medical College

### **Dermet Fong**

Assistant Professor  
MD, University of California, San Diego

# COLLEGE OF PHARMACY

## Introduction and Accreditation

Based in the beautiful city of Elk Grove, minutes from downtown Sacramento, California Northstate University College of Pharmacy offers a Doctor of Pharmacy (PharmD) program, which is the required entry level degree to practice as a pharmacist in the United States. Our PharmD program is fully accredited by the Accreditation Council for Pharmacy Education (ACPE) which accredits all schools and colleges of pharmacy in the United States.

**Mission, Vision, and Values** **Mission:** The mission of the College of Pharmacy is to advance the art and science of pharmacy through active learning, research, innovative patient care, and comprehensive interprofessional education

**Vision:** In the next 10 years, CNUCOP will become a nationally recognized leader in educating the next generation of pharmacists in integrated patient healthcare.

### **Values:**

- Innovation in student-centered teaching, scholarship, and practice
- Student success
- Open and clear communication
- Diversity of experience, culture, and thought
- Effective community partnerships
- Inspiration through altruism, empathy, and civic virtue
- Professionalism and integrity in all interactions
- Networking and collaboration through team-based learning.

### **Goals:**

- To foster critical thinking, problem-solving, clinical reasoning, and self-directed learning. To provide an integrated interprofessional experience
- To develop student skills, attitudes, values, judgment, professional behavior, and expertise in patient-centered care through experiential experiences.
- To prepare graduates to lead, collaborate, and educate others with integrity, professionalism, and compassion.
- To offer students participation in professional organizations and community projects to learn the skills required for professional advocacy

- To support faculty in discipline-related research and other scholarly activities.
- To provide a faculty development program that nurtures and supports a learning-centered curriculum and the scholarship of teaching
- To foster faculty engagement in professional and community activities
- To support a research program that promotes collaboration, innovation, and discovery

## Active Learning

Active learning is an educational strategy that CNUCOP employs throughout the first three years of the curriculum. Active learning promotes judgment, mastery of content, communication, teamwork skills, problem-solving, and critical thinking. It emphasizes the importance of individual accountability, group collaboration, and the application of basic concepts to work through team assignments. CNUCOP employs several active learning strategies throughout the program based on the learning objectives and the type of course. For example, we employ Team Based Learning, high fidelity simulations, community pharmacy-based simulations, laboratory skills courses, and many types of in-class activities, including gamification, and collaborative and associative learning. 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.

## Learning Outcomes

### Program Learning Outcomes

Upon successful completion of the CNUCOP Doctor of Pharmacy program, students will be able to demonstrate skills and knowledge associated with the following 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.

The college annually tracks student performance in all classes in all the listed PLOs. PLOs are carefully aligned with university-level assessment strategies ensuring comprehensive quality control.

## Co-Curricular Learning Outcomes

Upon successful completion of the CNUCOP Doctor of Pharmacy program, students will be able to demonstrate the skills and knowledge based on the following co-curricular learning outcomes:

1. **Social Awareness and Cultural Sensitivity.**
2. Demonstrate awareness of and responsiveness to social and cultural differences by adapting behaviors appropriately and using effective interpersonal skills.
3. **Professionalism and Advocacy.** Demonstrate
4. 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.
5. **Self-Awareness and Learning.** Demonstrate self-
6. awareness through reflection and the development of appropriate plans for self-directed learning and development.
7. **Innovation and Entrepreneurship.** Demonstrate
8. innovation and creativity to develop novel strategies to accomplish professional goals, or demonstrate an understanding for how innovation and creativity influence the development of novel strategies to accomplish professional goals.
9. **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.
10. **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 (APPE), students should demonstrate pharmacy practice 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.

### 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 respectfully, demonstrating cultural humility and awareness of diversity, equity, inclusion, and accessibility principles*

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 everyone'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. Distinguish professional interests from personal interests and respond appropriately.
4. Demonstrate awareness of personal competence and limitations and seek guidance or assistance from preceptors when appropriate.
5. Accept responsibility for one's actions.
6. Respond appropriately to feedback from preceptors, patients, peers, and other health care professionals.
7. Show initiative in interactions with patients, peers, and other health care professionals.
8. Demonstrate passion and enthusiasm for the profession.
9. Be aware of and work appropriately within the culture of the assigned practice setting.
10. Demonstrate awareness of site or institutional policies and procedures.
11. Prioritize workload appropriately.
12. Identify issues involving ethical dilemmas.
13. Weigh and balance different options for responding to ethical dilemmas.
14. Propose steps to resolve ethical dilemmas.
15. Adhere to all state and federal laws and regulations as a pharmacy intern in the practice setting.

## The Practice of Pharmacy and Pharmacists' Professional Identity

*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).

*1. E. Assist patients seeking self-care.*

2. 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.
3. 2. Discuss options for treatment and, if indicated, recommend appropriate non-prescription product(s).
4. 3. Counsel the patient about the proper use of self-care products.
5. 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.
6. 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.



## Public Health

### *1. 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.

### *2. 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 health care professionals and members of the community using a team approach to patient care. Pharmacy students need to practice communicating with other healthcare providers such as physicians and nurses; non-healthcare 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 interprofessional 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. With that in mind, 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 think critically and analytically in order to make compassionate and ethical decisions to engage in self-assessment and self-directed learning.

## Licensure

### Completion of Program and Licensing

Completion of the educational program leading to the Doctor of Pharmacy degree 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 Pharmacy Education (ACPE) and have fingerprint and background clearances. Complete registration instructions can be downloaded from the California State Board of Pharmacy website at: [Error! Hyperlink reference not valid.](#)

## 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 the predetermined deadline, prior to graduation. The Office of Student Affairs and Admissions reviews each application prior to submission to the Board; and discusses these with the CNUCOP Office of Academic Affairs. 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](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 Information

California Northstate University College of Pharmacy (CNUCOP) uses the Pharmacy College Application System (PharmCAS), a centralized application service for pharmacy programs, for applicants seeking to apply to the four-year Doctor of Pharmacy program. An electronic application must be submitted to PharmCAS.

The Admissions Committee holistically evaluates applicants for admission on an individual basis. Applicants are required to have completed 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 if an invitation for an interview should be extended.

All qualified applicants must interview for admission into the Doctor of Pharmacy program. 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. 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.

## Doctor of Pharmacy Requirements

While a minimum GPA of 2.6 is preferred, the Admissions Committee of California Northstate University College of Pharmacy uses a holistic review process to evaluate each application, thereby taking into account a variety of factors, in addition to an applicant's academic standing, including but not limited to: work or research experience, socioeconomic status, resilience, extracurricular activities, and other non-academic related activities. California Northstate University College of Pharmacy does not require a Bachelor's degree or PCAT.

According to the United States Department of Education guidelines, all applicants deemed eligible to be admitted as regular students into the College of Pharmacy must be:

- a) Persons who have a high school diploma or its recognized equivalent, or
- b) Persons who are beyond the age of compulsory school attendance in the State of CA, i.e. at least 18 years of age and pass a test that demonstrates the student's ability to benefit (ATB) from the educational program in which the student is enrolled.

A minimum of 40 semester units (54 quarter units) of prerequisite credit must be completed prior to matriculation into the program. Prospective students are strongly encouraged to carry full course loads (15 units per semester) during their undergraduate studies. AP exam scores of 3 or higher, with 4 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 by using college code: 7306. Additionally, the AP exam must have been taken no greater than ten 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.

Table 1. PREREQUISITE COURSEWORK		
	Semester	Quarter
General Chemistry I with	4	6
General Chemistry II with	4	6
*General Biology I	3	4
*General Biology II	3	4
*General Biology I or II lab	1	1
Organic Chemistry I	3	4
Organic Chemistry II	3	4
Organic Chemistry lab	1	1
**Human or Mammalian	3	4
Calculus or Statistics	3	4
Public Speaking or Oral Communication or a course focusing on oral	3	4
English Composition	3	4
General Education Requirements**: Psychology and	6	8
Total	40	54 (est.)

\*Upper division science courses or labs may be substituted for Biology I, Biology II, or Biology Lab on a case-by-case basis.

\*\*If taking a combined Anatomy and Physiology course, both Anatomy and Physiology I and II must be taken to fulfill the Physiology course requirement.

In addition to the requirements described above, all prerequisite coursework must meet the following requirements:

1. Must be completed at a regionally accredited US institution or its equivalent abroad.
2. Science and math courses, along with any AP credits, must have been completed no greater than ten years from the planned date of matriculation. Exceptions to this requirement may be

made based on a case-by-case basis if the applicant has been applying the skills learned in the older course directly to their position or research.

3. Must be completed with a grade of C- or higher.
4. All prerequisite coursework taken from non-US institutions (including Canada) must be submitted to the World Education Services (WES), Inc. for an evaluation of coursework. WES evaluations should be sent directly to PharmCAS.
5. International applicants who have not completed at least two years and at least 40 semester units (54 quarter units) at a US college or university are required to take the TOEFL IBT or IELTS exam. The preferred minimum TOEFL IBT and IELTS scores are 80 and 6.5, respectively.
6. 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 additional information about CNUCOP and the application process, please visit our website: [pharmacy.cnsu.edu](http://pharmacy.cnsu.edu). For questions, please contact [COPadmissions@cnsu.edu](mailto:COPadmissions@cnsu.edu).
7. Qualified applicants will be invited to an interview.
8. All prerequisites, including general education requirements, must be completed prior to orientation, which is held in mid-August of each year; however, applicants may still interview prior to the completion of all prerequisite coursework.

For an in-depth overview of admission requirements, how to apply, and key dates, please visit the Admissions website at <http://pharmacy.cnsu.edu> and the PharmCAS School Pages at [www.pharmcas.org](http://www.pharmcas.org).

## 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 candidates acquire the foundation of knowledge, attitudes, skills and behaviors that they will need throughout their 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 US 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. Domestic 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 as determined by the CNUCOP Office of Academic Affairs and Accreditation in collaboration with other CNUCOP offices and the Admissions Committee
- 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. International students who have completed or are currently enrolled in a BS Pharmacy program in a foreign country (non-US) must complete the International Pharmacy Student Application available on the CNUCOP webpage. 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.

## 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 acknowledges 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](http://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

Applicants 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 the applicant gives 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. This can be hand delivered, emailed, faxed, or mailed. 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, the applicant has the right to withdraw from the University at any time. Withdrawal shall occur when the applicant gives 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.

## Tuition & Fees

All tuition, fees, expenses, and policies listed in this publication are effective as of June 2023 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 withdrawal, and the Student Tuition Recovery Fund (STRF) disclosures are located in FINANCIAL SERVICES & DISCLOSURES,

### **Cost of Attendance and Tuition and Fees for Incoming Students**

The cost of attendance is an estimate of expected educational expenses for the period of enrollment.

These educational expenses are calculated as described below and apply to all students enrolled in the Doctor of Pharmacy program at California Northstate University:

## Doctor of Pharmacy - Tuition & Fees per Year for 2024-2027

Tuition & Fees	Year 1 – P1	Year 2 – P2	Year 3 – P3
Tuition	\$65,000	\$68,000	\$71,000
Pharmacy Lab Fee / Skill Lab Fee	\$695	\$695	\$695
Technology Fee	\$200	\$200	\$200
Professional Career Development Fee	\$60	\$60	\$60
Student Activity Fee	\$100	\$200	\$200
BCLS/CPR Certification Fee	\$50	\$0	\$50
Student Tuition Recovery Fee <sup>5</sup>	\$0	\$0	\$0
Aseptic Compounding Certification Fee/Pharmacists Letter Trainings	\$72	\$0	\$0
White Coat Ceremony Fee	\$90	\$0	\$0
Orientation Fee	\$75	\$0	\$0
Immunization Certification Fee	\$125	\$0	\$0
Board Preparation Fee	\$0	\$600	\$0
Enrollment Agreement Fee (non-refundable)	\$100	\$0	\$0
Graduation Fee	\$0	\$0	\$300
<b>Total Tuition &amp; Fees per Year</b>	<b>\$66,567</b>	<b>\$69,755</b>	<b>\$72,505</b>

**Total Estimated Tuition & Fees cost for the entire 3-year Doctor of Pharmacy program \$208,827.**

Estimated Other Optional Educational Related Costs <sup>1</sup>	Year 1 – P1	Year 2 – P2	Year 3 – P3
Health Insurance Premium <sup>2</sup>	\$3,529	\$3,529	\$3,529
Books and Supplies	\$1,600	\$1,600	\$1,600
Background Check/Drug Screen/Health -related costs <sup>3</sup>	\$500	\$500	\$500
Room and Board (based on 12 months)	\$28,152	\$28,152	\$28,152
Transportation (based on 12 months)	\$5,362	\$5,362	\$5,362
<b>Total Estimated Cost per Year<sup>4</sup></b>	<b>\$105,710</b>	<b>\$108,898</b>	<b>\$111,648</b>

<sup>1</sup> Estimated costs and expenses a student may incur as part of participation in the applicable year of the PharmD program, whether or not paid directly to CNUCOP. These expenses include estimated costs of living.

<sup>2</sup> Optional, estimated, and will vary based on number of insured members.

<sup>3</sup> Estimated cost of specific IPPE/APPE site requirements, including but not limited to physical exam, immunizations, etc.

<sup>4</sup> Includes tuition, fees, and other estimated educational related costs.

<sup>5</sup> Effective April 1, 2024, the STRF assessment rate will change from two dollars and fifty cents (\$2.50) per one thousand dollars (\$1,000) of institutional charges to zero dollar (\$0.00) per one thousand dollars (\$1,000) of institutional charges.

## Cost of Attendance and Tuition and Fees for Continuing Students

The cost of attendance is an estimate of expected educational expenses for a period of enrollment. These educational expenses are calculated as described below and apply to all students enrolled in the Doctor of Pharmacy program at California Northstate University:

### Doctor of Pharmacy - Tuition & Fees per Class for 2024-2025

Tuition & Fees	Year 2 - P2 Class of 2027	Year 3 - P3 Class of 2026	Year 4 - P4 Class of 2025
Tuition	\$57,290	\$57,290	\$57,290
Pharmacy Lab Fee / Skill Lab Fee	\$520	\$520	\$520
Technology Fee	\$150	\$150	\$150
Professional Career Development Fee	\$60	\$60	\$0
Student Activity Fee	\$200	\$200	\$100
BCLS/CPR Certification Fee	\$0	\$50	\$0
Student Tuition Recovery Fee <sup>5</sup>	\$0	\$0	\$0
Aseptic Compounding Certification Fee/Pharmacists Letter Trainings	\$0	\$0	\$0
White Coat Ceremony Fee	\$0	\$0	\$0
Orientation Fee	\$0	\$0	\$0
Immunization Certification Fee	\$0	\$0	\$0
Enrollment Agreement Fee (non-refundable)	\$0	\$0	\$0
Board Preparation Fee	\$0	\$600	\$0
Graduation Fee	\$0	\$0	\$300
<b>Total Tuition &amp; Fees per Class</b>	<b>\$58,220</b>	<b>\$58,870</b>	<b>\$58,360</b>

Estimated Other Optional Educational Related Costs <sup>1</sup>	Year 2 - P2 Class of 2027	Year 3 - P3 Class of 2026	Year 4 - P4 Class of 2025
Health Insurance Premium <sup>2</sup>	\$3,529	\$3,529	\$3,529
Books and Supplies	\$1,600	\$1,600	\$1,600
Background Check/Drug Screen/Health -related costs <sup>3</sup>	\$500	\$500	\$500
Room and Board (based on 12 months)	\$28,152	\$28,152	\$28,152
Transportation (based on 12 months)	\$5,362	\$5,362	\$5,362
<b>Total Estimated Cost per Class<sup>4</sup></b>	<b>\$97,363</b>	<b>\$98,013</b>	<b>\$97,503</b>

<sup>1</sup> Estimated costs and expenses a student may incur as part of participation in the applicable year of the PharmD program, whether or not paid directly to CNUCOP. These expenses include estimated costs of living.

<sup>2</sup> Optional, estimated, and will vary based on number of insured members.

<sup>3</sup> Estimated cost of specific IPPE/APPE site requirements, including but not limited to physical exam, immunizations, etc.

<sup>4</sup> Includes tuition, fees, and other estimated educational related costs.

<sup>5</sup> Effective April 1, 2024, the STRF assessment rate will change from two dollars and fifty cents (\$2.50) per one thousand dollars (\$1,000) of institutional charges to zero dollar (\$0.00) per one thousand dollars (\$1,000) of institutional charges.

## Scholarships

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/or 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-toolsp>.

For scholarships and awards specific to the College of Pharmacy, please visit:  
[https://pharmacy.cnsu.edu/PDFs/2022-2023\\_CNUCOP\\_Scholarship\\_and\\_Awards\\_List.pdf](https://pharmacy.cnsu.edu/PDFs/2022-2023_CNUCOP_Scholarship_and_Awards_List.pdf)

for a description of the different scholarships and awards available.

Students are also encouraged to apply for external scholarships.

## General Policies

### Orientation and Registration

New Student Orientation is mandatory for all incoming 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 of 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 and/or Student Affairs by the end of Orientation. To make updates, a new form must be submitted to the Registrar and the Office of Student Affairs must be notified. 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 non-compliant 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). During orientation week, students will complete their intern applications, which will then be 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 or online. 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.

## Instruction/Course Delivery

The College of Pharmacy offers a didactic component of the curriculum that is usually 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. Selected classes may be delivered virtually.

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 pharmacy practice experience throughout various offsite locations.

The College of Pharmacy provides learning experiences through the use of team-based learning to deliver many of the didactic courses in the curriculum. Team-based learning (TBL) prepares students to play a key role in a multidisciplinary team setting. High fidelity manikin-based simulations, community pharmacy-based simulations, gamification, class supplemental instruction, cooperative and associative learning and interprofessional education constitute some of the other active teaching and learning strategies employed.

All courses are delivered in English and English language services are not provided.

## Academic Policies & Procedures

### Academic Calendar

The COP Academic Calendar consists of two didactic course semesters lasting approximately 15 weeks long. 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). Practicum courses (PRCs) require adequate practice hours for student teams and the



Carnegie credit unit definition does not apply to these courses. Practicum courses will be at least 2 credit hours. Students complete 300 hours of IPPE and 1440 hours of APPE as part of their experiential education training (EL).

## Grading

Code	Course Type	Code	Course Type
AL	Active Learning	LEC	Lecture course
EL	Experiential	TBL	Team- Based
LAB	Laboratory		

A letter grade equal to or greater than a C is considered satisfactory performance (passing) for completion of a course. 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
Y	Remediation Placeholder	Not in GPA
W	Official Course Withdrawal	Not in GPA

## 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 need to repeat the course next time it is offered.

In 2024, the CNUCOP academic progression policy was revised. This policy will go into effect in the fall of 2024. This policy is provided at the end of this document.

## 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 three 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 Associate Dean 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 Assistant/Associate Dean 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 Assistant/Associate Dean for Academic Affairs.

The Assistant/Associate Dean 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 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 Assistant/Associate Dean I for Academics, the student may appeal the decision directly to the Dean.

#### *Third Step – The Dean of the College*

If the Assistant/Associate Dean 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 to submit an appeal in writing to the College

Dean. However, this is only allowed for exceptional cases. The appeal is not for the grade but for an exception from regular process and an additional opportunity to remediate the course. The Dean will refer the case to the Assistant/Associate Dean of Academic Affairs who will prepare the student's dossier for review by the college level Professionalism Committee. Provided that the student is in otherwise good academic standing and has no professionalism issues, PASC may recommend granting an exception to process and allow an exceptional remediation. The Academic Affairs Dean renders the final decision based on the recommendation from PASC and in consultation with the Dean. They 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 Qualifying Exams**

An examination on course material presented during the previous program years will be administered yearly. This comprehensive end-of-the-year exam for the P1 and P2 classes is referred to as the Milestone Exams. Each exam comprises 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 Milestone exams are held on the week prior to the beginning of the next fall semester.

The Qualifying Exam primarily covers pharmacotherapeutic content presented in all four didactic years at CNUCOP, including calculations and is designed to introduce and help develop the skills necessary for taking the NAPLEX and CJPE.

## Early Alert Policy

An Early 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 of less than 70% or a cumulative iRAT score of less than 70%. It could also be based on observation of behavior, such as participation in teamwork.

### *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 and Accreditation (OAAA) which then notifies the student's academic advisor. The OAAA 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 ensure all resources are being utilized to improve academic performance.

## Academic Progression

### I. POLICY STATEMENT

This policy establishes California Northstate University's College of Pharmacy's (COP) standards of academic progression. They are defined to ensure students advance through the curriculum in a timely manner, while maintaining high standards of academic performance and professional conduct.

### II. PURPOSE

The purpose of this policy is to ensure students reach and maintain high standards of learning throughout their time at COP and accomplish all course learning objectives. The policy delineates the process for academic progression. A student must complete the program within a maximum time period of 7 calendar

years (84 calendar months) from the time they register and attend their first core course. Students are required to pass all courses with a grade of C or high for the PharmD degree.

## 1. Annual Summative Exam Remediation

Each student is required to take an Annual Summative Exam (listed below), which is offered at different points in the program depending on the cohort.

P1 – Milestone Exam

P2 – Milestone Exam

P3 – Pre-Qualifying Exam

P4 – Qualifying Exam

Students must pass the Annual Summative Exam to progress. Students who fail an Annual Summative Exam may have an opportunity to remediate. If a student does not pass the remediation, they must meet with the Office of Academic Affairs to develop a revised Academic Plan. In case of failing or missing all 3 attempts of the P4 Qualifying Exam, the student will be required to submit and have a Board exam study plan approved by the corresponding course coordinator.

## 2. Extended Study Academic Plan

The CNU College of Pharmacy offers a sequential curriculum that is designed for completion in 4 years. Under certain circumstances a student may be placed on an Extended Study Academic Plan. Students must complete the program within a total of seven years or less from the time a student registers and attends their first course.

- A. Leave of Absence - A student may request a leave of absence for up to one year for medical or personal reasons. Leaves of absence must be approved by the Office of Academic Affairs. Appropriate documentation may be required for approval. For details, please see the Leave of Absence Policy.
- B. Un-remediated or Failed Course Work - If a student fails to remediate a D or F core course grade, then the course must be repeated the next time it is offered. In either case, the student must contact the Office of Academic Affairs to develop an Extended Study Academic Plan.

## 3. Academic Probation

A student will be placed on Academic Probation if:

- The student does not successfully remediate a D or F course grade
- The student fails to comply with the conditions of an I grade

- The student GPA for any semester falls below 2.0

If any of these three conditions occur, the Office of Academic Affairs will automatically place the student on Academic Probation and notify the student and the Registrar in writing of the action. When a student has been placed on Academic Probation, the following apply:

- a. Within one week of the date that the student receives notification of their Academic Probation, the student must meet with the Office of Academic Affairs to discuss their Academic Probation and to develop their Extended Study Academic Plan as needed.
- b. Once the plan has been agreed, the Office of Academic Affairs (or designated individual) will draw up documentation outlining details of the Extended Study 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 Dean's Executive Council and the student's advisor.
- c. While on Academic Probation, the student may not hold office in any College or University organization.
- d. Students may be removed from academic probation after they have successfully completed the course(s) that triggered the probation.

#### 4. Withdrawal from a course

During a semester, a student may withdraw from a class by the end of the first week of classes without restrictions. From the beginning of the second week through the twelfth week of instruction, withdrawal from a course will be allowed for compelling reasons determined and approved by the Office of Academic Affairs. Additionally, the student must meet with the Office of Academic Affairs to develop an extended study Academic Plan. Withdrawals shall not be permitted after the twelfth week of instruction except in cases, such as accident or serious illness, where the cause of withdrawal is due to circumstances clearly beyond the student's control and the assignment of an Incomplete is not possible. Such withdrawals require documentation and the approval of the Office of Academic Affairs, who will develop an extended study Academic Plan with the student. Withdrawals must be student-initiated. For Withdrawal from the program see the College of Pharmacy Withdrawal Policy.

#### 5. Incomplete Grade

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, meaning that the course work is incomplete but of passing quality. (See CNU Grading Convention Policy and Procedure Policy for more information.)

## 6. Dismissal

A student may be dismissed from CNUCOP for a variety of reasons:

- A. Unsuccessful coursework may result in dismissal based on the following point system:

F = 2 points

D = 1.0 point

**A student earning more than 4 points for combined Ds and Fs will be dismissed.**

- B. Failure to meet any terms of Remediation or Academic Probation
- C. Conduct subject to dismissal as described in the Honor Code section of the Student Handbook and decided by PASC
- D. Foregoing an academic semester without obtaining an approved leave of absence
- E. Failure to complete the degree requirements in a maximum of seven consecutive academic years from the date of the first day the student begins the program.
- F. All dismissals must be reviewed and approved by PASC.

## 7. Appeal of Dismissal

Students dismissed from the College may appeal against 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 3 business days of receipt of the formal written appeal. The Dean's decision is final. Dismissal can only be appealed once.

## 8. 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 APPE 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 Experiential Education Handbook for specific requirements regarding progression through IPPEs and APPEs.**

## 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

The preceptor will determine the schedule for the student during their rotation. Apart from the student's class schedule and mandatory College events, it is at the sole discretion of the preceptor to determine the student's schedule. The preceptors may, but are not required to, respect documented and significant religious or cultural dates. However, students must present such special requests to the preceptor as early as possible. Students must complete their entire six-week APPE rotation regardless of earning 240 hours prior to the final day. Students must make up any missed time during their rotations completing at a minimum, 240 hours during their APPE rotation or 75-150 hours for respective IPPE rotations. If, while on rotation, a holiday occurs which closes the rotation site or a student is called back to campus, the student must coordinate a time with the preceptor to make up all hours missed. The closing of the academic campus for a holiday (s) or vacation does NOT automatically determine an off day for the IPPE or APPE student. For any reason, there is a maximum of three (3) days missed during any rotation before a student fails the rotation.

**TARDINESS:** Any student who has missed greater than one hour of a scheduled rotation day must report the occurrence within 24 hours to the EED (or coordinator) and preceptor. The student is required to make up any time lost due to tardiness. Repetitive tardiness must be reported by the student to the IPPE or APPE Director, as appropriate. It is the responsibility of each student to allow sufficient time for traffic, parking, or other routine delays. Three tardy days of any duration is considered an unexcused absence, and the course grade will be dropped one letter grade.

## 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, some absences from coursework are 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 no later than one week before the early registration deadline for the conference. For a more detailed description of the Student Travel Guidelines, please review the Student Handbook located on our webpage.

## 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. COP students are block scheduled into their didactic classes by the Registrar. The COP Add/Drop Policy only applies to elective courses.

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 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.

## Leave of Absence

A leave of absence is approved for a specific period, 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. Extension of the leave of absence period requires approval from the Office of Academic Affairs.

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 Associate Dean of 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 the 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, the Dean, and Office of the Registrar. A student who officially withdraws from the University or College is eligible 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>.

## 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 the CNUCOP curricular requirements in a timely fashion, not to exceed seven (7) years from the date of initial enrollment (including approved leave of absence); exceptions may be granted in unusual circumstances.
- 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 expected to attend commencement and wear traditional academic regalia consisting of a cap, gown, and academic hood. Hoods of academic 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.

## 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.

(Prerequisites: none) Formerly PHAR 634

#### **CAS 608 Introduction to Clinical Topics (5 cr) (4 cr)**

Introduction to clinical topic is the first course in the therapeutic series. It is an interactive course with an emphasis in self-care management, which consists of systematic approach to evaluate a patient's self-care needs including assessing, triaging, and making appropriate treatment recommendations. This course also

discusses prescription and non-prescription medications related to selected clinical topics. Students will be expected to understand how and why obtaining a comprehensive patient history is necessary to objectively recommend appropriate prescription and nonprescription drugs 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 and ambulatory care pharmacy practice. (Prerequisites: IPP 607, PRC 609) Formerly PHAR 641

### **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 general 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. (Prerequisites: CAS 606) Formerly PHAR 743

### **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. (Prerequisites: PBS602 – Co-requisite PRC 709) Formerly PHAR 575

### **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: PBS 701 & CAS 703 – Co-requisite: PRC 710) Formerly 752

### **CAS 801 Pharmacy and the Health Care System (3 cr)**

This course will introduce the major healthcare stakeholders and explain how 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. (Prerequisites: none) Formerly PHAR 811

### **CAS 802 Pharmacy Law and Ethics (3 cr)**

This course is designed to prepare student pharmacists to identify, evaluate, and resolve the legal and ethical issues arising within the context of pharmacy practice. Upon completion, a student will understand the current regulatory environment duties and responsibilities of the Pharmacists in Charge and the standards of care to which pharmacists must adhere. Students will be able to identify, interpret and apply relevant laws and regulations within the context of pharmacy practice. (Prerequisites: IPP 607) Formerly PHAR 813

### **CAS 804 Pharmacy Management and Economic Principles (3 cr)**

To provide optimum care and services as a healthcare professional, pharmacists should understand the basic principles and key concepts of managerial, organizational, and financial management. Therefore, the objective of this course is to provide an opportunity for students to learn important management, organizational, accounting, marketing skills, and entrepreneurial and innovation applications for their future practice in pharmacy. The course emphasis will be focused on business 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. The course material will provide this introduction to students by developing skills to assist them in understanding the methods to choose a cost-effective drug therapy for patient populations 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 these important concepts. A final team and individual capstone project will be developed to ascertain attainment of knowledge learned in the course. (Prerequisites: CAS 801) *Formerly PHAR 815*

### **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. To accomplish these goals, the student will be required to comprehend common microbiologic laboratory tests used to identify microorganisms. The student will be expected to know the mechanisms of action, antimicrobial spectrum, mechanisms of bacterial resistance, common adverse reactions, pharmacokinetics/pharmacodynamics properties of antimicrobial agents discussed in course materials, and the dosing of select antimicrobials. (Prerequisites: PBS604, CAS 703, & PBS 803) *Formerly 853*

### **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. (Prerequisites: PBS 704 & CAS 706 – Co-requisite: PRC 810) *Formerly PHAR 856*

### **CAS 812 Applied Clinical Pharmacokinetics and Calculations (2 cr)**

This course covers applied clinical pharmacokinetics and calculations, primarily in case-based format. Focus areas include applications of PK in critical care, antibiotics, behavioral health and antiepileptic agents, nutrition supplementation (including Total Parenteral Nutrition), pediatrics, neonatal, nutrient deficiency and excess in infants and children, as well as practical application of biostatistics, epidemiological and pharmacoeconomic measures. The student will need to integrate physiologic, pathophysiologic, pharmacologic, pharmacodynamics, 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. (Prerequisites: CAS 706 – Co-requisites: CAS 806 & PRC 810)

## Pharmaceutical & Biomedical Sciences (PBS)

### **PBS 601 Cell and Molecular Biology and Biochemistry (4 cr)**

The Cellular and Molecular Biology and Biochemistry 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 prokaryotic and eukaryotic cell structure and function, virus biology, cellular signal transduction, human carbohydrate, lipid and protein metabolism, biomedical aspects of human nutrition, genetic regulation, the molecular basis of inherited genetic diseases and acquired diseases, principles of commonly used biotechnologies, drug targets screening, and biopharmaceutical products generation. (Prerequisite: none) Formerly PHAR 621

### **PBS 602 Pathophysiology and Pharmacology I: (The Nervous System) (6 cr)**

This course introduces the principles of pathophysiology and pharmacology, and then focuses on the nervous and renal systems. Normal neural and renal development, anatomy and physiology are reviewed, and then integrated into discussions of the etiologies, pathologies, clinical manifestations, treatments, and preventive measures of selected major or notable neurologic, psychiatric, and renal diseases and disorders. The principles of pharmacology are introduced through drug-receptor interactions, pharmacodynamics, and dose-response curves. Neurology and neuropharmacology include the anatomy of the central and peripheral nervous system (including the CNS & PNS, neurophysiology, electrophysiology, ion channels, action potentials, the resting membrane potential, neurotransmitters, and receptors). Neurologic and psychiatric diseases and disorders covered will include epilepsy, insomnia, glaucoma, pain, disorders of memory and cognition (Alzheimer's), affect (depression and bipolar), movement (Parkinson's and Huntington's), and thought (schizophrenia), as well as the relevant neuropharmacological agents used for their treatment. (Prerequisites: PBS 601 & PBS 603) Formerly PHAR 622

### **PBS 603 Medicinal Chemistry & Physical Pharmacy (3 cr)**

The course consists of five components: 1. Fundamentals of Medicinal Chemistry – which introduces the concepts required to understand the principles of Medicinal Chemistry, including drugs sources, acid base properties of drugs, importance of functional groups' chemistry, drug structure-relationships, prediction of water and lipid solubility of drugs, and Physical & Chemical factors that affect drug stability. 2. Drug Structure and Pharmacological Activity – This module emphasizes macromolecular targets of drug action focusing on receptors and ligand-receptor interactions, stressing stereochemical considerations. 3. Basic knowledge of the major pathways of drug metabolism, factors influencing drug metabolism and that can contribute to drug-drug interactions. The students will be able to predict the metabolism and pharmacological activity of drugs classes based on the contribution of their functional groups to their structures and understand the rationale for using pharmacogenomics to optimize medication use. 4. Introduction to Drug Development - This module covers the process of drug discovery and development, introduction to different aspects of basic drug candidate identifications, and how candidate molecules are made into drugs and drug products in the clinic and market. The module also examines the current state of personalized medicine and its impact on drug discovery and the future of pharmacy. 5. Alternative medicines - The module provides students with a fundamental knowledge of the active constituents of natural medicines with emphasis on the top selling medicinal herbs. It also refer to some of the well-known



efficacy, safety concerns those herbal products, and dietary supplements may present to patients.  
(Prerequisite: none)  
Formerly PHAR 631

### **PBS 604 Pharmacokinetics (5 cr)**

This course focuses on understanding and applying pharmacokinetic principles for optimizing drug dosage. It is divided into three modules: descriptive, quantitative, and pharmacokinetics of special populations. Descriptive pharmacokinetics provides a basic introduction to the key pharmacokinetic principles. This module 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. Quantitative pharmacokinetics covers the mathematical aspects, including the calculation of pharmacokinetic parameters following drug administration and compartment modeling. The third module covers the process of using pharmacokinetic principles to optimize the dose for special populations. (Prerequisite: PBS 605, PBS 611) Formerly PHAR 633

### **PBS 605 Pharmaceutics (4 cr)**

This course is designed to provide students with the deep understanding of the drug physicochemical properties and its effects on drug formulation and compounding, dosage form as well as an understanding of the interactions between drug delivery systems and biological systems. The course covers the traditional and nontraditional dosage forms as well as drug delivery systems. (Prerequisite: none)

### **PBS 701 Pathophysiology and Pharmacology II: (6 cr)**

This course describes and evaluates underlying pathogenesis of major cardiovascular disorders and the cardiovascular pharmacology. Upon completion of this course, students gain an understanding of major cardiovascular disease states, drug targets based on understanding the pathophysiology, the mechanism of action and adverse effects of drugs used to treat cardiovascular disorders. Selected topics include hypertension, atherosclerosis and dyslipidemia, thrombosis, arrhythmia, ischemic heart diseases, heart failure, venous thromboembolism, peripheral arterial diseases, stroke, valvular disease, and cardiovascular shock. In addition, this course also covers acute kidney injury and chronic kidney disease as well as homeostasis and imbalance of sodium/water, electrolyte, and acid-base in the living body. These concepts and disorders are relevant to cardiovascular diseases and others. (Prerequisites: PBS601, PBS602, PBS603, & PBS604) *Formerly PHAR 724*

### **PBS 704 Pathophysiology and Pharmacology III (6 cr)**

In this course, students will learn to identify drug targets based upon an understanding of the pathophysiology of major diseases of the endocrine, respiratory, renal, gastrointestinal, genitourinary, and endocrine system and oncology. 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: PBS 602)

### **PBS 803 Immunology and Rheumatology (3 cr)**

This 3-credit course will present an overview of the human immune system underlining the conceptual, physiological, biochemical and pharmacological basis of innate and adaptive immunity. Students will be provided with detailed information about the immune system, immune cells and tissues, and soluble proteins (cytokines) that orchestrate its function. The specific roles of immune cells and cytokines will be discussed

with respect to human diseases. The course will also cover the development and biology of B and T cells as key players of adaptive immunity. Special emphasis will be placed on autoimmune diseases and their management, with examples including TH1, TH2 (e.g. allergy), and TH17-mediated diseases. Other topics covered in the course include organ transplantation, passive and active immunity (vaccination), immunodeficiency diseases, AIDS, SARS-COV-2, as well as interactions between the immune system and cancers. Students will gain an understanding of specific disease state management through the interpretation of basic scientific findings, application of pharmacologic principles, relevant clinical reports/data and evidence-based clinical guidelines. These principles will be emphasized in reading assignments, assigned applications, and in-class discussion. Team-based and evidence-based patient case discussion as well as patient pharmacological treatment plan recitation will be applied throughout the course. (Prerequisites: PBS 601, PBS 603, & PBS 704) *Formerly PHAR 827*

## Experiential Education (EED) - IPPE

### **IPP 607 Introduction to Pharmacy Practice (3.5 cr)**

This class covers introductory and contemporary pharmacy issues, practice history, pharmacy organizations, medical terminology/pharmacy vernacular, and certificate programs as required by experiential practice experiences. Additionally, students will be introduced to pharmacy law and professionalism issues, will be provided with an opportunity to develop introductory knowledge of the top 100 dispensed prescription medications, 100 selected over-the-counter medications, and 50 medical terminologies. (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)

**APP 910 Advanced Pharmacy Practice Experience: Seminar 1 (1 cr)**

This is the first of a required, two-semester sequential course for pharmacy students during their advanced pharmacy practice experiences. This course is designed to: 1) prepare students for practice in the profession of pharmacy, 2) build upon didactic knowledge gained previously in the Doctor of Pharmacy program, and 3) help students become life-long learners through self-assessment and reflection on learning. Course activities may include but are not limited to board exam preparation, quizzes, student presentations, disease state and/or drug information presentations/discussions, and/or journal club presentations. (Co-requisite: Enrollment in APP 901-905/906)

**APP 911 Advanced Pharmacy Practice Experience: Seminar 2 (1 cr)**

This is the second of a required, two-semester sequential course for pharmacy students during their advanced pharmacy practice experiences. This course is designed to: 1) prepare students for practice in the profession of pharmacy, 2) build upon didactic knowledge gained previously in the Doctor of Pharmacy program, and 3) help students become life-long learners through self-assessment and reflection on learning. Course activities may include but are not limited to board exam preparation, quizzes, student presentations, disease state and/or drug information presentations/discussions, and/or journal club presentations. (Co-requisite: Enrollment in APP 901-905/906)

## 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. (Prerequisite: none)

### **PRC 610 Longitudinal Practicum II (1 cr)**

Longitudinal Practicum II will provide students with a hands-on introduction to the essential technical skills of intravenous (IV) sterile compounding, calculations, regulations, aseptic techniques, personal and patient safety measures using the sterile IV hood. In addition, other community pharmacy practice standard procedures (prescription processing, medication dispensing, labeling and verification, etc.) will be introduced through the advanced pharmacy practice simulations (APPS lab). In parallel, students will learn how to perform patient immunizations, manual blood pressure and blood glucose measurements and how to perform patient counseling at a skill sufficient to partake in community health screening environments and introductory pharmacy practice experiences (IPPEs). (Prerequisites: IPP607 & PRC609)

### **PRC 613 Pharmaceutical Calculations (1.5 cr)**

The course covers pharmaceutical calculations and basic mathematical skills required for accurate and effective use of pharmaceutical preparations. The course contains major calculations accomplished by pharmacists in different settings. The information in each chapter is aimed to assist in understanding the purpose and importance of accuracy in calculation to provide a better and safe health outcome. (Prerequisite: knowledge of Algebra)

### **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 using an oral clinical exam. Basic laboratory elements will be introduced, and skill sets related to conducting MTM/motivational interviewing will be further refined. Students can also 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. (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 participate in various workshops, which were first introduced in Practicum III. Journal Clubs, SOAP Notes and Care Plans will all be revisited, using various cardiovascular, endocrine, 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)**

The fifth Lab Practicum will provide students with the ability to simulate real life pharmacy inpatient and outpatient experiences and challenges in a structured environment. This includes the Advanced Pharmacy Simulation (APPS) Lab which provides hands-on community pharmacy experiences, and our NeehrPerfect software that simulates an inpatient EMR system. Students will have opportunities to review patient cases using disease states from previous or concurrent pharmacotherapeutic course topics such as cardiovascular, endocrine, respiratory, neuropsychology, geriatrics, and infectious disease. (Prerequisite: CAS 703; Co-requisites: 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. 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 leadership, MTM, patient care and inter-professional practice. (Prerequisite: CAS703; Co-requisite: CAS806)

## **Pharmacy Professional Readiness 1-3**

The Pharmacy Professional Readiness courses assist students with preparation for experiential rotations and eventual practice as pharmacists. Introductory Pharmacy Practice Experience (IPPE) readiness sessions focus on the logistics of IPPE rotations, and the skills students will need to utilize for successful educational experiences. The Career Development component of the courses provide longitudinal programming that prepares students to pursue postgraduate training opportunities or enter the workforce, as well as introduces students to different pharmacy career paths. The focus of the Professional Career Development component is to assist students in identifying their professional goals and provide the support and resources needed to pursue successful careers.

## **Elective Courses**

P2 and P3 students must choose one from several 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 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 718: Personalized Medicine (2 cr)**

This course describes the basic concepts of personalized medicine and molecular diagnostic, as well as therapeutic methods in personalized medicine. It outlines genetic and non-genetic factors in personalized medicine and indicates personalized drug therapy in cancer, cardiovascular disease, and neurological disorders. Personalized medicine is an evolving science to provide treatment as individualized as the disease. It integrates personal genomic and clinical information, as well as drug information that allows accurate predictions about a person's susceptibility to disease and treatment. After learning this course, students will be able to describe better-targeted therapies and methods to maximize therapeutic efficacy and reduce probability of adverse effects. This course is taught in team-based learning (TBL) form, student presentation, case report, and assignment. (Prerequisites: PBS 601, PBS 602 & PBS 701)

### **ELC 761 / 861 Pharmacogenomics & 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 considering the relevance and the scope of pharmacy practice. The course is designed with a learner-centered perspective, leading stepwise 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. (Prerequisites: PBS604, PBS701, PBS704, & CAS705. Equivalence: ELC861).

### **ELC 762 Pharmacists in Public Health (2 cr)**

Offered as a Hybrid-Online Course

This is a hybrid course, combining online learning modules and in-class learning experiences. This elective course introduces, develops, and integrates the skills and knowledge needed for student pharmacists who choose to explore the realm of public health through applying their unique pharmacy backgrounds and interests. Throughout the course, the learning modules are designed to illustrate how pharmacy would fit into the greater scheme of health care from a public health perspective. This will demonstrate how pharmacists can contribute to inter-professional efforts on enhancing the quality of healthcare services delivered to integrate clinical practice and population health in pharmacists' work, and to identify public health efforts of which pharmacists are already involved. A large portion of this course is devoted to program planning, implementation, execution, and evaluation: to prepare student pharmacists in their future leadership roles on the healthcare team. To enhance students' skills, evidence-based practice will be discussed and applied. Lastly, journal article analysis will be conducted to familiarize students with translating research results into real-world practice to promote population health management and practice.

### **ELC 764 Principles of Clinical Pharmacology (2 cr) (Part 1) Offered as an Online Course**

The Principles of Clinical Pharmacology Part 1 elective course will provide students with an overview of clinical pharmacology and its real-world usage. Topics relating to the following subject areas will be covered: pharmacokinetics, drugs metabolism and transport, drug therapy in special populations. This is an online course that will run for 10 weeks. Each week, students will be expected to review assigned YouTube videos that are presented by world renowned experts in each subject area and are freely available through the NIH Clinical Center. Students will also be expected to participate in weekly online discussion boards as well as complete weekly online open book quizzes. There will be an online open book final exam at the

end of the course that must be completed/submitted prior to the end of the semester. (Prerequisites: P2/P3 Standing)

### **ELC 765 Principles of Clinical Pharmacology (2 cr) (Part 2) Offered as an Online Course**

The Principles of Clinical Pharmacology Part 2 elective course, a continuation of the Part 1 elective course, will provide students with an overview of clinical pharmacology and its real-world usage through the review of the following topics: Assessment of Drug Effects, Drug Discovery and Development, Pharmacogenomics and Pharmacotherapy. This is an online course that will run for 6 weeks. Each week, students will be expected to review assigned YouTube videos that are presented by world renowned experts in each subject area and are freely available through the NIH Clinical Center. Students will also be expected to participate in weekly online discussion boards as well as complete weekly online open book quizzes. There will be an online open book final exam at the end of the course that must be completed/submitted prior to the end of the course. (Prerequisites: P2/P3 Standing)

### **ELC 766 Special Pops. Pharmacotherapy: Preg, Peds, & Ger. (2 cr)**

Special Populations Pharmacotherapy: A Focus on Pregnant, Pediatric, & Geriatric Patients that will focus on common disease states affecting the pediatric, geriatric, and pregnant populations and their management. These specific patient populations require special consideration because of their varying pharmacokinetic and pharmacodynamics 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 in-class discussion to enhance students' knowledge base and improve oral and written communication skills. Each team will be responsible for presenting assigned topics (pregnant, pediatric, or geriatric topic) and creating an in-class application exercise for each topic. Additionally, each student who is not presenting will be responsible for developing questions to ask each presenting team. Class participation points will be based on student engagement with in-class applications and presentation questions. (Prerequisites: PBS602, PBS603, PBS701, & CAS705. (Equivalent to PHAR781AI "Special Populations: A Focus on Pediatric and Geriatric Pharmacotherapy"))

### **ELC 768: Decision Analysis for Health Professionals (2 cr)**

Healthcare professionals always face tough clinical decisions under uncertainty. The uncertainty may come from the diagnostic or treatment uncertainty or both. In addition, the increase of a complex healthcare environment adds more difficulties in making decisions for healthcare professionals. This course will introduce students to the concepts and methods for formulating and making informed decisions in health care (e.g., treatment plans, health policies, etc.). The course will cover a wide range of topics including decision analysis and cost-effectiveness analysis in health care programs, public health policy, technology assessment, medical decision making, and health resource allocation. (Prerequisites: P2/P3 Standing)

### **ELC 780: Journal club for landmark clinical studies (2 cr)**

This journal club elective course will be focused on landmark clinical studies that are most relevant to current clinical guidelines and benchmarks of pharmacy practice. Selected original research and/or review articles from literature will be used to emphasize the basic scientific concepts of generation of hypothesis, testing hypothesis, proper experimental/study design and methodology. In addition, hands-on experiences from student presentations and in-class discussions with participating instructors will be used for further development of students' essential presentation skills along with the necessary skills of critical thinking, problem solving and literature evaluation for evidence-based pharmacy practice. Students will be required to participate in group journal club presentations, in addition to active participation in online in-class discussions for their individual assessment. (Prerequisites: CAS 703).

**ELC 787: Topics in Pathophysiology and Pharmacology of the Nervous System (2 cr)**

This course reviews the fundamental principles of pathophysiology and pharmacology, and then focuses on specific topics regarding the nervous system, neurological and psychiatric diseases/disorders, and neuropharmacology. Normal neural development regarding anatomy and physiology will be reviewed. The content will be integrated into discussions of the etiologies, pathologies, clinical manifestations, treatments, and preventive measures of selected major or notable neurologic and psychiatric diseases as well as disorders. Disease processes and treatment aims will be related to drug mechanism (s) of action.

**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 because of their varying pharmacokinetic and pharmacodynamic profiles. The 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 857 Advanced Neuropharmacology (2 cr)**

This course provides an in-depth review of neuropharmacology, focusing on the pathogenesis and treatment of selected major neurological and psychiatric disorders, including topics not otherwise covered in depth in P1-P3 courses. Students will build on their knowledge base by exploring new findings about pathogenic mechanisms, preventive measures, neuropharmacologic mechanisms of actions, and optimal use of new and established neuropharmacologic agents. Students and teams will review clinical cases, write practice questions, and prepare for the PCOA and licensing boards. (Prerequisites: P2/P3 Standing)

**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 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)

**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 and PBS 601)

### **ELC 865 Advanced Topics in Diabetes (2 cr)**

This hybrid course combines online learning modules and in-class learning experiences. Students are expected to be in class for several live sessions and the final exam/final presentation. This elective course introduces students to advanced topics in diabetes, such as Cardiovascular Outcomes Trials for Diabetes Medications, Technology in the Diabetes World, Psychosocial Aspect of Diabetes Management, etc. The online learning modules integrate the fundamental learning content and the application of main concepts with students' reflection. Throughout the course, the learning modules are designed to enhance students' competency in each of the chosen advanced topics with opportunities in class to further consolidate and integrate the learned information through clinical cases. (Prerequisite: CAS 706)

### **ELC 867 Pediatrics Pharmacology (2 cr)**

This course is designed to familiarize students with pediatric specific disease states, pathophysiology, diagnosis as well as safe and effective drug use to optimize medication therapy in children up to 18 years of age. Importance will be placed on the pharmacist's role in individualizing drug therapy through proper product selection, dosage calculations, patient counseling and patient monitoring. (Prerequisite: P3 standing)

### **ELC 869 Advanced Pharmacy Management Practice Techniques (2 cr)**

The purpose of this class is to prepare student pharmacists to successfully navigate the complex humanistic challenges within the workplace. These include but are not limited to, how to garner teams around a central vision and mission, conflict management, managing up and talent management. We will explore how to give your team the room to innovate, when to micro vs macro manage, leveraging listening skills, managing coworkers, and how to intrinsically motivate. We will learn how to earn trust and respect from your coworkers, delegate wisely, support, coach, and mentor, recognize achievements and celebrate success and appropriately communicate with all levels within your organization. The course is a series of 10, once a week 3-hour classes. The course will have readings, lectures, and discussions. We will review actual scenarios of situations you may encounter, and potential responses. The intent is to give participants the tools necessary to become successful, compassionate, ethical, and effective practitioners in the workplace. (Prerequisites: None).

### **ELC 888 Anticoagulation (2 cr)**

The purpose of this course is to help students strengthen their knowledge about anticoagulation and gain more experience on the practical application of anticoagulation. Presently, there are many different applications for anticoagulation in different settings, such as the inpatient, outpatient, and ambulatory care setting. Pharmacists play an important role in the management of anticoagulation to make sure patients with/without comorbidities are well managed. After this course students will be able to understand the importance of anticoagulation, its indications, and dosage formulations as well as doses. The course will be a combination of online recorded videos and virtual classes. The topics of the online videos are listed in the "Topics and Schedule" section below. The virtual classes will add content to the videos via lecture, case-based learning, and/or other team-based learning items. (Prerequisite: P3 standing)

### **ELC 891 Medical Writing (2cr)**

ELC 869 is a 2-unit elective course that will teach you how to become a more effective writer. The topics for this course include principles of good writing, writing techniques, and tips for writing faster with less

anxiety. The course will also provide guidance in writing a variety of documents that pharmacists commonly use, such as conference presentations, abstracts, journal articles, grants and writing for general purposes. This is a hybrid course. Each face-to-face class will include exercises in specific areas of grammar and editing with a quiz at the end of the period over the material covered. Prior to the class meeting, you will view a series of video lectures related to the various types of documents that we will study. You will also write a final 2-page reflection paper. (Prerequisites: none)

## COP Transition from a 4-Year to a 3-Year PharmD Program

### COP 4-Year PharmD Curriculum for Academic Year 2024-2025

COURSE #	COURSE TITLE	CREDITS	COORDINATOR
<b>P1 - Fall Semester I (FA 2023)</b>			
PBS 601	Cell and Molecular Biology and Biochemistry	4	Ruth Vinall
PBS 603	Medicinal Chemistry & Physical Pharmacy	3	Tibebe Woldemariam
PBS 605	Pharmaceutics	4	Dipongkor Saha and Uyen Le
IPP 607	Introduction to Pharmacy Practice and Professionalism	3.5	Sonya Frausto
PRC 609	Longitudinal Practicum I	1	Uyen Le
PRC 613	Pharmaceutical Calculations	1.5	Arooj Fatima
<b>Semester total</b>		<b>17</b>	
<b>P1 - Spring Semester II (SP 2024)</b>			
PBS 602	Pathophysiology & Pharmacology I	6	Suzanne Clark
PBS 604	Pharmacokinetics	5	Dipongkor Saha
CAS 606	Biostatistics and Pharmacoepidemiology	3	Eugene Kreys
CAS 608	Introduction to Clinical Topics	5	Shahanara Ahsan
PRC 610	Longitudinal Practicum II	1	Welly Mente
<b>Semester total</b>		<b>20</b>	
<b>P2 - Fall Semester III (FA 2024)</b>			
PBS 701	Pathophysiology & Pharmacology II	6	Zhuqiu Jin
CAS 703	Drug Literature Information & Evaluation	3	Olivia Phung
CAS 705	Pharmacotherapy I	6	Tiffany Kreys
*IPP 707	Introductory Pharmacy Practice Experience I	4	Jennifer Courtney
PRC 709	Longitudinal Practicum III	2	Shahanara Ahsan
<b>Semester total</b>		<b>21</b>	
<b>P2 - Spring Semester IV (SP 2025)</b>			
ELC 700	Elective I	2	Various
PBS 704	Pathophysiology & Pharmacology III	6	Linh Ho
CAS 706	Pharmacotherapy II	6	Victor Phan
PRC 710	Longitudinal Practicum IV	2	Tony Eid
<b>Semester total</b>		<b>16</b>	
<b>P3 - Fall Semester V (FA 2025)</b>			
ELC 800	Elective II	2	Various
CAS 801	Pharmacy and the HealthCare System	3	Eugene Kreys
PBS 803	Immunology and Rheumatology	3	Ashim Malhotra
CAS 805	Pharmacotherapy III	6	Justin Lenhard
*IPP 807	Introductory Pharmacy Practice Experience II	2	Jennifer Courtney
PRC 809	Longitudinal Practicum V	2	Jennifer Courtney
<b>Semester total</b>		<b>18</b>	
<b>P3 - Spring Semester VI (SP 2026)</b>			
CAS 802	Pharmacy Law and Ethics	3	Ivan Petrzelka
CAS 804	Pharmacy Management	3	Peter Tenerelli
CAS 806	Pharmacotherapy IV	6	Tarek Kassem
*IPP 808	Introductory Pharmacy Practice Experience III	2	Jennifer Courtney
PRC 810	Longitudinal Practicum VI	2	Olivia Phung
CAS 812	Applied Clinical Pharmacokinetics and Calculations	2	Karim Addassi
<b>Semester total</b>		<b>18</b>	
<b>P4 – Year-6 Blocks over Summer, Fall and Spring (SU-FA 2026 – SP 2027)</b>			
APP 901	Advanced Pharmacy Practice Experience: Community	6	Tony Eid
APP 902	Advanced Pharmacy Practice Experience: Hospital/Health System	6	Tony Eid
APP 903	Advanced Pharmacy Practice Experience: General Medicine	6	Tony Eid
APP 904	Advanced Pharmacy Practice Experience: Am Care	6	Tony Eid
APP 905	Advanced Pharmacy Practice Experience: Specialty I	6	Tony Eid
APP 906	Advanced Pharmacy Practice Experience: Specialty II	6	Tony Eid
APP 910	Advanced Pharmacy Practice Experience: Seminar I	1	Jason Wong
APP 911	Advanced Pharmacy Practice Experience: Seminar II	1	Jason Wong
<b>Year total</b>		<b>38</b>	
<b>Program total credits</b>		<b>148</b>	

\*Students might be required to complete IPPEs in the Summer or Winter Breaks and must be completed prior to the start of the P4 Year.

## COP 3-Year PharmD Program for CO2027 Starting AY 2024-2025

Year 1		Block	Course #	COURSE TITLE	Credits	Coordinator
<b>2024-2025</b>	<b>Fall</b>			<b>Fall Trimester I (Mon 8/26/24 - Mon 11/18/24)</b>		
Trim 1	2024	A	PBS 601	Cell and Molecular Biology and Biochemistry	4	Vinall
Trim 1	2024	A	IPP 607	Introduction to Pharmacy Practice and Professionalism	3.5	Frausto
Trim 1	2024	B	PBS 605	Pharmaceutics	4	Saha and Le
Trim 1	2024	B	PRC 609	Longitudinal Practicum I	1	Le
Trim 1	2024	B	PRC 613	Pharmaceutical Calculations	1.5	Fatima
Trim 1	2024	B	PPR-1	Pharmacy Professional Readiness-1 Part 1	0.25	Courtney
Trim 1	2024	C	CAS 608	Introduction to Clinical Topics	5	S. Ahsan
Trim 1	2024	C	PRC 610	Longitudinal Practicum II	1	Mente
Trim 1	2024	C	PPR-1	Pharmacy Professional Readiness-1 Part 2	0.25	Courtney
				Semester total	20.5	

<b>2024-2025</b>	<b>Spring</b>			<b>Spring Trimester II (Mon 1/6/25 - Mon 03/31/25)</b>		
Trim 2	2025	A	CAS 606	Biostatistics and Pharmacoepidemiology	3	E. Kreys
Trim 2	2025	A	PBS 603	Medicinal Chemistry & Physical Pharmacy	3	Woldemariam
Trim 2	2025	B	PBS 604	Biopharmaceutics & Pharmacokinetics	5	Saha
Trim 2	2025	B	CAS 703	Drug Literature Information & Evaluation	3	Phung
Trim 2	2025	B	PPR-2	Pharmacy Professional Readiness-2 Part 1	0.25	Courtney
Trim 2	2025	C	PBS 701	Pathophysiology & Pharmacology I: (Renal and CV)	6	Jin
Trim 2	2025	C	PPR-2	Pharmacy Professional Readiness-2 Part 2	0.25	Courtney
				Semester total	20.5	
<b>2024-2025</b>	<b>Sum</b>			<b>Summer Trimester III (Mon 04/28/25 - Mon 07/21/25)</b>		
Trim 3	2025	A	CAS 706	Pharmacotherapy I: (Cardiovascular, Renal, Autoimmune and Anemia Disorders)	6	Phan
Trim 3	2025	A	PRC 709	Longitudinal Practicum III (2 credit units)-Part 1	0.66	S. Ahsan
Trim 3	2025	B	CAS 804	Pharmacy Management and Economic Principles	3	Tenerelli
Trim 3	2025	B	PRC 709	Longitudinal Practicum III (2 credit units)-Part 2	0.67	S. Ahsan
Trim 3	2025	B	PBS 803	Immunology and Rheumatology	3	TBD
Trim 3	2025	C	CAS 805	Pharmacotherapy II: (Infectious Diseases)	6	Lenhard
Trim 3	2025	C	PRC 709	Longitudinal Practicum III (2 credit units)-Part 3	0.67	S. Ahsan
Trim 3	2025	C	IPP 707*	Introductory Pharmacy Practice Experience I (Community Practice)	4	
				Semester total	24	

Year 2		Block	Course #	COURSE TITLE	Credits	Coordinator
<b>2025-2026</b>	<b>Fall</b>			<b>Fall Trimester IV (Mon 08/25/25 - Mon 11/17/25)</b>		
Trim 4	2026	A	PBS 704	Pathophysiology & Pharmacology II: (Endocrine, Pulmonary, Gastrointestinal and Genito-Urinary Disorders, and Cancer)	6	Ho
Trim 4	2026	A	PRC 710	Longitudinal Practicum IV (2 credit units)-Part 1	0.66	Eid
Trim 4	2026	B	CAS 806	Pharmacotherapy III: (Endocrine, Pulmonary, Gastro-Intestinal, and Oncology)	6	Kassem
Trim 4	2026	B	PRC 710	Longitudinal Practicum IV (2 credit units)-Part 2	0.67	Eid
Trim 4	2026	B	PPR-3	Pharmacy Professional Readiness-3 Part 1	0.25	Courtney
Trim 4	2026	C	CAS 812	Applied Clinical Pharmacokinetics and Calculations	2	Mente
Trim 4	2026	C	ELC 700	Elective I	2	Varies
Trim 4	2026	C	PRC 710	Longitudinal Practicum IV (2 credit units)-Part 3	0.67	Eid
Trim 4	2026	C	PPR-3	Pharmacy Professional Readiness-3 Part 2	0.25	Courtney
Trim 4	2026	C	IPP 807*	Introductory Pharmacy Practice Experience II (Hospital)	2	
				Semester total	20.5	

<b>2025-2026</b>	<b>Spring</b>			<b>Spring Trimester V (Mon 01/5/26 - Mon 03/30/26)</b>		
Trim V	2026	A	PBS 602	Pathophysiology & Pharmacology III: (Neuro- & Psychiatric, Pediatrics, Geriatrics)	6	Clark
Trim V	2026	A	PRC 809/810	Longitudinal Practicum V (2 credit units)-Part 1	0.66	Phung
Trim V	2026	A	CAS 802	Pharmacy Law and Ethics-Part 1	1	Petrzelka
Trim V	2026	B	CAS 705	Pharmacotherapy IV: (Neuro, Psychiatric, Pediatrics, Geriatrics, & Therapeutics Review)	6	T. Kreys
Trim V	2026	B	PRC 809/810	Longitudinal Practicum V (2 credit units)-Part 2	0.67	Phung
Trim V	2026	B	CAS 802	Pharmacy Law and Ethics-Part 2	1	Petrzelka
Trim V	2026	B	PPR 4	Pharmacy Professional Readiness-4 Part I	0.25	Courtney
Trim V	2026	C	ELC 800	Elective II	2	Various
Trim V	2026	C	CAS 801	Pharmacy and the HealthCare System	3	
Trim V	2026	C	PRC 809/810	Longitudinal Practicum V (2 credit units)-Part 3	0.67	Phung
Trim V	2026	C	CAS 802	Pharmacy Law and Ethics-Part 3	1	Petrzelka
Trim V	2026	C	PPR 4	Pharmacy Professional Readiness-4 Part II	0.25	Courtney
Trim V	2026		IPP 808*	Introductory Pharmacy Practice Experience III (Specialty)	2	
				Semester total	24.5	

Year 3	2026-2027			APPE Rotations (05/18/26 - 05/28/27)		
		APP 910	APP 910	Advanced Pharmacy Practice Experience: Self-Directed Learning I	1	
		APP 901	APP 901	Advanced Pharmacy Practice Experience: Community	6	
		APP 902	APP 902	Advanced Pharmacy Practice Experience: Hospital/Health System	6	
		APP 903	APP 903	Advanced Pharmacy Practice Experience: General Medicine	6	
		APP 904	APP 904	Advanced Pharmacy Practice Experience: Am Care	6	
		APP 905	APP 905	Advanced Pharmacy Practice Experience: Specialty I	6	
		APP 906	APP 906	Advanced Pharmacy Practice Experience: Specialty II	6	
		APP 911	APP 911	Advanced Pharmacy Practice Experience: Self-Directed Learning II	1	
				Semester total	38	
				<b>Program total credits</b>	<b>148</b>	

\*Students might be required to complete IPPEs during Breaks and must be completed prior to the start of the P3 Year.

## COP Academic Calendar for 4-Year PharmD 2024-2025

### University Holidays

Holiday	Date	Holiday	Date
Memorial Day	05/27/2024	New Year's Day	01/01/2025
Juneteenth	06/19/2024	Martin Luther King	01/20/2025
Independence Day	07/04/2024	President's Day	02/17/2025
Labor Day	09/02/2024	Memorial Day	05/26/2025
Thanksgiving	11/28/2024– 11/29/2024	Juneteenth	06/19/2025
Christmas Day	12/25/2024	Independence Day	07/04/2025

### SUMMER 2024

Summer: 05/28/2024 – 07/26/2024		
Event	Start Date	End Date
Summer	05/28/2024 - Tuesday	07/26/2024-Friday
P1 Milestone Exams	07/11/2024 - Thursday	
P2 Milestone Exams	07/12/2024 - Friday	
Milestone Exam - second attempt	07/20/2024 - Saturday	
Milestone Exam Remediation period	07/22/2024 - Monday	Fall semester
P1 Orientation Week	07/30/24 – Tuesday	08/02/24 – Friday
P2 and P3 Reorientation	08/01/24 – Thursday	08/02/24 -Friday
White Coat Ceremony- Class 2027	08/24/24 - Saturday	

FALL 2024

<b>Fall Semester: 08/05/2024 – 12/09/2024</b>		
<b>Event</b>	<b>Start Date</b>	<b>End Date</b>
Instructional Period	08/05/2024 - Monday	11/26/2024 – Tuesday
Course Add/Drop Period	08/05/2024 - Monday	08/12/2024 – Monday
Study Day	11/27/2024 - Wednesday	
Final Exams Period	12/02/2024 - Monday	12/09/2024 – Monday
Final Grades Due	12/12/2024 - Thursday	
Remediation Period	12/13/2024 - Friday	12/20/2024 – Friday
Winter Break	12/10/2024 – Tuesday	01/03/2025 – Friday

WINTER 2024

<b>Winter Term: 12/16/2024 – 01/03/2025</b>		
<b>Event</b>	<b>Start Date</b>	<b>End Date</b>
Winter Term (IPPE Only)	12/16/2024 - Monday	01/03/2025 – Friday

SPRING 2025

<b>Spring Semester: 01/06/2025 – 05/05/2025</b>		
<b>Event</b>	<b>Start Date</b>	<b>End Date</b>
Instructional Period	01/06/2025 - Monday	04/24/2025 – Thursday
Course Add/Drop Period	01/06/2025 - Monday	01/13/2025 – Monday
Spring Break	03/03/2025 - Monday	03/07/2025 – Friday
Study Day	04/25/2025 - Friday	
Final Exam Period	04/28/2025 - Monday	05/05/2025 – Monday
Final Grades Due	05/08/2025 - Thursday	
Remediation Period	05/09/2025 – Friday	05/16/2025 – Friday

IPPE Rotation Calendar 2024 – 2025\*

<b>Event</b>	<b>Start Date</b>	<b>End Date</b>
Summer IPPE	05/13/2024 – Monday	08/04/2024 - Sunday
Fall IPPE	08/05/2024 – Monday	11/24/2024 - Sunday
Winter IPPE	12/16/2024 – Monday	01/05/2025 - Sunday
Spring IPPE	01/06/2025 – Monday	04/20/2025 - Sunday

*\*As needed*

APPE Rotation Calendar 2024 – 2025

<b>Event</b>	<b>Start Date</b>	<b>End Date</b>
<b>A Block</b>	05/20/2024 – Monday	06/28/2024 - Friday
<b>B Block</b>	07/01/2024 – Monday	08/09/2024 - Friday

<b>C Block</b>	08/19/2024 – Monday	09/27/2024 - Friday
<b>D Block</b>	09/30/2024 – Monday	11/08/2024 - Friday
<b>E Block</b>	11/11/2024 – Monday	12/20/2024 - Friday
<b>P4 Winter Break</b>	12/21/2024	01/05/2025 -Sunday
<b>F Block</b>	01/06/2025 – Monday	02/14/2025 - Friday
<b>G Block</b>	02/17/2025 – Monday	03/28/2025 - Friday
<b>H Block</b>	03/31/2025 – Monday	05/09/2025 - Friday

EXAM/REVIEW & GRADUATION SCHEDULE 2024 - 2025

Event	Start Date
First Qualifying Exam attempt (P4; Proctored High Stake)	02/21/2025 - Friday
Second Qualifying Exam attempt (P4; Proctored High Stake)	04/04/2025 - Friday
Final Qualifying Exam attempt (P4; Proctored; High Stake)	05/02/2025 - Friday
Pharmacy Law Review (P4)	05/11/2025 - Sunday
NAPLEX Board Review (P3 & P4)	05/12/2025 - 05/15/2025 (Monday-Thursday)
Graduation Clearance Day	05/16/2025 - Friday
Graduation Ceremony	05/17/2025 - Saturday

## COP 3-Year PharmD Curriculum for Academic Year 2024-2025

University Holidays

Holiday	Date	Holiday	Date
Memorial Day	05/27/2024	New Year's Day	01/01/2025
Juneteenth	06/19/2024	Martin Luther King	01/20/2025
Independence Day	07/04/2024	President's Day	02/17/2025
Labor Day	09/02/2024	Memorial Day	05/26/2025
Thanksgiving	11/28/2024– 11/29/2024	Juneteenth	06/19/2025
Christmas Day	12/25/2024	Independence Day	07/04/2025

Professional Year-1

TRIMESTER-I, FALL 2024

<b>Fall Semester: 08/26/2024 – 11/18/2024</b>		
Event	Start Date	End Date
Instructional Period, All Blocks, A, B, and C	08/26/2024-Monday	11/18/2024-Monday
Instructional Period, Block A	08/26/2024-Monday	09/20/2024-Friday
Instructional Period, Block B	09/23/2024-Monday	10/18/2024-Friday
Instructional Period, Block C	10/21/2024-Monday	11/18/2024-Monday
Final exam, Block A, B, and C	*Last teaching day of each block	
Course Add/Drop Period (as applicable)	08/05/2024 - Monday	08/12/2024 – Monday
Final Grades Due	Three days after final exam	
Remediation Period -1	11/21/2024-Thursday	12/02/2024-Monday



Remediation Period -2	12/05/2024-Thursday	12/19/2024-Thursday
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WINTER BREAK 2024

<b>11/19/2024 – 01/05/2025</b>
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TRIMESTER-II, SPRING 2025

<b>Spring Semester: 01/06/2025 – 03/31/2025</b>		
Event	Start Date	End Date
Instructional Period	01/06/2025-Monday	03/31/2025-Monday
Instructional Period, Block A	01/06/2025-Monday	01/31/2025-Friday
Instructional Period, Block B	02/03/2025-Monday	02/28/2025-Friday
Instructional Period, Block C	03/03/2025-Monday	03/31/2025-Monday
Final exam, Block A, B, and C	*Last teaching day of each block	
Course Add/Drop Period	01/06/2025 - Monday	01/13/2025 – Monday
Final Grades Due	Three days after final exam	
Remediation Period -1	04/02/2025-Wednesday	04/07/2025-Monday
Remediation Period -2	04/10/2025-Thursday	04/21/2025-Monday

SPRING BREAK 2025

<b>04/01/2025 – 04/27/2025</b>
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TRIMESTER-III, SUMMER 2025

<b>Summer Semester: 04/28/2025 - 07/21/2025</b>		
Event	Start Date	End Date
Instructional Period	04/28/2025-Monday	07/21/2025-Monday
Instructional Period, Block A	04/28/2025-Monday	05/23/2025-Friday
Instructional Period, Block B	05/27/2025-Tuesday	06/20/2025-Friday
Instructional Period, Block C	06/23/2025-Monday	07/21/2025-Monday
Final exam, Block A, B, and C	*Last teaching day of each block	
Course Add/Drop Period	04/28/2025-Monday	05/05/2025-Monday
Final Grades Due	Three days after final exams	
Remediation Period-1	07/24/2025-Thursday	07/28/2025-Monday
Remediation Period -2	07/31/2025-Thursday	08/18/2025-Monday

IPPE Rotation Calendar 2024 – 2025\*

Event	Start Date	End Date
Winter IPPE	11/25/24	01/05/25
Spring IPPE	04/07/25	04/27/25
Summer IPPE	07/28/25	08/24/25

*\*As needed*

APPE Rotation Calendar 2024 – 2025 (For P4s on 4-Year Plan)

Event	Start Date	End Date
<b>A Block</b>	05/20/2024 – Monday	06/28/2024 - Friday
<b>B Block</b>	07/01/2024 – Monday	08/09/2024 - Friday
<b>C Block</b>	08/19/2024 – Monday	09/27/2024 - Friday
<b>D Block</b>	09/30/2024 – Monday	11/08/2024 - Friday
<b>E Block</b>	11/11/2024 – Monday	12/20/2024 - Friday
<b>P4 Winter Break</b>	12/21/2024 –Saturday	01/05/2025 -Sunday
<b>F Block</b>	01/06/2025 – Monday	02/14/2025 - Friday
<b>G Block</b>	02/17/2025 – Monday	03/28/2025 - Friday
<b>H Block</b>	03/31/2025 – Monday	05/09/2025 - Friday

EXAM/REVIEW & GRADUATION SCHEDULE 2024 – 2025 (For P4s on 4-Year Plan)

Event	Start Date
First Qualifying Exam attempt (P4; Proctored High Stake)	02/21/2025 - Friday
Second Qualifying Exam attempt (P4; Proctored High Stake)	04/04/2025 - Friday
Final Qualifying Exam attempt (P4; Proctored; High Stake)	05/02/2025 - Friday
Pharmacy Law Review (P4)	05/11/2025 - Sunday
NAPLEX Board Review (P3 & P4)	05/12/2025 - 05/15/2025 (Monday-Thursday)
Graduation Clearance Day	05/16/2025 - Friday
Graduation Ceremony	05/17/2025 - Saturday

# **COP Academic Progression Policy and Procedure, 2024-2025**

## **ACADEMIC PROGRESSION POLICY AND PROCEDURE**

### ***FOR STUDENTS IN THE DOCTOR OF PHARMACY (PHARM D) PROGRAM***

#### **I. PURPOSE**

The policy outlines the expectations to guide California Northstate University College of Pharmacy (CNCUOP) Doctor of Pharmacy (PharmD) students through their academic journey to progress timely and successfully towards the completion of the program.

#### **I. REASON FOR REVISION**

In February 2024, CNUCOP received approval from the Accreditation Council for Pharmacy Education to transition from a 4-year to a 3-year accelerated PharmD program. The new 3-year PharmD will commence in the fall of 2024. This revised CNUCOP Academic Progression Policy and Procedure (5101) document will apply to both students enrolled in the current 4-year and the new 3-year PharmD program from fall 2024 onwards.

#### **III. SCOPE**

The policy and procedures outlined here include i) the overall definition of timely progression, ii) the number of remediation opportunities available to the students for on-time graduation, iii) opportunities for extended learning/remediation through specialized academic plans, iv) the number of courses students may remediate, v) remediation requirements for courses with “core” skills or components, and vi) tracking student progression through the use of a “negative strikes” system for D and F grades received through the duration of the PharmD program. This policy and procedure document was created through a revision of the previously existing academic progression policy and adopted at CNUCOP through an all-faculty vote on February 2, 2024.

#### **IV. POLICY STATEMENT**

CNUCOP has established a set of guidelines and expectations associated to the development and acquisition of knowledge, skills, and competencies necessary to successfully advance in the PharmD program towards graduation.

##### **A. Course Remediation**

Remediation consists of taking a comprehensive remedial examination that covers the material presented throughout the course. Both course grades of D and F are now eligible for remediation. 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. Satisfactory mastery of the material will be decided by the course coordinator/director/instructor, generally representing a score of at least 70 percent on the comprehensive remedial examination.

##### **1. Remediation Criteria**

- a. CNUCOP uses a “strike” system for GPA calculations. Students may not stay in the program with a cumulative GPA below 2.0 and cannot earn more than 7 strikes cumulatively throughout the PharmD program. A "D" counts as one strike and an "F" counts as two strikes. For example:

students can have 7 "D" courses or a maximum of 3 "F" courses plus one "D" course, all of which they can remediate. Beyond this, they are subject to dismissal.

- b. For all didactic courses, a student who receives a course grade between 59.95 and 69.94 earns a "D," while a student with a grade of 59.94 and below earns an "F," as defined in course syllabi. Both D and F grades require remediation. If students pass the remediation, their F or D grades will be changed to a C. The fact of remediation will be reflected as a transcript record.
- c. Students in the 4-year PharmD track are allowed a total of 3 opportunities to remediate the same course through the duration of the program, followed by a dismissal from the PharmD program. This includes the extended learning plan (a 5-year plan). Please refer to the procedure below.
- d. Students in the 3-year PharmD program are allowed a total of 4 opportunities to remediate the same course through the duration of the PharmD program. This includes an extended learning plan (a 4-year plan). Please refer to the procedure below.
- e. Students may remediate any number of courses within a given semester (for the 4-year PharmD) or trimester (within the 3-year PharmD) per the items above with the contingency that they need to complete the PharmD program within 1.5 years of degree program length (6 years for the 4-year program).
- f. Remediation for P1-P3 courses with required/core passing components: The PharmD program has several courses that incorporate the teaching and learning of required skills. These skills are assessed by assignments and are placed as required passing components of select courses. The most common examples are "practicum" courses, abbreviated as PRCs. The PRC courses are offered in all didactic years of the PharmD program. Example courses for the 4- and 3-year PharmD programs: PRC sequence of courses and the CAS 812 course. This provision does NOT apply to P4 years clinical rotation courses called "Advanced Pharmacy Practice Experiences or APPE courses. Students will receive a total of 4 attempts to pass the required components including the initial attempt, remediation 1, remediation 2, and remediation 3 or extended remediation.

## **B. Academic Probation**

If a student fails a course, or if remediation is unsuccessful, the Office of Academic Affairs and Accreditation (OAAA) 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 means a student in the 3-year PharmD program is placed on a four-year schedule and a student in the 4-year PharmD program is placed on the five-year schedule to complete the program.
- b. The program must be completed within the stated number of consecutive years from the date of the first day the student begins the program.
- c.

## **C. Incomplete Grade or Withdrawal from a Course**

- a. 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.
- b. 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.

- c. Failure to complete the course will result in an earned F grade for the course and placement on Academic Probation.
- d. Withdrawal from a course must first be approved by the course coordinator and the Office of Academic Affairs and Accreditation. 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.

#### **D. Dismissal from the Program**

- 1. The decision to dismiss is solely at the discretion of the CNUCOP Office of Academic Affairs and Accreditation (OAAA) and will be based on the academic performance of the student. However, the OAAA will consult with CNUCOP Professional and Academic Standards Committee (PASC) as outlined below.
- 2. Dismissal decisions may be appealed to the Dean, whose decision will be final.
- 3. PASC will make recommendations to the OAAA based on professionalism, honor code, and similar issues PASC may also be convened upon a request by the OAAA.

### **IV. PROCEDURES**

#### **1. General Remediation Procedure.**

- a. 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.
- b. Eligibility for remediation is determined by the CNUCOP Office of Academic Affairs and Accreditation (OAAA) based on the number of courses where an F or D grade is achieved in a semester.
- c. If eligible, instructors will make arrangements with the student to remediate.

#### **2. Number of Remediation Opportunities and Remediation Placements**

##### ***For the 4-year PharmD Program***

- a. For the 4-year program, the first remediation will occur at the end of the semester.
- b. If the student does not pass, the second remediation will occur at the end of the academic year.
- c. If the student does not pass, they will be placed on a 5-year academic plan and will need to retake the course. If they pass, their earned grade will be recorded.
- d. If they fail the course final exam again (third and final attempt),
- e. Students who fail again will be dismissed from the program.

##### ***For the 3-year PharmD Program***

- a. Remediations 1 and 2 will occur at the end of each trimester.
- b. Students who do not pass remediation 2, will be allowed to progress with courses with the stipulation that they conduct approved self-directed study along with taking the new courses.
- c. They will receive a third remediation opportunity at the end of the next trimester.
- d. If they fail, they will be placed on a 4-year academic plan and will need to retake the course (fourth and final attempt). If they fail, they will be dismissed from the program.

#### **3. Remediation for P1-P3 Courses with Required/Core Passing Components.**

- a. Remediation 1 will be scheduled during the semester. If a student fails Remediation 1, they must consult their course instructors to review eligibility for Remediation 2. If a student passes Remediation 1, their grade on the **assessment of the core component** will be changed to 70%.
- b. Remediation 2 will be scheduled after the instructional period (during the remediation period). If a student fails Remediation 2, they will get a grade of “incomplete” or “I” in the course and may be eligible for Remediation 3 (extended remediation). If the student passes Remediation 2, their grade on the **assessment of the core component** remains the same as the score from the original attempt.
- c. Remediation 3 (extended remediation) will be scheduled during the summer. If a student fails the extended remediation, they will get a D for the course. If they pass the extended remediation, they will get the maximum grade of a C (70%).

#### **4. Dismissal Appeals**

- a. Students dismissed from the College may appeal against the decision in writing within thirty (30) calendar days of notification of dismissal to the Dean of the College.
- b. The Dean will render a decision in writing within 15 calendar days of receipt of the formal written appeal.
- c. The Dean’s decision is final.

#### **5. IPPES and APPEs**

- a. A failed IPPE or APPE cannot be remediated except by retaking the rotation.
- b. 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. Students have the right to appeal dismissal decisions according to this policy and per the CNUCOP appeals policy.
- c. 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.
- d. Students should refer to the EEP Handbook for specific requirements regarding progression through IPPEs and APPEs.

## **V. GRADUATION REQUIREMENTS**

Degree approval is awarded provided that the student has:

- a. Conducted themselves in an ethical, moral, professional, and lawful manner.
- b. Satisfactorily completed the curricular and co-curricular requirements in a timely fashion, not to exceed seven (6) years from the date of initial enrollment (including approved leave of absence).
- c. Passed all high stakes exams including course final exams, milestone exams, qualifying exams, and other examinations as outlined in the graduate catalog.
- d. Fulfilled all tuition and financial requirements and completed all necessary paperwork.
- e. Attends graduation and commencement ceremonies in person. Under special circumstances, the Dean of the College may release the attendance requirement in the preceding sentence.

## COLLEGE OF PHARMACY - Faculty

### ADMINISTRATION

Name	Position	Email Address	Phone
Xiaodong Feng, PhD, PharmD	Dean and Professor	xfeng@cnsu.edu	916-686-8066
Ashim Malhotra, PharmBS, MS, PhD, FAPE	Assistant Dean of Accreditation & Program Development	ashim.malhotra@cnsu.edu	916-686-8885
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Justin Lenhard, PharmD	Chair, Department of Clinical and Administrative Sciences and Director of Clinical Research	justin.lenhard@cnsu.edu	916-686-8007
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Tony Joseph Eid, PharmD, REHS, BCACP, APH, CHC, AACC	Interim Assistant Dean of Experiential Education	Tony.eid@cnsu.edu	916-686-7951

### CLINICAL AND ADMINISTRATIVE SCIENCE DEPARTMENT

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### EXPERIENTIAL EDUCATION DEPARTMENT

Name	Position	Email Address	Phone
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# COLLEGE OF PSYCHOLOGY

## Our Core

### **Our Mission:**

Our mission is to advance the science and practice of psychology by developing clinicians trained to promote health through knowledge, research, service, and social responsibility.

### **Our Aims:**

Our aims are to provide students with the core knowledge necessary to become health service psychologists; to teach scientifically proven interventions; to provide hands-on clinical experience to prepare students for a practice treating diverse and complex mental health populations; and to train future clinical psychologists who are professional, ethical, and sensitive to aspects of diversity and culture.

### **Our Personal Values:**

1. Curiosity  
Each person will adopt an active curiosity towards their clinical work and scholarship, along with an openness to the change that comes in discovery.
2. Integrity  
Each person will show honesty in all relationships and build trust through genuine communication.
3. Accountability  
Each person is accountable for their behavior as they transition through the roles of student, scholar, and psychologist.
4. Respect  
Each person must respect their work, their colleagues, the clients, and themselves.
5. Service  
Each person has a duty to use their knowledge and skills to provide service and expertise to organizations and individuals most in need of care.

### **Our Program Values:**

1. Student Learning and Development  
The College of Psychology strives to provide educational experiences of exceptional quality and a student environment that provides for continuous personal and professional development.
2. Community and Professional Involvement  
The College of Psychology assists local community resources by lending its services and expertise to increase psychological awareness and mental health treatment.
3. Continuous Quality Improvement  
The College of Psychology strives for continuous improvement in all areas and measures its progress against appropriate national standards provided by the American Psychological Association.

#### 4. Diversity of People, Ideas, and Beliefs

The College of Psychology strives to develop long term relationships based on honesty, fairness, and respect by providing a safe environment that supports freedom of inquiry, protects diversity, and fosters a sense of well-being.

#### 5. Programmatic Transparency and Flexibility

The College of Psychology strives for transparency in decision making while supporting a culture of flexibility and the pursuit of opportunity.

### **Our Beliefs**

- We believe psychologists change lives through treatment, motivation, and inspiration.
- We believe in serving our communities as leaders and practitioners.
- We believe students are transformative when their voices are heard.
- We believe a multidisciplinary environment of respect benefits all patients.
- We believe in taking an active role in the profession 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 students 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 and incorporate information gained through classroom instruction and practicum experiences into their clinical practice.

The College of Psychology strives to create and maintain a learning community based on collaboration, cooperation, and a sense of interdependence that balances individual responsibilities with community obligations. This relational approach to education is foundational to the design and operation of the program.

### **Non-discrimination**

The College of Psychology at 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. We believe that diversity enhances and enriches the quality of our academic program. The College of Psychology at CNU provides equal opportunity in education and employment and does not discriminate based on race, color, creed, religion, national origin, ethnicity, gender identity, gender expression, age, sexual orientation, political affiliation, veteran status, or

disability.

Students are required to (a) attain an understanding of cultural and individual diversity as related to both the science and practice of psychology and (b) provide competent and ethical services to diverse individuals. We are committed to a training process that ensures that our students develop the knowledge, skills, attitudes, and relational ability to work effectively with members of the public who embody intersecting demographics, attitudes, beliefs, and values. The program faculty and supervisors are committed to a developmental training approach that is designed to foster the acquisition of professional competence.

We support graduate students in finding a belief or value congruent path that allows them to work in a professionally competent manner with all patients.

To complete our program successfully, every graduate student must be able to work with any patient placed in their care in a beneficial and non-injurious manner. Professional competencies are determined by the profession for the benefit and protection of the public; there should be no reasonable expectation of a student being exempted from having patients with any background or characteristics assigned to them for the duration of their training. Students do not have the option to avoid working with certain client populations or refusing to develop professional competencies because of conflicts with their attitudes, beliefs, or values.

## 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 engage in research or other scholarly activities that contribute to the scientific, psychological, or professional knowledge base.
2. **Assessment and Intervention:** Students will select and apply assessment and intervention methods that draw from empirical literature, reflect the science of measurement and efficacy, and take into consideration contextual variables and diversity characteristics.
3. **Relational and Cultural Competence:** Students will adapt their interactions with clients and professionals in a respectful and appropriate manner for a variety of diverse cultural and social contexts.
4. **Professionalism:** Students must 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.

5. **Ethical Practice:** Students will resolve complex moral and ethical situations by acting in accordance with relevant rules, laws, and regulations governing the profession of psychology.
6. **Collaboration and Consultation:** Students will demonstrate knowledge and respect for the roles and perspectives of other professions as well as knowledge of consultation practices utilized in health service psychology.

### Discipline Specific Knowledge

The curriculum also addresses the discipline specific knowledge and profession wide competencies required 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 theories and interventions. They will also learn about the changes that have occurred in the profession, 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 of various emotional conditions.
3. **Biological Aspects of Behavior:** Students will know the biological underpinnings of behavior including neural, physiological, anatomical, and genetic influences.
4. **Cognitive Aspects of Behavior:** Students will learn about 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:** This is not a separate subject, but the integration of graduate-level knowledge across multiple basic discipline-specific content areas. This knowledge is acquired through evaluated educational experiences incorporating at least two content areas learned in the Foundations of Behavior Series.
8. **Research Methods:** These skills include the ability to critically read journal articles, understand the

mathematical underpinnings of assessment measures, and working on research. Students learn the strengths and limitations, means of interpretation, and the technical aspects of a case study. They will also learn the difference between correlational, descriptive, and experimental research design while studying measurement techniques such as sampling, replication, and theory testing.

9. **Quantitative Methods:** Students learn about meta-analysis, quasi-experimentation, modeling, data analysis, description, inference, univariate and multivariate analysis, null-hypothesis testing, power, and estimation.
10. **Psychometrics:** Theory and techniques of psychological measurement, scale and inventory construction, reliability, validity, evaluation of measurement quality, classical and contemporary measurement theory, and standardization are learned.

### 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 through 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 to resolve issues related to patient care while conducting themselves in a professional and ethical manner.

5. **Individual and Cultural Diversity:** Students must engage in professional activities with the appropriate knowledge, awareness, sensitivity, and skills regarding individuals and communities of varying cultural and personal backgrounds. It is important that students understand how their own personal and cultural history, attitudes, and biases affect their interactions with others. They must 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. These include 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 colleagues, communities, organizations, supervisors, and clients. They must produce 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, utilizing effective interpersonal skills to relay relevant information to clients, families, and other professionals.
8. **Supervision:** Psychologists 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:** 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 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 Doctor of Psychology (Psy.D.) degree at CNU is a 5-year program that prepares students for entry into the profession of psychology.

**Year 1:** The first year of the program involves two days of classroom instruction, including clinical training using professional actors (standardized patients).

**Year 2:** Second-year students have two days of classroom instruction and at least two days of practicum. Practicum is an average of 12 hours a week. Students may begin their dissertation in the summer between the first and second year.

**Year 3:** Third year students have two days of classroom instruction and at least two days of practicum. Practicum will be an average of 15 hours a week. Upon completion of the Masters Integrative Learning Experience and receiving a grade of B or better in all of their first- and second-year courses, students earn a Master of Arts degree in clinical psychology.

**Year 4:** Fourth year students have one day of classroom instruction and at least three days of practicum. Practicum will be an average of 18 hours a week. Students will also be applying for their APA internship. Before applying for an internship, a student must defend their dissertation proposal.

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.

**Year 5:** The fifth year of the program is completed off campus. Most students will be attending their pre-doctoral internship full time. There is an option to take a part-time internship. This will result in an extra year in the program.

If the internship is completed successfully and the student has satisfied all other program requirements, they will graduate and receive a Doctor of Psychology (Psy.D.) degree.

**Licensure:** Each state has separate requirements for licensure as a psychologist. California requires two years (3,000 hours) of supervised professional experience, at least 1,500 of which must be completed post-doctoral.

After a student has been awarded their doctorate, they may take the national psychology test called Examination for the Professional Practice of Psychology (EPPP). This is a requirement for licensure.

Once all 3,000 hours have been obtained and the EPPP passed, a candidate may sit for the California Psychology Law and Ethics Examination (CPLÉE). 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.

## Accreditation

### **Senior Colleges and Universities of the Western Association of Schools and Colleges (WASC)**

The Doctor of Psychology degree was granted regional approval by the WSCUC Commission on June 8, 2018.

### **Bureau for Private Postsecondary Education (BPPE)**

PsyD program was granted state approval on June 12, 2018.

### **American Psychological Association (APA)**

The College of Psychology was granted *Accredited, on contingency* status by the American Psychological Association (APA) on April 11, 2021. It is in effect until April 11, 2026 or the program receives full accreditation. In 2024 APA's Commission on Accreditation (COA) will review the program for full accreditation status.

## Admission to the Psy.D. Program

College of Psychology uses APA's centralized application service for psychology graduate programs called PSYCAS.

### Minimum requirements:

1. An undergraduate (BA or BS) degree in any subject from an accredited college or university
2. Overall undergraduate GPA of 3.0 or higher
3. Or an overall graduate GPA of 3.3 or higher
4. At least 3 units in each of the following areas:
  - a. Introduction to Psychology
  - b. Developmental Psychology
  - c. Statistics
  - d. Abnormal Psychology
5. Applicants who have an undergraduate or graduate degree in psychology are exempt from these course requirements.

### **All applicants must submit:**

- A completed PSYCAS application
- A curriculum vitae or resume
- Personal Statement
- All official college transcripts
- Three (3) letters of recommendation



## International Applicants

The College of Psychology welcomes applications from international students.

Applicants who have received university or graduate level education in English and maintained a satisfactory GPA are considered to have demonstrated English proficiency and are exempt from the English proficiency requirement.

Applicants who have not received university or graduate level instruction in English 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. International transcripts will be evaluated by World Education Services (WES) if:

1. The institution awarded a degree that is being used as a prerequisite for the Psy.D. program
2. Credits for prerequisite coursework were obtained at the institution.

## Application Timeline

The application process opens in PSYCAS in September.

If students wish to be considered for early admittance, they must have their applications submitted by December 1.

After December 1 applications are accepted and evaluated on a rolling basis. Offers of admission are made until available spaces in a cohort are filled.

The application cycle for each year ends on July 15.

## Admissions Interviews

Interviews begin in January. Applicants will be notified by email if they have been selected for invitation to attend an interview. The admissions committee will use the interview to evaluate the candidate's critical thinking, interpersonal skills, and level of commitment and motivation in obtaining a doctoral degree. Applicants who have not been selected for an interview may be put on a waitlist.

## Decisions

Each application will be thoroughly reviewed by the Admissions Committee. It is important that the student body at the College of Psychology represents the best of future clinicians and attention is paid to professional, research, education, and life experiences. The committee will be looking for students with diverse cultural, socioeconomic, work, and educational backgrounds.

It is the admissions policy of the University and the College of Psychology that no applicant will be discriminated against based on 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.

Admissions recommendations are made by the Admissions Committee. Final admissions decisions are made by the Assistant Dean of Student Affairs and Admissions. Only complete applications are considered. In some instances, applicants may be offered conditional acceptance pending successful completion of admissions requirements.

Offers of admission, denial of admission, and notice of waitlist status are sent by email. Except by individual arrangement, a nonrefundable enrollment deposit is due 14 days following an offer of admission to reserve a place in the program.

The 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 there is a 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.

## Transferring Credits from Other Institutions

The College of Psychology does not accept transfer credits, courses, or students.

## Student Enrollment Agreement

The Student Enrollment Agreement is a legally binding contract that is completed and submitted to the college along with the enrollment deposit.

Before signing the Student Enrollment Agreement, a prospective student is strongly urged to visit the University website at [www.cnsu.edu](http://www.cnsu.edu), and review the General Catalog, Student Rights and Responsibilities handbook, and the School Performance Fact Sheet (SPFS). The Catalog contains important information and policies regarding this institution. The Student Rights and Responsibilities handbook contains important information about what is expected of students and due process procedures for conduct violations. The SPFS contains important performance data for 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 for review.

## Registration and Orientation

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. New students must submit the *Emergency Contact and Medical Information Form* to the Office of the Registrar by the end of orientation.

It is the student's responsibility to maintain valid contact information throughout their enrollment at CNU. Instructions for accessing the Student Portal are sent by the CNU IT department to the student's CNU email address.

Students with business, financial, or other registration holds on their account will not be registered for classes until the hold has been cleared.

Orientation is mandatory for all new students. The Office of Student Affairs and Admissions must be notified if a student is not able to attend orientation. The student will be required to provide documentation for the absence and complete a make-up orientation within the first week of classes.

### Address Where Instruction Will Be Provided

Class sessions are conducted at 2920 Prospect Park Dr., Suite 210 Rancho Cordova, CA 95670.

Practicums and service-learning activities are conducted at assigned professional clinical locations and community sites as established by agreement among the student, Dean of Clinical Training, and the practicum supervisor/training director.

All courses are delivered in English and English language services are not provided.

### Student's Right to Cancel, Withdraw, and Refund

Students have the right to cancel their 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 occurs when a student gives written notice to the College of Psychology admissions office at the address shown at the top of the first page of the Enrollment Agreement. Students 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 on the date postmarked.

After the cancellation period described above, students have the right to withdraw from the University at any time. Withdrawal shall occur when students give written notice 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 at:

<https://www.cnsu.edu/registrar/forms.php>.

## Tuition & Fees

### Cost of Attendance and Tuition and Fees for Incoming Students

The cost of attendance is an estimate of expected educational expenses for a period of enrollment. These educational expenses are calculated as described below and apply to all students enrolled in the Doctor of Psychology program at California Northstate University:

#### Doctor of Psychology - Tuition & Fees or Academic Year: 2024-2029

Tuition & Fees	Year 1 - PSY1	Year 2- PSY2	Year 3 - PSY3	Year 4 - PSY4	Year 5 - PSY5
Tuition	\$40,538	\$42,565	\$44,693	\$16,208	\$17,018
Student Activity Fee	\$320	\$320	\$320	\$320	\$320
Technology Fee	\$75	\$75	\$75	\$75	\$75
Practicum Software Fee	\$100	\$100	\$100	\$100	\$100
Orientation Fee	\$50	\$0	\$0	\$0	\$0
Enrollment Fee (Nonrefundable)	\$200	\$0	\$0	\$0	\$0
Student Tuition Recovery Fund Fee <sup>4</sup>	\$0	\$0	\$0	\$0	\$0
Graduation Fee	\$0	\$0	\$0	\$0	\$350
<b>Total Tuition &amp; Fees per Year</b>	<b>\$41,283</b>	<b>\$43,060</b>	<b>\$45,188</b>	<b>\$16,703</b>	<b>\$17,863</b>

**Total Estimated Tuition & Fees cost for entire 5-year Doctor of Psychology program \$164,097.**

Estimated Other Optional Educational Related Costs <sup>1</sup>	Year 1 - PSY1	Year 2- PSY2	Year 3 - PSY3	Year 4 - PSY4	Year 5 - PSY5
Health Insurance Premium <sup>2</sup>	\$3,529	\$3,529	\$3,529	\$3,529	\$3,529
Books and Supplies	\$2,500	\$2,500	\$2,500	\$2,500	\$2,500
Room and Board (based on 12 months)	\$28,152	\$28,152	\$28,152	\$28,152	\$28,152
Transportation (based on 12 months)	\$5,362	\$5,362	\$5,362	\$5,362	\$5,362
<b>Total Estimated Cost per Year<sup>3</sup></b>	<b>\$80,826</b>	<b>\$82,603</b>	<b>\$84,731</b>	<b>\$56,246</b>	<b>\$57,406</b>

<sup>1</sup> Estimated costs a student may incur as part of participation in the applicable year of the Psy program, whether or not paid directly to CNU.

<sup>2</sup> Choice of your own insurance carrier, estimated, and rate will differ if other than student only coverage.

<sup>3</sup> Includes tuition, fees, and other estimated educationally related costs.

<sup>4</sup> Effective April 1, 2024, the STRF assessment rate will change from two dollars and fifty cents (\$2.50) per one thousand dollars (\$1,000) of institutional charges to zero dollar (\$0.00) per one thousand dollars (\$1,000) of institutional charges.

### Cost of Attendance and Tuition and Fees for Continuing Students

The cost of attendance is an estimate of expected educational expenses for a period of enrollment. These educational expenses are calculated as described below and apply to all students enrolled in the Doctor of Psychology program at California Northstate University:

## Doctor of Psychology - Tuition & Fees per Class for 2024-2025

Tuition & Fees	Year 2 - PSY2 Class of 2028	Year 3 - PSY3 Class of 2027	Year 4 - PSY4 Class of 2026	Year 5 - PSY5 Class of 2025
Tuition	\$40,538	\$40,538	\$16,208	\$16,208
Student Activity Fee	\$320	\$320	\$320	\$320
Technology Fee	\$75	\$75	\$75	\$75
Practicum Software Fee	\$100	\$100	\$100	\$100
Orientation Fee	\$0	\$0	\$0	\$0
Enrollment Fee (Nonrefundable)	\$0	\$0	\$0	\$0
Student Tuition Recovery Fund Fee <sup>4</sup>	\$0	\$0	\$0	\$0
Graduation Fee	\$0	\$0	\$0	\$350
<b>Total Tuition &amp; Fees per Class</b>	<b>\$41,033</b>	<b>\$41,033</b>	<b>\$16,703</b>	<b>\$17,053</b>

Estimated Other Optional Educational Related Costs <sup>1</sup>	Year 2 - PSY2 Class of 2028	Year 3 - PSY3 Class of 2027	Year 4 - PSY4 Class of 2026	Year 5 - PSY5 Class of 2025
Health Insurance Premium <sup>2</sup>	\$3,529	\$3,529	\$3,529	\$3,529
Books and Supplies	\$2,500	\$2,500	\$2,500	\$2,500
Room and Board (based on 12 months)	\$28,152	\$28,152	\$28,152	\$28,152
Transportation (based on 12 months)	\$5,362	\$5,362	\$5,362	\$5,362
<b>Total Estimated Cost per Class<sup>3</sup></b>	<b>\$80,576</b>	<b>\$80,576</b>	<b>\$56,246</b>	<b>\$56,596</b>

<sup>1</sup> Estimated costs a student may incur as part of participation in the applicable year of the Psy program, whether or not paid directly to CNU.

<sup>2</sup> Choice of your own insurance carrier, estimated, and rate will differ if other than student only coverage.

<sup>3</sup> Includes tuition, fees, and other estimated educationally related costs.

<sup>4</sup> Effective April 1, 2024, the STRF assessment rate will change from two dollars and fifty cents (\$2.50) per one thousand dollars (\$1,000) of institutional charges to zero dollar (\$0.00) per one thousand dollars (\$1,000) of institutional charges.

## Academic Policies and Procedures

### Academic Calendar

The academic calendar consists of two semesters of classroom instruction. Each are **approximately** 15 weeks. Practicum and internship hours are completed throughout the calendar year.

### Credit Hour Policy

One credit hour is assigned for one hour of classroom instruction and a minimum of two hours of homework. One credit hour is assigned for approximately 3 hours in practicum or internship.

### Grading

The College of Psychology uses the following rubric when determining which letter grades are awarded on assignments and in courses. No pluses or minuses are used. This table applies to all academic and didactic courses:

Percentage Score in Course	Letter Grade in Course	Grade Points
89.50-100%	A	4.0
79.50-89.49%	B	3.0
69.50-79.49%	Y/C	2.0
59.50-69.49%	D	1.0
0.00-59.49%	F	0.0

A score between 69.50 to 79.49 will be given the mark of C on individual assignments in a class. A final course grade in the same range will receive a Y.

For Pass/No Pass Courses:

Percentage Score in Course	Letter Grade in Course
79.50-100%	P
79.49-0.00%	NP

If a student does not receive a Pass in a Pass/No Pass course, they must either retake the course or arrange an independent study option with the professor.

**Y: Must Remediate-** This designation is a preliminary notation indicating that the student has not reached the minimal level of achievement. Students have two options for removing a Y from their transcript:

1. Complete a remediation assignment with a score of at least 79.5% or
2. Retake the course

All Y's must be successfully remediated by the end of the next semester after receiving the grade. For example, if a student receives a Y in the fall semester, they must remediate it by the end of the next spring semester. There is one exception to this rule. If a student receives a Y in their first spring semester of the program, they must remediate the Y before the start of their second year. Y's received in the first fall semester follow the rules above.

Remediation assignments are based on the material in the class. The form of assignment is at the discretion of the professor. Remediation assignments may only be completed once. If the grade has not been remediated successfully, the course must be retaken.

If a student successfully completes a remediation assignment with a grade of 80% or better, the Y becomes a B on the transcript with a notation indicating that the new grade is a change from initial performance. The new grade will be used to calculate GPA. A remediated course can never result in an A.

While a student may take the MILE exam while needing to remediate a grade, they will not receive their diploma until all grades are remediated.

**D or F: Must Retake**-If a student receives a D or F, they must retake the course. All D or F grades must be successfully remediated before the Master's degree can be awarded, and again before the PsyD can be awarded. Repeating courses may extend the student's expected graduation date and may have financial implications. Students repeating a course are encouraged to discuss their situation with the CNU Financial Aid Office.

All courses in the program may only be retaken once unless prior approval is given by the Dean of the program. If they receive a D or F in the remediated class, they are removed from the program.

If a student receives between 69.5%-79.49% in the remediated course, they will receive a Y. The student then follows the procedures outlined in the above section, with one exception. Since the student has already repeated the course, if they unsuccessfully remediate the Y grade they will be removed from the program.

If a student successfully retakes a course with a final grade of 79.50% or better, the new grade is placed on their transcript and used in calculating GPA. A notation is placed next to the new grade indicating a change from initial performance. Retaking a course can result in an A grade.

**I**-An incomplete on the transcript is a preliminary notation indicating that work in a course was satisfactory but not completed when grades were due. All incomplete work must be finished in the time frame determined by the student's Academic Advisor in conjunction with the course professor. However, all incompletes must be resolved before the Master's degree can be awarded, and again before the PsyD can be awarded. Once the assignments have been submitted, they will be graded, and the scores incorporated into the overall performance in the course. The professor shall then resolve the resultant grade by following the College grading procedures.



**W**-It is possible to withdraw from a course until the last day of class. There is no penalty for withdrawal, however, there is also no refund. The course will appear on the student's transcript with the grade of W. Students may only receive one W for any given course. Students are reminded that they can only retake a class once in the program.

## Grade Appeal

If a student is not satisfied with a grade received, 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 15 business days of the online grade posting. The appeal must be in writing and submitted to the Assistant Dean of Research and Academics or their representative. The Assistant Dean will respond to the appeal in writing within 10 business days.

If the appeal is not resolved to the student's liking, it can be resubmitted within 2 business days of response from the Assistant Dean of Research and Academics to the Dean of the College who will render a decision within 10 business days. The Dean's decision is final.

## Performance Alert

A Performance Alert is designed to allow instructors, program administrators, or practicum supervisors to refer a student for support at any point during the semester, based on assessment of the student's behavior.

### Academic Performance

An Academic Alert can be issued at any time during the semester at the professor's discretion. It must be issued after the student has completed 20% of the class grade and has a cumulative score of under 80% in the course.

### Professionalism Issues

There are behavioral and professional matters that may also improve after the issuance of a professionalism alert. These center around issues of respect, honesty and integrity, legal and ethical behavior, professionalism, and personal accountability. These are elaborated in the Code

of Conduct. If a professor or practicum supervisor finds that a student has not lived up to the expectations outlined in the Code of Conduct, they may issue the student a professionalism alert.

### Behavioral Expectations

Students may fail a course due to lack of timely completion of assignments, attendance, or for violations of ethical and professional standards of care. Demonstration of professional behavior (professionalism) includes following the APA Ethical Principles for Psychologists and Code of Conduct; adhering to school guidelines as listed in the Student Handbook and complying with other directives from the CNU administration. In addition, professionalism includes respectful and responsible speech and actions, communicating directly should issues or problems arise, and maintaining professional boundaries, such as the confidentiality of patients and the privacy of classmates.

### Process

All alerts will be emailed to the student, their Academic Advisor, and the appropriate dean. If the alert is due to academic issues it should be sent to the Assistant Dean of Academics. If it is issued because of practicum performance, it should be sent to the Associate Dean of Clinical Training. For all other issues, they should be sent to the Assistant Dean of Student Affairs and Admissions.

### Academic Probation

Students can only have two courses in which they earned a Y, D, or F on their transcript at any given time. If a student has more than two such classes on their transcript, they will be sent to the Professional and Academic Standards Committee for possible dismissal from the program.

If a student has two courses in which they earned a Y, D, or F they are placed on academic probation. Academic probation formally begins when written notification is given to the student by their Academic Advisor through a probation plan. The Academic Advisor has 2 weeks after semester grades are finalized to provide a probation plan to the student. Once students have fulfilled the conditions of the probation plan, they will no longer be on probation.

A student may be terminated from the program if they fail to meet the conditions detailed in the probation plan, if they are acting in a manner that violates the ethical and professional standards of the APA 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.

For procedures related to dismissal from the PsyD program, please refer to the College of Psychology Student Rights and Responsibilities and Code of Conduct handbook.

### *Practicum Readiness*

Readiness for practicum is based on academic performance and feedback from the Practicum Preparation instructor. A Practicum Readiness form is completed and forwarded to the Academic Advisor for additional review and signature. This recommendation is then submitted to the Office of Clinical Training for final approval. The Assistant Dean of Clinical Training makes the determination of readiness for a student to participate in practicum, barring appeal to the Dean of the College.

The Practicum Readiness Form is completed at the end of the fall semester of a student's first year in the program. If the student is approved, but then earns a Y in Practicum Preparation for the spring semester, the grade must be remediated prior to the beginning of practicum. A grade of D or F in the spring semester of Practicum Preparation will result in the student not being able to start practicum. The case will also be reviewed for possible student dismissal.

If a student is deemed unprepared for practicum by their Practicum Preparation professor or Academic Advisor, and this decision is upheld by the Assistant Dean of Clinical Training and/or the Dean of the College, the student's case will be reviewed for dismissal.

### *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 program.

### *PsyD Degree Requirements*

To receive a doctorate degree in the College of Psychology students must:

1. Conduct themselves in an ethical, moral, professional, and lawful manner as outlined in the Student Rights and Responsibilities and Code of Conduct handbook
2. Complete all required coursework with a score of 80% or better
3. Meet all Minimum Level of Achievement requirements
4. Obtain 169 credits
5. Pass the Master's Integrative Learning Experience

6. Gain written approval from their Academic Advisor
7. Be free of any probationary status
8. Complete a dissertation and have it accepted by the College
9. Complete of all practicum requirements
10. Complete of all internship requirements
11. Fulfill all tuition and financial requirements of California Northstate University
12. Complete all necessary graduation paperwork for California Northstate University and the College of Psychology.

Upon successful completion of the above, the Doctor of Psychology degree will be posted to their official transcript by the University Registrar. Diplomas will be printed and mailed to recipients after the posting is completed.

## **Transcripts**

Upon graduation, transcripts shall reflect:

1. The courses taken, which semester, and grades achieved
2. Degrees conferred
3. Completion of dissertation including the title, date that the document was accepted by the College of Psychology, and the date that the dissertation was defended
4. Any honors awarded

The Psy.D. may be conferred by the President of the University once students will have satisfied all degree requirements listed above.

## **Academic Advisors**

Students are 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. Throughout the program the student and Academic Advisor will meet once each semester, though either the student or Advisor may choose to meet more frequently.

The advisor completes an integrative assessment of the student's performance at the end of each spring semester.

A student may elect to change their Academic Advisor. They must contact the Assistant Dean of Research and Academics to determine the availability of any alternate advisors.

## 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.

Regular class attendance is important and expected of all students. **Students are allowed 6 hours of unexcused absence per course.** Additional absences may adversely impact course grades and excessive absences may result in disciplinary action.

If a student knows they will need to miss a class, the student should contact the professor in advance. Students are permitted to make up missed work for excused absences that are properly documented in a timely manner.

A student cannot miss more than 15 hours of any course for any reason. If a student misses more than 15 hours, the student will be required to retake the course.

Students who know they will miss more than 6 hours, but less than 15 hours of the course, should request an Extended Absence.

## Tardiness

Students are considered tardy if they arrive to class more than 15 minutes late. Tardiness counts as one hour of missed class and is added to a running tally of total missed class time for each course. Students who are habitually tardy to class will receive a Performance Alert.

## Excused Absences

A student may request an excused absence for the following circumstances:

- medical/illness (self or immediate family)
- maternity/paternity leave
- military duty
- immigration or naturalization
- emergency
- jury duty or legal/court mandated appearance
- bereavement (immediate family)
- professional conference
- involvement in traffic accident documented by a law enforcement report

Verification is always required if the absence is more than one day, or if the absence included any exams or in-class graded assignments.

A student seeking an excused absence should submit any required verification to the Associate Dean of Academics. They will determine if the absence is excused or unexcused according to the above policy.

Students who know they will miss more than one week of class should complete the Extended Absence Request Form.

### Extended Absence

Extended absences are initiated by the student. If the student knows that they will need to miss class, they have the option to file an Extended Absence Request Form with the Office of Student Affairs and Admissions.

Students are allowed to makeup missed work for excused absences. Vacations do not qualify as excused absences. If it is an unexcused absence, excluding the 6 hours discussed above, students are only allowed to make up assignments at the course professor's discretion.

If 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 can be no less than one semester, but no more than one academic year. While on leave, the student cannot participate in classes, practicums, internships, or any other department activity. Students are required to meet with the Financial Aid Manager because during leave they are not enrolled at the University.

Students considering a leave of absence must submit a College of Psychology Leave of Absence Request Form to the Assistant Dean of Student Affairs and Admissions the semester before the leave is to be taken, or as soon as it is known that a leave of absence is needed. Non-attendance does not constitute notification of intent to apply for leave of absence status. The request must include the basis for the request and expected time of return. If approved by all parties, the request will require a final signature from the Dean once the College of Psychology has approved the leave. The student must also fill out the CNU Leave of Absence Request Form.

Approved leave of absences will be noted on the student's transcript. Leave status is recorded as the date the Registrar receives the signed form.

### Return from Leave of Absence

At the agreed deadline indicated on the approved Leave of Absence Request Form, the student is responsible for notifying the University Registrar and the College of Psychology of their return.

Students are advised to maintain contact with the Office of Clinical Training during their leave of absence to coordinate clinical training experiences on their return.

A student who does not return to enrolled status at the end of the approved period of leave will be administratively withdrawn from the program. Students who stop attending classes and/or practicum experiences without following the leave of absence procedures will be administratively withdrawn from the program.

### Withdrawal from the College/University

Students may voluntarily withdraw from the University/College at any time. A "W" will be on their transcript for any course not completed.

To withdraw, students must submit a completed, official University/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: the Office of Research and Academics, Office of Clinical Training, Office of Student Affairs and Admissions, 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.

### Administrative Withdrawal from the College/University

The Assistant Dean of Student Affairs and Admissions may request that a student be administratively withdrawn from the program. This may be due to the student's continuing and unexcused failure to attend all classes or clinical training experiences. They may also be withdrawn if the student fails to return from a leave of absence. A student who is withdrawn is no longer considered an enrolled student. The effective date of withdrawal is the last day of attendance. A student who is withdrawn is eligible to reapply for admission.

## Student Complaint/Conduct Resolution Policy

It is the policy of the College of Psychology that complaints and conduct violations should be handled at the lowest level possible. Complaint/conduct resolution within the College of Psychology follows a three-tiered system. The following is a summary of policies included in Section 4 of the Student Rights and Responsibilities handbook.

### *Tier 1: Informal Resolution Procedure*

Student can share minor complaints with professors, academic advisors, or members of the College of Psychology administration. Minor infractions of academic or professional policy may be handled informally by faculty or practicum personnel.

Within practicum settings, a supervisor or practicum agency coordinator may choose to involve the Office of Clinical Training to facilitate open communication intended to aid students in professional development.

### Tier 2: Formal Resolution Procedure

If complaints and conduct violations cannot be resolved at Tier 1 they are brought to Tier 2.

These issues should be brought to the attention of the appropriate Dean:

1. Academic concerns: Assistant Dean of Academics
2. Practicum and internship concerns: Associate Dean of Clinical Training
3. All other concerns: Assistant Dean of Student Affairs and Admissions

Assistant Deans may investigate and resolve matters by:

1. Referral back to all relevant parties for informal resolution
2. Referral back to course instructor or practicum setting for resolution using appropriate measures for minor complaints/concerns/violations
3. Assignment of corrective action
4. Refer to Professional and Academic Standards Committee (PASC)

### Tier 3: Appeals

Appeals of Tier 2 resolutions may only be pursued when:

1. Significant new information has surfaced that was not available when the issue was originally considered by an Assistant Dean or PASC
2. Due process procedures were not followed  
Deans decide whether to accept an appeal.



### *Professional and Academic Standards Committee*

PASC is composed of three faculty members and their recommendations are made by super majority vote. If an issue involves a question of student responsibility or possible dismissal from the College of Psychology, the issue must be referred to PASC by the appropriate Dean. Any other matter concerning student conduct may be referred to PASC by a Dean.

A referral to PASC will include the Request for Formal Complaint/Conduct Resolution form and any additional documentation pertinent to the case. The referring Dean will notify the student within 5 working days of a referral to PASC. The student may attend the scheduled PASC meeting in person or provide a written statement to clarify their actions. They may also provide additional documentation to the referring dean for consideration by PASC.

Student notification includes:

1. The nature of the alleged behavior or concern
2. The date, time, and place of the alleged behavior or concern
3. The process used to review the relevant information
4. The date, time, and place of the PASC meeting
5. The sanctions applicable if the student is found to be responsible for the alleged behavior or concern
6. A notice that a decision will be made in the student's absence if the student chooses not to appear at the meeting or has submitted a statement.

PASC must meet within 21 days of receipt of the Assistant/Associate Dean's referral. A recommendation must be made by PASC and presented to the Dean of the College within 5 working days of the meeting.

The Dean may accept or reject the recommendations. The student must be notified of the Dean's decision within 10 working days. The Dean's decision is final.

If the recommendation is dismissal, and the Dean of the program accepts the recommendation, it is moved on for a faculty vote. If 2/3s of the faculty vote for dismissal, the student is dismissed from the program.

There are events that cause dismissal that do not require a vote by the faculty. These can include not passing the MILE, failing a course a second time, not completing the program requirements within 7 years, or egregious activity involving patient care or violations of the law. These issues of dismissal are decided by the Dean of the program and the Dean's decision is final.

## Resolution of Matters Involving Alleged Criminal Conduct

All matters involving alleged criminal conduct will be referred to University legal counsel and/or the Office of Human Resources. The College of Psychology reserves the right to pursue resolution according to the procedures described in the Student Rights and Responsibilities handbook regardless of any civil or criminal outcome.

## Record of Student Complaints and Conduct Proceedings

A record of student complaints and conduct resolutions is kept on file in the Office of Student Affairs and Admissions.

## Anonymous Reporting

Students and faculty may report grievances, complaints, and conduct violations anonymously through a drop box outside the office of the Assistant Dean of Student Affairs.

## Curriculum Description

### Masters Integrative Learning Experience

The MILE is a written case report and oral presentation that occurs in the spring semester of a student's 3<sup>rd</sup> year. Students write about a patient, collaborating with a panel of professors who guide them as the case report is examined and revised. Once the written report has been approved, an oral presentation is scheduled. The student provides the panel with information about their clinical case applying knowledge learned in the Foundations of Behavior series (biological, developmental, cognitive, affective, and social). Once both written and oral sections of the MILE have been approved by their panel, the student has completed the culminating experience requirement. To receive their Master of Arts degree in clinical psychology a student must complete the MILE and obtain a B or better in all first- and second-year courses.

If a student does not pass their written and oral exams within the timeframes outlined in the MILE Handbook, they are no longer allowed to continue in the program.

### Dissertation and Defense

Dissertations represent an opportunity to create original scholarly work that contributes new information to the field's body of knowledge.

Students are expected to formulate their dissertation questions during their first year and to begin work on the project after completing the Research Methods and Statistics courses. Once students know the hypothesis they wish to test, they should begin seeking faculty members that will agree to be their Chair and reader. If the student wishes to select a committee member who is not in the College of Psychology faculty, they must get approval from the Assistant Dean of Research and Academics.

Students may elect to write a monograph or a three-paper dissertation. For details regarding the dissertation and defense process, please refer to the Dissertation Guide: A Handbook for Students from Proposal to Defense.

## 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 practicum training.

In years two through four, students will be in practicums. The Field Placement Office has 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. Students may also elect to be at the CNU Community Counseling and Psychological Services clinic.

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.

During 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.

At least 1,500 hours of practicum training are required for a student to graduate from the program. Students are encouraged to manage their time carefully to ensure that all practical and academic requirements are met.

## *Internship*

To obtain an APA internship, students will participate in the AAPIC match system. Internships are full time commitments and take up the entirety of the 5<sup>th</sup> 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 associate.

## PSY Course Descriptions

### Didactic Courses

#### *Foundations of Behavior Series*

##### **PSY 601 Foundations of Behavior: Biological**

This course focuses on the biological underpinnings of behavior including neural, physiological, anatomical, and genetic influences.

##### **PSY 602 Foundations of Behavior: Developmental**

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 606 Foundations of Behavior: Cognitive and Affective**

This course examines the ways in which humans learn, elements that effect memory, how thought processes are categorized. It also covers response, mood, feeling states, and the interplay between behavior and emotion.

#### *Assessment Series*

##### **PSY 720 Assessment Series: Intellectual**

This class focuses on intellectual assessment of both children and adults. It introduces students to assessment writing and the various components necessary in client interviews.

##### **PSY 721 Assessment Series: Personality and Emotion**

This class focuses on tests that gauge a patient's personality and emotional state. Measurements include detection of personality disorders and mood disturbances.

##### **PSY 722 Assessment Series: Neuropsychological**

This course is the culmination of the assessment series, using knowledge students have gained about both brain function and the capabilities of psychological assessment they will complete full neuro-psychological batteries and review cases of severe impairment, injury, stroke, and dementia.

### Psychopathology Series

#### **PSY 603 Psychopathology: Adult**

This class reviews DSM-5 conditions found in adult patients. Attention will be given to the construction of the DSM and a comparison to the ICD 11.

#### **PSY 604 Psychopathology: Child/Adolescent**

This course will review DSM-5 diagnoses that are found among children or adolescents. Special attention will be given to the autistic spectrum and learning disabilities.

### Interventions Series

#### **PSY 710 Interventions: Child and Adolescent**

This course examines therapies for children and adolescents focusing on the latest empirically validated treatments.

#### **PSY 711 Interventions: Behavioral**

This course examines treatments for psychological conditions through the lens of behavioral theories.

#### **PSY 715 Interventions: Psychodynamic**

This course examines treatments for psychological conditions through the lens of psychodynamic theories.

#### **PSY 712 Interventions: Groups**

This course focuses on interventions for groups, with special attention given to the ethical and professional issues that differentiate work with groups from that of individuals.

#### **PSY 803 Interventions: Crisis and Trauma**

Students in this course will learn effective means to evaluate and treat patients in crisis or who have experienced recent traumatic events.

#### **PSY 804 Interventions: Consulting and Supervision**

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 also addresses effective means of supervision and spotlights ethical issues that present themselves in the supervisor/supervisee relationship.

### Research and Statistics

#### **PSY 613 Research Methods**

This class prepares students to critically read research, understand research design, and to begin work on their dissertation. They will learn the strengths and limitations, means of interpretation, and the technical aspects of rigorous case study. Students will learn the difference between correlational, descriptive, and experimental research designs and will be introduced to qualitative methods including meta-analysis and quasi-experimentation.

#### **PSY 614 Statistics**

In this course, students will learn to engage in mathematical modeling, analysis of psychological data, description, inference, univariate and multivariate analysis, null-hypothesis testing, power, and estimation.

**PSY 703 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.

*Diversity, Equity, and Inclusion Series***PSY 801 Human Diversity and Cultural Awareness**

This course will review the social and cultural context of both patient care groups and clinicians. Students are expected to challenge their own preconceptions and attitudes about cultural attitudes and norms and the way human diversity affects psychological treatment.

**PSY 607 Foundations of Behavior: Social and Cultural**

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 815 Advocacy and Social Justice**

This course teaches how to competently incorporate advocacy and social justice into students' professional identity and behavior as a psychologist.

*Individual Courses***PSY 605 History and Systems**

This course examines the origins and development of the discipline of psychology. It moves 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 608 Standards and Ethics**

This course reviews the current American Psychological Association's Ethics and Professional Code through the lens of real-world cases.

**PSY 808 Psychopharmacology**

Students learn about the medications that can be used to treat disorders, the resultant physiology, and their overall effectiveness.

**PSY 861 Dissertation Seminar 1**

This class assists students in completing their dissertation. Students will find a supportive environment where they can work through challenges, seek feedback, and progress in a systematic fashion towards finishing this task.

**PSY 862 Dissertation Seminar 2**

This is a continuation of Dissertation Research Seminar 1. Clinical Training

## Practicum

### **PSY 650 Practicum Preparation 1**

This course is designed to prepare students for starting work in the community as new practitioners. Students work to understand theoretical orientations, their role as a volunteer, their rights and responsibilities at practicum, and charting and organizing their appointments.

### **PSY 651 Practicum Preparation 2**

This is the second semester and a continuation of Practicum Preparation 1.

### **PSY 713 Practicum Case Conference 1**

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.

### **PSY 714 Practicum Case Conference 2**

### **PSY 813 Practicum Case Conference 3**

### **PSY 814 Practicum Case Conference 4**

### **PSY 913 Practicum Case Conference 5**

### **PSY 914 Practicum Case Conference 6**

### **PRC 750 Practicum 1**

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, but the Field Placement Office has final approval on practicum selection.

### **PRC 751 Practicum 1**

### **PRC 850 Practicum 2**

### **PRC 851 Practicum 2**

### **PRC 950 Practicum 3**

### **PRC 951 Practicum 3**

### **PRC 799 Summer Session**

## Internship

### **PSY 960 Internship**

Students must participate in an APA internship, CAPIC internship, or work with a private psychologist to earn their internship hours as a psychological associate. Part-time is available and requires 24 months to complete.

## Curriculum

1st Year	Course #	Course Title	Credits	Semester
	PSY 601	Foundations of Behavior: Biological	3	Fall
	PSY 602	Foundations of Behavior: Developmental	3	Spring
	PSY 603	Psychopathology: Adult	3	Fall
	PSY 604	Psychopathology: Child/Adolescent	3	Spring
	PSY 608	Standards and Ethics	3	Fall
	PSY 801	Human Diversity and Cultural Awareness	3	Spring
	PSY 613	Research Methods	3	Fall
	PSY 614	Statistics	3	Spring
	PSY 650	Practicum Preparation 1	3	Fall
	PSY 651	Practicum Preparation 2	3	Spring
Total			30	
2nd Year				
	PSY 607	Foundations of Behavior: Social and Cultural	3	Fall
	PSY 606	Foundations of Behavior: Cognitive/Affective	3	Spring
	PSY 703	Psychometrics	3	Fall
	PSY 710	Interventions: Child and Adolescent	3	Spring
	PSY 711	Interventions: Behavioral	3	Fall
	PSY 712	Interventions: Groups	3	Spring
	PSY 720	Assessment Series: Intellectual	3	Fall
	PSY 721	Assessment Series: Personality and Emotion	3	Spring
	PSY 713	Practicum Case Conference 1	3	Fall
	PSY 714	Practicum Case Conference 2	3	Spring
Total			30	
3rd Year				
	PSY 803	Interventions: Crisis and Trauma	3	Fall
	PSY 804	Interventions: Consultation and Supervision	3	Spring
	PSY 815	Advocacy and Social Justice	3	Fall
	PSY 808	Psychopharmacology	3	Spring
	PSY 722	Assessment Series: Neuropsychology	3	Fall
	PSY 861	Dissertation Research Seminar 1	3	Spring
	PSY 605	History and Systems	3	Fall
	PSY 715	Interventions: Psychodynamics	3	Spring
	PSY 813	Practicum Case Conference 3	3	Fall
	PSY 814	Practicum Case Conference 4	3	Spring
Total			30	
4th Year				
	PSY 862	Dissertation Research Seminar 2	3	Fall
	PSY 913	Practicum Case Conference 5	3	Fall
	PSY 914	Practicum Case Conference 6	3	Spring
Total			9	



## Curriculum Cont.

2nd - 4th Year	PRACTICUM REQUIREMENT (duration of practicums range up to 12 months)			
2nd year	PRC 799	Summer Session (if required)	0-1	Summer
	PRC 750	Practicum 1	4	Fall
	PRC 751	Practicum 1	4	Spring
3rd year	PRC 799	Summer Session (if required)	0-1	Summer
	PRC 850	Practicum 2	5	Fall
	PRC 851	Practicum 2	5	Spring
4th year	PRC 799	Summer Session (if required)	0-1	Summer
	PRC 950	Practicum 3	6	Fall
	PRC 951	Practicum 3	6	Spring
	PRC 799	Summer Session (if required)	0-1	Summer
			Total	30
5th Year	INTERNSHIP	2000 Total Hours Required		
	PSY 960	Internship	Full-time	Half-time
		Fall	14	7
		Spring	14	7
		Summer	12	6
			Total	40      20

**Total Program Credit Hours: 169**

# Academic Calendar 2024-2025

## Summer Semester 2024

	<u>Start Date</u>	<u>End Date</u>
<b>Summer Practicums</b>	05/20/2024 - Monday	08/16/2024 - Friday

## Fall 2024

	<u>Start Date</u>	<u>End Date</u>
<b>Orientation &amp; Welcome Ceremony</b>	08/13/2024 - Tuesday	08/16/2024 - Friday
<b>Start of Instructional Courses</b>	08/19/2024 - Monday	
<b>Holiday – Labor Day</b>	09/02/2024 - Monday	
<b>Holiday – Thanksgiving Break</b>	11/25/2024 - Monday	11/29/2024 - Friday
<b>Final Exams</b>	12/09/2024 - Monday	12/19/2024 - Thursday
<b>Holiday – Winter Break</b>	12/13/2024 - Friday	01/17/2025 - Friday
<b>Final Grades Due</b>	01/10/2024 - Friday	

## Winter Intersession 2024-2025

	<u>Start Date</u>	<u>End Date</u>
<b>Winter Intersession (Practicums only)</b>	12/13/2024 - Friday	01/17/2025 - Friday

## Spring 2025

	<u>Start Date</u>	<u>End Date</u>
<b>Start of Instructional Courses</b>	01/21/2025 – Tuesday	
<b>Holiday – Martin Luther King Jr.</b>	01/20/2025 – Monday	
<b>Holiday – President’s Day</b>	02/17/2025 – Monday	
<b>Holiday – Spring Break</b>	03/10/2025 - Monday	03/14/2025 - Friday
<b>Classes Resume</b>	03/17/2024 - Monday	
<b>Final Exams</b>	05/12/2025 - Monday	05/15/2025 - Thursday
<b>Grades Due</b>	05/30/2025 - Friday	

## Practicum Schedule

	<u>Start Date</u>	<u>End Date</u>
<b>Summer Term</b>	05/19/2025 - Monday	08/15/2025 - Friday
<b>Fall Term</b>	08/19/2024 - Monday	12/12/2024 - Thursday
<b>Winter Intersession</b>	12/13/2024 - Friday	01/17/2025 - Friday
<b>Spring Term</b>	01/20/2025 - Monday	05/15/2025 - Thursday

## University Holidays

	<u>Start Date</u>	<u>End Date</u>
<b>Independence Day</b>	07/04/2025 – Friday	
<b>Labor Day</b>	09/01/2025 - Monday	
<b>Thanksgiving</b>	11/27/2025 - Thursday	11/28/2025 - Friday
<b>Martin Luther King Day</b>	01/20/2025 - Monday	
<b>President’s Day</b>	02/17/2025 - Monday	
<b>Juneteenth</b>	6/19/2025 - Thursday	

## Directory

## Administration

### **Bret McLaughlin, Founding Dean**

MBA, Business Administration, California State University Sacramento  
PsyD, Clinical Psychology, The Wright Institute  
MA, Clinical Psychology, The Wright Institute  
MA, American and British Literature, New York University

### **Sandra Nevis, Associate Dean of Clinical Training**

PhD, Clinical Psychology, Bowling Green University  
MA, Clinical Psychology, Bowling Green University

### **David Jull-Patterson, Associate Dean of Faculty Affairs**

PhD, Clinical Psychology, Pacific Graduate School of Psychology  
MA, Counselor Education, New York University

### **Veronica Dobson, Assistant Dean of Admissions and Student Affairs**

PsyD, Clinical Psychology, California School of Professional Psychology

### **Jason Lillis, Assistant Dean of Research**

PhD, Clinical Psychology, University of Nevada Reno  
MA, Clinical Psychology, University of Nevada Reno

### **Isabel K'Burg, Clinic Director**

PsyD, Clinical Psychology, John F. Kennedy University  
MA, Counseling Psychology, National University

### **Kelsy Harris, Director of Admissions**

BA, Psychology, California State University Monterey Bay

## Faculty

### **Lisa Cochran-Navarra, Assistant Professor**

PhD, Psychology, University of Birmingham

### **Mark Ettensohn, Associate Professor**

PsyD, Clinical Psychology, The Wright Institute  
MA, Clinical Psychology, The Wright Institute

### **Kristee Haggins, Associate Professor**

PhD, Counseling Psychology, Ohio State University  
MA, Counseling Psychology, Ohio State University

### **Kathleen Kendra, Assistant Professor**

PhD, Clinical Psychology, Louisiana State University, Baton Rouge  
MA, , Clinical Psychology, Louisiana State University, Baton Rouge

### **Katherine Kruser, Assistant Professor**

PsyD, Clinical Psychology, Alliant International University Sacramento  
MA, Clinical Psychology, Alliant International University Sacramento

### **Diana Le, Assistant Professor**

PhD, Clinical Psychology, Alliant International University Fresno  
MA, Clinical Psychology, Alliant International University Fresno

### **Haleigh Scott, Assistant Professor**

PhD, Intellectual and Developmental Disabilities Psychology, Ohio State University  
MA, Intellectual and Developmental Disabilities Psychology, Ohio State University

### **Nazli Seewer, Assistant Professor**

PsyD, Clinical Psychology, Alliant International University, Sacramento  
MA, Clinical Psychology, Alliant International University, Sacramento  
MPH, Community Health Education, San Jose State University

### **DeAnn Smetana, Associate Professor**

PsyD, Psychology, California Southern University  
DBH, Behavioral Health, Arizona State University  
MA, Clinical Mental Health Counseling, George Fox University

**Clary Tepper, Assistant Professor**

PhD, Clinical-Developmental-School Psychology, Bryn Mawr College  
MSS, Social Service, Bryn Mawr College

**Eric Vogel, Professor**

PsyD, Clinical Psychology, John F. Kennedy University

**Craig Wetterer, Associate Professor**

MS, Clinical Psychopharmacology, Fairleigh Dickinson University  
PhD, Clinical Psychology, Fielding Graduate University  
JD, Juris Doctorate, William Taft University School of Law  
MA, Psychology, California State University Sacramento

Staff

**Kira Garvey, Executive Assistant to the Dean**

BS, Criminal Justice, California State University Sacramento  
All faculty and staff emails are [firstname.lastname@cnsu.edu](mailto:firstname.lastname@cnsu.edu)

# MASTER OF PHARMACEUTICAL SCIENCES

## **Mission and Vision**

**Mission:** To advance the science of pharmaceutical research by developing future scientists trained to promote health through knowledge, research, and social responsibility.

**Vision:** Preeminence in pharmaceutical sciences research, drug development skills, and integrated education abilities.

## **Accreditation**

**Senior Colleges and Universities of the Western Association of Schools and Colleges (WASC).**

California Northstate University is accredited by the Accrediting Commission for Senior Colleges and Universities of the Western Association of Schools and Colleges (WASC), 985 Atlantic Avenue, #100, Alameda, CA 94501, 510.748.9001

## Program Overview

The option of One year and Two Years Master of Pharmaceutical Sciences (MPS) program offered by CNU is designed to provide fundamental knowledge and skills in the pharmaceutical sciences field to enable students to pursue careers in academia, the pharmaceutical industry, regulatory affairs, and government positions upon graduation.

This program also provides advanced training in theory and laboratory- based settings to students opting for higher education in the health-related professions (MD/PharmD, MD/Ph.D., and PharmD/Ph.D.) and graduate schools (Ph.D.). In addition, this program provides a sufficient foundation in basic pharmacology, molecular biology and biochemistry to allow the students the flexibility to pursue careers in pharmaceutical and biotechnology industries, as well as regulatory affairs.

## **Program Objectives**

- Expand the students' foundation of Basic Pharmaceutical Sciences with emphasis in drug design, drug development or drug delivery.
- Expand the students' pharmaceutical research skills.
- Develop the students' ability to identify problems, formulate hypotheses, plan and execute experiments, analyze data and present results.

## **MPS at CNU: Strengths & Unique**

### **Features**

- Two track options: 1) One Year Capstone Paper Track (Non-thesis), and 2). Two Year Thesis Track
- Foundational core courses are complemented by a broad spectrum of well-designed electives.
- Multiple teaching pedagogical formats maximize learning and subject retention.
- Small class sizes suitable for individualized education and research skills.
- Close proximity and ties to the Colleges of Pharmacy and Medicine, with course paths to prepare students seeking entry into pharmacy or medical school.
- Established collaborations with regional clinical centers, and pharmaceutical industries, providing an array of cooperative educational opportunities.
- Located in Elk Grove, California, the second largest city in the Greater Sacramento Metropolitan Area. Northern California is the hub for many biopharmaceutical companies.

## **Curriculum**

MPS students have two course of study track options:

1) a one-year Capstone paper track; and 2) a two-year Thesis track.

### **Thesis/Course Track**

#### **Core Courses (29 credits)**

- MPS 501 Introduction to Pharmaceutical Sciences I (3 cr)
- MPS 511 Introduction to Pharmaceutical Sciences II (3 cr)
- MPS 502 Techniques in Pharmaceutical Sciences: Theory and Practice (2 cr)
- MPS 512 Principal of FDA Regulatory Affairs and Drug Discovery (3 cr)
- MPS 513 Biostatistics & Research Methods (3 cr)
- MPS 514 Clinical Biochemistry (3 cr)
- MPS 515 Medical Immunology (3 cr)
- MPS 518 Advances in Drug Delivery (2 cr)
- MPS 506 Research and Thesis-I (3 cr)
- MPS 516 Research and Thesis-II (3 cr)
- MPS 505 Graduate Seminar (1 cr)

#### **Elective Courses (2 credits)**

A minimum of 2 credits are required.

### **Capstone/Course Track**

#### **Core Courses (29 credits)**

- MPS 501 Introduction to Pharmaceutical Sciences I (3 cr)
- MPS 511 Introduction to Pharmaceutical Sciences II (3 cr)
- MPS 502 Techniques in Pharmaceutical Sciences: Theory and Practice (2 cr)
- MPS 512 Principal of FDA Regulatory Affairs and Drug Discovery (3 cr)
- MPS 513 Biostatistics & Research Methods (3 cr)
- MPS 514 Clinical Biochemistry (3 cr)
- MPS 515 Medical Immunology (3 cr)
- MPS 518 Advances in Drug Delivery (2 cr)
- MPS 507 Capstone Paper-I (3 cr)
- MPS 517 Capstone Paper-II (3 cr)
- MPS 505 Graduate Seminar (1 cr)

### **Elective Courses (2 credits)**

A minimum of 2 credits are required.

### **Elective Course Options (Subject to Change)**

- MPS 601 Advanced Topics in Drug Design (2 cr)
- MPS 603 Emerging Viral Diseases (2cr)
- MPS 604 Advances in immunology (2 cr)
- MPS 605 Medical writing skills (2 cr)

### **MPS to MD (1+4) and (2+4)-Pathway**

The (1+4) and (2+4) MPS to MD (Master of Pharmaceutical Sciences + Doctor of Medicine) pathway at California Northstate University is designed to offer a unique opportunity (pathway) for students to enter medical school. This combined program will significantly increase the chances to enter medical school, receiving competitive clinical residencies and pursue career opportunities in advanced medicine. For this MPS-MD pathway, the students must maintain a cumulative GPA of 3.5 in the MPS program and require MCAT score to grantee interview in CNUCOM.

### **Program Learning Outcomes (PLOs)**

**PLO 1: Foundational Knowledge in Pharmaceutical Sciences. Demonstrates the knowledge, skills, attitudes, and ethics that are required as scientists or scientific advocates**

- 1.1. Demonstrate essential knowledge of pharmaceutical sciences needed to advance these sciences
- 1.2. Evaluate scientific literature and scientific products

**PLO 2: Exposure to research instrumentation and laboratory techniques of pharmaceutical sciences**

- 2.1. Demonstrate technical proficiency with basic laboratory techniques for pharmaceutical sciences
- 2.2. Utilize innovation in research instrumentation and laboratory techniques in basic science and drug discovery/ development

**PLO 3: Critical thinking skills and problem-solving abilities**

- 3.1. Demonstrate skillful research design and adaptation
- 3.2. Apply critical thinking and problem-solving skills to make decisions in developing, testing, and producing pharmaceutical products

**PLO 4: Critical writing skills and data presentation abilities**

- 4.1. Demonstrate writing skills needed for a career in pharmaceutical sciences and effective communication of scientific ideas in oral and visual formats appropriate for key audiences
- 4.2. Work effectively in a collaborative scientific setting and demonstrate appropriate intercommunication skills

## **PLO 5: Promote scientific and technique development of pharmaceutical sciences**

5.1. Demonstrate ability to design mechanism-based drugs

5.2. Utilize scientific and technical skills needed to advance the discovery and management of new drugs and other therapeutic products.

## **Admissions**

### **Educational Prerequisites**

- A bachelor's degree (B.S. or B.A.) or higher in Biology, Chemistry or relevant science disciplines, or one year of biology and
- year of chemistry.
- A cumulative grade point average (GPA) of 2.5 is considered competitive. When evaluating applicants, greater emphasis will
- be placed on courses that are relevant to our program.
- Completion of the GRE is preferred but not required.

### **Applying to M.S. in Pharmaceutical Sciences:**

- The online application must be completed fully.
- Application Fee: \$60 for applicants
- Personal Statement: Please provide a personal statement describing your professional goals as well as the characteristics you possess that make you a qualified candidate for entry into the Masters of Pharmaceutical Sciences Program.
- Official Transcripts: Your academic records from each college-level institution you have attended are required. Canadian applicants and all other foreign applicants must submit a foreign coursework evaluation; CNU accepts evaluations from ECE, IERF, WES, and Education Perspectives.
- Transcripts from undergraduate and graduate institutions attended must be sent directly from the institution, even if a degree was not awarded.
- Minimum requirement GPA 2.5
- Official GRE General Test scores is preferred, but not required
- Official TOEFL scores for international applicants
- Letters of Recommendation: At least two letters must be submitted from faculty members who are knowledgeable about your academic capabilities and interests.
- Official letters of recommendation should be mailed directly to CNU Master of Pharmaceutical Sciences at the following address:

California Northstate University Master of Pharmaceutical Sciences

Admissions

9700 W. Taron Dr.

Elk Grove, CA 95757

### **Additional Admission Requirements**

Applicants are strongly encouraged to communicate with potential CNU research advisors listed in the graduate program prior to the admissions process. It is important to identify a research mentor and anticipated area of research prior to beginning the program. Formal research laboratory rotations with faculty members will be implemented after your admission. Onsite interviews are also provided to enable applicants to familiarize themselves with CNU faculty and their research areas.



## **Deadlines**

The deadline to submit an application for Fall enrollment will be August 15<sup>th</sup> of the same year. All supporting documents must be received prior to August 1st for a Fall enrollment and official transcripts must be received by September 30th of the same year. The online application must be fully completed to be accepted.

## **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 acknowledges 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 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](http://www.cnsu.edu), and to read and review the CNU General Catalog. The Catalog contains important information and policies regarding this institution.

## **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.

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.

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.

## **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 the 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.

### **Student Tuition Recovery Fund (STRF) Disclosures**

Information on the Student Tuition Recovery Fund disclosures (STRF) can be found on page 221 of the General Catalog.

## **Disclosures**

All tuition, fees, expenses, and policies listed in this publication are effective as of June 2021 and are subject to change without notice by California Northstate University.

In the tables below, MPS1 and MPS2 indicate the student's year in the program, e.g. MPS1 is a first-year student; MPS2 is a second-year student.

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 two (2) years of coursework consisting of 31 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 withdrawal, and the Student Tuition Recovery Fund (STRF) disclosures are located on page 196 of the General Catalog.

### **Cost of Attendance and Tuition and Fees for Incoming Students: CAPSTONE**

The cost of attendance is an estimate of expected educational expenses for the period of enrollment.

These educational expenses are calculated as described below and apply to all students enrolled in the Master of Pharmaceutical Sciences program at California Northstate University:

**Master of Pharmaceutical Sciences Degree Program - Tuition & Fees for Academic Year:  
2024-2025**

<b>Tuition &amp; Fees</b>	<b>Amount</b>	<b>Class</b>
Tuition - Fall 2024	\$13,650	MPS1
Tuition - Spring 2025	\$13,650	MPS1
Tuition - Summer 2025	\$13,650	MPS1
Student Activity Fee	\$100	MPS1
Technology Fee	\$50	MPS1
Pharma Sci Lab Fee	\$700	MPS1
Orientation Fee	\$50	MPS1
Student Tuition Recovery Fee <sup>4</sup>	\$0	MPS1
Enrollment Fee (Nonrefundable)	\$100	MPS1
Graduation Fee	\$250	MPS1
<b>MPS1 Total Tuition &amp; Fees per Year</b>	<b>\$42,200</b>	

**Total cost for the 1-year Master of Pharmaceutical Sciences Degree Program is \$42,200.**

<b>Other Educational Related Costs<sup>1</sup></b>	<b>Amount</b>	<b>Class</b>
Health Insurance premium <sup>2</sup>	\$3,529	MPS1
Books and Supplies	\$1,600	MPS1
Room and Board (based on 12 months)	\$28,152	MPS1
Transportation (based on 12 months)	\$5,362	MPS1
<b>MPS1 Total Estimated Cost per Year<sup>3</sup></b>	<b>\$80,843</b>	

<sup>1</sup> Estimated costs and expenses a student may incur during the applicable year of the program, whether or not paid directly to CNU or MPS. These expenses include estimated out-of-pocket cost of living expenses for the year.

<sup>2</sup> Optional, estimated, and will increase based on number of insured members.

<sup>3</sup> Includes total of Tuition & Fees and Other / Optional Estimated Educational Related Costs tables, including some out-of-pocket cost of living expenses as described in footnote 3 above.

<sup>4</sup> Effective April 1, 2024, the STRF assessment rate will change from two dollars and fifty cents (\$2.50) per one thousand dollars (\$1,000) of institutional charges to zero dollar (\$0.00) per one thousand dollars (\$1,000) of institutional charges.

**Cost of Attendance and Tuition and Fees for Incoming Students: THESIS TRACK**

The cost of attendance is an estimate of expected educational expenses for the period of enrollment.

These educational expenses are calculated as described below and apply to all students enrolled in the

Master of Pharmaceutical Sciences program at California Northstate University:

**Master of Pharmaceutical Sciences Degree Program - Tuition & Fees for Academic Year:  
2024-2025**

<b>Tuition &amp; Fees</b>	<b>Year 1 - MPS1</b>	<b>Year 2 - MPS2</b>
Tuition	\$35,772	\$37,561
Student Activity Fee	\$100	\$100
Technology Fee	\$50	\$50
Pharma Sci Lab Fee	\$700	\$700
Orientation Fee	\$50	\$0
Student Tuition Recovery Fee <sup>4</sup>	\$0	\$0
Enrollment Fee (Nonrefundable)	\$100	\$0
Graduation Fee	\$0	\$250
<b>Total Estimated Tuition &amp; Fees per Year</b>	<b>\$36,772</b>	<b>\$38,661</b>

**Total cost for the 2-year Master of Pharmaceutical Sciences Degree Program \$75,433.**

<b>Other Educational Related Costs<sup>1</sup></b>	<b>Year 1 - MPS1</b>	<b>Year 2 - MPS2</b>
Health Insurance premium <sup>2</sup>	\$3,529	\$3,529
Books and Supplies	\$1,600	\$1,600
Room and Board (based on 12 months)	\$28,152	\$28,152
Transportation (based on 12 months)	\$5,362	\$5,362
<b>Total Estimated Cost per Year<sup>3</sup></b>	<b>\$75,415</b>	<b>\$77,304</b>

- <sup>1</sup> Estimated costs and expenses a student may incur during the applicable year of the program, whether or not paid directly to CNU or MPS. These expenses include estimated out-of-pocket cost of living expenses for the year.
- <sup>2</sup> Optional, estimated, and will increase based on number of insured members.
- <sup>3</sup> Includes total of Tuition & Fees and Other / Optional Estimated Educational Related Costs tables, including some out-of-pocket cost of living expenses as described in footnote 3 above.
- <sup>4</sup> Effective April 1, 2024, the STRF assessment rate will change from two dollars and fifty cents (\$2.50) per one thousand dollars (\$1,000) of institutional charges to zero dollar (\$0.00) per one thousand dollars (\$1,000) of institutional charges.

**Cost of Attendance and Tuition and Fees for Continuing Students: THESIS TRACK**

The cost of attendance is an estimate of expected educational expenses for the period of enrollment.

These educational expenses are calculated as described below and apply to all students enrolled in the Master of Pharmaceutical Sciences program at California Northstate University:

**Master of Pharmaceutical Sciences Degree Program - Tuition & Fees per Class for 2024-2025**

<b>Tuition &amp; Fees</b>	<b>Year 2 - MPS2 Class of 2025</b>
Tuition	\$35,772
Student Activity Fee	\$100
Technology Fee	\$50
Pharma Sci Lab Fee	\$700
Orientation Fee	\$0
Student Tuition Recovery Fee <sup>4</sup>	\$0
Enrollment Fee (Nonrefundable)	\$0
Graduation Fee	\$250
<b>Total Estimated Tuition &amp; Fees per Class</b>	<b>\$36,872</b>

<b>Other Educational Related Costs<sup>1</sup></b>	<b>Year 2 - MPS2 Class of 2025</b>
Health Insurance Premium <sup>2</sup>	\$3,529
Books and Supplies	\$1,600
Room and Board (based on 12 months)	\$28,152
Transportation (based on 12 months)	\$5,362
<b>Total Estimated Cost per Class<sup>3</sup></b>	<b>\$75,515</b>

- <sup>1</sup> Estimated costs and expenses a student may incur during the applicable year of the program, whether or not paid directly to CNU or MPS. These expenses include estimated out-of-pocket cost of living expenses for the year.
- <sup>2</sup> Optional, estimated, and will increase based on number of insured members.
- <sup>3</sup> Includes total of Tuition & Fees and Other / Optional Estimated Educational Related Costs tables, including some out-of-pocket cost of living expenses as described in footnote 3 above.
- <sup>4</sup> Effective April 1, 2024, the STRF assessment rate will change from two dollars and fifty cents (\$2.50) per one thousand dollars (\$1,000) of institutional charges to zero dollar (\$0.00) per one thousand dollars (\$1,000) of institutional charges.

## **General Policies Orientation & Registration**

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 proof of medical insurance coverage and any other institutional requirements.

Students may enroll in the Student Health Insurance Plan to satisfy the insurance requirement.

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 MPS classroom at 9700 West Taron Drive, Elk Grove CA 95757.

### **Catalog, School Performance Fact Sheet, and Website**

Before signing the Student Enrollment Agreement, students are strongly encouraged to visit the College website at <http://pharmasciences.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 acknowledges that the catalog, disclosures, and information located on the website have been made available to the student to read and review.

### **Instruction/Course Delivery**

All courses for MPS are 90% face-to-face on-campus teaching, with the exception of two courses: MPS 512 and MPS 518

Discovery and Development. This comprehensive course is designed using a hybrid teaching format, combining direct faculty-student interaction and eLearning.

All courses are taught in English and English language services are not provided.

### **Description of Facilities**

Information on research laboratories and facilities utilized by California Northstate University in conjunction with the delivery of instruction for all CNU Colleges, can be located on page 229 of the General Catalog.

### **Academic Policies and Procedures**

#### **Academic Calendar**

The academic calendar consists of two semesters lasting approximately 15 weeks long.

#### **Credit Hour Policy**

<b>Code</b>	<b>Course Type</b>	<b>Code</b>	<b>Course Type</b>
<b>AL</b>	Active Learning	<b>LEC</b>	Lecture course
<b>LAB</b>	Laboratory	<b>SEM</b>	Seminar

For each 15- week semester, one (1) unit of credit is assigned per hour each week of classroom and a minimum of two (2) hours of out-of-class student work (homework) (*LEC/SEM*). For courses that include workshop and/or laboratory time, one (1) unit of credit is assigned per two (6) hours each week of student time spent in this activity (*LAB/AL*) course.

## Grading

A letter grade equal to or greater than C is considered satisfactory performance (passing) for completion of a course. Students must 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

## 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.

## Course Add/Drop Procedure

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 term.

## 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.



## **Grade Appeals Procedure**

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 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 MPS Director who renders a decision in writing within ten (10) business days of receipt of the formal appeal. (If the course Coordinator is the MPS Director, then the student may appeal the decision directly to the Dean. The student has two (2) business days to submit an appeal in writing to the Dean. The Dean will render a decision in writing within ten (10) business days of receipt of the formal appeal).

If the MPS Director cannot resolve the appeal, the student has two (2) business days to submit an appeal in writing to the Dean. The Dean will render a decision in writing within ten (10) business days of receipt of the formal appeal.

If a grade appeal is approved, the course coordinator must complete a Grade Change Form and submit the form to the MPS Director for final approval. The form must then be submitted to the Registrar so that the grade can be changed on the transcript.

A record of the final decision concerning the appeal will be kept on file in the MPS Director office.

## **Academic Progression Policy**

The Master of Pharmaceutical Sciences (MPS) at California Northstate University has a rigorous academic progression policy to ensure students' progression through the curriculum in a timely manner.

The purpose of the academic progression policy is to ensure students in the MPS program reach and maintain a high standard of course learning and successfully complete course credits and thesis or capstone paper within required time frame.

Students in the MPS program must pass all courses each semester with at least a grade of C and maintain a minimum grade point average (GPA) of 2.0. A grade of D or below in a course indicates a lack of understanding of the fundamental knowledge of the course necessary for progression.

Students struggling with academic courses must complete the MPS program either within 2 years (1-year program) or 3 years (2-year program) from the time they register and attend their first core course if insufficient knowledge has been identified and remediated.

## **Remediation**

Remediation is provided to students who earn a letter grade lower than C in any course in the MPS curriculum. The course coordinator/instructors determine the format of remediation examination that covers the course material presented throughout the course. Preparation of the remediation exam is the sole responsibility of the student. A grade of C to this course will be reported to the Registrar if the remediation examination was satisfactorily completed.

## **Dismissal**

A student may be dismissed from the MPS program if any of the following conditions occur, 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 Student Handbook.
- c. Failure to complete the degree requirements in three (two-year program) or five (dual degree) consecutive academic years from the date of the first day the student begins the program.

## **Appeal of Dismissal**

Students dismissed from the MPS program may appeal the decision in writing within thirty 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 the receipt of the formal written appeal. The Dean's decision is final.

## **Degree Requirements**

The Master of Pharmaceutical Sciences degree is a one- and two-year (12-24 months) program. Degree requirements for the Thesis-based track and the Capstone/Course track are as follows:

### **Thesis-based Track:**

To graduate from the M.Sc. program, students in this track must earn a minimum of 31 credits. In addition to the course requirements, students must pass and complete a thesis.

### **Capstone/Course Track:**

Students in this track must pass a minimum of 31 credits along with successfully completing a written qualifying examination, and a capstone paper that consists of conducting a detailed literature review and analysis on a selected topic in lieu of a thesis.

## Comparison of Thesis-based and Capstone Track

	Thesis Track	Capstone Track
Years	2	2
Total Credits	31	31
Core Course Credits	29	29
Elective Credits	2	2
Written Examination	Yes	Yes
Thesis	Yes	Capstone paper

### Attendance Policy

The MPS program will follow University guidelines in attendance policy, which requires mandatory attendance for all students. Specifically, students are expected to attend and participate in all classes and complete all exams and assessments as scheduled (together defined as “coursework”).

However, occasionally an absence from coursework will be unavoidable. The policy described below delineates the circumstances when an absence will be considered excused along with expectations for timely communication with the Course Coordinator and makeup of missed coursework.

#### A. Approval of Absence

Students should seek approval for an absence from the course coordinator well in advance of the absence, if possible, by completing an Excused Absence Request Form. In the case of emergency absence, students should complete and submit the Excused Absence Request Form within 3 business days of returning to campus after the absence. Regardless of whether an absence is excused or unexcused, students are expected to demonstrate professionalism and to follow procedure when requesting an absence.

#### B. Duration of Absence

A student may request no more than three academic days of excused absences per semester. Absences exceeding five academic days per semester may require a student to request a Leave of Absence or a Withdrawal. Students must contact the Office of Academic Affairs (OAA) if any one absence period exceeds five days to discuss these options.

#### C. Type of Excused Absence

A student may request an excused absence, from the course coordinator, only for reasons listed below:

- Medical (self or immediate family)
- Military duty
- Immigration & Naturalization
- Jury Duty
- Legal

- Bereavement (first degree relative)
- Involvement in traffic accident documented by law enforcement report
- Professional Leave – conferences, invited presentations/posters, competitions, (requires verification of academic standing).

#### **D. Makeup Allowances**

Students are responsible for contacting the course coordinator to arrange makeup of coursework, otherwise they will receive a zero grade. A student seeking an excused absence should complete the Excused Absence Request Form and seek the Course Coordinator’s signature for each course the student was absent within three business days upon return to courses or campus. The form must then be given to the Dean of Academic Affairs, who will approve or not the absence request. The OAA will notify the student and course coordinator of the outcome of the absence request.

If an absence is excused, students will be allowed the option to make up missed coursework, rotations, or missed assessments. The nature and type of makeup, makeup time, date, format, duration, and grading is at the sole discretion of the Course Coordinator, but in general Coordinators will draw the following distinction between “high” and “low” stakes assessments/coursework, and professional leave:

A student who is absent for a “high stakes” exam or other such activity considered high stakes, provided the absence has been excused, will be required and allowed to make up the work.

If a student is absent for a “low stakes” assessment the Course Coordinator may choose to drop the missed coursework from the gradebook or provide a makeup opportunity.

A student requesting an absence to attend a professional meeting must demonstrate they are in good academic standing. Requests for professional leave must be submitted at least 10 business days in advance of the professional conference attendance. If attendance coincides with a high stakes exam it is highly likely that the absence will be denied.

#### **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 Academic Official for Academic Affairs. If a student is requesting a leave of absence, the 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 the 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. 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.

### **Journal Club & Attendance at Seminars and Thesis Presentations**

The journal club and graduate seminar are conducted mainly by students, facilitated by the course coordinator. Each week, a student presents a paper related to their research/scholarship interest. The chosen paper will be announced prior to the class and copies provided to all participants. The goal of the journal club is to create an open venue for friendly but lively scientific discussion. Students are encouraged to critically review the paper and understand how to gauge its impact on the field. Grades will be determined primarily based on the presentation of the student during the course, as well as overall class participation.

### **Assisting in Research and Teaching**

Under the recommendation of faculty members and the advisory committee, research assistantships and teaching assistantships that cover tuition and other expenses are provided to outstanding graduate students with the final approval from the Dean.

### **MPS Thesis Advisory Committee**

This committee, which is recommended by the MPS program Director and approved by the Dean, shall consist of at least three faculty members. All members of the committee shall be members of the Graduate Program Faculty.

### **Thesis Guidelines**

The thesis is a vital portion of the curriculum for graduate students choosing the thesis-based track. These students will conduct hands-on, original research in CNU's state-of-the-art laboratories, mentored by faculty with experience in the biomedical and pharmaceutical sciences. Students will select their research

topics after consultation with their major advisors. This course will examine student capabilities in scientific literature review, research design, research execution, statistics, result analysis & discussion, and written skills as required to produce a laudable thesis. Lab-based thesis research starts in the summer of the 1st year and proceeds through the entire 2nd year, with 1 credit in each semester. Students will be evaluated each semester, and their progress monitored closely by their thesis advisors. The components of this course evaluation include the following comprehensive elements: literature review; experimental design; research performance; statistical analysis; result presentation and discussion, and conclusion.

### **Defense of thesis or capstone paper project**

Defense of thesis or capstone paper project is the final step for MPS students. This process tests the depth and breadth of knowledge in pharmaceutical sciences and will assess the overall understanding of scientific inquiry. Students will be expected to justify their decisions in study design and interpretation of data. The advisory committee will make the recommendation based on the quality of the project, answers to all questions, and other factors.

### **Requirements for Laboratory-based Research**

Laboratory research is one of the essential components for graduate students in the Master's program in Pharmaceutical Sciences at California Northstate University (CNU). Any student working in the Lab must abide by the following standards.

1. Students must complete the Collaborative Institutional Training Initiative (CITI) training and relevant biosafety training that are required for the personnel working in the Lab at CNU. CITI is an on-line service program providing research ethics and related modules to faculty, staff, and students working for research projects or courses. Students must present completion certificates to their major advisors prior to self-directed work in the labs. Students must complete and pass the Responsible Conduct of Research course and the student Biosafety and Biosecurity Course. Additional courses may be recommended or required by their instructors.
2. Students must respect all ethical standards and must observe all federal, state, local, and institutional regulations.
3. Students must abide by all safety regulations while present in the labs, including those regarding appropriate clothing and shoes. Students must wear lab coats, gloves, and other appropriate personal protective equipment when performing procedures in the Lab.
4. Students must follow all standard operating procedures and protocols when conducting research.
5. Students must work in their designated areas. All shared equipment and instruments must be cleaned and stored in their original (one) Location after completing experiments.

6. Students must maintain original research records, catalogs, and research materials following good practices. Computer records must be consistent with the notebooks. Students are strongly encouraged to discuss the records and seek approval from the advisors.
7. All packages, containers, buffers and reagents in the Lab must have discernible, compliant labels that include name, date, identity, and sources.
8. Eating, drinking, or smoking in the Lab are strictly prohibited. Violators will be excluded from research projects or relevant courses.
9. Hand washing with clean, running water is good practice before leaving the Lab, and is required after certain procedures.
10. It is expected that all students will exercise professionalism and decorum while in the Labs. Horseplay, practical jokes, pranks or other inappropriate or distracting behaviors will result in a loss of Lab privileges and may impact student graduation.
11. Please report all unexpected issues to your advisors or Lab Manager.

## **Student Grievance Policy**

If a student wishes to file a grievance, they can submit a written complaint using the Complaint/Grievance form placed in a sealed envelope and delivered to the Vice President of Academic Affairs or submit an online Anonymous Report available on the CNU website. The Vice President of Academic Affairs will handle the complaint in accordance with 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.

For complaints related to accreditation standards can be found on page 10 of the General Catalog.

## **Student Services**

Information on Student Services can be located on page 223 of the General Catalog.

## **MPS Course Descriptions**

### **Core Courses**

#### **MPS 501 Introduction to Pharmaceutical**

##### **Sciences-I (3 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.

### **MPS 502 Techniques in Pharmaceutical Sciences: Theory and Practice - I (2 cr)**

This course is designed to advance critical thinking in research approaches and methodology providing MPS and PharmD dual degree students an overview in new advances in therapeutics including gene therapy and technical applications in the field of Industrial Pharmacy, Integrated Pharmacological Medicine, Translational Medicine, Alternative and Complementary Medicine, Drug Discovery and Targeting Complement Therapeutics. Course subjects will cover research technique trends, pitfalls and alternative approaches to overcome them.

### **MPS 506 Research and Thesis - I (3 cr)**

This course is designed to provide hands-on research experience in laboratories of biomedical and pharmaceutical sciences. Students will choose the research topics after consultation with their major advisors. This course will exam the students' capabilities in original article review, research design, research execution, statistics, result analysis & discussion, and written skills of thesis.

### **MPS 507 Capstone Paper - I (3 cr)**

This course is designed to advance critical thinking and written skills in the identification and synthesis of contemporary topics in the broad area of pharmaceutical sciences. MPS 504 (Literature & Technical Writing Skills) is divided into two sections for the graduate students in Plan B (Capstone Track):

- (i) section I delineates the basic skills and techniques in reference search, review, and writing exercise;
- and (ii) section II is designed to evaluate the students' capabilities in integration of science, literature, and communication skills. Successful and timely completion of capstone paper is mandatory for students in this track.

### **MPS 511 Introduction to Pharmaceutical Sciences– II (3 cr)**

This course is designed to provide students with the deep understanding of the drug physicochemical properties and its effects on drug formulation and computing, dosage form as well as an understanding of the interactions between drug delivery systems and biological systems The course covers the traditional and non-traditional dosage forms as well as drug delivery systems. The course also covers pharmaceutical calculations and an overview of drug quality control and regulation.

### **MPS 512 Principal of FDA Regulatory Affairs and Drug Discovery (2 cr)**

This course focuses on regulatory strategy, guidance and regulatory compliance, legal and ethical issues, processes for product development and the business components of regulation in clinical research, all while reinforcing the science behind the methods. The regulatory affairs course provides students with the knowledge and understanding for the key elements of the regulatory process in various industries, governmental agencies, and consultancies worldwide.

### **MPS 513 Biostatistics & Research Methods (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.

### **MPS 514 Clinical Biochemistry (3 cr)**

Clinical Biochemistry (MTMS 514) course provides to MPS students a clear and comprehensive introduction to the biochemical basis of disease processes, how these diseases are investigated in biomedical laboratories, and selected clinical cases as framework for class discussion activities. This class is one of the major courses with great benefit for prospective medical students. The course is established on organ base system study that is compatible with the teaching module in medical program.

This course prepares prospective medical students to do well in step one exam in medical school. The students taking this class are particularly enthusiastic and love the class because the exams in this class are also given in USMLE style, preparing the students to be familiar with the exam (Step 1, 2 & 3) styles they will be facing in medical school. In the class, the students learn new trends of clinical cases and their biochemical basis to further emphasize the link between theory and practice while helping them engage with emerging diseases and how to treat them. In addition, the course provides a biochemical foundation for the understanding of drug action, drug absorption and drug metabolism in the treatment of these diseases.

### **MPS 515 Medical Immunology (3 cr)**

MPS 515 is a broad-spectrum course that covers the fundamentals and clinical aspects of Immunology. The course is divided into 4 major modules: (1) Introduction to Immunology, (2) Innate and adaptive Immunity, (3) T and B cells development and (4) Clinical Immunology. Each module will be followed by an exam covering all the discussed topics within that module. In addition, students will be engaged in journal club activity for classical articles known to be the pillars in the Immunology field.

### **MPS 516 Research and Thesis - II (3 cr)**

This course is designed to provide hands-on research experience in laboratories of biomedical and pharmaceutical sciences. Students will choose the research topics after consultation with their major advisors. This course will exam the students' capabilities in original article review, research design, research execution, statistics, result analysis & discussion, and written skills of thesis.

### **MPS 518 Advances in Drug Delivery Systems (3cr)**

This course gives the students an overview on Drug Delivery Systems in terms of Formulation, Manufacture, and Quality Control. Students will learn Oral, Topical, Parenteral, Transdermal and other Modified-release Drug Delivery Systems. Details are given with respect to advanced technologies such as 3D Printing for Personalized Medicine and Nanoparticle Delivery Systems for Protein and Vaccine Therapeutics. The course also covers basic Pharmacokinetics and Pharmacodynamics considerations, Pharmaceutical Compounding and Calculations.

### **MPS 505 Graduate Seminar (1cr)**

This course is designed to review and discuss the most relevant and recent articles in experimental, translational and clinical research of COVID-19. An emphasis will be placed on relevant models in areas of disease history, epidemiology, virology, molecular mechanism of disease progression, clinical picture of the disease, diagnostic markers, immunology, and

preventive/therapeutic intervention. This course would be helpful in developing the student's skills in critical thinking and evaluation of scientific literature, testing hypothesis, proper experimental design and methodology. Students will be required to actively participate in individual and/or group presentations.

## **MPS Curriculum**

### **Example of Schedule for Capstone Paper Track**

### **Example of Schedule for Thesis Track**

## **TOTAL CREDITS REQUIRED FOR MASTER OF PHARMACEUTICAL SCIENCES DEGREE = 31**

### **COLLEGE OF GRADUATE STUDIES**

CGS Administration

**Catherine Yang** PhD, Tufts University

Dean; Vice President of Academic Affairs, Associate Dean of Medical Education

### **MASTER OF PHARMACEUTICAL SCIENCES**

#### **MPS Faculty by Last Name**

**For a current listing of faculty, titles and contact information, please visit:**

<http://pharmasciences.cnsu.edu/faculty>

**El-Shamy, Ahmed** Associate Professor

#### **Director, MPS**

Associate Assistant-Professor, MPS PhD, Kobe University, Japan

**Wang, Hongbin** Associate - Professor, MPS PhD, University of Pennsylvania  
MS, Second Military Medical University, Shanghai, China  
PharmBS, Second Military University, Shanghai, China

**Ali, Hazem**, Adjunct Assistant Professor, MPS

PhD, University of Louisiana at Monroe, Monroe, LA B. Pharmacy, Mansoura University, Egypt

**Farahat, Abdelbasset** Assistant Professor, MPS PhD, Georgia State University, Atlanta, GA  
MS, Mansoura University Egypt  
PharmBS, Mansoura University Egypt

**Mohieldin Ashraf M**, Assistant Professor,  
MPS, PhD University of Toledo, OH

**Mohamed, Eslam** Assistant Professor, MPS  
PhD, Medical College of Georgia, Augusta, GA  
PharmBS, Cairo University

**Yang, Catherine** Professor of Molecular Pharmacology and Clinical Biochemistry  
PhD, Tufts University

## **Master of Healthcare Administration**

### **MHA Faculty by Last Name**

**For a current listing of faculty, titles and contact information, please visit:**

<https://www.mha.cnsu.edu/faculty>

**Sheldon, Melissa** Director, MHA  
MBA, Magna Cum Laude California State University, Sacramento

**Sun, Yang** Associate Dean for Academic Affairs and  
Assessment, Professor  
Ph.D Arizona State University

**Bienati, Larry** Associate Professor MBA, California State University Ph.D Golden Gate  
University

**Donde, Rajiv** Adjunct Professor  
MBA, Case Western Reserve University

**Hu, Feiran** MHA Programs Admissions and Academic Advisor  
MBA, California State University, Sacramento

**Heinert, Maya** Adjunct Professor  
MD, Wayne State University School of Medicine  
MBA, California State University, Sacramento

**Mikhailitchenko, Andrey** Adjunct Professor DBA in Marketing, Cleveland State University MBA in  
Marketing, Syracuse University Stanislaus, Selvi Adjunct Professor  
JD, Lincoln Law School  
LLM, McGeorge School of Law

**Varshney, Sanjay** Adjunct Professor  
Chartered Financial Analyst (CFA) (Charter in 1997) PhD, Finance Louisiana State University  
MA, Economics University of Cincinnati  
BCom, Accounting and Financial Management Bombay  
University

# MASTER OF HEALTHCARE ADMINISTRATION

## **Mission and Vision**

Mission: To advance the art and science of healthcare management

Vision: To provide innovative graduate education in healthcare management and delivery to meet the complexities and challenges in the evolution of healthcare.

## **Accreditation**

Senior Colleges and Universities of the Western

Association of Schools and Colleges (WASC).

California Northstate University is accredited by the

Accrediting Commission for Senior Colleges and

Universities of the Western Association of Schools and Colleges (WASC), 985 Atlantic Avenue, #100,

Alameda, CA 94501, 510.748.9001

## **Program Overview**

Optimize your future by investing in yourself at CNU, where we strive to deliver the best graduate healthcare management education in the field. The Bureau of Labor Statistics predicts that over 4 million healthcare jobs will be added through 2026, making it the fastest growing professional field. Healthcare is currently 18% of the U.S. gross domestic product (GDP).

Our Master of Healthcare Administration (MHA) degree complements the University's mission to prepare early to mid-careerists with the industry knowledge and business administration skills required to pursue potential leadership positions in healthcare management such as: health service administrators, managers, analysts, entrepreneurs, and eventually, executive leadership. We cultivate entrepreneurial mindsets geared towards innovating and engineering healthcare systems of the future while corresponding to the societal need of producing ethical and responsible leaders. Through this transformational change, leaders will deliver improved healthcare delivery systems through operational excellence.

Foundational concepts and competencies prescribed by the Healthcare Leadership Alliance (HLA) have been incorporated into the curriculum. Our pedagogy includes the Interprofessional Education framework that will yield collaborative leaders who aim to communicate empathetically among their teams. Students include aspiring medical doctors, nurses, psychologists, pharmacists, administrators, marketers, operation managers, data analysts, accountants, health insurance managers, IT managers and engineers, start-up owners and anyone who seeks to complement their field of studies in healthcare. The Interprofessional

Education pedagogy has been touted by the World Health Organization as “a necessary step” in preparing a collaborative practice - ready health workforce.

### **Program Objectives**

- Summarize and evaluate foundational business functions and management theories.
- Evaluate healthcare delivery models and stakeholders.
- Explore and evaluate the role of leadership and ethics in healthcare management.
- Incorporate critical thinking and optimal decision-making skills to produce an integrated analysis that enhances healthcare management.
- Evaluate the role of healthcare delivery as it relates to individual and organizational differences.

### **MHA at CNU: Strengths & Unique Features**

- 39 credit units in two academic years (less than 24 months)
- Three unique concentrations: 1) Leadership, 2) Analytics and Intelligence (A.I.), and 3) Service Excellence
- Integrated core curriculum complemented by a broad spectrum of well-designed electives.
- We serve as the West Coast educational catalyst to deliver cutting-edge and proven technologies in analytics and intelligence (A.I.) that will optimize healthcare delivery systems.
- Classes are delivered in a HyFlex format (hybrid or distance education) with one course at a time over 5-week blocks.
- Classes meet Friday evenings from 5-8pm and Saturdays from 8am to 2pm with every 2nd and 4th week online.
- Our HyFlex model offers flexibility to working professionals as well as students taking other degree programs in parallel.
- We offer cohort-based experiential education with small class sizes centered around focused student learning experiences. The cohort includes students from various backgrounds in healthcare or those aspiring to enter the field. The cohort environment fosters collaborate learning, camaraderie and life-long bonds
- The program blends world-class business and healthcare faculty from the Northern California region.
- College of Graduate Studies
- Courses incorporate industry leaders and professionals to integrate real-world experience and case studies.
- Instructors are accessible and serve as mentors during all stages of a student’s academic journey.
- Proximity and ties to other Colleges on campus, with transfer credit opportunities
- Established collaborations with regional healthcare organizations providing an array of internship, residency, and cooperative educational opportunities for the capstone project.
- Research-based thesis-track option for the A.I. concentration.
- Located in the Greater Sacramento Metropolitan Area. Northern California is the hub for many healthcare and hospital systems as well as information technology and biotechnology companies.

## **Curriculum**

39 credit units in total that include 21 units of core courses and 6 units of capstone. Three concentrations are available: 1) Leadership (12 units), 2) Analytics and Intelligence (A.I.) (12 units), and 3) Service Excellence (12 units)

### **Core Curriculum**

Core Courses (21 credit units)

- MHA 501 Introduction to healthcare systems, policies, markets, economics
- MHA 502 Legal, ethical, and regulatory principles in healthcare
- MHA 503 Data, information and technology systems management in healthcare
- MHA 504 Operations and supply chain management in healthcare
- MHA 505 Accounting and financial management in healthcare
- MHA 506 Organizations and human capital management in healthcare
- MHA 507 Healthcare marketing and communications strategies

### **Capstone 1 (after core courses; 3 credit units)**

- MHA 600 Practicum/service-learning activity

### **Capstone 2 (final capstone after all courses; 3 credit units)**

- MHA 601 Thesis or
- MHA 602 Residency/service-learning activity
- Leadership Concentration

### **Leadership Concentration**

#### **Required Courses (6 credit units)**

- MHA 511 Strategic analysis and planning for healthcare
- MHA 512 Change management and leadership

#### **Elective Courses (6 credit units depending on cohort choice)**

- MHA 521 Executive decision making for healthcare
- MHA 522 Global Procurement and supply management
- MHA 523 Healthcare in the global marketplace
- MHA 524 Public health, compliance, and risk management
- MHA 525 Innovation, entrepreneurship and new venture financing

### **Analytics and Intelligence (A.I.) Concentration**

#### **Required Courses (6 credit units)**

- MHA 531 Data analytics and predictive models for business intelligence
- MHA 532 Optimization and prescriptive decision models

#### **Elective Courses (6 credit units depending on cohort choice)**

- MHA 533 Systems simulation and design for healthcare delivery
- MHA 541 Introduction to analytics programming
- MHA 542 Machine learning and artificial intelligence for healthcare
- MHA 534 Health Record Management and cybersecurity
- MHA 552 Lean Six Sigma and project management for healthcare
- MHA 525 Innovation, entrepreneurship and new venture financing

### **Service Excellence Concentration**

Required Courses (6 credit units)

- MHA 551 Healthcare delivery and service management
- MHA 552 Lean Six Sigma and project management for healthcare

**Elective Courses (6 credit units depending on cohort choice)**

- MHA 533 Systems simulation and design for healthcare delivery
- MHA 522 Global Procurement and supply management
- MHA 531 Data analytics and predictive models for business intelligence
- MHA 532 Optimization and prescriptive decision models
- MHA 534 Health Record Management and cybersecurity

### **Program Learning Outcomes**

1.0 Summarize foundational business functions and management theories (Domain 1: Business skills and knowledge)

1.1 Organize and manage the human, financial and physical resources of the organization to achieve input, buy-in and optimal performance.

1.2 Determine the efficacy of interrelationships among access, quality, technology, cost, resource allocation, decisions, accountability, and community.

1.3 Use data to inform decision making in regard to documentation, analysis and design of business and/or clinical processes.

1.4 Assess projects related to performance, structure and outcomes of health services.

2.0 Evaluate healthcare delivery models and stakeholders. (Domain 2: Knowledge of the Healthcare environment)

2.1 Explain the roles, responsibilities, structures and influence governing bodies hold in health care organizations.

2.2 Identify circumstances causing major changes and reform to the structure of U.S. health care delivery systems and explain the impact on the delivery of health services to populations at a local, regional, and national level.

2.3 Analyze health-related legal principles including standards, regulations and risk management specific to the funding and payment mechanisms of the healthcare systems as well as private insurance.

2.4 Identify and explain the major factors in health status to health care professionals and the various roles and expectations of stakeholders.

3.0 Explore and evaluate the role of leadership and ethics in Healthcare Management (Domain 3: Leadership)

3.1 Demonstrate reflective leadership and an understanding that all leadership begins from within. Exhibit how to hold self and others accountable for personal and organizational goal attainment. Determine how to establish an organizational climate that encourages teamwork that values and supports diversity.

3.2 Apply evidence-based decision-making techniques to health care questions. Be able to assess the potential impacts and consequences of decisions in a broad variety of situations including internal and external. Synthesize and integrate divergent viewpoints for the good of the organization. Demonstrate how to promote and manage change.

3.3 Cultivates a climate of mutual respect and shared values while applying ethical business principles and exhibiting ethical behaviors.

4.0 Incorporate critical thinking and optimal decision-making skills to produce an integrated analysis that enhances healthcare management. (DOMAIN 4: Communication and Relationship Management)

4.1 Builds collaborative relationship and negotiation skills with sensitivity to diverse cultures while constructively supporting conflict resolution. Recognize and use non-verbal forms of communication.

4.2 Demonstrate effective interpersonal relations by practicing value-shared decision making to build trust among team; including: peers, staff, other disciplines, physicians, vendors, community leaders, legislators, nursing, and other educational programs.

4.3 Prepare business communications and demonstrate effective oral communication and

4.4 Communicate a shared organizational mission, vision, and priorities. Accomplish objectives through persuasion appropriate to each stakeholder/audience.

5.0 Evaluate the role of healthcare delivery as it relates to individual and organizational differences. (DOMAIN: 5 Professionalism)

5.1 Professional and community contribution: Lifelong learning through professional societies and memberships to foster professional contributions to the field.

5.2 Working in teams: Demonstrate effective interpersonal relations by practicing value-shared decision making to build trust among team; including: peers, staff, other disciplines, physicians, vendors, community leaders, legislators, nursing, and other educational programs.

5.3 Regulations, values and ethics: Promotes a climate of mutual respect and shared values. Adheres to legal and regulatory standards while upholding ethical business principles. Applying to Master of Healthcare Administration Requirements for Admission to the Master of Healthcare Administration Program Critical Date:



## **Applying to Master of Healthcare Administration**

Requirements for Admission to the Master of Healthcare Administration Program Critical Date:

The deadline to apply for Fall 2024 enrollment is July 12, 2024, while the Spring 2025 enrollment deadline is January 31, 2025.

All supporting documents must be received prior to the deadline and official transcripts must be received within 30 days after the deadline. The online application must be completed fully.

Bachelor's Degree: accredited, four-year equivalent program.

- a. Minimum requirement: GPA 2.5 Official GRE/GMAT or waiver.
- b. A waiver can be granted for those with demonstrated and relevant work experience (10 years+) or for a relevant Master's degree, Doctorate, or Doctoral program enrollment.
- c. A waiver can be granted for a satisfactory LSAT/MCAT/DAT/OAT/PCAT score within 5 years.
- d. Other special conditions approved by the Associate Dean for Academic Affairs Official TOEFL/IELTS scores for international applicants.
- e. TOEFL 80-Internet based b. IELTS 6.5 minimum

\*International applicants are exempt only if you are a native English speaker or have completed at least two years as a full-time student at a college or university where English is the primary language of instruction at the time in which you apply.

### **Requirements and Materials for Applying to Master of Healthcare Administration:**

1. Application Fee: \$115. Applicants who demonstrate financial need can request an application fee waiver.
2. Personal Statement: Please provide a personal statement describing your professional goals as well as the characteristics you possess that make you a qualified candidate for entry into the Master of Healthcare Administration Program.
3. Official Transcripts: Your academic records from each college-level institution you have attended are required and must be directly submitted from your institution or educational credential evaluators. Canadian applicants and all other foreign applicants must submit a foreign coursework evaluation; CNU accepts evaluations from ECE, IERF, WES, and Education Perspectives.
4. Official GRE General or GMAT Test scores, or an approved Waiver Request
5. Official TOEFL or IELTS scores for international applicants
6. A minimum of Two Letters of Recommendation: At least one of the two letters must be submitted from faculty members who are knowledgeable about your academic capabilities and interests. The letter can also come from your direct supervisor in a professional setting. You will be asked to list the names and contact information for those references as well. They will each receive instructions for uploading their letter of recommendation.
7. An official interview conducted by the faculty admissions committee. The interview is typically scheduled shortly after the application submission.

## **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 acknowledges 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](http://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 and Refund**

You have the right to cancel the Student Enrollment Agreement until 11:59 PM on the orientation day. 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.

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.

## **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 the 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.

## Student Tuition Recovery Fund (STRF) Disclosures

Information on the Student Tuition Recovery Fund disclosures (STRF) can be found on page 220 of the General Catalog.

### Tuition & Fees

#### Cost of Attendance and Tuition and Fees for Incoming Students: SPRING 2024 STARTS

The cost of attendance is an estimate of expected educational expenses for the period of enrollment.

These educational expenses are calculated as described below and apply to all students enrolled in the

Master of Healthcare Administration Degree program at California Northstate University:

#### Master of Healthcare Administration Degree Program - Tuition & Fees for Academic Year: 2024-2026

Tuition & Fees	Year 1 - MHA1	Year 2 - MHA2
Tuition	\$28,815	\$30,256
Student Activity Fee	\$320	\$320
Technology Fee	\$75	\$75
Enrollment Fee (nonrefundable)	\$200	\$0
Service-Learning Activity (Optional International)	\$0	\$3,500
Orientation Fee	\$75	\$0
Student Tuition Recovery Fund Fee <sup>4</sup>	\$156	\$0
Graduation Fees	\$0	\$350
<b>Total Estimated Tuition &amp; Fees per Year</b>	<b>\$29,641</b>	<b>\$34,501</b>

**Total cost for the 2-year Master of Healthcare Administration program \$64,142.**

Other Educational Related Costs <sup>1</sup>	Year 1 - MHA1	Year 2 - MHA2
Health Insurance Premium <sup>2</sup>	\$3,529	\$3,529
Books and Supplies	\$2,500	\$2,500
Room and Board (based on 12 months)	\$28,152	\$28,152
Transportation (based on 12 months)	\$5,362	\$5,362
<b>Total Estimated Cost per Year<sup>3</sup></b>	<b>\$69,184</b>	<b>\$74,044</b>

<sup>1</sup> Estimated costs a student may incur as part of participation in the applicable year of the Master program, whether or not paid directly to CNU.

<sup>2</sup> Optional, estimated, and will increase based on number of insured members.

<sup>3</sup> Includes tuition, fees, and other estimated educationally related costs.

<sup>4</sup> The STRF fee was re-instated to \$2.50 per \$1,000 of institutional charges on April 1, 2022.

Service-Learning Activity will be deducted from tuition and fees if student opts out.

(Note: MHA1 - Year 1 in the MHA program; MHA2 - Year 2 in the MHA Program)  
Summer courses are included in Fall billing.

#### Cost of Attendance and Tuition and Fees for Incoming Students: FALL 2024 STARTS

The cost of attendance is an estimate of expected educational expenses for the period of enrollment.

These educational expenses are calculated as described below and apply to all students enrolled in the

Master of Healthcare Administration Degree program at California Northstate University:

**Master of Healthcare Administration Degree Program - Tuition & Fees for Academic Year: 2024-2026**

Tuition & Fees	Year 1 - MHA1	Year 2 - MHA2
Tuition	\$29,518	\$30,994
Student Activity Fee	\$320	\$320
Technology Fee	\$75	\$75
Enrollment Fee (nonrefundable)	\$200	\$0
Service-Learning Activity (Optional International)	\$0	\$3,500
Orientation Fee	\$75	\$0
Student Tuition Recovery Fund Fee <sup>4</sup>	\$0	\$0
Graduation Fees	\$0	\$350
<b>MHA Total Estimated Tuition &amp; Fees per Year</b>	<b>\$30,188</b>	<b>\$35,239</b>

**Total cost for the 2-year Master of Healthcare Administration program \$65,427.**

Other Educational Related Costs <sup>1</sup>	Year 1 - MHA1	Year 2 - MHA2
Health Insurance Premium <sup>2</sup>	\$3,529	\$3,529
Books and Supplies	\$2,500	\$2,500
Room and Board (based on 12 months)	\$28,152	\$28,152
Transportation (based on 12 months)	\$5,362	\$5,362
<b>MHA Total Estimated Cost per Year<sup>3</sup></b>	<b>\$69,731</b>	<b>\$74,782</b>

<sup>1</sup> Estimated costs a student may incur as part of participation in the applicable year of the Master program, whether or not paid directly to CNU.

<sup>2</sup> Optional, estimated, and will increase based on number of insured members.

<sup>3</sup> Includes tuition, fees, and other estimated educationally related costs.

<sup>4</sup> Effective April 1, 2024, the STRF assessment rate will change from two dollars and fifty cents (\$2.50) per one thousand dollars (\$1,000) of institutional charges to zero dollar (\$0.00) per one thousand dollars (\$1,000) of institutional charges.

Service Learning Activity will be deducted from tuition and fees if student opts out.

(Note: MHA1 - Year 1 in the MHA program; MHA2 - Year 2 in the MHA Program)

Summer courses are included in Fall billing.

## Cost of Attendance and Tuition and Fees for Continuing Students

The cost of attendance is an estimate of expected educational expenses for the period of enrollment.

These educational expenses are calculated as described below and apply to all students enrolled in the

Master of Healthcare Administration Degree program at California Northstate University:

### Master of Healthcare Administration Degree Program - Tuition & Fees for Academic Year: 2024-2025

Tuition & Fees	Year 2 - MHA2 (Spring 2023 Starts)	Year 2 - MHA2 (Fall 2023 Starts)
Tuition	\$28,815	\$29,518
Student Activity Fee	\$320	\$320
Technology Fee	\$75	\$75
Enrollment Fee (nonrefundable)	\$0	\$0
Service-Learning Activity (Optional International)	\$3,300	\$3,300
Orientation Fee	\$0	\$0
Student Tuition Recovery Fund Fee <sup>4</sup>	\$0	\$0
Graduation Fees	\$350	\$350
<b>Total Estimated Tuition &amp; Fees per Year</b>	<b>\$32,860</b>	<b>\$33,563</b>

Other Educational Related Costs <sup>1</sup>	Year 1 - MHA1 (Spring 2023 Starts)	Year 2 - MHA2 (Fall 2023 Starts)
Health Insurance Premium <sup>2</sup>	\$3,529	\$3,529
Books and Supplies	\$2,500	\$2,500
Room and Board (based on 12 months)	\$28,152	\$28,152
Transportation (based on 12 months)	\$5,362	\$5,362
<b>Total Estimated Cost per Year<sup>3</sup></b>	<b>\$72,403</b>	<b>\$73,106</b>

<sup>1</sup> Estimated costs a student may incur as part of participation in the applicable year of the Master program, whether or not paid directly to CNU.

<sup>2</sup> Optional, estimated, and will increase based on number of insured members.

<sup>3</sup> Includes tuition, fees, and other estimated educationally related costs.

<sup>4</sup> Effective April 1, 2024, the STRF assessment rate will change from two dollars and fifty cents (\$2.50) per one thousand dollars (\$1,000) of institutional charges to zero dollar (\$0.00) per one thousand dollars (\$1,000) of institutional charges.

Service-Learning Activity will be deducted from tuition and fees if a student opts out.

(Note: MHA1 - Year 1 in the MHA program; MHA2 - Year 2 in the MHA Program)

Summer courses are included in Fall billing.

## General Policies

### Orientation & Registration

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 proof of medical insurance coverage and any other institutional requirements. Students may enroll in the Student Health Insurance Plan to satisfy the insurance requirement.

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:

2910 Prospect Park Dr, Rancho Cordova, CA 95670.

2920 Prospect Park Dr, Rancho Cordova, CA 95670.

Catalog, School Performance Fact Sheet, and Website

Before signing the Student Enrollment Agreement, students are strongly encouraged to visit the College website at <http://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.

By signing the Enrollment Agreement, the student acknowledges that the catalog, disclosures, and information located on the website have been made available to the student to read and review.

## **Instruction/Course Delivery**

All courses for MHA, with the exception of capstone courses, are hybrid with 60% face-to-face teaching and 40% distant learning or 100% online (synchronous). All courses are taught in English and English language services are not provided.

## **Description of Facilities**

Information on research laboratories and facilities utilized by California Northstate University in conjunction with the delivery of instruction for all CNU Colleges, can be located on page 229 of the General Catalog.

## **Academic Policies and Procedures**

### Academic Calendar

The academic calendar consists of two semesters lasting approximately 15 weeks long and one summer term lasting approximately 10 weeks. MHA courses are delivered one at a time in 5-week blocks. A student can take approximately three MHA courses in a Fall or Spring semester, and two in the summer, and is expected to complete the degree program in approximately five terms in two academic years.

## **Credit Hour Policy**

Three (3) units of credit is assigned 45 contact hours and 90 hours of out-of-class student work. For one (1) unit of credit assigned per hour minimum of two (2) hours of out-of- class student work (homework).

Courses are delivered in 5-week blocks with 9 hours of instruction per week and 18 hours of out-of-class student work (homework) expected.

<b>Code</b>	<b>Course Type</b>	<b>Code</b>	<b>Course Type</b>
AL	Active Learning Course	LEC	Lecture Course
		SEM	Seminar



## Grading

A letter grade equal to or greater than C is considered satisfactory performance (passing) for completion of a course. Students must maintain a minimum cumulative grade point average (GPA) of 3.0. The breakdown for assignment of letter grades and grade points for each letter grade are as follows:

Grade	Definition	GPA Unit
A	90.00-100%	4.00
B	80.00-89.99%	3.00
C	70.00-79.99%	2.00
D	60.00-69.99%	1.00
F	<60%	0.00
I	Incomplete	Not in GPA
S	Satisfactory	Not in GPA
U	Unsatisfactory	Not in GPA
W	Withdrawal	Not in GPA

## 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.

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 term.

### Incomplete or Withdrawal from a Course

During a course, 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. The

general requirement for receiving an Incomplete is that the student has completed 70% of the course's coursework with a satisfactory (70%) performance.

All missed assignments and exams must normally be completed within 10 business days after the end of the course 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.

## **Grade Appeals Procedure**

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 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 Assistant Dean who renders a decision in writing within ten (10) business days of receipt of the formal appeal. (If the course Coordinator is the Assistant Dean, then the student may appeal the decision directly to the Vice President of Academic Affairs. The student has two (2) business days to submit an appeal in writing to the Vice President of Academic Affairs. The Vice President of Academic Affairs will render a decision in writing within ten (10) business days of receipt of the formal appeal).

If the Assistant Dean cannot resolve the appeal, the student has two (2) business days to submit an appeal in writing to the Vice President of Academic Affairs. The Committee will make a 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 Vice President of Academic Affairs for final approval. The form must then be submitted to the Registrar so that the grade can be changed on the transcript. A record of the final decision concerning the appeal will be kept on file in the Vice President of Academic Affairs office.

## **Academic Progression Policy**

The Master of Healthcare Administration (MHA) at California Northstate University has a rigorous academic progression policy to ensure students' progression through the curriculum in a timely manner.

The purpose of the academic progression policy is to ensure students in the MHA program reach and maintain a high standard of course learning and successfully complete course credits and thesis or capstone paper within the required time frame.

Students in the MHA program must pass all courses each semester with at least a grade of C and maintain a minimum grade point average (GPA) of 3.0. A grade of D or below in a course indicates a lack of understanding of the fundamental knowledge of the course necessary for progression.

Students struggling with academic courses must complete the MHA program within 3 years (2-year program) from the time they register and attend their first core course if insufficient knowledge has been identified and remediated.

### **Remediation**

Remediation is provided to students who earn a letter grade lower than C in any course in the MHA curriculum. The course coordinator/instructors determine the format of remediation examination that covers the course material presented throughout the course. Preparation of the remediation exam is the sole responsibility of the student. A grade of C to this course will be reported to the Registrar if the remediation examination was satisfactorily completed.

### **Academic Probation**

If a student fails a course or remediation is taking place for three or more courses, the student will be automatically placed on academic probation for a three- year plan (2-year program) from the time they register and attend their first core course. An academic plan for probation must be documented and approved by the Dean of the College of Graduate Studies.

### **Dismissal**

A student may be dismissed from the MHA program if any of the following conditions occur 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 Student Handbook

- c. Failure to complete the degree requirements in three (two-year program) consecutive academic years from the date of the first day the student begins the program.

## **Appeal for Dismissal**

Students dismissed from the MHA program may appeal the decision in writing within thirty 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 the receipt of the formal written appeal. The Dean's decision is final.

## **Degree Requirements**

The Master in Healthcare Administration degree is a two year (21-24 months) program. All requirements must be fulfilled within a period of two academic years following initial registration, although course credit is not nullified until three years after completion of a course. Any student who has not achieved candidacy by the end of their second year will be reviewed by the Thesis/Capstone Committee for placement on academic probation, regardless of grade point average, and recommendations for progress will be established.

Degree requirements for the Thesis-based track and the Capstone track are as follows:

Thesis-based Track:

To graduate from the MHA program, students in this track must earn a minimum of 39 credits. In addition to the course requirements, students must pass a proposal examination and complete a thesis.

Capstone Track:

Students in this track must pass a minimum of 39 credits along with successfully completing a written proposal examination, and a capstone report paper in lieu of a thesis.

## **Attendance Policy**

The MHA program will follow University guidelines in attendance policy, which requires mandatory attendance for all students. Specifically, students are expected to attend and participate in all classes and complete all exams and assessments as scheduled (together defined as "coursework").

However, occasionally an absence from coursework will be unavoidable. The policy described below delineates the circumstances when an absence will be considered excused along with expectations for timely communication with the Course Coordinator and makeup of missed coursework.

### **A. Approval of Absence**

Students should seek approval for an absence from the course coordinator well in advance of the absence, if possible, by completing an Excused Absence Request Form. In the case of emergency absence, students should complete and submit the Excused Absence Request Form within 3 business days of returning to campus after the absence. Regardless of whether an absence is excused or unexcused, students are expected to demonstrate professionalism and to follow procedure when requesting an absence.

**B. Duration of Absence** A student may request no more than three academic days of excused absences per semester. Absences exceeding five academic days per semester may require a student to request a Leave of Absence or a Withdrawal. Students must contact the Office of Academic Affairs (OAA) if any one absence period exceeds five days to discuss these options.

### **C. Type of Excused Absence**

A student may request an excused absence, from the course coordinator, only for reasons listed below:

- Medical (self or immediate family)
- Military duty
- Immigration & Naturalization
- Jury duty
- Legal
- Bereavement (first degree relative)
- Involvement in traffic accident documented by law enforcement report
- Professional Leave – conferences, invited presentations/posters, competitions, (requires verification of academic standing).

### **D. Makeup Allowances**

Students are responsible for contacting the course coordinator to arrange makeup of coursework, otherwise they will receive a zero grade. A student seeking an excused absence should complete the Excused Absence Request Form and seek the Course Coordinator's signature for each course the student was absent within three business days upon return to courses or campus. The form must then be given to the Dean of Academic Affairs, who will approve or not the absence request. The OAA will notify the student and course coordinator of the outcome of the absence request.

If an absence is excused, students will be allowed the option to make up missed coursework, rotations, or missed assessments. The nature and type of makeup, makeup time, date, format, duration, and grading is at the sole discretion of the Course Coordinator, but in general Coordinators will draw the following distinction between “high” and “low” stakes assessments/coursework, and professional leave:

A student who is absent for a “high stakes” exam or other such activity considered high stakes, provided the absence has been excused, will be required and allowed to make up the work.

If a student is absent for a “low stakes” assessment the Course Coordinator may choose to drop the missed coursework from the gradebook or provide a makeup opportunity.

A student requesting an absence to attend a professional meeting must demonstrate they are in good academic standing. Requests for professional leave must be submitted at least 10 business days in advance of the professional conference attendance. If attendance coincides with a high stakes exam it is highly likely that the absence will be denied.

## **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 Academic Official for Academic Affairs. If a student is requesting a leave of absence, the 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 the 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.

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.

## **Assisting in Research and Teaching**

Under the recommendation of faculty members and the advisory committee, research assistantships and teaching assistantships that cover tuition and other expenses are provided to outstanding graduate students with the final approval from the Dean.

## **MHA Thesis Advisory Committee**

This committee, which is recommended by the MHA Program Director and approved by the Dean, shall consist of at least two faculty members. All members of the committee shall be members of the Graduate Program Faculty. The students Major Advisory (Thesis Mentor) typically serves as Chair of the committee.

## **Thesis Guidelines**

The thesis is a vital portion of the curriculum for graduate students choosing the thesis-based track. These students will conduct hands-on, original research mentored by faculty with experience in the relevant field. Students will select their research topics after consultation with their major advisors. This course will examine student capabilities in literature review, research design, research execution, result analysis & discussion, and written skills as required to produce a laudable thesis.

Thesis research can start as soon as the student completes MHA 601 and passes a proposal examination. Students will be evaluated each term, and their progress monitored closely by their thesis advisors. The components of this thesis evaluation include the following comprehensive elements: literature review; research design; research performance; Analytics; result presentation and discussion, and conclusion.

- Literature review: 5%
- Research design: 20%
- Research performance: 15%
- Analytics: 15%
- Result presentation: 10%
- Discussion: 5%
- Total quality: 20%
- Oral presentation: 10%

Final grades for the student thesis will be indicated as Satisfactory (S) or Unsatisfactory (U) without any computation of grade points for the course into the semester or cumulative grade point average (GPA). A Satisfactory score in this course is granted based on the evaluation results with 70% or above. Unsatisfactory for Research & Thesis will be indicated if the net result of evaluation components is less than 70% in two semesters. Extension to the 3rd year for students with “U” grade will be reviewed by the thesis committee and approved by the Dean of College of Graduate Studies. Only one year extension is allowed for students with “U”. For details, please refer to the Graduate Student Handbook.

## **Thesis Defense**

Defense of thesis is the final step for graduate students on the thesis-based track. This process tests the depth and breadth of knowledge in healthcare analytics and intelligence and will assess the overall understanding of theory and practice as they relate to the thesis. Students will be expected to justify their decisions in study design and interpretation of outcome. The advisory committee will make the recommendation based on the quality of thesis, answers to all questions, and other factors. The Dean of College of the Graduate upon the recommendation of committee.

## **Student Grievance Policy**

If a student wishes to file a grievance, they can submit a written complaint using the Complaint/Grievance form placed in a sealed envelope and delivered to the Vice President of Academic Affairs or submit an online Anonymous Report available on the CNU website. The Vice President of Academic 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. For complaints related to accreditation standards can be found on page 10 of the General Catalog.

**Student Services:** Information on Student Services can be located on page 223 of the General Catalog.



## **MHA Course Descriptions**

Core Courses :

### **MHA 501 Introduction to healthcare systems, policies, markets, economics (3 cr)**

An introductory course that focuses on the system of health and welfare. An integrated understanding of economic principles and healthcare practices sets the foundation for the professional development of healthcare leaders with the objective to lead improvements and transformational changes in healthcare organizations and systems. Topics include healthcare systems, accountable care, managed care, healthcare economics and insurance, policy changes and reform strategies, global markets and health supply chains, and the roles of healthcare stakeholders.

### **MHA 502 Legal, ethical, and regulatory principles in healthcare (3 cr)**

Explores and analyzes legal, regulatory, and ethical issues facing healthcare professionals. Topics include government regulations and laws for providers, the court system and healthcare decisions, patient rights and informed consent, information management and privacy, tax exemption, insurance and risk management, liability risk and prevention, licensure and accreditation, ethical and political dilemmas, as well as cutting-edge legal and ethical issues involved in research, intellectual property development and the use of emerging technologies.

### **MHA 503 Data, information and technology systems management in healthcare (3 cr)**

The CIO's perspective for driving digital transformation in healthcare. The ability to use data such as electronic health records, financial data, claims, and surveys - and cutting-edge analytics and technologies through the information technology system to improve quality and operational effectiveness and support strategic and managerial decisions is a differentiating factor for today's healthcare managers. Topics include the core information technology elements and management issues in healthcare delivery, strategic planning and innovation, data analytics for prediction, evaluation and decision support, regulation, governance, infrastructure, portfolio and contract management, as well as discussions on trending issues such as Internet of Things, big data, artificial intelligence, cloud computing, cybersecurity and blockchain.

### **MHA 504 Operations and supply chain management in healthcare (3 cr)**

Provides an integrated approach to designing, improving, and optimizing healthcare processes and supply chain systems to achieve competitive advantages: cost, quality, service, flexibility, adaptability, and sustainability, which support healthcare organizations' strategies of efficiency and service excellence. Topics include the operations research framework, resource and capacity planning, process analytics and throughput management, queueing and the impact of variability, procurement, inventory, and supply chain management, continuous quality improvement, and business model innovation.

### **MHA 505 Accounting and financial management in healthcare (3 cr)**

Learn to speak the language of a healthcare CFO for the effective development and allocation of financial resources to maximize value and outcomes. The goal is to develop a framework with methods and models for making sound financial decisions in healthcare organizations and systems. Topics include financial accounting, managerial accounting, and corporate finance.

### **MHA 506 Organizations and human capital management in healthcare (3 cr)**

Managing people and teams is essential to modern healthcare systems. This course explores how organizational theory methods, models and principles help healthcare organizations succeed. Topics include talent management in healthcare, retention improvement, compensation and job design, credentialing and professional growth, emotional intelligence, performance measurement, motivation and incentive structures, conflict and negotiation, leadership and communication, technology support, and decision-making.

### **MHA 507 Healthcare marketing and communications strategies (3 cr)**

The course is aimed at providing frameworks and tools for analyzing healthcare markets to address who to market to and how to market questions and developing strategies and marketing plans for successfully competing in the healthcare marketplace. Topics include marketing research, market segmentation, branding, pricing, promotion and advertising, patient behavior and relationship management, digital and social media marketing, fundraising, public relations, and corporate communications.

### **MHA 600 Practicum/service-learning activity (3 cr)**

This course and its successor, MHA601 or MHA602, are required for the MHA degree program. The purpose of these courses is to accomplish a capstone project or thesis in the field of Healthcare Management. The goal of this course is for students to gain first-hand experience in a fieldwork setting and complete a project or thesis proposal that serves as an entry point into their last course.

### **MHA601 Master's Thesis or MHA602 Residency/Service**

Learning Activity, in which they will complete the cumulating project.

### **MHA 601 Thesis (3 cr)**

This course or its equivalent, MHA 602, is required for the MHA degree program. The purpose of this course is to complete a capstone research project in the field of Healthcare Management with a focus on the applications of Analytics and Intelligence (A.I.) methods, culminating students' experiences in the MHA Program. Based upon the thesis proposal and thesis work completed under the supervision of the student's faculty advisor(s) and with the approval of the MHA faculty, students should be undertaking this course to complete their thesis writing and successfully defend their theses.

### **MHA 602 Residency/Service-Learning Activity (3 cr)**

This course or its equivalent, MHA 601, is required for the MHA degree program. The purpose of this course is to complete a capstone project in the field of Healthcare Management, culminating students' experiences in the MHA Program. Based upon the project proposal and project work completed under the supervision of the student's faculty advisor(s) and with the approval of the MHA faculty, students should be undertaking this course to complete their project report writing and successfully present their projects.

## **Elective Courses**

### **MHA 511 Strategic analysis and planning for healthcare (3 cr)**

From the viewpoint of a healthcare CEO, a senior executive, a board member, a public officer, or an entrepreneur, this course focuses on developing an integrated framework for formulating a strategic plan or a strategic decision through the exercise of identifying opportunities, evaluating alternatives,

redesigning systems, and fostering innovations in order to maximize value and optimize care quality and patient outcomes, employee satisfaction, as well as institutional efficiency, accountability, and sustainability through strategic thinking and leadership.

### **MHA 512 Change management and leadership (3 cr)**

Changing management and leadership have become essential skills for managers in the ever- changing healthcare industry. Transforming healthcare needs tremendous leadership. In these courses, students are introduced to the concepts and practice of leadership and complex change leadership issues in healthcare organizations. Behavior models and a 360-degree approach of leadership assessment are introduced through experiential activities that set the foundation for developing leadership action plans and managing transformational changes on a continuous basis.

### **MHA 521 Executive decision making for healthcare (3 cr)**

This course is designed to provide a framework that integrates quantitative and qualitative analyses for effective evidence- based, value-shared decision making in healthcare. Topics include decision styles of healthcare professionals, leaders and stakeholders, ethical judgment and behavior decision making, group and organizational decisions, multi-objective optimization and decision making under uncertainties, planning, implementation, and communication of decision making, and executive decision making with modern technologies such as data sciences and artificial intelligence.

### **MHA 522 Global Procurement and supply management (3 cr)**

Public health crises expose problems in the healthcare supply chain. This course provides an overview of sourcing strategies in the global marketplace that can potentially create value for all healthcare stakeholders. Topics include demand management, procurement and purchasing, insourcing, outsourcing and multi- sourcing, group purchasing, supplier selection and management, global logistics, inventory control, security and compliance, information infrastructure, knowledge management, and supply chain leadership.

### **MHA 523 Healthcare in the global marketplace (3 cr)**

Global healthcare is a \$10 trillion market that keeps growing and offers significant opportunities of investment, innovation and collaboration. This course provides a global perspective on various healthcare economics and delivery models in developed and developing countries, social and environmental issues, mental health, disease control, complementary medicine, nutrition, and other issues, and explores opportunities for proactively engaging in and capitalizing on the globalization of healthcare with cost reduction, patient and provider mobility, value-based collaboration, technology and care model innovation, and digital transformation.

### **MHA 524 Public health, compliance, and risk management (3 cr)**

Explores external risk factors such as social, cultural, behavioral, environmental and regulatory factors that affect public health and healthcare outcomes, as well as risk management strategies for patient care, emergency preparation, financial and personnel management, and medical research. Topics include regulatory review and assessment of safety and compliance risks, risk remediation, risk monitoring, risk auditing and reporting, risk management plans and implementation, and preparation for future policy changes.

### **MHA 525 Innovation, entrepreneurship, and new venture financing (3 cr)**

The entrepreneur's perspective on fostering market-driven product and service innovations and initiating new ventures. Students learn to serve as leaders with the knowledge and management skills to develop, scale and deliver breakthrough solutions to healthcare problems, and write a comprehensive business plan that include the new product or service and its technology innovation, mission and vision of the organization, value proposition, market analysis and marketing plan, pricing, financial analysis and projections, operations and human capital strategies, organizational design, supply chain design and fulfillment plans, compliance and ethical risks, and social and environmental impacts. Students are also prepared to make key decisions on valuating the company, raising money from individual investors, ventral capital or private equity, and structuring funding, employment contracts and exit strategies.

### **MHA 531 Data analytics and predictive models for business intelligence (3 cr)**

Examines real-world cases of how analytics and innovations have been used to support decisions and transform healthcare delivery. Through these cases, the following cutting-edge data analytics and prediction methods are covered under an optimization framework: data visualization, regression, machine learning, decision trees, classification, clustering, and text analysis, with applications in various areas, e.g., demand management, forecasting and inventory planning, dashboards and scorecards, cost control, care performance and quality improvement, cybersecurity, personalized medicine, disease prevention and control, safety, clinical research, etc.

### **MHA 532 Optimization and prescriptive decision models (3 cr)**

Introduces the frameworks, algorithms and applications of optimization modeling and operations research methods that can help healthcare professionals, managers and organizations prescribe optimal decisions and solutions. Real-world cases will be discussed with applications of linear programming, network flows, integer programming, nonlinear programming, heuristics, as well as stochastic methods, to motivate the use of optimization to support managerial decision making and problem solving and develop relevant skills for identifying opportunities and managing the implementation of optimization.

### **MHA 533 Systems simulation and design for healthcare delivery (3 cr)**

Introduces key elements of computer simulation of healthcare delivery systems that can provide healthcare managers and professionals a unique decision support tool to evaluate design alternatives in complex systems subject to uncertainty, without interrupting the actual process. Topics include simulation modeling with a software package, design of simulation experiments, input modeling, output analysis, cost analysis, verification and validation, systems comparison, optimization via simulation, and visualization and communication. Real-world examples include simulating patient flows at a major hospital for resource allocation and scheduling; disease spread for evaluating mitigation strategies; a pharmaceutical distribution center for congestion reduction; and a pharmaceutical market for evaluating promotion strategies among others.

### **MHA 534 Health Record Management and cybersecurity (3 cr)**

Explores the roadmap of design, implementation and optimization of electronic health record systems, as well as the prevention of cybercrimes which threaten patient privacy and safety, clinical outcomes and healthcare organizations' financial performances. Topics include budgeting, workflows, vendor selection, governance, communication and training, privacy and security compliances, strategies for improving cybersecurity, technology and infrastructure, systems optimization, and implications on medical decisions and outcomes.

### **MHA 541 Introduction to analytics programming (3 cr)**

Students will gain a fundamental understanding of a popular programming language with a simple syntax and a powerful set of libraries by creating a variety of scripts for analytics, database access, and web applications. Programming for analytics is becoming an integral part of many professions ranging from finance and insurance to education and healthcare, and an essential skill for many professionals including healthcare researchers, practitioners and managers. This course is suitable for students without any prior programming experience. Students learn to implement basic coding skills for practical, real-world applications, which can be built in a simple cloud-based environment and will be able to organize and analyze data efficiently by writing scripts.

### **MHA 542 Machine learning and artificial intelligence for healthcare (3 cr)**

Explores various ML/AI technologies, applications and opportunities for healthcare as more real-world applications emerge. This course is aimed to provide a fundamental understanding of the potential for AI innovations to transform healthcare through the efforts of leaders and professionals from both the healthcare and technology industries. Students will have the experiential learning opportunity to practice data organization, data aggregation and ML model building using case data or real data organization, data aggregation and ML model building using case data or real data with various healthcare applications. Prerequisite: MHA 541 or permission of the instructor.

### **MHA 551 Healthcare delivery and service management (3 cr)**

Explores value-based healthcare delivery with focuses on improved quality, lower cost and patient satisfaction for achieving service excellence as a competitive advantage. Topics include service systems and strategies for delivering customer value, communication, staffing and training, motivation and empowerment, financial incentives and risk sharing, accountable care organizations, impact of population health and public policies, informational technology infrastructure, quality and safety improvement, waste elimination, contract management, and systems integration.

### **MHA 552 Lean Six Sigma and project management for healthcare (3 cr)**

Lean Six Sigma combines the methodologies of six sigma quality management and the lean enterprise to enable fact-based management and change management and create an efficient organization that maximizes value. Students will practice business problem solving and process improvement through experiential learning activities, and experience a project-based approach for defining, measuring, analyzing, improving and controlling healthcare outcomes. In addition to Lean Six Sigma methodologies, topics also include the essentials of project management including initiating, planning, implementing, managing, and controlling a project, which drives innovations and changes in healthcare organizations.

## MHA 2024-2025 Academic Calendar

California Northstate University Master of Healthcare Administration Academic Calendar 2024 – 2025

### **SUMMER 2024** Summer Term: 05/31/2024 – 08/11/2024

Event	Start Date	End Date
<b>Instructional Period</b>	<b>06/01/2024 - Saturday</b>	<b>08/11/2024 - Saturday</b>
Cohort6, Cohort7: Summer Course 1	Started in Spring on 05/11	06/15/2024 - Saturday
Cohort5: Summer Course 1	Started in Spring on 05/18	06/29/2024 - Saturday
Cohort6: MHA600 (Capstone 1)	06/29/2024 - Saturday	08/10/2024 - Saturday
Cohort5: Summer Course 2	07/13/2024 - Saturday	08/10/2024 - Saturday
Cohort7: Summer Course 2	06/29/2024 - Saturday	08/03/2024 - Saturday

### **FALL 2024** Fall Semester: 08/09/2024 – 12/14/2024

Event	Start Date	End Date
Orientation (Cohort8 New Students)	08/09/2024 - Friday	08/10/2024 - Saturday
<b>Instructional Period</b>	<b>08/09/2024 - Friday</b>	<b>12/14/2024 - Saturday</b>
Cohort5: MHA601 or MHA602 (Capstone2)	08/16/2024 - Friday	11/15/2024 - Friday
Cohort6, Cohort7, Cohort8: Fall Course 1	08/17/2024 - Saturday	09/21/2024 - Saturday
Cohort6, Cohort7, Cohort8: Fall Course 2	09/28/2024 - Saturday	10/26/2024 - Saturday
Cohort2, Cohort3, Cohort4: Fall Course 3	11/02/2024 - Saturday	12/14/2024 - Saturday

### **SPRING 2025** Spring Semester: 01/02/2025 – 06/13/2025

Event	Start Date	End Date
Orientation (Cohort9 New Students)	02/14/2025 - Friday	
<b>Instructional Period</b>	<b>01/04/2025 - Saturday</b>	<b>02/15/2025 - Saturday</b>
Cohort6, Cohort8: Spring Course 1	01/04/2025 - Saturday	<b>06/14/2025 - Saturday</b>
Cohort7: MHA600 (Capstone1)	01/04/2025 - Saturday	02/08/2025 - Saturday
Cohort6: MHA601 or MHA602 (Capstone2)	01/04/2025 - Saturday	02/22/2025 - Saturday
Cohort8: Spring Course 2, Cohort9: Spring Course 1	02/22/2025 - Saturday	<b>05/17/2025 - Saturday</b>
Cohort7: Spring Course 1	02/22/2025 - Saturday	03/29/2025 - Saturday
Cohort8: Spring Course 3, Cohort9: Spring Course 2	03/01/2025 - Saturday	04/05/2025 - Saturday
Cohort7: Spring Course 2	04/05/2025 - Saturday	05/03/2025 - Saturday
Cohort8: Spring Course 4, Cohort9: Spring Course 3	04/12/2025 - Saturday	05/10/2025 - Saturday
Cohort7: Spring Course 3 (to end in Summer 2024)	05/10/2025 - Saturday	06/14/2025 - Saturday
	05/17/2025 - Saturday	06/28/2025 - Saturday

<b>HOLIDAYS</b>	<b>Date</b>	<b>Holiday</b>	<b>Date</b>
<b>Holiday</b>			
Memorial Day	05/27/2024 (weekend off)	Thanksgiving	11/28/2024 (weekend off)
Juneteenth	06/19/2024	Winter Break	12/20/2024 - 01/03/2025
Independence Day	07/04/2024 (weekend off)	Martin Luther King	01/20/2025 (weekend off)
Labor Day	09/02/2024 (weekend off)	President's Day	02/17/2025 (weekend off)
<i>Veteran's Day</i>	<i>11/11/2024 (weekend off)</i>	Spring Break (Tentative)	03/11/2024 - 03/16/2024

## **COLLEGE OF GRADUATE STUDIES**

CGS Administration

### **Catherine Yang, Ph.D., MD (h.c)**

Dean; Vice President of Academic Affairs & Research,  
PhD, Tufts University

### **MASTER OF SCIENCE in Pharmaceutical Sciences**

For a current listing of faculty, titles and contact information, please visit: <http://pharmasciences.cnsu.edu/faculty>

### **MPS Faculty by Last Name**

#### **El-Shamy, Ahmed**

Director, MPS Associate Professor  
PhD, Kobe University, Japan

#### **Ali, Hazem**

Adjunct Assistant Professor, MPS  
PhD, University of Louisiana at Monroe, Monroe, LA B. Pharmacy, Mansoura University, Egypt

#### **Farahat, Abdelbasset**

Assistant Professor,  
MPS PhD, Georgia State University, Atlanta, GA MS, Mansoura University Egypt PharmBS, Mansoura University  
Egypt

#### **Wang, Hongbin**

Associate Professor  
MPS PhD, University of Pennsylvania  
MS, Second Military Medical University, Shanghai, China  
PharmBS, Second Military University, Shanghai, China

#### **Yang, Catherine**

Professor of Molecular Pharmacology and Clinical Biochemistry  
PhD, Tufts University

#### **Mohamed, Eslam**

Assistant Professor of Medical Immunology  
PhD, Medical College of Georgia

#### **Mohieldin, Ashraf**

Assistant Professor of Molecular Biology and Biochemistry  
PhD, University of Toledo

## **MASTER OF HEALTH ADMINISTRATION**

For a current listing of faculty, titles and contact information, please visit:

<https://www.mha.cnsu.edu/faculty>

### **MHA Faculty by Last Name**

#### **Sheldon, Melissa**

Graduate Program Director, MHA  
MBA, California State University, Sacramento

#### **Bienati, Larry**

Associate Professor  
Ph.D Golden Gate University  
MBA, California State University

#### **Donde, Rajiv**

Adjunct Professor  
MBA, Case Western Reserve University  
MA, Economics Delhi School of Economics

#### **Heinert, Maya**

Adjunct Professor  
MD, Wayne State University School of Medicine  
MBA, California State University, Sacramento

#### **Mikhailitchenko, Andrey**

Adjunct Professor  
DBA, Cleveland State University

#### **Stanislaus, Selvi**

Adjunct Professor  
LLM, Mc George School of Law  
J.D., Lincoln Law School

#### **Sun, Yang**

Adjunct Professor  
PhD Arizona State University

#### **Varshney, Sanjay**

Adjunct Professor  
PhD Louisiana State University  
MA, Economics University of Cincinnati



# COLLEGE OF HEALTH SCIENCES

The California Northstate University College of Health Sciences (CNUCHS) offers two Bachelor of Science degree programs: the Bachelor of Science in Health Sciences (BSHS) and the Bachelor of Science in Nursing (BSN). The BSN program is approved by the Board of Registered Nursing (BRN) as required by the California Nursing Practice Act (Article 4, Sections 2785 to 2789).

In addition, CNUCHS offers pathways to other CNU colleges and programs, and a curriculum-designed to enhance the application portfolio for those who hold a BS degree and want to apply to health sciences professional schools (PHPB – Pre-Health Post-Baccalaureate).

## I. Mission, Vision, and Values

**Mission:** To advance the science and art of healthcare through education, service, research, personal wellness, and social accountability.

**Vision:** We envision to challenge undergraduate students with comprehensive academic programs that prepare 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, chemistry, mathematics, and physics that are intertwined with humanities and social sciences disciplines in such way that infuses in students' essential skills such as scientific literacy, problem solving, cultural sensitivity, communication, professionalism, and collaboration. 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 a well-crafted and aligned curriculum. 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, Respect, Social Accountability, Civic-Minded Commitment to Service, Respect for Human Diversity.

## II. Educational Philosophy

The philosophy across our academic programs encompasses three goals of competency and personal development, which students who pursue careers in biomedical science and healthcare must attain to be compassionate practitioners: Cognitive Ability and Intellectual Depth, Social and Communication Skills, and Community Engagement/Civic Responsibility.

To demonstrate Cognitive Ability and achieve Intellectual Depth in any discipline requires thoughtful study of the relevant body of knowledge under the guidance of faculty who are experts in the field and are well-prepared to mentor students. Learning is often a demanding and inscrutable process, but it emerges reliably from the interplay of thoughtful reading, attendance of inspiring lectures, meaningful laboratories, case studies, and practice problems, enriching classroom discussion, and rigorous assessment. There is no magic substitute for the hard work of studying; ultimately, every student must commit to personal engagement in the learning process using methods that work best for the individual. However, our faculty members use innovative teaching methods and technologies proven to be effective by pedagogical research and reach a variety of learning styles. The goal of every faculty is not merely to convey a list of facts, but to transform novice students into active scholars, and ultimately to prepare them for life-long learning. Every field of knowledge 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 best health science in the world loses its purpose unless it can benefit the people who need it. 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, verbal, and non-verbal communication to exchange technical information and establish rapport with different people. This process involves personal interaction between the healthcare professional and the patient. The patient must feel free to communicate concerns, and the care provider must respond effectively and with values beyond mastery of medical science: cultural humility, empathy, and compassion. Emotional and cultural understanding must accompany the delivery of care. These values emerge from the liberal arts, humanities, and social sciences in conjunction with physical and natural sciences. Courses in areas 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 become socially and intellectually well-rounded through the study of human culture and participation in extra-curricular activities.

People need to live in healthy communities to sustain their own good health; health professionals demonstrate their Civic Responsibility through Community Engagement. 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 contribution to the greater good through supervised projects that partner with advocacy groups and organizations for the benefit of the community at large.

### III. Learning Outcomes

The goals of our Bachelor of Science degree programs 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. Every course delivered at CNUCHS has specific learning outcomes measured by various forms of assessment. The assessment results are used to make changes that continually improve upon teaching and the curriculum.

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.

#### BSHS Program Learning Outcomes

Courses satisfying a Program Learning Outcome (PLO) must be completed at CNUCHS. While a transferred equivalent course cannot satisfy a PLO, it can count toward general elective degree credit. In some instances, a course may satisfy more than one PLO. In such instances, the credit from the course will only count once toward the degree. Pathway coursework requirements may require students to complete more than one course per Program Learning Outcome category.

Upon successful completion of the CNUCHS Bachelor of Science in Health Sciences, students will be able to demonstrate the following Program Learning Outcomes (PLOs):

**PLO1: Core Sciences and Mathematics.** Demonstrate knowledge of the core sciences and mathematics.

**PLO2: Arts and Humanities.** Demonstrate understanding of how the arts and humanities enhance health, well-being, and healthcare practice and delivery.

**PLO3: Critical and Systemic Thinking.** Demonstrate understanding of the collaborative nature of healthcare delivery.

**PLO4: Professional Interaction.** Communicate with respect, empathy, and cultural humility.

**PLO5: Social Accountability and Community Service.** Acts with social accountability and demonstrates commitment to community service.

The Program Learning Outcomes are fulfilled by completion of the following courses:

**PLO1: Core Sciences and Mathematics (3 cr)** BIOL310; BIOL310L; BIOL320; BIOL330; BIOL340; BIOL350; BIOL410; BIOL420; BIOL440; BIOL450; BIOL460; BIOL470; BIOL480; CHEM 310.

**PLO2: Arts and Humanities (3 cr)** ENGL310; ENGL320; HIST310; HUMN410; PHIL310; PHLT310.

**PLO3: Critical and Systemic Thinking (3 cr)** PSYC310; PSYC320; PSYC410; PSYC420; PSYC430; SOCL410; COLL 310; COLL 320.

**PLO4: Professional Interaction (3 cr)** COLL420 & COLL 430.

**PLO5: Social Accountability & Community Service (2 cr)** COLL 210 & COLL220

## BSN Program Learning Outcomes

**PLO 1: Knowledge of Nursing Practice.** Apply foundational knowledge from the natural, behavioral, and social sciences to inform critical thinking and clinical reasoning within the discipline and practice of nursing.

**PLO 2: Person-centered Care.** Demonstrate person-centered care that is ethically driven, and considers justice, equity, diversity, and inclusivity of individuals, families, and populations, especially the underserved.

**PLO 3: Population Health.** Integrate knowledge of health promotion, health prevention, health policy, and population health that applies advocacy strategies, collaborative activities, and healthcare to aggregate populations.

**PLO 4: Scholarship for Nursing Practice/Discipline.** Analyze and apply knowledge from nursing research and evidence-based practice to improve patient outcomes.

**PLO 5: Quality and Safety.** Apply knowledge of healthcare systems and principles of quality improvement to promote safety, optimize care, and reduce costs.

**PLO 6: Interprofessional Partnerships.** Engage with the healthcare team across professions in activities to improve quality of care and patient outcomes.

**PLO 7: Informatics and Healthcare Technologies.** Apply healthcare technology, information literacy, and knowledge of healthcare systems to improve patient and healthcare outcomes.

**PLO 8: Personal, Professional, and Leadership Development.** Integrate personal, professional, and leadership development activities to foster reflection and promote accountability, life-long learning, resilience, and professional identity formation.

The Program Learning Outcomes are fulfilled by completion of the following courses: HSCI410; HSCI430; NURS200; NURS210; NURS220; NURS220CL; NURS230; NURS230CL; NURS300; NURS310; NURS3210CL; NURS320; NURS320CL; NURS330; NURS340; NURS340CL; NURS350; NURS350CL; NURS360; NURS360CL; NURS370; NURS370CL; NURS420; NURS420CL; NURS490.

## 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 any CNUCHS Bachelor of Science program, students will be able to demonstrate the following general education learning outcomes:

**GELO1: Written Communication.** Demonstrate the ability to write coherent, supported and logically structured prose.

**GELO2: Oral Communication.** Listen and speak effectively in formal communication.

**GELO3: Information Literacy.** Identify and search relevant libraries of information and databases; synthesize information obtained from primary literature using properly referenced citations.

**GELO4: Critical Thinking.** Exercise reasoned judgement to assess technical information and make well-informed decisions using evidence-based approaches.

**GELO5: 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.

**GELO 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 CNUCHS 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 36 credit units of the minimum 120 required credits for graduation (30% of total degree credits). Each Bachelor of Science program may have different GE requirements to comply with all regulations.

The GE Learning Outcomes are fulfilled by completion of the following courses:

**GELO 1: Written Communication (6 cr):** ENGL 110 (3 cr); ENGL 110x (3 cr) ENG 120 (3 cr) ENGL 120x (3 cr)

**GELO 2: Oral Communication (3 cr):** COMM 110 (3 cr)

**GELO 3: Information Literacy (3 cr):** ENGL 120 or ENGL 120x (3 cr)

**GELO 4: Critical Thinking (3 cr):** ENGL 120 or ENGL 120x (3 cr)

**GELO 5: Scientific Inquiry and Quantitative Reasoning (12 cr):** BIOL 110/L (3 cr/1 cr) or BIOL130 (3cr) and CHEM 110/L (3 cr/1 cr) or CHEM130 (3cr); MATH110 (3cr) MATH 120 (3 cr); MATH 120x (3 cr); MATH 125 (3 cr), MATH 125x (3 cr) or MATH 130 (3 cr), MATH 130x (3cr)

**GELO 6: Liberal Arts (13 cr):**

- **Fine Arts (3 cr):** ARMU 110 (3 cr), ARMU 120 (3 cr), ARMU120x (3 cr), or approved Arts elective
- **Humanities (3 cr):** ANTH 210 (3 cr), ANTH210x (3 cr) or approved Humanities elective
- **Social Sciences (3 cr):** ECON 210 (3 cr), GOVT 110 (3 cr), PSYC 110 (3 cr), PSYC 110x (3 cr) SOCL 110 (3 cr), or approved Social Sciences elective
- **Social Accountability and Community Service (4 cr):** COLL 210 (2 cr) and COLL 220 (2 cr)

## IV. Academic Programs

California Northstate University College of Health Sciences (CNUCHS) offers two Bachelor of Science degree programs: the Bachelor of Science in Health Sciences (BSHS) and the Bachelor of Science in Nursing (BSN).

The Bachelor of Science in Nursing offers a baccalaureate pre-licensure program that prepares graduates to test for RN licensure.

CHS also offers a curriculum designed for those who already have a Bachelor's degree and want to meet prerequisites for professional schools in the health professions, as well as to improve their academic credentials and application portfolio to those schools: the Pre-Health Post-Baccalaureate curriculum (PHPB). The PHPB curriculum is not a program and does not lead to a diploma or a degree.

### A. Bachelor of Science in Health Sciences (BSHS)

The Bachelor of Science in Health Sciences (BSHS) program provides a solid foundation in the biological, physical, and social sciences, and the humanities, applied to the health sciences. Students may choose to graduate with no concentration or from four concentrations aligned with specific options for career paths in healthcare: Biotechnology, 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. 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, equipping them with a strong foundation to pursue professional and graduate education in the field.

### BSHS Concentrations

Students may declare a concentration the semester in which they petition to graduate. Up to two concentrations can appear on the transcript. Only one course may overlap between two concentrations. Concentrations will not be awarded after the degree has been conferred.

**Biotechnology:** This concentration is appropriate for students interested in the latest advances in technologies that contribute to understanding the molecular nature of living organisms. Coursework is designed to support content expertise and hands-on lab skills development in areas necessary for the biotechnology industry. Key courses including Advanced Cell and Molecular Biology, Bioinformatics, and Ethical Concerns in Biotechnology are just some of the options students choose from. Students that choose this concentration are prepared to pursue careers in the biotechnology industries, academic research laboratories, postgraduate work in molecular biology or biochemistry, or professional health programs. *Requirements to Earn:* Fifteen (15) credit hours of courses with a BIOT reference at CNUCHS.

**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. *Requirements to Earn:* Fifteen (15) credit hours of courses with an upper division (300 or 400 level) BIOL reference at CNUCHS.

**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 professional 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.

*Requirements to Earn:* Six (6) credit hours of courses with an upper division (300 or 400 level) BIOL reference and nine (9) credits hours of courses with an upper division (300 or 400 level) PSYC reference at CNUCHS.

**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.

*Requirements to Earn:* Six (6) credit hours of courses with an upper division (300 or 400 level) PHLT reference and nine (9) credit hours of courses with an upper division (300 or 400 level) ADMN reference at CNUCHS.

## B. PRE-HEALTH PROFESSIONS PATHWAY (PHP)

A Pathway is not a program, but a guided path within the BSHS program that offers students a dedicated rout to earn an interview with our CNU professional schools and graduate school programs, provided they reach and maintain certain benchmarks while working towards their bachelor's degree in health sciences. Our Pre-Health Professions (PHP) Pathway establishes CNUCHS as a premier destination for students pursuing health professions careers. In addition to our strong academic preparation and embedded research and service-learning experiences, our CNUCHS PHP Pathway offers undergraduates focused, personalized health professions academic and career advising from our academic and faculty advisors. While earning the BS degree in Health Sciences, our CNUCHS PHP Pathway undergraduates can also earn a priority interview to any of our CNU professional or graduate schools of their choice:

- College of Dental Medicine
- College of Medicine

- College of Pharmacy
- College of Psychology
- College of Graduate Studies
- Master of Pharmaceutical Sciences
- Master of Healthcare Administration

To earn the priority interview, our CNUCHS PHP Pathway students will need to meet or exceed the established benchmarks between CNUCHS and the CNU Professional school pathway of choice.

Benchmarks differ between the CNU Colleges. CNUCHS PHP Pathway students may pursue more than one CNU College Pathway at the same time if they choose. Earning an interview does not imply guaranteed admission.

### General Benchmarks of the Pre-Health Professions Pathways

The benchmarks set the criteria for CNUCHS Pathway students to become academically prepared to apply and hopefully attend CNU Professional Schools (including Graduate Programs). Pathway students who complete the rigorous academic and good conduct benchmarks and entry requirements of their chosen CNU Professional School shall be granted an interview at the professional school upon completion of the CNUCHS program of study.

To provide a general benchmark overview a CNUCHS PHP Pathway student must attain or exceed to earn an interview at the CNU Professional School of choice, PHP Pathway Students must:

- Complete all the CNU benchmarks and professional school pre-requisite coursework as defined by the CNU College of choice
- Earn and maintain the required cumulative GPA for Pathway Students as required by each respective Professional School
- Be in good academic and conduct standing each semester at CNUCHS
- Maintain full-time enrolled student status each semester at CNUCHS
- Meet and/or exceed the minimum acceptable standardized test score for Pathway Students as required by each respective Professional School
- Participate in at least one professional or academic activity per year offered by the corresponding CNU Professional School while attending CNUCHS
- Submit a completed and verified application to CNU professional school application portal before the deadline published by the corresponding CNU Professional School
- Submit a completed supplemental application as required by some of our CNU Professional Schools
- Attend all CNUCHS Annual Summer Pathway preparation workshops while enrolled at CNUCHS
- Satisfy the CNU professional school's technical standards

The specific benchmarks for each CNUCHS PHP Pathway can be found in our Progressions Criteria section of this catalog.



### C. Bachelor of Science in Nursing (BSN)

CNUCHS's Bachelor of Science in Nursing is a three-year, year-round entry program (Summer, Fall, and Spring entry) with a curriculum that incorporates a solid foundation in natural, behavioral, social, and nursing sciences. CHS's general education coursework provides a solid basis for the Bachelor of Science in Nursing (BSN) major requirements. All BSN graduates from CHS must complete the service-learning curriculum and a capstone project. The Program Learning Outcomes (PLOs) are designed to align to the AACN Essentials: Core Competencies for Professional Nursing Education (2021); the Quality and Safety in Nursing Education (QSEN) competencies; and the American Nurses Association (ANA) Scope and Standards of Practice (2021). The BSN curriculum is aligned with the Board of Registered Nursing (BRN) requirements for required content for licensure. CNUCHS BSN is approved by the California Board of Registered Nursing (BRN) and as such, the curriculum complies with all required content areas of the Nursing Practice Act Regulation 1426 – Required Curriculum. The curriculum comprises of 127 semester-credits, 21 clinical credits, and 1,008 clinical hours.

Learning and instructional outcomes are focused on delivering safe, therapeutic, effective, patient-centered care; practicing evidence-based practice; working as part of interdisciplinary teams; focusing on quality improvement; and using information technology. Instructional content includes, but is not limited to, the following: critical thinking, personal hygiene, patient protection and safety, pain management, human sexuality, client abuse, cultural diversity, nutrition (including therapeutic aspects), pharmacology, patient advocacy, legal, social, and ethical aspects of nursing, and nursing leadership and management.

### D. Pre-Health Post-Baccalaureate (PHPB) Coursework

The Pre-Health Post-Baccalaureate coursework is designed to enhance the academic credentials and application portfolio of students aiming for a professional degree in the health professions (Medicine, Pharmacy, Dentistry, Psychology, etc.). The post-baccalaureate coursework provides a comprehensive educational experience that may include coursework in biomedical science, prerequisite coursework, extracurricular support, and test preparation for professional school admission (i.e., MCAT and DAT exams). Students will complete a minimum of 27 credit hours of advanced or prerequisite undergraduate coursework in the natural and social sciences over the course of at least two semesters. Students can enroll in prerequisite courses that they need to apply for professional schools. 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. PHPB coursework is a planned one-year course of study.

Topics covered in career-building workshops for professional schools' admissions include career seminars, MCAT and DAT exams skill-building and practice testing, application procedures (AMCAS, AACOMAS, AADSAS, PHARMCAS, PSYCAS), interview coaching, and portfolio fine-tuning. A comprehensive letter of recommendation will be provided for students who complete the course of study with good academic performance and no record of academic integrity and good conduct.

#### E. PHPB Pre-Health Professions Pathways

PHPB students may be admitted in the PHPB Pre-Health Professions Pathways. In the "Full PHPB Pathway," students are able to earn an interview with all CNU professional colleges (Medicine, Dental Medicine, Psychology, Pharmacy) and the Graduate School programs (Master of Pharmaceutical Sciences and Master of Healthcare Administration). In the "Limited PHPB Pathway," students are able to earn an interview with CNU colleges of Pharmacy and School of Graduate Studies (Master of Pharmaceutical Sciences and Master of Healthcare Administration). Criteria for admission in the PHPB pathways are included under the Admissions to the College of Health Sciences section of this catalog.

### V. Admission to the College of Health Sciences

This section provides an outline of the criteria and requirements for admission to CNUCHS. We are committed to creating a diverse and inclusive community of learners, fostering intellectual curiosity, and nurturing personal growth. Admission to CNUCHS is governed by CHS 3201 Admissions Policy, CHS 3202 Definition of Categories for Student Admission Policy, CHS 3203 Advanced Placement (AP) and International Baccalaureate (IB) Credit Evaluation Policy, and CHS 3404 Transfer Student Enrollment and Evaluation of Transfer Credit Policy.

#### A. Applicant Categories

First-Time College Student: CNUCHS defines as a first-time college student any applicant 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. To start attending classes at CNUCHS as a first-time college student, the applicant must have earned a high school diploma or equivalent.

Transfer Student: CNUCHS defines transfer student as any applicant who has been a registered student in a regular term at a community college, college, university or in college-level extension classes since graduating from high school and has completed at least 25 college credits. 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.

International Student: CNUCHS defines international student as any applicant with citizenship from and residence in any country other than the United States of America.

Non-degree Seeking Student: CNUCHS defines a non-degree seeking student as any applicant who wants to enroll in the college on a term-by-term and course-by-course basis without aiming to earn a degree or certificate from the college. Non-degree seeking students may enroll full- or part-time at any given term and are subjected to the same admissions requirements as of any degree-seeking student. If a non-degree seeking student wants to earn a degree from CNUCHS, they must re-apply for admissions as a degree seeking student. The non-degree seeking status does not grant any privilege for changing student categories.

Post-Baccalaureate Student: A post-baccalaureate applicant is one who has earned or will earn a Bachelor's degree prior to their enrollment at CNUCHS.

## B. General Eligibility Requirements

The College degree programs aim to attract high school graduates who showed 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 excellent chances of success, are most likely to thrive at our campus, and will enhance the university's academic and cultural community.

Applications are evaluated by the college's Admissions Committee following a holistic review process, in which each applicant is evaluated using multiple measures of academic and personal achievement.

Comprehensive review considers the context for each academic and personal achievement of the applicant. CNSU does not discriminate based on race, religious creed, color, national origin, ancestry, medical condition, marital status, sex, age, or physical disability.

Please note:

**CNU does not participate in Title IV funding.**

All students applying for admission at CNUCHS must fulfill all the following general eligibility requirements:

- Be a US citizen or legal permanent resident if not applying as an international student.
- Submit current transcripts from all high schools (first-time college student applicants only) and colleges (all applicants who have college credit) attended for evaluation by the Admissions Committee. All incoming CNUCHS students must submit their final Official Transcripts by the end of the 8<sup>th</sup> week of instruction during the first term at CNUCHS.
- If applicable, submit official test scores for AP and/or IB courses directly from the testing agency to receive consideration for course credit.

- Submit a record of service activities in the community and/or school, employment, athletic accomplishments, and/or other extra-curricular accomplishments.
- Submit a personal statement.
- Disclose any academic integrity or conduct issues in their educational record. The Admissions Committee has the discretion to analyze any academic or conduct issue in the educational record to recommend the acceptance or denial of the application.
- Additionally:
- CNUCHS prefers official standardized SAT or ACT test scores from first-time college students to be submitted as part of the application.
- All accepted students must meet the CNU immunization and health insurance requirements.

CNUCHS accepts 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) for first-time college students.

### C. Admission Criteria for Transfer Students

Transfer students are defined in sub-section A of section V of this catalog. To be considered for admissions transfer students must apply officially apply to the college. Prospective transfer students must have a GPA of 2.70 or higher in college coursework to be considered for transfer to the BSHS degree, or a GPA of 3.00 or higher in college coursework to be considered for transfer to the BSN degree. In addition, they must comply with all applicable general eligibility requirements as indicated in this catalog to be considered for admission at CNUCHS.

Transfer student applicants with GPA from 3.40 and above may be considered for CNUCHS's BSHS Pre-Health Professions Pathway status, if approved by the CNUCHS Admissions Committee. Admission into a BSHS pathway is not guaranteed, and if admitted, students do not have guaranteed progression to any CNU professional or graduate schools and programs. Transfer student applicants for the BSN will be considered on equal grounds as first-time college students. Submission of a transfer application does not guarantee admission to the program.

### D. Guidelines for Evaluation of Transfer Credits

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 regionally 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 universities, and other regionally accredited

colleges and universities, with exception of certain unrecognized programs. All upper division courses are not transferrable and must be taken at CNUCHS.

Acceptance of any course for transfer credit granted toward a degree program is subject to evaluation of the course equivalence (topic, content, and teaching methodologies/ pedagogy) by a CNUCHS expert faculty in that discipline.

Credit for equivalent courses will be awarded from only one source toward a course equivalency. CNUCHS does not award duplicate credit. Students are advised to speak with an academic advisor to determine which course (s) will provide the greatest benefit.

CNUCHS adopts the semester-based credit hour. Course credits earned at other institutions based on different credit hours than used by CNUCHS are subject to conversion and possible decrease in credit hour value. Transfer students are subject to the same graduation requirements for the B.S. degree.

CNUCHS cumulative grade point average (GPA) is based solely upon coursework taken at CNU.

### E. Types of Transfer Credits NOT Accepted by CNUCHS

- Courses in which the student earned below “C” (2.0 = Grade Point Equivalent) (4.0 = “A”) as the final grade, including “C-“
- Credit awarded by post-secondary schools in the United States that 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.

### F. Advanced Placement (AP) and International Baccalaureate (IB) Credits

CHS 3203 Advanced Placement (AP) and International Baccalaureate (IB) Credit Evaluation Policy governs the acceptance of such credits. Credit hours for AP and IB courses will appear on the student’s transcript but will not be used in the calculation of the Grade Point Average (GPA) noted on the CNUCHS transcript. Duplicate credit will not be awarded for equivalent AP/IB test scores and transfer courses.

Students are required to submit official test scores for AP and IB courses directly from the testing agency to the college. The college will evaluate the AP and IB credits and may grant credit to students based on the evaluation charts in the next pages of this catalog.

While some graduate and professional schools accept AP and IB courses to satisfy admissions requirements pertaining to course subject preparation, many do not. Undergraduate students planning to apply to graduate

or professional schools bear the responsibility to carefully research admission requirements of the graduate and professional schools before deciding to use AP/IB credits to opt out of required college courses.

## G. International Students

International applicants must submit a completed application at least 3 months prior to the start of classes to allow processing time of necessary admission documents and issuance of the I-20. Accepted students are responsible for obtaining their F-1 entrance visa.

CNUCHS accepts applications from graduates of foreign institutions only for the Bachelor of Science in Health Sciences and requires transcripts and coursework from such institutions to be evaluated by WES, ECE, or IERF. Official evaluations must be sent in a sealed envelope directly to CNUCHS Admissions Office and must include semester units and letter grades for each course and cumulative GPA. When possible, it is advisable to include the science GPA.

Please note:

**CNUCHS does NOT accept applications from international students for the Bachelor of Science in Nursing, the PHPB coursework or the full PHP Pathway**

International applicants are subjected to all applicable general eligibility requirements as outlined in this catalog (Section V Admission to the College of Health Sciences, sub-section B General Eligibility Requirements). International students are not accepted into the Full PHP Pathway that includes the CNU Colleges of Medicine and Dental Medicine.

Applicants who received their degree from a non-English speaking country and/or whose courses were not taught in English are required to submit official scores from the TOEFL Examination or IELTS at least 30 days before the first day of class with the following minimum scores:

- 1) Test of English as a Foreign Language (TOEFL): minimum 510 paper/88iBT
- 2) International English Language Testing System (IELTS) (Academic): minimum 6.5

This requirement does not apply if an additional degree has been obtained at a U.S. institution.

Applicants must have the test score sent directly to the College of Health Sciences at:

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  
PO Box 6151  
Princeton, NJ 08541-6151, USA  
or visit [www.toefl.org](http://www.toefl.org).

IELTS: For information about this test and registration procedures, contact:

IELTS Office  
University of Cambridge Local Examination Syndicate  
1 Hills Road, Cambridge/CB1 2EU, UK  
or visit [www.ielts.org](http://www.ielts.org).

## AP Credit Courses Chart

List of AP courses from: <a href="https://aphighered.collegeboard.org/exams">https://aphighered.collegeboard.org/exams</a>				
Examination	Score	Credit Hours	Equivalency	GE Area
Art: Art History	3, 4, or 5	3	ARMU 110	Liberal Arts: Fine Art
Biology	4 or 5	3	General Elective	
Chemistry	4 or 5	3	General Elective	
Economics: Macroeconomics	3, 4 or 5	3	ECON 110	Liberal Arts: Social Science
Economics: Microeconomics	3, 4 or 5	3	ECON 120	Liberal Arts: Social Science
English: Language/Composition	3, 4 or 5	3	General Elective	Written Communication
English: Literature/Composition	3, 4 or 5	3	General Elective	Written Communication
Environmental Science	3, 4 or 5	3	Biology Elective	
Comparative Government/Politics	3, 4 or 5	3	General Elective	
U.S. Government/Politics	3, 4 or 5	3	GOVT 110	Liberal Arts: Social Science
History: European	3, 4 or 5	3	General Elective	
History: U.S.	3, 4 or 5	3	General Elective	
History: World	3, 4 or 5	3	General Elective	
Human Geography	3, 4 or 5	3	General Elective	
Chinese Language/Culture	3, 4 or 5	3	General Elective	
French Language	3, 4 or 5	3	General Elective	
French Literature	3, 4 or 5	3	General Elective	
Japanese Language/Culture	3, 4 or 5	3	General Elective	
Latin	3, 4 or 5	3	General Elective	
Spanish Language	3, 4 or 5	3	General Elective	
Spanish Literature	3, 4 or 5	3	General Elective	
Math: Calculus AB/AB sub score	4 or 5	3	General Elective	
Math: Calculus BC	4 or 5	3	General Elective	
Physics AP 1 Mechanics	4 or 5	3	General Elective	
Physics AP 2 Electricity and Magnetism	4 or 5	3	General Elective	
Physics AP Mechanics C	4 or 5	3	General Elective	
Physics AP Electr/Magnet C	4 or 5	3	General Elective	
Psychology	4 or 5	3	PSYC 110	Liberal Arts: Social Science
Statistics	3, 4 or 5	3	General Elective	
No credit is awarded if the language is the student's native language. For tests not listed, scores will be evaluated independently.				



## IB Credit Courses Chart

International Baccalaureate (IB) Diploma/Certificate				
Examination*	Score	Credit Hours	Equivalency	GE Area
Art/Design	5, 6, or 7	3	ARMU 110	Liberal Arts: Fine Art
Biology	5,6, or 7	3	General Elective	
Business and Management	5, 6, or 7	3	General Elective	
Chemistry	5,6 or 7	3	General Elective	
Classical Languages (Latin)	5, 6, or 7	3	General Elective	
Economics	5, 6, or 7	3	ECON 110	Liberal Arts: Social Science
English A	5, 6, or 7	3	General Elective	Written Communication
English B	No credit	0	None	
Geography	5, 6, or 7	3	General Elective	
History—American	5, 6, or 7	3	General Elective	
History—East & Southeast & Oceania	5, 6, or 7	3	General Elective	
History—European	5, 6, or 7	3	General Elective	
Mathematics	5,6, or 7	3	General Elective	Scientific Inquiry and Quantitative
Music	5, 6, or 7	3	ARMU 120	Liberal Arts: Fine Art
Modern Languages	5, 6, or 7	3	General Elective	
Physics	5,6, or 7	3	General Elective	
Psychology	5, 6, or 7	3	PSYC 110	Liberal Arts: Social Science
Social and Cultural Anthropology	5, 6, or 7	3	General Elective	
Theatre	5, 6, or 7	3	General Elective	Liberal Arts: Fine Art
Visual Arts	5, 6, or 7	3	General Elective	Liberal Arts: Fine Art
No credit is awarded if the language is the student's native language. For tests not listed, scores will be valued independently.				
List of IB curriculum from: <a href="http://www.ibo.org/en/programmes/diploma-programme/curriculum/">http://www.ibo.org/en/programmes/diploma-programme/curriculum/</a>				

## H. Admissions Requirements for the Bachelor of Science in Health Sciences (BSHS)

Applicants who meet or exceed the general eligibility requirements outlined in this catalog (Section V Admission to the College of Health Sciences, sub-section B General Eligibility Requirements) are qualified to be considered for admission into the Bachelor of Science in Health Sciences degree program.

In addition, first-time college student applicants (CHS 3202 Definition of Categories for Student Admission Policy) must have a minimum High School GPA of 2.7 (on a 4.0 scale) and have completed the following classes with a grade of C or better:

- 4 years of English
- 3 years of mathematics (4 recommended)
- 2 years of natural sciences (3 recommended)
- 2 years of social sciences
- 2 years of a language other than English

## I. Admission into the BSHS Pre-Health Professions Pathway (PHP)

CNUCHS offers a Pre-Health Professions Pathway (PHP) to highly qualified students who want to pursue professional careers in health sciences with CNU professional and graduate schools. A pathway is not a program; it is a structured roadmap that CNUCHS may offer to highly qualified students based on certain admission benchmarks. Students who are offered admission to a pathway must comply with very strict progression benchmarks in order to earn an interview at a CNU graduate or professional school.

Please note:

- 1. A pathway is not a program.**
- 2. Admission in a pathway does not imply guaranteed admission at any CNU professional or graduate school.**

To be considered for a PHP admission offer, the applicant must comply with all the following requisites:

- Meet all general eligibility requirements outlined in this catalog (Section V Admission to the College of Health Sciences, sub-section B General Eligibility Requirements).
- First-time college students must:
  - Have a minimum high school GPA of 3.0 (on a 4.0 scale).
  - Have completed at least one high school course in each of the following areas with a grade of C or better: Biology, Chemistry, or Physics. The course(s) should be honors, AP or IB-level course(s) if available at the applicant's high school.
  - Have completed a pre-calculus course or higher-level math course with a grade of C or better. The course(s) should be honors, AP or IB-level course(s) if available at the applicant's high school.
- Transfer students must:
  - Have a cumulative college GPA of 3.4 (on a 4.0 scale).
  - Have completed natural sciences courses with a grade of C or better.
  - Have completed precalculus or higher-level math course with a grade of C or better.

- Have completed all courses eligible for transfer within the past 8 years.

First-time college and transfer student applicants not considered for the PHP Pathways but admitted into the BSHS may request reconsideration to PHP Pathway after one year of residence at CNUCHS. Admission to the PHP Pathway is not guarantee

## J. Admissions Requirements for the Bachelor of Science in Nursing (BSN)

Applicants who meet or exceed the general eligibility requirements outlined in this catalog (Section V Admission to the College of Health Sciences, sub-section B General Eligibility Requirements) are qualified to be considered for admission into the Bachelor of Science Nursing (BSN). The CNUCHS BSN degree program offers three additional admission pathways: for military personnel, for LPNs/LVNs who want to earn their BSN, and for LPNs/LVNs who want to complete a 30-unit non-degree option.

Admission into programs leading to licensure and credentialing, such as the BSN, does not guarantee that students will obtain a license or credential. Licensure and credentialing requirements are set by agencies that are not controlled by or affiliated with CNU and requirements can change at any time. Students are responsible for determining whether they can meet licensure or credentialing requirements. CNUCHS will not refund tuition, fees, or any associated costs, to students who determine subsequent to admission that they cannot meet licensure or credentialing requirements.

To be considered for admission in the BSN degree program, applicants must fulfill all the requirements outlined below:

- Complete the application to the BS in Nursing on a CNUCHS designated application portal.
- Have completed the Test of Essential Academic Skills (TEAS) within the last 3 years with the following minimum scores:
  - Minimum Science TEAS score – 75%
  - Minimum Math TEAS Score – 70%
  - Minimum Overall TEAS Score – 75%
  - Submit a personal statement according to the submission criteria set in the application portal.
  - Submit 2 recommendation letters according to the submission criteria set in the application portal.
  - Meet all Technical Standards, Immunization Requirements, and Health Insurance Requirements for the BSN as described in this catalog.
  - First-time college students must:
    - Have a minimum cumulative GPA of 3.0 from high school.
    - Have completed the following classes with a grade of **B-** or better:
      - 4 years of English
      - 3 years of mathematics at the level of Algebra I or higher.
      - 2 years of natural science with lab (minimum).
      - 2 years of social sciences
- Transfer students must:

- Abide by all criteria outlined in this catalog for the transfer of credits (Section V Admissions to the College of Health Sciences, Sub-section B General Eligibility Requirements, Item 2 Guidelines for Evaluation of Transfer Credits).
- Have achieved a minimum grade of “B” in all college-level natural and behavioral courses for them to be eligible for transfer.
- Have completed all courses eligible for transfer within the past 5 years.

## K. BSN Technical Standards for Admission and Progression

CNUCHS values inclusivity. We celebrate diversity and acknowledge the adaptations that we all implement to navigate our world in different ways. To that end, we encourage potential applicants and students who identify as having a disability to see the following technical standards as examples of how to navigate the physicality and environment of nursing.

In learning to ensure the best patient care, BSN students will engage in a range of diverse and complex practices specific to the various constituencies and settings that nurses serve. While students may aim to practice in a particular subset of nursing, they will learn and demonstrate competence across the full curriculum. The examples offered do not encompass the entirety of what students may be required to perform. To uphold the ethical commitments of nursing, and CNU’s commitment to patient care, students will need the following capabilities or their equivalent:

### **Behavioral and Emotional/Social Standards**

Applicants and BSN students must be able to engage with patients in stressful situations in complex, heightened environments. They will need to:

- utilize appropriate and competent judgement in clinical decision-making.
- demonstrate behavior appropriate to their specific situations.
- cope with stress in healthy ways within their support systems.
- establish responsive, professional, and effective relationships with patients even and especially under stressful conditions.
- respect differences in ethnicity, social and economic positions, cultural practices, religious and political preferences, gender and sexuality, and physical and cognitive abilities.

### **Interpersonal Communication Standards**

Applicants and BSN students must be able to interact with patients, colleagues and other professionals in the care team, and navigate those various relationships. This includes clear articulation of their own ideas, feelings, and boundaries, and engaged understanding of others’ ideas, feelings, and boundaries in the context of patient-centered care. They will need to be able to:

- Maintain healthy and mature relationships with patients, other students, faculty, staff, and all other professionals in a team.
- Communicate effectively through speaking and writing, using appropriate technologies as necessary.

- Convey and exchange information clearly and efficiently (example: taking patient health history; explanation of treatment to patients; communicating between healthcare professionals).
- Receive critique and feedback respectfully and integrate it appropriately into their practice.

### **Observation Standards**

Applicants and BSN students must be able to assess and evaluate patient responses and perform care interventions safely and accurately using a variety of instruments. Using reasonable adaptations as necessary, students will need the following acuity:

- Sufficient use of **visual, auditory, and olfactory** senses in combination to perform their duties (examples: perform a physical examination; note patient distress; attend to visual or auditory alerts from instruments).
- Ability to perform physical inspections using instruments as necessary (examples: palpation, auscultation, percussion).

### **Motor/Physical Standards**

Applicants and BSN students must be able to manipulate a variety of instruments, aid patients in movement, and navigate busy environments. They will need to:

- navigate clinical settings and environments.
- continue to provide care in physically strenuous situations (examples: aiding in an operating room; assisting in labor and delivery; moving patients' bodies).
- achieve competence in gross and fine-motor abilities to provide therapeutic nursing interventions according to safety standards (examples: placing a catheter; drawing blood; moving a patient on/to a bed; administering medication).

## **L. Admission through the Military to BSN Option**

CNUCHS offers persons with applicable military education and experience who wish to become a Registered Nurse an option to have credit evaluated and applied toward completion of prelicensure nursing education. It includes the use of challenge examinations and is contingent upon seats availability.

United States (US) Veterans with military education and experience planning to enroll into nursing courses must first be accepted by and fulfill all matriculation requirements of CNUCHS. The following are the specific eligibility criteria to be admitted in the "Military to BSN" option:

- Be a veteran of the United States military, honorably discharged.
- Provide a DD form 214 "Certificate of Release or Discharge from Active Duty" showing proof of healthcare specialist rating, or;
- Be serving in active-duty status with the United States military and provide proof of healthcare specialist rating or;
- Be classified with a healthcare specialist rating (i.e., Navy HM, AF 4NOX1, Army 68W) while serving in the military or;
- Submit proof of a minimum of 2 years or equivalent experience as a healthcare specialist or comparable role within the past 3 years.

Applicants must have a minimum cumulative GPA of 3.0 for all college-level courses completed and must complete all pre-clinical nursing requirements. To be accepted into the BSN Program, applicants must also meet the general eligibility requirements as outlined in this catalog (Section V Admission to the College of Health Sciences, sub-section B General Eligibility Requirements).

Generic military credit is not given. If admitted to the CNUCHS BSN Program, veterans may submit a portfolio to demonstrate theoretical and clinical learning, and work experience. The portfolio will be the basis for evaluating eligibility. The portfolio will include the following:

- Documentation of Military Health Care Occupation (Basic Medical Technician Corpsman (Navy HM or Air Force BMTCP), Army HealthCare Specialist (68W Army Medic) or Air Force Independent Duty Medical Technician (IMDT 4NOXIC) with an honorable discharge.
- Official military transcript with ACE recommendations.
- Copy of any licenses or certifications.
- Two references letters, including one from an immediate supervisor who has worked with the applicant for at least 5 months.
- Educational and work resume of accomplishments outside of the military

Military Corpsmen will be eligible for a challenge examination option of NURS220 Nursing Fundamentals Theory, and NURS220CL Nursing Fundamentals Clinical Lab.

NURS220 Nursing Fundamentals Theory will be challenged through a written test. Upon challenge examination confirmation, students will be given course materials (syllabus, content outline, bibliography/textbook list). NURS220CL Nursing Fundamentals Clinical Skills Lab challenge examination will require the validation of skills included in the NURS220CL course curriculum.

To earn proficiency credit, students must pass the written exam before being allowed to schedule validation of clinical skills with the instructor. Students must pass both parts of the challenge examination process to earn proficiency credits.

### M. Admissions Requirements for the LPN/LVN to BSN Option

CNUCHS provides applicants with a qualified LPN/LVN license an opportunity to earn up to 7 credits in the BSN program through proficiency testing. Proficiency exams are national exams to be scheduled after acceptance to the BSN. Eligible applicants must be admitted to the BSN degree program before applying for LPN/LVN advance standing through the successful completion of the proficiency exams and criteria described below:

- 1) Maintenance of an active unencumbered LPN/LVN license from a jurisdiction recognized by the National Council of State Boards of Nursing (NCSBN)
- 2) Employed as an LVN/LPN within the last twelve months.
- 3) To earn proficiency credits for NURS220 Fundamentals Theory and NURS220CL Fundamentals Clinical, students must successfully complete the Nursing Fundamentals standardized assessment (need title) and the nursing skills validation.
- 4) Students must take the assessment test to qualify for the skills assessment. Both competencies must

be passed to receive credit for NURS220 and NURS220CL.

- 5) To earn proficiency credits for PSYC310 Developmental Psychology, students must successfully complete the Lifespan Development proficiency exam.
- 6) The scheduling of the proficiency examination is determined by Admissions. Students are responsible for proficiency examination costs.

**N. ADMISSION THROUGH THE LPN/LVN 30-UNIT OPTION**

CNUCHS offers applicants with a qualified LPN/LVN license an opportunity for the LPN/LVN 30-unit Non-Degree Option, as per CA regulations. Intention for the 30-unit, non-degree option must be submitted at the time of application. Acceptance is limited to seat availability. Applicants pursuing the LPN/LVN 30-unit Non-Degree Option are required to:

- Submit an official high school transcript with documentation of graduation or GED certificate.
- Submit official transcripts with documentation of completion from LVN program.
- Submit a copy of the current/valid California LPN/LVN license.
- Submit all department and clinical agency documents, including a criminal background check, drug screening, CPR for healthcare professionals, physical examination and immunizations, and a valid government-issued form of identification.
- Submit an academic and work experience portfolio. Applicant will be given credit for previous successful completion of required courses at another accredited institution. Additional prerequisites may be required and are determined individually.
- Be subject to writing, theory, skills and math testing and additional faculty costs for indicated remediation.

**LPN/LVN 30-unit course requirements are:**

<b>Courses</b>	<b>Theory Credits</b>	<b>Clinical Credits</b>	<b>Totals</b>
NURS320/320CL Adult Health II	4	4	8
NURS340/340CL Psych/Mental Health Nursing	3	1	4
NURS420/420CL Leadership	3	4	7
NURS490 Capstone	3	--	3
BIOL220/220L Human Physiology with lab	4	--	4
BIOL310 Microbiology with lab	4	--	4
<b>TOTALS</b> .....	21	9	30

## O. Admissions Requirements for the Pre-Health Post Baccalaureate (PHPB) Coursework

Post-Baccalaureate applicants who meet or exceed the applicable general eligibility requirements outlined in this catalog (Section V Admission to the College of Health Sciences, sub-section B General Eligibility Requirements) are eligible for admission into the Pre-Health Postbaccalaureate coursework (PHPB) at CNUCHS. The following are the admissions requirements for the PHPB:

- Complete the application to the PHPB coursework on an approved CNUCHS application portal.
- Have a minimum cumulative baccalaureate degree GPA of 2.6 (on a 4.0 scale) and a minimum 2.6 BCPM GPA.
- The following prerequisite coursework must be completed within the last 8 years, with a grade of C or better:
  - 2 semesters, 3 quarters, or 1 year of college level English.
  - 2 semesters, 3 quarters, or 1 year of General Biology with Laboratory.
  - 2 semesters, 3 quarters, or 1 year of General Chemistry with Laboratory.
  - 2 semesters, 3 quarters, or 1 year of Organic Chemistry with Laboratory.
  - 2 semesters, 3 quarters, or 1 year General Physics with Laboratory.
  - 2 semesters, 3 quarters, or 1 year of college level Math (Statistics and/or Calculus Preferred).
- Prerequisite coursework taken more than 8 years prior to application, or not taken during the baccalaureate coursework, must be taken/re-taken while the student is engaged in the post-baccalaureate coursework.

## P. Admissions into the PHPB Pathways

CNUCHS offers two PHPB Pathways to highly qualified post-baccalaureate students who want to pursue professional careers in health sciences with CNU professional and graduate schools: the Full PHPB Pathway and the Limited PHPB Partway. A PHPB pathway is a structured coursework that CNUCHS may offer to highly qualified students based on certain admission benchmarks. Students who are offered admission on a PHPB pathway must comply with very strict progression benchmarks in order to earn an interview at a CNU graduate or professional school.

The Full PHPB Pathway allows for the student to earn an interview with CNU Colleges of Medicine, Dental Medicine, Psychology, Pharmacy, and Graduate Studies, if all progression benchmarks are met. The Limited PHPB Pathway allows for the student to earn an interview with CNU Colleges of Pharmacy and Graduate Studies, if all progression benchmarks are met.

In order to be competitive to be offered admission in one of the PHPB pathways, the applicant must:

- Comply with all admissions requirements as outlined in this catalog for the PHPB Coursework (Section V Admission to the College of Health Sciences, Sub-Section F Admissions Requirements for the PHPB Coursework).
- Have minimum GPAs and BCPM GPAs as indicated in the table below:



PHPB Pathway	Cumulative GPA	BCPM GPA
Full PHPB Pathway	2.95	2.95
Limited PHPB Pathway	2.70	2.60

## VI. Progression Criteria

Progression criteria is regulated by CHS 3101 Academic Progression Policy, CHS 3126 Academic Standing and Formal Warning Policy, CHS 3127 Course Failure Remediation Policy, CHS 3129 Course Repeat Policy, CHS 3124 Graduation Requirements for the BSHS and CHS 3125 Graduation Requirements for the BSN, and dispositions in this catalog.

Once admitted to CNUCHS, students must achieve and maintain certain requirements to progress towards earning a Bachelor's degree. Progression requirements are regulated by CHS 3101 Academic Progression Policy. CNUCHS students bear the responsibility to review their progress toward meeting all degree requirements as prescribed by the curriculum plan.

Please note:

**CNUCHS students must comply with the course sequence prescribed by the curriculum plan. If any change is desirable, students must consult with an academic advisor. The college will not provide any accommodation for student progression based on unilateral course sequence change made by the student.**

### **General Progression Criteria:**

- 1) Students must maintain good academic integrity, professionalism and conduct standing in compliance with CHS 3701 Academic Integrity and Good Conduct Policy.
- 2) Students who take a leave of absence for one or more terms will need to enroll in the term immediately following the leave (pending seat availability) to remain in good academic standing. All leave of absence periods are included in the maximum time frame allowed to complete the program, as per the CHS 3702 Leave of Absence Policy. Courses taken outside CNUCHS while in Leave of Absence are not transferrable towards the degree.
- 3) Students not meeting academic progression requirements are expected to repeat courses at CNUCHS the next time they are offered, if/when seats are available, as per CHS 3127 Course Failure Remediation and CHS 3129 Course Repeat policies.
- 4) Students who do not successfully complete a prerequisite course to a successive course must retake the prerequisite course in the next term it is offered (pending seat availability) and prior to enrolling in the successive course. See CHS 3129 Course Repeat Policy.
- 5) Students who are not academically progressing may not be eligible for financial aid.

### A. BSHS Progression Criteria and Degree Requirements

- 1) Students must comply with all general progression criteria as outlined above.

- 2) The Bachelor of Science in Health Sciences (BSHS) is designed to be completed in at minimum of 3 and a maximum of 6 years, with 4 years as a standard completion length for first-time college students without transferring college credits.
- 3) To successfully progress through the BSHS, students must maintain a minimum CNUCHS cumulative GPA of at least 2.0 per semester/term. Failure to meet this requirement subjects the student to be placed in academic warning, academic probation, or having their enrollment terminated for academic reasons, as per CHS 3126 Academic Standing and Formal Warning Policy.
- 4) The BSHS degree requires a minimum of 120 semester credit hours for the degree to be granted, provided they took a minimum of 36 upper division credits at CNUCHS and all courses that are degree requirements.

## B. PHP Progression Requirements

Students admitted into the BSHS PHP must comply with all general progression and BSHS progression criteria and degree requirements as outlined above, and the following additional requirements, to earn an interview at the CNU graduate or professional schools of their choice:

- Successfully complete all the prerequisite coursework for the colleges of their choice.
- Earn the BSHS degree at CHS prior to matriculation at the CNU graduate school or at a professional CNU school.
- Maintain a cumulative GPA according to the table below, while at CNUCHS:

<b>CNU Colleges/Programs</b>	<b>CHS GPA</b>
CDM (College of Dental Medicine)	3.30
COM (College of Medicine)	3.50
COP (College of Pharmacy)	3.00
PSY (College of Psychology)	3.20
GRAD (Master of Pharmaceutical Sciences)	3.00
GRAD (Master of Healthcare Administration)	2.50

- Maintain full-time enrollment status (12+ credits) each required semester while at CNUCHS. BSHS students are not required to maintain full-time status during the summer term.
- Submit a complete and verified application to the colleges of their choice, using the specific portal for each college (e.g. ADEA – Dental; AMCAS – Medicine; PharmCAS – Pharmacy; PSYCAS – Psychology; PharmGrad – Master of Pharmaceutical Sciences; HAMPCAS – Master of Healthcare Administration) by the deadline set by each college.
- Submit a completed supplemental application (CDM, COM, COP, and Master of Pharmaceutical Sciences) as required, by the deadline set by each college.
- Reach the minimum scores in the entrance exams for the following colleges:

<b>CNU College</b>	<b>Entrance Exam</b>	<b>Min. Score</b>
CDM	DAT Academic Average	19
	DAT Perceptual Ability	19
	CASPer exam	N/A
COM	MCAT	510
MHA*	GMAT, or	500
	GRE	320

\* Master of Healthcare Administration

- Satisfy all professional schools technical standards, as published on CNU website.
- Attend all CNUCHS Annual Summer Pathway preparation workshops while attending CNUCHS.
- Participate in at least one professional or academic activity per year with the graduate or professional schools of their choice while at CNUCHS.
- Satisfy all other admission requirements established by the graduate or professional schools of their choice.

Please note:

- 1. Admission processes at CNUCHS and any other CNU colleges or graduate school are independent, and admission decisions are at the sole discretion of each college according to their own criteria and standards.**
- 2. Earning an interview at a CNU professional or graduate school does NOT imply guaranteed admission.**

### C. BSN Progression Criteria and Degree Requirements

1. BSN students must maintain a cumulative GPA of at least 2.7 per semester/term for satisfactory academic progression.
2. In order to satisfy graduation requirements, a minimum of 127 semester credit hours is required. Students must have completed all related natural science prerequisite coursework, 6 credit hours in communication skills, 4 credit hours in service-learning, and at least one hour of implicit bias training. All service-learning, NURS coded courses and upper division BSN degree required courses must be completed at CNUCHS.
3. Students must complete the required clinical hours, as defined by the Board of Registered Nursing (BRN), while at CNUCHS in the five following areas: geriatrics, medical-surgical, mental health/psychiatric nursing, obstetrics, and pediatrics.
4. BSN students must successfully complete all clinical and pre-professional practice requirements before moving into clinical classes/activities, such as background checks, drug screenings, immunizations, and any other tests or required activities mandated by laws and regulations, as well as by the college.
5. If a BSN student takes a Leave of Absence longer than one semester starting in Term 6 in the program or later, the student will need to demonstrate retention of clinical skills by assessment with

faculty before being allowed to re-enroll.

6. BSN students must comply with all clinical course requirements and protocols as indicated in the course syllabus and college policies, including but not limited to CHS 3301 Clinical Practice Guidelines, CHS 3302 Clinical and Laboratory Dress Code, CHS 3303 Safe Clinical and Laboratory Practice, and CHS 3305 Confidentiality and Protection of Privacy.
7. Clinical course evaluation is based on a pass/no pass basis. The clinical course must be initially taken concurrently with its lecture companion course.
8. Behavior that jeopardizes patient safety is grounds for immediate removal from clinical environments and/or dismissal from the program. A student dismissed from a clinical placement for unsafe practice will not be eligible for readmission to the program until the review and appeal process has been completed.
9. A student who receives an Early Academic Alert notice must comply with all provisions indicated in the academic recovery agreement, as indicated in CHS 3127 Course Failure Remediation Policy.
10. A student who fails more than one NURS-coded course will be dismissed from the program.
11. Students who withdraw from a NURS-coded course due to pending failure will be marked WF (CHS 3106 Grading Convention Policy) and their grade will be considered as one of the two failures before final dismissal from the program. Re-entry, if allowed, will depend on seat availability. Progression in the program will be contingent upon successful completion of the course in which the WF grade was received.

#### D. PHPB Pathways Progression Requirements

Students admitted into the Full- and Limited-PHPB Pathways must comply with all specific benchmarks as outlined below to earn an interview with CNU professional and graduate schools:

- Successfully complete all the prerequisite coursework for the schools of their choice.
- Maintain a cumulative GPA according to the table below while at CNUCHS:

<b>CNU Colleges/Programs</b>	<b>CHS GPA</b>
CDM (College of Dental Medicine)	3.30
COM (College of Medicine)	3.50
COP (College of Pharmacy)	3.00
PSY (College of Psychology)	3.20
GRAD (Master of Pharmaceutical Sciences)	3.00
GRAD (Master of Healthcare Administration)	2.50

- Maintain full-time enrollment status (12+ credits) each semester while at CNUCHS.
- Submit a complete and verified application to the colleges of their choice, using the specific portal for each college (e.g. ADEA – Dental; AMCAS – Medicine; PharmCAS – Pharmacy; PSYCAS –

Psychology; PharmGrad – Master of Pharmaceutical Sciences; HAMPCAS – Master of Healthcare Administration) by the deadline set by each college.

- Submit a completed supplemental application (CDM, COM, COP, and Master of Pharmaceutical Sciences) as required, by the deadline set by each college.
- Reach the minimum scores in the entrance exams for the following colleges:

<b>CNU College</b>	<b>Entrance Exam</b>	<b>Min. Score</b>
CDM	DAT Academic Average	19
	DAT Perceptual Ability	19
	CASPer exam	N/A
COM	MCAT	510
MHA*	GMAT, or	500
	GRE	320

\* Master of Healthcare Administration

- Satisfy all professional schools technical standards, as published on CNU website.
- Attend all CNUCHS Annual Summer Pathway preparation workshops while attending CNUCHS.
- Participate in at least one professional or academic activity per year with the graduate or professional schools of their choice while at CNUCHS.
- Satisfy all other admission requirements established by the graduate or professional schools of their choice.

Please note:

- 1. Admission processes at CNUCHS and any other CNU colleges or graduate school are independent, and admission decisions are at the sole discretion of each college according to their own criteria and standards.**
- 2. Earning an interview at a CNU professional or graduate school does NOT imply guaranteed admission.**

## VII. Tuition & Fees

All tuition, fees, expenses, and policies listed in this publication are effective as of June 2024 and are subject to change without notice by California Northstate University. Effective for the 2024-2025 academic year, a change in tuition charges is applicable to new incoming students enrolled for the 2024-2025 academic year. For continuing students, the tuition charges will remain the same with the exception of the annual estimated tuition and fee increases.

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-

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 219).

All tuition, fees, expenses, and policies listed in this publication are effective as of June 2024 and are subject to change without notice by California Northstate University. Effective for the 2024-2025 academic year, a change in tuition charges is applicable to new incoming students enrolled for the 2024-2025 academic year. For continuing students, the tuition charges will remain the same with the exception of the annual estimated tuition and fee increases.

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. 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 219).

International Students are not charged additional fees or charges associated with vouching for student status. 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.). This timetable assumes 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.

**Cost of Attendance and Tuition and Fees for Incoming Students: BSHS**

The cost of attendance is an estimate of expected educational expenses for a period of enrollment. These educational expenses are calculated as described below and apply to all students enrolled in the Bachelor of Science in Health Sciences program at California Northstate University:

**Bachelor of Science in Health Sciences - Tuition & Fees for Academic Year: 2024-2028**

Tuition & Fees	Year 1 - Y1	Year 2 - Y2	Year 3 - Y3	Year 4 - Y4
Tuition	\$56,338	\$59,158	\$62,114	\$65,220
Student Association and Activity Fee	\$200	\$200	\$200	\$200
Technology Fee	\$50	\$50	\$50	\$50
Student Tuition Recovery Fund (STRF) (nonrefundable) <sup>5</sup>	\$0	\$0	\$0	\$0
Lab Fee	\$700	\$700	\$0	\$0
Graduation Fees	\$0	\$0	\$300	\$300
Lab Fee and Scholarly Fee	\$0	\$0	\$400	\$0
Orientation Fee	\$75	\$0	\$0	\$0

Enrollment Fee (nonrefundable)	\$100	\$0	\$0	\$0
<b>Total Tuition &amp; Fees per Year</b>	<b>\$57,463</b>	<b>\$60,108</b>	<b>\$63,064</b>	<b>\$65,770</b>

**Total tuition and fees for the entire 4-year College of Health Sciences undergraduate program \$246,105.**

<b>Estimated Other Optional Educational Related Costs<sup>1</sup></b>	<b>Year 1 - Y1</b>	<b>Year 2 - Y2</b>	<b>Year 3 - Y3</b>	<b>Year 3 - Y3</b>
Health Insurance premium <sup>2</sup>	\$3,529	\$3,529	\$3,529	\$3,529
MyRecordTracker Fee	\$25	\$25	\$25	\$25
Books and Supplies	\$1,600	\$1,600	\$1,600	\$1,600
Laptop	\$1,100	\$1,100	\$1,100	\$1,100
Room and Board <sup>3</sup> (based on 12 months)	\$28,152	\$28,152	\$28,152	\$28,152
Transportation <sup>3</sup> (based on 12 months)	\$5,362	\$5,362	\$5,362	\$5,362
<b>Total Estimated Cost per Year<sup>4</sup></b>	<b>\$97,231</b>	<b>\$99,876</b>	<b>\$102,832</b>	<b>\$105,538</b>

<sup>1</sup> Costs a student may incur as part of participation in the applicable year of the program, whether or not paid directly to CNU.

<sup>2</sup> Optional, estimated, and subject to modification based on number of insured members.

<sup>3</sup> (Based on 12 months) Estimated amount of student's individual housing, transportation, and food costs, not operated or charged by CNUCHS.

<sup>4</sup> Includes tuition, fees, and other estimated educationally related costs.

<sup>5</sup> Effective April 1, 2024, the STRF assessment rate will change from two dollars and fifty cents (\$2.50) per one thousand dollars (\$1,000) of institutional charges to zero dollar (\$0.00) per one thousand dollars (\$1,000) of institutional charges.

**Cost of Attendance and Tuition and Fees for Continuing Students: BSHS**

The cost of attendance is an estimate of expected educational expenses for a period of enrollment. These educational expenses are calculated as described below and apply to all students enrolled in the Bachelor of Science in Health Sciences program at California Northstate University:

**Bachelor of Science in Health Sciences - Tuition & Fees per Class for 2024-2025**

<b>Tuition &amp; Fees</b>	<b>Year 2 -Y2 Class of 2027</b>	<b>Year 3 -Y3 Class of 2026</b>	<b>Year 4 -Y4 Class of 2025</b>
Tuition	\$56,338	\$56,338	\$56,338
Student Association and Activity Fee	\$200	\$200	\$200
Technology Fee	\$50	\$50	\$50
Student Tuition Recovery Fund (STRF) (nonrefundable) <sup>5</sup>	\$0	\$0	\$0
Lab Fee	\$700	\$0	\$0
Graduation Fees	\$0	\$300	\$300
Lab Fee and Scholarly Fee	\$0	\$400	\$0
Orientation Fee	\$0	\$0	\$0
Enrollment Fee (nonrefundable)	\$0	\$0	\$0
<b>Total Tuition &amp; Fees per Year</b>	<b>\$57,288</b>	<b>\$57,288</b>	<b>\$56,888</b>

<b>Estimated Other Optional Educational Related Costs<sup>1</sup></b>	<b>Year 2 -Y2 Class of 2027</b>	<b>Year 3 -Y3 Class of 2026</b>	<b>Year 4 -Y4 Class of 2025</b>
Health Insurance Premium <sup>2</sup>	\$3,529	\$3,529	\$3,529
MyRecordTracker Fee	\$25	\$25	\$25
Books and Supplies	\$1,600	\$1,600	\$1,600
Laptop	\$1,100	\$1,100	\$1,100
Room and Board <sup>3</sup> (based on 12 months)	\$28,152	\$28,152	\$28,152
Transportation <sup>3</sup> (based on 12 months)	\$5,362	\$5,362	\$5,362
<b>Total Estimated Cost per Year<sup>4</sup></b>	<b>\$97,056</b>	<b>\$97,056</b>	<b>\$96,656</b>

<sup>1</sup> Costs a student may incur as part of participation in the applicable year of the program, whether or not paid directly to CNU.

<sup>2</sup> Optional, estimated, and subject to modification based on number of insured members.

<sup>3</sup> (Based on 12 months) Estimated amount of student's individual housing, transportation, and food costs, not operated or charged by CNUCHS.

<sup>4</sup> Includes tuition, fees, and other estimated educationally related costs.

<sup>5</sup> Effective April 1, 2024, the STRF assessment rate will change from two dollars and fifty cents (\$2.50) per one thousand dollars (\$1,000) of institutional charges to zero dollar (\$0.00) per one thousand dollars (\$1,000) of institutional charges.



## Cost of Attendance and Tuition and Fees for Incoming Students: BSN

The cost of attendance is an estimate of expected educational expenses for a period of enrollment. These educational expenses are calculated as described below and apply to all students enrolled in the Bachelor of Science in Nursing program at California Northstate University:

### Bachelor of Science in Nursing - Tuition & Fees for Academic Year: 2024-2027

Tuition and Fees	Y1	Y2	Y3
Tuition	\$50,000	\$52,500	\$55,125
Student Association & Activity Fee	\$200	\$200	\$200
Technology Fee	\$50	\$50	\$50
Lab and Equipment Fee	\$300	\$300	\$0
Simulation Lab Fee	\$0	\$350	\$350
Student Liability Coverage	\$0	\$40	\$40
Student Disability & Needle Stick Coverage	\$45	\$45	\$45
Educational System Software Fee (including NCLEX Preparation Package)	\$0	\$2,156	\$1,527
Enrollment Fee (nonrefundable)	\$100	\$0	\$0
Orientation Fee	\$100	\$0	\$0
Student Tuition Recovery Fund (STRF) <sup>6</sup>	\$0	\$0	\$0
CPR Fee	\$50	\$0	\$50
Background Check	\$0	\$75	\$0
Graduation Fees <sup>2</sup>	\$0	\$0	\$300
<b>Total Estimated Tuition and Fees Per Year<sup>1</sup></b>	<b>\$50,845</b>	<b>\$55,716</b>	<b>\$57,687</b>

**Total estimated cost for tuition and fees for the entire 3-year Bachelor of Science in Nursing Program is \$164,248.**

Estimated Other Educational Related Costs	Y1	Y2	Y3
Health Insurance Premium <sup>3</sup>	\$3,529	\$3,529	\$3,529
MyClinicalWallet	\$60	\$0	\$0
MyClinicalExchange or Other Agency Mandated Placement Costs	\$0	\$40	\$40
Nursing Uniform and Kit	\$0	\$350	\$0
Books and Supplies	\$1,000	\$500	\$500
TracPrac Fee	\$0	\$75	\$75
Background Check/Drug Screening/Fingerprinting <sup>7</sup>	\$0	\$200	\$200
Laptop	\$1,100	\$1,100	\$1,100
Room and Board (based on 12 months) <sup>4</sup>	\$28,152	\$28,152	\$28,152
Transportation (based on 12 months) <sup>4</sup>	\$5,362	\$5,362	\$5,362
<b>Total Estimated Cost per Year<sup>5</sup></b>	<b>\$90,048</b>	<b>\$95,024</b>	<b>\$96,645</b>

<sup>1</sup> Tuition, fees and charges are determined for the entire length of the program at the time of signing an Enrollment Agreement with CNU so long as state, federal and oversight fees do not change in any substantive way.

- <sup>2</sup> Covers diploma cover, transcripts, etc.
- <sup>3</sup> Optional, estimated, and subject to modification based on number of insured members.
- <sup>4</sup> (Based on 12 months) Estimated amount of student's individual housing, transportation, and food costs, not operated or charged by CNUCHS.
- <sup>5</sup> Includes tuition, fees, and other estimated educationally related costs.
- <sup>6</sup> Effective April 1, 2024, the STRF assessment rate will change from two dollars and fifty cents (\$2.50) per one thousand dollars (\$1,000) of institutional charges to zero dollar (\$0.00) per one thousand dollars (\$1,000) of institutional charges.
- <sup>7</sup> Agency mandated requirements for clinical placements based on site specifications may be required

### Cost of Attendance and Tuition and Fees for Incoming Students: PHPB

The cost of attendance is an estimate of expected educational expenses for a period of enrollment. These educational expenses are calculated as described below and apply to all students enrolled in the Pre-Health Post-Baccalaureate program at California Northstate University:

### Pre-Health Post-Baccalaureate Program - Tuition & Fees for Academic Year: 2024-2025

Tuition & Fees	Amount	Class
Tuition - Fall 2024	\$21,477	PHPB
Tuition - Spring 2025	\$21,477	PHPB
Student Tuition Recovery Fee <sup>5</sup>	\$0	PHPB
Technology Fee (Spring 2024 - nonrefundable upon start of instructions)	\$50	PHPB
Scholar Activity Fee (Spring 2024 - nonrefundable upon start of instructions)	\$100	PHPB
Orientation Fee (Spring 2024 - nonrefundable upon orientation)	\$50	PHPB
Enrollment Agreement Fee (nonrefundable)	\$100	PHPB
<b>PHPB Total Tuition &amp; Fees per Year</b>	<b>\$43,254</b>	

**Total cost for tuition and fees for one year of Pre-Health Post-Baccalaureate program will be \$43,254.**

Estimated Other Optional Educational Related Costs <sup>1</sup>	Amount	Class
Health Insurance Premium <sup>2</sup>	\$3,529	PHPB
Books and Supplies <sup>3</sup>	\$1,000	PHPB
Room and Board <sup>3</sup> (based on 12 months)	\$28,152	PHPB
Transportation <sup>3</sup> (based on 12 months)	\$5,362	PHPB
<b>PHPB Total Estimated Cost per Year<sup>4</sup></b>	<b>\$81,297</b>	

- <sup>1</sup> Costs a student may incur as part of participation in the applicable year of the program, whether or not paid directly to CNU.
- <sup>2</sup> Optional, estimated, and subject to modification based on number of insured members.
- <sup>3</sup> (Based on 12 months) Estimated amount of student's individual housing, transportation, and food costs, not operated or charged by CNUCHS.
- <sup>4</sup> Includes tuition, fees, and other estimated educationally related costs.
- <sup>5</sup> Effective April 1, 2024, the STRF assessment rate will change from two dollars and fifty cents (\$2.50) per one thousand dollars (\$1,000) of institutional charges to zero dollar (\$0.00) per one thousand dollars (\$1,000) of institutional charges.

Please note:

**Failure to comply with payment deadlines may result in:**

- 1. A business hold on the student account.**
- 2. Student will lose access to the Learning Management System (CANVAS).**
- 3. Student will be prevented from registering for courses.**
- 4. Student will be prevented from obtaining official transcripts.**

### A. 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 219 of this catalog.

### B. 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](http://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.

## C. Scholarships

### 1. MERIT SCHOLARSHIPS

CHS offers generous merit scholarships to qualified applicants ranging in value from \$3,000 to \$7,500. There are three award levels: Scholastic Award, Dean Scholarship Award, and the President Scholarship Award. Incoming freshman will be evaluated using their weighted high school GPA, SAT, or ACT scores if available. The student will be awarded the highest level of scholarship possible in accordance with the criteria listed. The merit scholarships are awarded each academic year, and the student must maintain the GPA requirements listed in the notification letter while enrolled at CHS to continue receiving the scholarship.

### 2. PRESIDENT'S DIVERSITY EXCELLENCE SCHOLARSHIP

This scholarship recognizes the academic achievement and potential of students who, through sharing their varied cultural perspectives, will enhance the education, excellence, and diversity of our CNUCHS student body. This scholarship looks to award undergraduate students of African American or Latino heritages who intend to study health sciences at CNUCHS. The scholarship pays for all tuition, fees, books, and health insurance. Students **must maintain a cumulative GPA of 3.00 each year** to keep the scholarship until graduation.

### 3. CONTINUING STUDENT NEED-BASED SCHOLARSHIP

The CSNB Scholarship is available in fall and spring terms to all current CNUCHS students (including PMPBs) not receiving the President's Diversity Excellence, the Merit Scholarships, or the Nursing Scholarship. This scholarship serves to act as partial aid for current CNUCHS students who may need supplementary assistance during their time at CNUCHS. To be considered for a CSNB Scholarship, students must have a cumulative GPA of at least 3.00, be in good academic and conduct standing, and have attended at least one term as a CNUCHS full-time student at the time of the award. Awards range from **\$500.00 to \$3,000.00**. Awards are applied to tuition.

### 4. CHS NURSING SCHOLARSHIP

The CNUCHS Nursing Scholarship recognizes the academic achievement and potential of students who will enhance the CNUCHS BSN program through academic excellence and campus community involvement. This scholarship is open to all students who have been accepted to the CNUCHS Bachelor of Science in Nursing (BSN) program who meet the required criteria. The scholarship amount of \$18,000 is awarded upon enrollment and renewed annually when students maintain a cumulative GPA of 3.0, maintain full-time enrollment status, maintain good academic and conduct standing, and make satisfactory progress toward degree completion.

## VIII. General Policies

### A. Orientation and Course Registration

Mandatory orientation for new students is held during the days preceding the start of classes. Since attendance is mandatory, new students must notify the Office of Academic and Student Affairs if they are unable to attend scheduled orientation due to illness or emergency. Notification may be sent to [chs.studentaffairs@cnsu.edu](mailto:chs.studentaffairs@cnsu.edu).

New student registration for classes requires:

1. All admission contingencies be fulfilled.

2. Financial aid clearance from the Financial Aid Office.
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 Student Affairs by the end of Orientation. To make updates, a new form must be submitted to the Office of Student Affairs. 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 are sent by the CNU IT department to the student’s CNU email address.

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.

The Registrar acting in conjunction with the Office of Academic and Student Affairs at CHS is responsible for managing course registration for incoming freshmen, non-degree seekers, transfer students, PHPB students, and continuing students.

Student registration calendar is based on the student standing classification as below:

<b>Classification</b>	<b>Number of Credits</b>
Freshmen	Less than 30
Sophomore	30 to 59 credits completed
Junior	60 to 89 credits completed
Senior	90+ credits completed
Non-degree seeker	N/A
PHPB	N/A
Transfer	25 credits or more completed

Registration is online through the student portal, except for freshmen. All freshmen will be pre-registered by the Office of Curriculum and Assessment, in conjunction to the Office of the Registrar, according to the curriculum plan. BSN students will be pre-registered every term, following the curriculum plan.

All other students’ categories as above will have the opportunity to register themselves online according to the online registration calendar below:

SUMMER 2024 REGISTRATION CALENDAR:

<b>Student Group</b>	<b>Registration Period</b>
Senior, PHPB, Non-degree	05/02 to 05/05/2024
Junior	05/03 to 05/05/2024
Sophomore	05/04 to 05/05/2024
Freshmen	No online registration

FALL 2024 REGISTRATION CALENDAR:

<b>Student Group</b>	<b>Registration Period</b>
Senior, PHPB, Non-degree	08/27 to 09/02/2024
Junior	08/29 to 09/02/2024
Sophomore	08/31 to 09/02/2024
Freshmen	No online registration

SPRING 2025 REGISTRATION CALENDAR:

<b>Student Group</b>	<b>Registration Period</b>
Senior, PHPB, Non-degree	12/26/2024 to 01/04/2025
Junior	12/30/2024 to 01/04/2025
Sophomore	12/31/2024 to 01/04/2025
Freshmen	No online registration

There are certain courses that are not open for online registration and require approval from faculty and from the Office of Academic and Student Affairs with proper paperwork. Those courses are COLL 220 Service-Learning Practicum, COLL 490a Peer-Assistant Learning, COLL 490b Research Experience, COLL 490c Student Services Assistant, and MEDS 410 a and b Standardized Patient Clinical Experience. Registration forms for those courses can be found at the “CHS Academic and Student Affairs” CANVAS page.

Students with business, financial, or any other registration holds on their accounts will not be registered until the hold has been cleared. To be able to register for courses, students must be in compliance with all immunizations and health insurance requirements as indicated in this catalog. If not able to register during the registration period, students must submit an “Course Add/Drop Form” during the add/drop period as specified in the academic calendar. Form can be found at the “CHS Academic and Student Affairs” CANVAS page. Students who are not able to register for courses during the regular registration and during

the add/drop periods cannot attend classes on that term. Please note that all students with business, financial, immunization, health insurance, or other registration holds on their account will lose access to the course management system (CANVAS) until the hold is removed.

## B. Limitations to Registration

Course Registration at CNUCHS is regulated by CHS 3703 Student Standing Classification and Course Registration Policy. In addition to the limitations indicated above, students must be mindful of the following restrictions:

- A minimum of 12 credit hours is required to be considered a full-time student.
- A maximum of 20 credit hours is allowed per full 15-week term. During condensed summer session (10 weeks or less), when offered, a maximum of 10 credit hours is allowed.
- When registering for any COLL 490 courses (a, b, or c) students must follow the maximum credit hours allowance as indicated in the table below:

<b>COLL 490 (a, b, c) # of credit hours</b>	<b>Max. credit hours allowance for other courses</b>
No Credit	17 Credit hours
1 Credit hour	17 Credit hours
2 Credit hours	16 Credit hours
3 Credit hours	15 Credit hours

- When registering online, students must follow their curriculum plan to ensure proper course sequence and compliance with all degree requirements. Students are highly encouraged to see an academic advisor to discuss their registration each term.

## C. Add/Drop and Withdrawal

Course Add/Drop and Withdrawal is governed by CHS 3128 Course Add/Drop and Withdrawal Policy.

### **a) Course Add/Drop:**

Students are able to make minor adjustments in their course registration during the add/drop period at the beginning of each term. The add/drop period is included in the academic calendar. Courses dropped during the add/drop period will the record of class enrollment is removed from the transcript without showing “W.”

To add or drop a course, students must note the conditions below:

- Students may only add or drop a course during the add and drop period by submitting an add/drop form via CANVAS Academic and Student Affairs page.
- Students who submitted an add/drop form must not stop or start attending a course until the add/drop chance is effectively reflected in their student portal.
- Approval for an add or for a drop is not automatic or guaranteed and may be denied.

- Students may add up to four and drop up to four courses per term (two in a condensed summer term).
- Students cannot add or drop the same course more than once per term.
- Faculty sponsored courses (COLL 490a, b, c) and courses that require community service placement (COLL 220) cannot be added or dropped during the add/drop period. They require a petition to the course instructor and approval from the Office of Academic and Student Affairs.

#### D. Course Withdrawal

After the add/drop period, students may withdraw from a course until the end of the 10<sup>th</sup> week of classes (5<sup>th</sup> week in a condensed summer term). Course withdrawal is documented by a course grade of “W” or “WF” with no credit noted in the transcript. A grade of WF indicates that the student had a failing grade at the withdrawn date (CHS 3106 Grading Convention Policy).

When withdrawing from a course, a student must complete a “Course Withdrawal Form” (hand writing not accepted) available at the CANVAS Academic and Student Affairs page, and submit directly to the Office of Academic and Student Affairs, in person, or via email ([academicaffairs.chs@cnsu.edu](mailto:academicaffairs.chs@cnsu.edu)).

Students are limited to a maximum of four course withdrawals during their tenure at CNUCHS. Please note that course withdrawal may increase the time of completion to graduation.

#### E. Evidence of Health Insurance and Immunization Requirements

All CNUCHS students are required to maintain health insurance while enrolled at the college and must provide health insurance evidence of coverage. Evidence must be from a current provider or MediCal to include dates of coverage. Health insurance cards are NOT acceptable. The expiration date should be the final date of coverage or July 31<sup>st</sup> of the following year, whichever comes first. Students MUST upload their proof of health insurance coverage into MyRecordTracker (MRT) for BSHS or PHPB students and Clinical Wallet (CW) for BSN students, no later than the first day of class. The Office of Student Affairs manages MRT and CW at the college level and is able to help students with any difficulties uploading their health insurance and immunization documentation.

Please note:

**If a student fails to meet the requirement of providing evidence of health insurance coverage by the deadline set by CNU, the student will be automatically enrolled in the CNU Student Health Plan. ONCE ENROLLED, THE ENROLLMENT FEE IS NOT REFUNDABLE.**

To Help students meet the health insurance requirement, CNU offers a student health plan through United Healthcare. The policy allows full-time students and their dependents to have continuous health coverage throughout the year. Students who have other current health insurance and have uploaded proof of insurance into My Record Tracker or Clinical Wallet, may opt out of the United Healthcare plan by completing an



online waiver at [United Healthcare Student Resources](#) page. Submitting a waiver must be done annually, before the annual deadline, and is only valid for the current academic year. Students who do not submit an approved waiver before the annual deadline will automatically be charged for the yearly insurance premium. There are no refunds or cancellations after the deadline. Please contact CNUCHS Office of Student Affairs for more information.

CNUCHS requires all registered students to provide proof of immunization uploaded to MRT/CW by the first day of class. All detailed immunization requirements are available at the CANVAS Academic and Student Affairs page. Below is the list of required immunizations all registered students must upload into MRT/CW:

- Measles, Mumps, and Rubella (MMR)
- Varicella (Chickenpox)
- Tetanus, Diphtheria, and Pertussis (T DAP)
- Hepatitis B
- Tuberculosis
- Meningococcal
- Covid-19 (or CNU waiver for vaccine refusal)

#### F. Delivery of Instruction

##### **ADDRESS WHERE INSTRUCTION WILL BE PROVIDED**

Class sessions are conducted at the CNUCHS Rancho Cordova 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 service-learning activities are conducted at assigned locations and community sites as established by agreement among the student, and College. BSN students have some of their clinical instruction off campus at selected clinical placement sites.

##### **Language of Instruction**

All courses are delivered in English and English language services are not provided.

#### G. 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. CNUCHS utilizes CANVAS as a Learning Management System and many additional resources to augment learning are posted on CANVAS by course instructors.

#### H. Disability Accommodations

Any student requiring disability assistance may apply for services through the CNUCHS Office of Student Affairs. The college is committed to promoting equal access to programs and facilities, thereby ensuring 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 to achieve successful completion of their degree or course of study.

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 Director of Student Affairs in writing as soon as they become aware of the disability. The Director of Student Affairs serves as the advisor to students with disabilities and as a liaison between students with disabilities and the faculty.

#### **A) 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.

#### **B) 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).

#### **C) 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 Director of Student Affairs 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.

#### **D) Documentation Guidelines**

Both medical and functional elements of 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.

## **E) 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, 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.

## **F) Recommendations for Accommodations**

The student's request for accommodation will be assessed by the Director of Student Affairs who will determine eligibility for available services and accommodation. 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 begins only after appropriate documentation is received and a reasonable time for accommodation development exists. Once registered, the Director of Student Affairs will work collaboratively with the student and faculty to provide the best reasonable accommodation for the student to achieve academic success.

## **G) Disability Services and Accommodations**

Academic Accommodations include but are not limited to:

- Extended exam times
- Exams in distraction-free environment
- Large print materials
- Note takers
- Readers

## I. Research Instruction

CNUCHS embeds research in its BSHS curriculum from the very first day. The Freshmen Research Experience is part of the core curriculum. Students enrolled in freshman biology and chemistry participate in original research projects during the entire first year of course work. The project is called the Interdisciplinary Science Learning and Novel Discovery (ISLaND) project and is a cross disciplinary innovation where student teams research the relationship between organismal health and environmental variables within a local ecosystem. This is an embedded research experience in the curriculum and all BSHS Freshmen students are required to participate. ISLaND represents the first formal research experience for all students at CHS, in their freshman year.

All BSHS students are required to take COLL 310 Research Methods (a degree requirement) to prepare for other research experiences within the college. This course serves as a foundation for COLL 320 Scholarly Project, which focuses on the language, ethics, approaches, and challenges of the research process. COLL 320 is also a BSHS degree requirement and is a research experience (3 units) in which students engage with faculty members in specific research activities designed to enhance students' research experience. Students will work in collaborative course-based teams to further develop research projects with assigned faculty mentors.

BSN students participate in a capstone research course in the final semester of the curriculum. This course facilitates development in the scholarship of nursing.

In addition, students can participate in structured research experience with individual faculty members, following an apprenticeship model in which a faculty acts as a mentor (COLL 490b Research Experience). Students can enroll in COLL 490b either for credit (1 – 3) or no credit. Only two (2) credits will count towards upper division credit requirements for graduation.

## J. 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 (COLL 210 Foundations of Service-learning). The subsequent semester includes meaningful work in the community with a concurrent course (COLL 220 Service-learning Practicum) to support students as they move from theory to practice.

## IX. Academic and Student Affairs Policies

### **IMPORTANT!**

**This Catalog provides a general summary of CNUCHS Academic Policies. Students must consult the full policies available on the Academic and Student Affairs Canvas Page and in the Office of Academic and Student Affairs.**

#### A. Academic Calendar and Curriculum Plans

The academic calendar and the curriculum plans are important academic resources for students, since they bring all critical academic dates and course sequence that allow for the students to stay organized, meet deadlines, and comply with all degree requirements.

In the Academic Calendar, all major academic events and deadlines are outlined. It covers the length of an entire academic year, consisting of three full academic terms: Summer, Fall, and Spring. At CNUCHS the academic year starts with the summer term each year and consists of three 15 + 1 -week terms. The Academic Calendar covers important deadlines such as the mandatory orientation and townhall meetings, deadlines for add, drop and withdraw from courses, final exams periods, date final grades are due, grade appeal deadlines, and graduation dates.

Each degree program, pathways, and PHPB curriculum has its own dedicated curriculum plan. A curriculum plan is a roadmap that students take to fulfill the requirements for a degree or to apply for professional schools. The curriculum plan outlines the timeline in which the student must take the necessary courses and the sequence in which the courses must be taken. The curriculum plan provides the student with the expected course load for each academic term. It keeps the student on track, provides a balanced schedule, and avoids the student taking unnecessary courses or delaying required ones. Students must strictly follow the curriculum plan and, if any change is desirable, it must be made in consultation with our academic advising team. **Course enrollment is not guaranteed if the student deviates from the curriculum plan.** The Academic Calendar and Curriculum Plans are available in the CANVAS Academic and Student Affairs page.



## Academic Calendar 2024 - 2025

### SUMMER 2024

### SUMMER 2024

#### Summer Term: 05/06/2024 – 08/22/2024

Event	Start Date	End Date	Day
Orientation (New Students)	05/02/2024	05/03/2024	Thursday & Friday
Academic Session Begins	05/06/2024		Monday
Mandatory Student Townhall	05/10/2024		Friday
Course Add/Drop Deadline	05/17/2024		Friday
Course Withdraw Deadline	07/12/2024		Friday
Last Day of Instruction	08/16/2024		Friday
Final Exams	08/19/2024	08/22/2024	Monday – Thursday
Final Grades Due	08/26/2024		Monday
Last Day for Grade Appeal	09/02/2024		Monday

### FALL 2024

#### Fall Semester: 09/03/2024 – 12/19/2024

Event	Start Date	End Date	Day
Orientation (New Students)	08/29/2024	08/30/2024	Thursday & Friday
Academic Session Begins	09/03/2024		Tuesday
Mandatory Student Townhall	09/06/2024		Friday
Course Add/Drop Deadline	09/13/2024		Friday
Course Withdraw Deadline	11/08/2024		Friday
Last Day of Instruction	12/13/2024		Friday
Final Exams	12/16/2024	12/19/2024	Monday - Thursday
Final Grades Due	12/23/2024		Monday
Last Day for Grade Appeal	12/30/2024		Monday

### SPRING 2025

#### Spring Semester: 01/08/2025 – 04/24/2025

Event	Start Date	End Date	Day
Orientation (New Students)	01/06/2025	01/07/2025	Monday & Tuesday
Academic Session Begins	01/08/2025		Wednesday
Mandatory Student Townhall	01/13/2025		Monday
Course Add/Drop Deadline	01/17/2025		Friday
Course Withdraw Deadline	03/14/2025		Friday
Research Day / Service-Learning Showcase	04/17/2025		Thursday
Last Day of Instruction	04/18/2025		Friday
Final Exams	04/21/2025	04/24/2025	Monday – Thursday
Final Grades Due	04/28/2025		Monday
Last Day for Grade Appeal	05/05/2025		Monday
Graduation Clearance Day	05/01/2025		Thursday
Graduation Ceremony	05/17/2025		Saturday

## UNIVERSITY HOLIDAYS

Holiday	Date
Juneteenth	06/19/2024
Independence Day	07/04/2024
Labor Day	09/02/2024
Thanksgiving	11/28 - 11/29/2024

Holiday	Date
Martin Luther King Day	01/20/2025
President's Day	02/17/2025
Memorial Day	05/26/2025

### B. Course Repeat, Course Placement, and Transfer of Credits

Course repeat is governed by CHS 3129 Course Repeat Policy; placement for first-year courses is governed by the CHS3122 Placement for First-Year Courses Policy; transfer of credits is governed by CHS 3204 Transfer Student Enrollment and Evaluation of Transfer Credit Policy.

#### 1. COURSE REPEAT

Students may only repeat a course in which they have received a grade of D, F, or WF. CNUCHS does not allow a student to repeat a previously passed course with a grade of "C" or better under the premise of improving the course grade. CHS 3129 Course Repeat Policy governs the topic.

BSHS students may repeat a course up to two times while BSN students may repeat a course only once. If a BSHS student wants to repeat a course for the second time, they need to petition to the Office of Academic and Student Affairs with documentation supporting an extenuating circumstance that may have caused the student to fail the course for the second time. If the second repeat is granted, the Office of Academic and Student Affairs will authorize the registration for a second course repeat. Please note that there is no exception for allowing a student to repeat a course a third time.

There is a maximum of 24 credits any student may repeat throughout their tenure at CNUCHS. If a student fails a course after having taken the 24 credit allowance, the student will be blocked from progressing towards the degree at CNUCHS.

Failed (D, F grades) and withdrawn failed (WF grade) courses with course IDs MATH, BIOL, CHEM, NURS, and PHYS may be repeated only at CNUCHS and must be taken the next time it is offered and seats are available. Courses other than the ones mentioned in this paragraph require authorization from the Office of Academic and Student Affairs to be taken outside CNUCHS (CHS 3131 Taking Pre-Approved Extramural Courses and Academic Remediation and Graduation Policy); such courses, when authorized, may satisfy degree requirements, but the CNUCHS course grade and GPA remain unchanged.

Once a student repeats a previously failed course at CNUCHS, the original grade is replaced with the new course grade and the GPA is recalculated. Failed course notation remains in the transcript and is marked as "Repeated" (R).

#### 2. PLACEMENT FOR FIRST-YEAR COURSES

Freshmen and transfer students enrolling at CNUCHS will take course placement diagnostic tests in English and Mathematics. Students will undergo academic advising and course placement based on their performance on the placement test as indicated in this policy.

1. CNUCHS accepts AP/IB results as elective credits only for English and mathematics, as indicated in CHS 3203 Advanced Placement (AP) & International Baccalaureate (IB) Credit Evaluation Policy.
2. First time college students and transfer students enrolling at CNUCHS who have approved English and/or mathematics equivalent credits to be transferred are not subjected to take the placement diagnostic tests. CNUCHS accepts equivalent courses that have been taken within five (5) years, as per CHS 3204 Transfer Student Enrollment and Evaluation of Transfer Credit Policy.
3. Freshmen and transfer students enrolling at CNUCHS who have no approved English and/or mathematics equivalent credits to be transferred will complete course placement diagnostic tests in English and/or mathematics before or during orientation, prior to the first day of classes. Placement diagnostic tests result keys are depicted in the table below:

<b>Subject</b>	<b>Placement Test Result</b>	<b>Action</b>
English	70% or above	Register in ENGL 110 English Communication
	69% and below	Register in ENGL 110 and ENGL 110L
Mathematics	70% or above	May register in MATH 130 Diff. & Integral Calculus
	69% and below	Must take MATH 125 Pre-calculus

4. Both English and Mathematics placement diagnostic tests will be designed and administered under the responsibility of the Office of Curriculum and Assessment. The Office of Curriculum and Assessment must publish specific procedures to operationalize the tests administration in consultation with the CNUCHS Assessment Committee.
  - Test results must be communicated to the student within 24 hours.
  - The Office of Curriculum and Assessment will provide the Office of Academic and Student Affairs with the official results of all diagnostic tests no later than the first day of class.



- The Office of Academic and Student Affairs will make sure all students are registered in the right classes according to the placement diagnostic tests results, no later than 24 hours after receiving the tests results.
- Students who fail to take the tests will be compulsorily registered in ENGL 110, ENGL 110L, and/or MATH 125 as indicated in Table 1.
- Once the test day(s) and time(s) is scheduled before the start of classes there is no opportunity to take the tests on a different day or time, however special accommodations for testing may be granted by the Office of Student Affairs.
- There is no opportunity for the students to re-take the course placement diagnostic exams, under any circumstances.
- Students may appeal the results of the course placement diagnostic exams to the Associate Dean of Academic and Student Affairs within 5 days from the test date. Only appeals related to content aspects of questions, with supporting documentation, will be considered. No appeal for personal reasons or circumstances will be considered.

## **TRANSFER OF CREDITS**

The maximum allowance for transfer credits varies according to the degree program but no more than sixty (60) course credit hours from other regionally accredited institutions and/or AP and IB hours can be transferred to CNUCHS.

### **C. College-level Credits**

CNUCHS may consider transfer of credits for certain college-level courses taken at regionally accredited 2- or 4-year institutions of higher education. Guidelines for evaluation of transfer credits are regulated by the CHS 3204 Transfer Student Enrollment and Evaluation of Transfer Credit Policy. Please see Section V Admission to the College of Health Sciences, Sub-section B General Eligibility Requirements, Item 2 Guidelines for Evaluation of Transfer Credits.

CNUCHS does not accept any upper division courses to be transferred.

### **D. Taking Extramural Courses for Transfer**

CHS 3131 Taking Pre-Approved Extramural Courses for Remediation and Graduation Policy governs all requirements and conditions that regulate the authorization processes for the transfer of credits to be taken outside of CNUCHS.

Once registered as a CNUCHS student, transfer of credits must be previously approved by the Office of Academic and Student Affairs. Students interested in taking extramural courses must fill a “Transient Student Credit Request” form (available at the Academic and Student Affairs CANVAS page) and submit to the Office of Academic and Student Affairs for approval, which may take up to 10 business days, and the decision is final, not subjected to appeal.

Courses taken outside CNUCHS without prior approval from the Office of Academic and Student Affairs while enrolled at CNUCHS or while on leave of absence, will not be accepted for transfer by CNUCHS. A registered student must have a minimum cumulative CNUCHS GPA of 2.0 and be in good standing with the college when requesting authorization to take courses outside CNUCHS.

Courses with IDs BIOL, CHEM, MATH, NURS, and PHYS are not allowed to be taken outside of CNUCHS, and as such are not allowed to be requested to be part of a “Transient Student Credit Request” form. See CHS 3131 Taking Pre-approved Extramural Courses for Academic Remediation and Graduation Policy, and CHS 3129 Course Repeat Policy.

Enrollment status (full-time/part-time) is determined by CNUCHS credits attempted only.

## E. Credit Hour and Grading Convention

### 1. CREDIT HOUR

One credit hour is the amount of work that represents one hour of direct instructional activities per week (“in-class” time), plus a reasonable approximation of a minimum of two and a maximum of three hours of preparation/homework (outside-class” time) per week over a 15-week term (CHS 3117 Credit Hour Policy).

For didactic/lecture courses, one credit hours is equivalent to one hour lecture with two-minute recess per week for a duration of 15 weeks. For laboratory and experiential learning courses, one credit hour is assigned per three 55-minute hours each week of student time spent in this activity. For clinical courses/activities, one credit hour is assigned for each 48 hours spent in clinical activities over the course of 16 weeks.

CNUCHS adopts the semester-based criteria (15-week of instruction, one week for final exams; 16 weeks for clinical experiences) for assigning credit hours. Any credit transferred from an institution who adopts the quarter system will be converted considering 1 quarter-system credit equals to 2/3 (0.66) of a semester credit.

CHS 3117 Credit Hour Policy governs the assignment of credit hours within the college.

### 2. GRADING CONVENTION

CHS 3106 Grading Convention Policy regulates grade assignment to students.

All courses are assigned student performance grades by the teaching faculty, according to the following grade point and letter grade convention:

Grade Point Equivalent	Letter Grade & Definition		Score %
4.00	A+	Outstanding	97-100%
4.00	A	Excellent	94 - 96%
3.70	A-	Very good	90 – 93%
3.30	B+	Commendable	87 - 89%
3.00	B	Good	84 - 86%
2.70	B-	Fair	80 – 83%
2.30	C+	Satisfactory	75 - 79%
2.00	C	Pass	70 - 74%
1.00	D	Unsatisfactory	60 - 69%
0.00	F	Fail	< 60%
Incomplete	I	Incomplete	n/a
Withdraw	W	Withdraw	n/a
Withdraw Failing	WF	Withdraw Failing	n/a
Audit	X	Audit	n/a
Pass	P	Passes Course	≥ 70%
No Pass	NP	Not Passing Course	< 70%

Each course syllabus defines the criteria for grade assignment and follows the grading convention above.

Please note:

**CNUCHS does not allow any course instructor to “grade on a curve”.**

CNUCHS does not offer the student a grade choice such as letter grade or pass/no pass. Courses with letter grade cannot be changed to pass/no pass and vice-versa.

**Only final grades can be rounded up**, and they can only be rounded up at 0.50% and above by one hundredth of a decimal point. For example, grades of 69.50% and above will be rounded up to 70%. A grade of 69.49% and below will not be rounded up to the next integer.

#### F. 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. Courses with a P/NP grade from another institution cannot be transferred to CNUCHS. “P/NP” grades are not calculated into the GPA, thus, have no effect on the term or cumulative GPA. Undergraduate and PHPB 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.

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.

#### G. Incomplete Grade

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 and is subjected to the approval of the Dean of Academic and Student Affairs. Students must request an incomplete grade directly to the course instructor within two weeks of the extenuating circumstance by submitting an Incomplete Grade form. The form is available on the CANVAS Academic and Student Affairs page.

If the course instructor approves of the granting of an “I” grade for the course, they will finalize the Incomplete Grade Form and send it to the Dean of Academic and Student Affairs for approval. If the Associate Dean of Academic and Student Affairs approves the incomplete, 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. Note that neither the student nor the course instructor should send the Incomplete Grade Form directly to the Registrar, without the approval from the Dean of Academic and Student Affairs.

Removal of the “I” grade from the transcript is contingent upon the completion of missed assignments and exams within 21 days after the final grades were submitted. Failure to complete the coursework within the 21-day extension period will result in automatic conversion of “I” to the previously calculated grade for the course.

## H. GPA Calculation

The running and final grade point average (GPA) is calculated according to the following formula where  $C_1$  = credit hours of Course1 and  $GP_1$  = 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 only from courses taken 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 GPA calculation.

## I. Academic and Degree Honors

Undergraduate students who earn 12 or more graded semester hours during a semester in residence at CNUCHS can qualify for term honors. The honor is noted on the transcript for the term it is earned.

**President's List:** Term GPA of 3.75 or higher

**Dean's List:** Term GPA of 3.50 or higher

Students who complete the BS degree requirements with specified CHS grade point averages (GPAs) will have an Honors designation placed on their transcripts. Coursework completed at other institutions are not considered in calculating degree honors. The 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

## J. Course Auditing

A course grade of “X” (Audit) will be recorded on a student transcript when a student has been granted permission to audit a course and enrolls in the course. “X” 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 Dean of Academic and Student Affairs. The instructor will inform the student of the amount of participation that is expected in the course. Laboratory, clinical, experiential learning, and NURS-coded 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.

## K. Grade Appeal and Grade Change

Grade appeal is regulated by CHS 3120 Course Grade Appeal Policy, while CHS 3121 Course Grade Change Policy regulates grade changes.

### a) Course Grade Appeal:

Students are permitted to appeal a final course grade only if:

- the assigned course grade is inaccurate based on calculation error by the course instructor(s), or;

- the assigned grade was calculated based on unpublished criteria, not indicated in the course syllabus, or;
- the assigned grade was based on procedures inconsistent with specific course, college, or university policies.

To appeal from a final grade, students must fill out a “Course Grade Appeal Form” (available at the CANVAS Academic and Student Affairs page) and follow strictly the process below:

- i. Students must communicate with faculty regarding the grade appeal within five (5) business days from the day final grades are posted, as per the academic calendar. Communication must be through email, with the Course Grade Appeal Form attached. Faculty has up to five (5) business days to respond to the student from the day they received the grade appeal.
- ii. If not satisfied, student may appeal to the Department Chair within five (5) business days from the receipt of the faculty response. Faculty response and the original Course Grade Appeal Form must be submitted to the Department Chair. The Department Chair has up to five (5) business days to respond to the student from the day the grade appeal is received.
- iii. If not satisfied, students may appeal to the Dean of Academic and Student Affairs within five (5) business days from the receipt of the Department Chair response. Department Chair and faculty responses, and the original Course Grade Appeal Form must be submitted to the Associate Dean. The Dean has up to ten (10) business days to respond to the student from the day the grade appeal is received.
- iv. If still not satisfied, students may appeal to the Dean of the College within five (5) business days from the receipt of the Dean of Academic and Student Affairs response. Dean of Academic and Student Affairs, Department Chair, and faculty responses, as well as the original Course Grade Appeal Form must be submitted to the Dean of Academic and Student Affairs. The Dean has up to five (5) business days to respond to the student from the day the grade appeal is received. Dean’s decision is final.

Students filing a grade appeal must provide all the following information attached to the Course Grade Appeal Form:

- A description of their attempt at resolution of the grade dispute with all instances as applicable (Faculty, Department Chair, Associate Dean of Academic and Student Affairs).
- Evidence of graded assignments and any other relevant materials that support the dispute.

Decisions on grade appeals, at all levels, are based on evidence, not on feelings. Please be professional and do not include any personal statements that are negative or disrespectful.

**b) Course Grade Change:**

Course grade changes are permissible only 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 Form with an explanation of the circumstances for the change and submit it to the Office of Academic and Student Affairs. The request will be reviewed in accordance with the policy statement outlined above and either approved or denied. If approved, the completed form will be sent by the Office of Academic and Student

Affairs directly to the Office of the Registrar for processing.

Please note that there are no other permissible reasons other than the enumerated above to change a grade.

## L. Attendance, Excused Absences, and Leave of Absence

### A) ATTENDANCE

Regular attendance fosters engagement and enhances academic success, while habitual lack of attendance may put students at academic disadvantage. CHS 3102 Attendance Policy governs expectations, rules, and attendance requirements for all CNUCHS students.

While all students are expected and highly encouraged to attend all curricular and mandatory co-curricular activities, the following rules apply:

- For laboratory, clinical, and experiential learning courses/activities, students cannot have more than three (3) absences per term, excused or unexcused, sequentially or not, due to the nature of the activity. A fourth absence will automatically flag the student for absenteeism and the student will be administratively withdrawn from the course/activity with a “W” or “WF” recorded in the transcript (CHS 3106 Grading Convention Policy) and required to repeat the course/activity next time it is offered, and seats are available.
- Attendance in online synchronous activity requires the student to have the camera active during the time of the activity, to be considered present.
- Students must follow all attendance requirements included in the course syllabus for all courses, (e.g. attendance requirements, penalties, attendance incentive measures, tardiness, etc.).
- Attendance criteria for the Bachelor of Science in Nursing are stated in NURS coded course syllabi, following all Board of Registered Nursing’s regulations.
- Students who have five or more consecutive unexcused absences will be subjected to the provisions set forth on CHS 3702 Leave of Absence Policy.

### B) EXCUSED ABSENCES

CHS 3702 Leave of Absence Policy regulates the criteria and procedures for students to request an excused absence. All excused absence requests must be sent through email to the Office of Student Affairs at [chs.studentaffairs@cnsu.edu](mailto:chs.studentaffairs@cnsu.edu) . Students requesting an excused absence must fill the “Request for Excused Absence Form” available at the CANVAS Academic and Student Affairs page (handwriting not allowed) and send attached to the email with all supporting documentation.

CNUCHS may grant an excused absence only under the following circumstances:

- 1) **Illness or Hospitalization**: Includes office visits for medical or dental appointments, admission into a hospital or emergency room, or physician or legally verified quarantine. In order for the absence to be granted, proper supporting documentation must be provided. Acceptable documentation for illness or hospitalization includes:
  - a) Medical and dentist office visit notes. In order to be accepted, such notes must indicate date and time of the visit, date the note was issued, be signed by the professional and include their full name and license number. Proof of scheduling an appointment or appointment reminder notes are not accepted.  
**NOTE:** CNUCHS considers a conflict of interest a medical and/or dentist note issued by the

student's parents or siblings, and as such does not accept as a valid documentation for excused absences.

- b) Hospital or emergency room admittance document, issued in the hospital's official letterhead and signed by an authorized hospital official, identified by their registration number.
  - c) Official medical or state document attesting the quarantine recommendation with a period covered by the quarantine.
- 2) Death of an immediate family member: CNUCHS defines an immediate family member as the student's parent, grandparent, legal guardian, spouse or life partner, child, sibling, as well as step- and in-laws of the same relationship.
  - 3) Jury Duty and Court Subpoena: A student who is required and selected to participate in any jury duty, and/or required to appear in court as a witness, victim of a crime, or other court-required appearance has an excused absence. Supporting court documents such as the jury summons or note from the appropriate jury commissioner or clerk of the court, as proof of attendance, is required for the excused absence to be granted.
  - 4) Professional School Entrance Exams or Interviews: Exams such as MCAT, DAT or other required exam for admission in professional schools are considered circumstances in which application for excused absences are allowed. In such cases, only the exam day is counted towards the excused absence and one additional day if the exam site is distant more than 200 miles from CNUCHS campus. Proof of registration for the exam or official confirmation of interview must be presented.
  - 5) Religious Holidays: CNUCHS may recognize selected religious holidays for the purpose of excused absences. Such holidays may include, but are not limited to, Eid-Al-Fitr, Eid-Al- Adha, Diwali, Holi, Good Friday, Chanukah, and Passover.
  - 6) Personal Emergency: Under this category, students can request an excused absence in cases of fire at home, flooding, natural disasters, traffic accidents, being victim of a crime or domestic violence, and a life-threatening situation. Students must provide supporting documentation that includes, but is not limited to, police reports, insurance claims, or hospital summary.

Please be aware of the following rules pertained to excused absences:

1. Excused absences are not counted against any attendance requirements and do not relieve students from their responsibilities for completing any course work, assignments, or assessments/evaluations assigned or due during their absence.
2. The College Dean may grant excused absences for special reasons, not included in this policy, as long as the request is supported by documentation and represents an event in which the student absence was mandatory. Family reunions, birthdays, weddings, vacations, and other private/family celebrations are not justifiable excused absence in any circumstances.
3. All documents requesting an excused absence must be provided, whenever possible, by the day of the absence. When this is not possible, supporting documents must be provided no longer than five (5) business days after the absence event. If documentation is not supplied within this timeframe, the student waives the right to request an excused absence. Documents are accepted in hard copies or pdf format; no pictures or jpeg documents are accepted.
4. An excused absence must be requested by the student through an official "Request for Excused Absence" form as indicated above, that must be sent with supporting documentation, to the Office of Student Affairs through email ([chs.studentaffairs@cnsu.edu](mailto:chs.studentaffairs@cnsu.edu)) or hand delivered directly at the Office of Student Affairs.

5. Once the Office of Student Affairs receives and evaluates the students request for an excused absence, the student will be notified of the approval or denial of the request via CNSU email within two (2) business days. The Office of Student Affairs will notify the faculty of approved excused absences via CNSU email.
6. Faculty should not grant any make-up or extend deadlines for assignments without a notice from the Office of Student Affairs that an excused absence was officially granted.
7. To avoid chronic absenteeism, a maximum of 4 excused absence events from lecture/didactic courses may be granted to a student per semester/term, if it does not exceed twenty percent (20%) of the total number of instructional hours. An event is considered a single (1) completed and approved excused absence form. An excused absence event cannot be granted for a period equal to or greater than 5 consecutive business days. For extended periods of absence, student should consider a leave of absence.
8. Experiential/laboratory courses require students to be present and actively engaged to meet the learning objectives. As such, students who have 4 or more absences (excused or unexcused) in experiential/laboratory courses will be administratively withdrawn from the experiential/laboratory course, with a “W” recorded in the transcript and required to repeat the course.
9. Faculty should make all necessary efforts to provide students with a way to effectively learn the missed course content and make-up all assignments, tests, and exams, within ten (10) business days of the excused absence event at the faculty’s discretion. The Office of Student Affairs will provide support when needed. End of the term make-ups cannot exceed fourteen days after the final exam date.

#### M) College Withdrawal

If for any reason a student decides to withdraw from the college, student must fill an “Official College Withdrawal Form” available at the CANVAS Academic and Student Affairs page, collect all necessary signatures and deliver the form to the Office of Academic and Student Affairs.

It is important that the student consult the Enrollment Agreement to get acquainted with the rules and criteria for tuition reimbursement if it is the case. Questions on tuition reimbursement and on financial aid must be directed to CNU Business Office and CNU Financial aid, respectively.

If a student does not fill in an Official College Withdrawal Form, the student may have some financial responsibilities associated with the lack of proper notification.

#### N) Leave of Absence

CHS 3702 Leave of Absence Policy regulates the criteria for CNUCHS students to request a leave of absence.

A Leave of Absence (LOA) is defined as an absence of longer than five consecutive academic days from college enrollment but may not exceed one academic year. CNUCHS grants an approved LOA to students for properly documented maternity, military, family, personal or medical reasons. Non-attendance in courses does not constitute notification of intent to apply for LOA status.

A student requesting a Leave of Absence (LOA) should fill out a “Leave of Absence Form” (available at the CANVAS Academic and Student Affairs page) after discussing their decision with a CNUCHS health professions advisor. The Leave of Absence form must be signed by the student and approved by the Office



of Academic and Student Affairs, the Business Office, and Financial Aid representatives before it is forwarded to the Office of the Registrar for official notation on the transcript.

A LOA may have progression timing consequences. Students are advised to meet with a CNUCHS health professions advisor to create an academic plan supporting the LOA request. Before a student considers a LOA, they should consult with the Financial Aid Office, in order to make an informed decision to apply for a LOA. A student returning from a Leave of Absence may need to reapply for financial aid. Any student taking a LOA who does not return at the end of the excused absence is subject to dismissal and may trigger repayment of student loans.

The student must return his or her student ID badge to IT or the Office of Student Affairs at the time of signing the LOA form. CNSU email will remain active during the term of LOA.

The LOA may not exceed more than one academic year in length. Students with leave extending beyond one year must reapply for admissions consideration.

The student is required to complete the **Notice of Intent to Return Form** or the **College Withdrawal Form** at least 30-days prior to their return date. If the student fails to submit either form, the student will be notified by the Office of Academic and Student Affairs prior to the return date requesting the student to submit one of the above-mentioned forms or be administratively withdrawn. If a student does not respond to the notification, they will be administratively withdrawn from the college effective one day after the LOA return date.

#### O) Academic Standing

CHS 3126 Academic Standing and Formal Warning Policy, CHS 3127 Course Failure Remediation Policy, and CHS 3703 Student Standing Classification and Course Registration Policies regulate student academic standing at CNUCHS.

#### P) Course Failure and Remediation

Any letter grade less than a “C” is a failing grade and must be remediated or repeated in order to earn credit for required graduation units. Credit hours from courses with a grade of NP, D, F, or WF are not counted as credit hours toward graduation.

Remediation of “D” grades, and only “D” grades, up to a “C” grade may be offered to students who have complied with all expectations, conditions, and requirements outlined in the “Academic Recovery Plan” established between the student and the faculty member as a result of the “Early Academic Alert” as indicated below. There are two types of remediation offered by the college:

- Just-in-time remediation - comprises the processes that happen throughout the term and include students who are identified in potential danger of failing a course (below “C”). In just-in-time-remediation, student and instructor work together on an academic recovery plan that offers a possibility of learning improvement on the course.
- End-of-the-term remediation – refers to the process in which students who were involved in just-in-time remediation, complied with all requirements set forth in the academic recovery plan and still end the term with a grade of D, participate in remediation activities after final grades are entered, according to the rules and criteria set forth in this policy. If a student was performing as “C” and ended up with a D as a final grade, the student may be eligible for end-of-the-term remediation, at

the discretion of the course instructor.

Just-in-time remediation starts with the student being notified that they are in potential danger of failing a course. Such notifications usually happen two times each term and are issued by the Office of Curriculum and Assessment via CNSU email.

Notified students must contact the corresponding faculty member for the course and set up a meeting to create a formal academic recovery plan. The student will report regularly to the course instructor and, as needed, to the faculty advisor according to the academic recovery plan. The student must comply with all provisions established in the academic recovery plan; If the student does not follow the plan built with their instructor, that student is not eligible for end-of-term remediation.

### Q) Early Academic Alert

CNUCHS has implemented an early academic alert system to bring awareness to students who are underperforming and may be at risk of failing a course. The system, managed by the Office of Curriculum and Assessment, collects data on course performance at two different points on each term and notifies each individual student who is identified as being at risk. The objective is to diagnose and provide appropriate support/intervention to help students to be academically successful. The early academic alert is at the core of just-in-time remediation.

Once a student receives the academic alert email, student must contact the course instructor and, if needed, the faculty advisor, to set up an “Academic Alert and Recovery Plan” form (available at the CANVAS Academic and Student Affairs page) outlining all necessary actions and support for the student to remediate their academic performance in the course. Students are highly encouraged to seek support from the Office of Student Affairs to help them throughout the recovery plan.

As mentioned before, students must comply with all recommendations in the academic recovery plan to be eligible for the end-of-the-term remediation.

### R) Academic Warning and Academic Probation

CHS 3126 Academic Standing and Formal Warning Policy defines the criteria and procedures for monitoring academic standing, warning students of academic performance, and determining the dismissal of students on academic performance.

Students who fall below a 2.00 term GPA are subjected to formal academic warning or academic probation, as detailed below:

Academic Warning: A term GPA (Summer, Fall, or Spring) of less than 2.00 will result in a record of “Academic Warning” placed on the official transcript.

Academic Probation: After receiving an “Academic Warning”, if during a subsequent term (Summer, Fall, or Spring), sequentially or not, a student earns a term GPA of 2.00 or less, a record of “Academic Probation” will be placed in the official transcript.

### S) Dismissal from the College on Academic Grounds

After being placed on academic warning and subsequent academic probation, a student who incurs in a third term (Summer, Fall, or Spring), sequentially or not, with a term GPA of less than 2.00, will be dismissed from the university on academic grounds. An “Academic Dismissal” note will be placed permanently on the

student transcript. Academic dismissal represents a separation from the university and termination of enrollment for academic reasons.

## X. Exam Taking, Academic Integrity and Good Conduct

Exam taking at CNUCHS is governed by CHS3103 Exam Taking Policy; CHS 3701 Academic Integrity and Good Conduct Policy governs integrity and conduct at CNUCHS.

### A. Exam Taking Policy

The purpose of this policy is to establish rules and procedures for students taking exams in didactic, laboratory, experiential learning, and clinical courses at California Northstate University College of Health Sciences (CNUCHS).

1. All final exams including make-ups in any course, including hybrid and online courses offered by CNUCHS, must be in-person. Other exams may be administered using different delivery strategies, such as online, take-home, group, etc.
2. When taking an in-person exam, students must leave backpacks, purses, and any other bags in front of the room, in a dedicated area designated by the course instructor. Faculty is charged with the responsibility to strictly enforce this disposition. Any violation is considered subject to CHS 3701.
3. When taking an exam, students are strictly forbidden to have smartwatches, handheld devices, and cell phones with them. Students cannot use these devices to perform calculations during the exam. Instructors may allow the use of a calculator. All electronic devices must be turned off. It is required that such devices must be put inside of the student's bag kept in the area indicated in item 2 above. Any violation is considered subject to CHS 3701.
4. Faculty must define in the course syllabus which materials students can have in their possession during the exam.
5. Faculty are responsible for proctoring exams and ensuring compliance with exam procedures stated in the syllabi and in this policy. At any sign of undue communication between students, either visual, written or verbal, faculty are expected to promptly intervene and take action that may include removing the student(s) from the exam room. Faculty are encouraged to have clear rules and consequences for cheating in their syllabi.
6. Faculty may assign random seating to students in the exam room and students are required to comply with the seat assignment in all circumstances.
7. Punctuality is essential. At the faculty's discretion, a student may be able to start the exam after the start time, as long as no student has finished taking the exam and left the exam room. Please note that when a student arrives late and is allowed into the exam room, they will not be granted extra time to finish the exam. All such criteria are recommended to be included in the course syllabus.
8. Any student who is suspected of cheating will face the consequences set forth in CHS 3701 Academic Integrity and Good Conduct Policy and are subjected to all penalties included in the course syllabus.

9. If a student is granted an excused absence for any exam, the exam re-take must occur within two (2) business days after the approval date of the excused absence.
10. All grades from exams must be released to the student within 10 calendar days from the exam date.
11. Faculty have the right to include additional exams rules and procedures in their syllabi, not conflicting with this policy, and require students to comply with them.

## B. Code of Honor

The college's Code of Honor aligns with the Academic Integrity and Good Conduct Policy by emphasizing core principles all college community members are expected to exemplify: Respect, Honesty and Integrity, Professionalism, and Legal and Ethical Behavior.

### **Respect**

CNUCHS is dedicated to the pursuit of education, scholarly activity, research, and service in an open, honest and responsible manner. We extend respect to all persons and disavow none. We promote goodwill within our diverse population and uphold the autonomy, dignity, and moral integrity of all. We respect the abilities, customs, beliefs, values, and opinions of others. We exemplify respect within and beyond the college. The college curriculum provides a variety of lectures and seminars on student success and leadership featuring professional standards of personal ethics and emphasizes how to model respectful behavior and exemplify good conduct.

Respect for diversity is our lighthouse. We celebrate differences, we listen without judgment, learn with wonder, and grow with understanding. We do not accept discrimination of any type, including but not limited against race, religion, sexual orientation, physical disabilities, national origin, and social and economic backgrounds. In fact, we believe that by respecting our differences we discover our richest treasures. Breaches in respect, including respect for diversity are subject to disciplinary action.

### **Honesty and Integrity**

CNUCHS is committed to teaching, scholarly activity, and professional growth in a community-based learning environment, as the basis to maintain a thriving and ethical community. Academic and personal honesty and integrity are required in all aspects of education, scholarly activity, research, and service. Members are to be truthful in their personal, academic and professional relationships. Individual work must result from individual effort. Work assigned to a team, whether students, staff or faculty, requires both individual contribution and collaborative effort inclusive of all team members. Examinations, projects, in-class and laboratory work, and off-campus assignments and activities, whether individual or team-based, are to be accomplished with honesty and integrity. Cheating, plagiarism, commercial purchase of term paper assignments, and other forms of academic dishonesty are prohibited. Upholding confidentiality and anonymity when required are one hallmark aspect of honesty and integrity expected from any future healthcare professional. Breaches of honesty and integrity are subject to disciplinary action.

### **Professionalism**

CNUCHS abides by high standards of professionalism in learning, teaching, scholarly activity, research, clinical and laboratory activities, and service. In educating students, the college cultivates professional virtues and provides opportunities for professional development. All members of the college community are

required to meet expectations for participation and timeliness, seek and accept feedback and constructive instruction, admit to and assume responsibility for mistakes, be mindful of demeanor, language, and appearance, and be accountable to all individuals in the college, our partner organizations, clinical sites, and the broader community. Students, staff, preceptors, clinical supervisors, and faculty serve as positive role models by striving for excellence in the performance of their duties, while protecting the health and autonomy of classmates, colleagues, patients, and clients, and in serving individual, community, and societal needs. Good judgment, accuracy and honesty are expected in all social media communications, and members should take care to do no harm to themselves, others and the college. College members should strive to communicate respectfully with each other and maintain correspondence that is informative, clear, polite and reasonably succinct. Civility and respect should prevail in the classroom and beyond. Breaches in academic professionalism, a core competency of the college, are subject to disciplinary action.

### **Legal Standards and Ethical Behavior**

The college is dedicated to behavior that follows legal and ethical standards in learning, teaching, scholarly activity, clinical and laboratory activities, research, and service. The commitment extends to following all federal, state, and local laws and regulations, and professional practice standards. Members of the college community are expected to develop and maintain a culture of consideration for the codes of ethics, values, and moral convictions of those who could be affected by our decisions and actions. Whenever appropriate, members should seek advice and counsel to make the best decision and determine the appropriate course of action on behalf of those who depend on them to do so. Members of the college community must be particularly attentive to all social media activities that may cause harm to others. Acts in violation of the legal standards and ethical behavior principle are subject to disciplinary actions.

### **C. Academic Integrity and Good Conduct**

CNUCHS students must follow the provisions of CHS 3701 Academic Integrity and Good Conduct Policy. Each student is personally responsible and accountable for maintaining the culture and environment of honesty, integrity, legal and ethical behavior, professionalism and respect, both within and beyond the College campus.

Therefore, students are expected to:

- a. Know the Code of Honor and its standards of behavior.
- b. Uphold the Code of Honor in daily life whether on-campus or off-campus.
- c. Promote the Code of Honor through a culture and environment of respect, honesty, integrity, legal and ethical behavior, and professionalism.
- d. Report potential violations of Academic Integrity and/or Good Conduct to the Office of Academic and Student Affairs using the Incident of Misconduct Form.
- e. When unsure of the process, seek advice from the Office of Academic and Student Affairs.
- f. Cooperate with investigations of Academic Integrity and Good Conduct violations.

## **Violation of Academic Integrity**

Attempts to be dishonest or deceptive in the performance of academic work whether face-to-face or online, in or out of the classroom, laboratory, clinical site, or community partner site, alterations of academic records, alterations of official data on paper or electronic documents, or unauthorized collaboration with another student are violations of academic integrity. Knowingly allowing others to represent one's work as their own is as serious an offense as submitting another's work as one's own. They include but are not limited to:

**Cheating on Assignments or Exams.** Any attempt by a student to alter her/his performance on an assignment or examination in violation of specific rules set by the professor/proctor administering the exam. Examples include, but are not limited to:

- a. Communicating answers with another person during an exam.
- b. Preprogramming a device to contain answers or other unauthorized information for exams.
- c. Use of unauthorized materials, prepared answers, written notes, or concealed information during an exam.
- d. Sharing answers unless specifically authorized by course instructor.
- e. Tampering with an exam after it has been graded and returning it in an attempt to earn more credit.
- f. Violating any requirements set forth in CHS 3103 Exam Taking Policy and/or in the course syllabus.

**Plagiarism.** Taking someone's work and presenting it as your own, with no proper attribution. This includes your own previous work (self-plagiarism). Examples include, but are not limited to:

- a. Buying, stealing or borrowing a paper or portions of a paper.
- b. Hiring another person to write a paper.
- c. Claiming authorship of written material not so authored.
- d. Lack of attribution of cited material.
- e. Using a source too closely when paraphrasing.
- f. Changing key words or phrases but retaining essential content of the source.
- g. Including citations to non-existent or inaccurate information about sources.
- h. Reusing large portions of a work produced in one class for submission in another class without prior approval.
- i. Including proper citation but the paper includes almost no original work.
- j. Citing sources that do not exist.
- k. Purposefully misinterpreting a source or citing a source out of context.
- l. Claiming personal credit for research performed by others.
- m. Claiming participation on a team project while not participating on the project.
- n. Representing AI (Artificial Intelligence) work as your own. Artificial Intelligence cannot replace the student's own thinking, research, or writing. Use of AI tools, when approved by the course instructor, must be attributed and cited as any other source would be, following the style manual approved by the instructor.

**Additional Actions of Academic Misconduct** include, but are not limited to:

- a. Furnishing false information in the context of an academic assignment.
- b. Theft or destruction of academic materials, including research data, owned by CNUCHS or a member of the CNUCHS community. Publishing of research data without the faculty mentor's approval is considered theft of academic materials.
- c. Contamination of laboratory samples or altering indicators during a practical exam, such as moving a pin in a dissection specimen for an anatomy course.
- d. Selling, distributing, website posting, or publishing course lecture notes, handouts, readers,

recordings, or other information provided by an instructor, or using them for any commercial purpose without the express permission of the instructor.

- e. Failure to identify one's role in an academic incident.
- f. Fabrication or alteration of information or data and presenting it as legitimate.
- g. Providing false or misleading information to an instructor or any other College official.
- h. Forgery of an instructor's signature on a letter of recommendation or any other document.
- i. Violation of course rules as indicated in the course syllabus.

### **Violation of Good Conduct**

Personal misconduct involves behaviors that disrespect the rights and dignity of others both within and outside of the College community. Professional misconduct includes disrespectful and discourteous interactions with colleagues, faculty, staff, and members of the broader community outside the College such as community partners, patients, and personnel at clinical sites. The list is not exhaustive as there are many additional forms.

- a. **Harassment**: Conduct that is sufficiently severe, pervasive or persistent to create a hostile environment that interferes with or diminishes the ability of an individual to participate in or benefit from activities in the College.
- b. **Bullying**: Intentional and repeated aggressive behavior that causes another person who is in a disadvantaged situation either emotionally, mentally, or physically that results in injury, harm, or discomfort. Bullying may take different forms such as physical, verbal, emotional, or social.
- c. **Cyberbullying**: A specific type of bullying that represents a willful and repeated taunting, threatening, harassing, or intimidation inflicted through the medium of electronic text, images, videos, or social media posts. It includes propagating false or unauthorized information about other people.
- d. **Sexual misconduct**: Sexual discrimination, sexual harassment, sexual assault, interpersonal violence and stalking.
- e. **Harmful behavior**: Action that threatens the health and/or safety of another person.
- f. **Hate crime**: Prejudice motivated action in which one targets another person or person's property motivated by a bias against a race, religion, disability, sexual orientation, ethnicity, gender or gender identity.
- g. **Stalking**: A course of conduct directed at a specific person that would cause a reasonable person to fear for the person's safety or the safety of others.
- h. **Disruptive conduct**: Inappropriate actions that have the potential to interfere with or disrupt student learning, research, administration or other authorized activity. Attempt to violate any College rule.
- i. **Theft and/or property damage**: Action that damages, defaces, destroys, tampers with or takes without authorization property of the college or property of another person.
- j. **Firearms, dangerous materials and prohibited items**: Possession, use or display of any firearm, dangerous material, and/or prohibited items that could be used as a weapon.
- k. **Drugs and alcohol**: Possession or use of prohibited or recreational substances on college grounds, including but not limited to cigarettes, e-cigarettes, and vapes.

### **Additional actions of personal and professional misconduct:**

- a. Defamation: the action of damaging the good reputation of another person, group, or entity through false information. The defamation can be heard by another person via spoken word (slander) and/or seen by another person such as in writing, print, and/or art (libel).
- b. Intentional false accusation of misconduct, forgery, alteration, or misuse of any College document, record, or identification.

- c. Providing the college official any information known to be false.
- d. Assuming another person's identity or role through deception or without proper authorization. Communicating or acting under the guise, name, identification, e-mail address, signature, or other indications of another person or group without proper authorization or authority.
- e. Knowingly initiating, transmitting, filing, or circulating a false report or warning concerning an impending bombing, fire, or other emergency or catastrophe; or transmitting such a report to an official or an official agency.
- f. Unauthorized release or use of any university access codes for computer systems, duplicating systems, and other university equipment.
- g. Actions that endanger oneself, others in the university community, or the academic process.
- h. Unauthorized entry, use, or occupancy of college facilities.
- i. Violating any rules of safety and dress code in laboratory and clinical settings as specified in CHS 3302 Clinical and Laboratory Dress Code and CHS 3303 Safe Clinical and Laboratory Practice.
- j. Any behavior that violates federal, state or local laws, of any University/College or formal affiliate policy or rule.
- k. Any act that represents discrimination against race, religion, sexual orientation, disability status, and social and economic backgrounds directed to any member of the college community, community partners, clinical site personnel, both within and outside campus, by any means.
- l. Any act that represents a breach of confidentiality and violation of FERPA, HIPAA, or any other federal, state, or local laws and regulations.

### **Action on Suspected Violations**

- a) Cases of undisputed academic misconduct by first-time offenders. If the student admits to academic misconduct and has not been found guilty of previous violations, the faculty member may sanction the student by means of a course related penalty. The faculty member will enter into a written agreement with the student outlining the option given to agree to a course penalty. This written agreement is formalized using the Faculty Report of Academic Integrity Incident form and submitted to the Office of Academic and Student Affairs as a Faculty Disposition matter (matter has been resolved by the faculty). The accused student is not compelled to sign such an agreement and may instead choose to have the case moved to the Office of Academic and Student Affairs. Depending on the seriousness of the matter, the faculty may report directly to the Office of Academic and Student Affairs to be resolved by the Academic Integrity and Good Conduct Committee.
- b) Cases of disputed academic misconduct or repeat offenders. If the student disputes the alleged misconduct, the case moves to the Office of Academic and Student Affairs. If the Office of Academic and Student Affairs determines that the violation likely did not occur, the process ends without further reporting. If the Office of Student Affairs determines that the violation may have occurred, the charge and supporting evidence move to the Academic Integrity and Good Conduct Committee to review evidence. In all cases involving possible repeat offenders, the OASA will send the case and supporting documents to the Academic Integrity and Good Conduct Committee. In the event of disputed cases, the faculty member will refrain from applying any course related penalty until the case is resolved.

### **Possible Disciplinary Actions for Violation of the Academic Integrity and Good Conduct Policy**

Actions include but are not limited to:

- a. Written warning or censure to be kept in the student academic records at the college level.
- b. Loss of assignment credit.
- c. Special assignments such as attending a workshop, writing a paper, etc.
- d. Disciplinary probation for a term, with a permanent or temporary record on transcript.



- e. Suspension from classes for a semester.
- f. Delayed graduation.
- g. Restriction from University and/or College activities or functions.
- h. Restitution to repair or compensate for loss or damages.
- i. Holds on transcripts.
- j. Notation on transcript of academic dishonesty or violation of good conduct, on a permanent or temporary basis.
- k. Dismissal from the College

### **Non-Retaliation**

The college does not tolerate retaliation against individuals who report dishonest, illegal, unethical, unprofessional, hateful, or otherwise inappropriate acts. Anyone who retaliates against reporting or whistleblower individuals is in violation of the Code of Honor and is subject to appropriate disciplinary action for that violation including suspension or termination of enrollment.

### **Maintenance of Disciplinary Records**

If a student is found in violation of Academic Integrity and Good Conduct as indicated in this policy, her/his file is converted to an academic disciplinary record retained by the Office of Academic and Student Affairs and noted in the student's academic record at the college level. The information in the file may be retained for statistical or record keeping purposes for up to 5 years, or as required by the law and university regulations.

### **C. Student Complaint and Grievance**

CHS 3704 Student Complaint and Grievance Policy regulates the matter at CNUCHS. CNSU does not discriminate on the basis of race, religious creed, color, national origin, ancestry, medical condition, marital status, sex, age, or physical disability, and denial of family care leave.

Students who wish to appeal a grade should refer to CHS 3120 Course Grade Appeal Policy. To file an anonymous complaint please refer to the form on the University website:

<https://CaliforniaNorthstateUniversity.formstack.com/forms/anonymousreportcnu>.

It is the intent of the college for individuals with a complaint to address concerns at the most appropriate level through interactive problem resolution and communication. However, under certain circumstances, the person with the complaint or concern may self-determine to file a complaint form. The college will treat all persons who file complaints and grievances with fairness, impartiality, timeliness, confidentiality, and will follow the due processes as set forth in CHS 3704 Student Complaint and Grievance Policy. It is expected from all students filing a complaint or grievance to strictly follow the principles of honesty, civility, and truthfulness throughout the entire process.

#### **a. Types of Complaints and Grievances**

1. Academic matters (excluding grade disputes and appeals included in CHS 3120 Course Grade Appeal Policy).
2. Misconduct related to students, faculty, staff, and college administration.
3. Discrimination, harassment, and/or aggression from students, faculty, staff, and college administration (verbal, written, and/or physical).

## **b. Confidentiality and Limited Disclosure of Information**

In the course of investigation or resolution of a complaint, any individual involved with the process of resolution is considered to have access to private information as needed. Any individual so authorized in the process of resolution is bound by confidentiality of the information received by whatever legal authority controls.

## **c. Filing a Complaint or a Grievance**

1. A student who wants to file a complaint or a grievance against any member of the college community must fill out and submit the “Complaint and Grievance Form” online via the CNUCHS website, providing all necessary and required information. The submitted form will be routed to the appropriate college office.
2. The administration official will convene an investigation team of 3 people which will examine the complaint or grievance and provide a written report with a recommended resolution to the administration official within 30 business days. The administration official will provide the person who filed the grievance with the notice of case adjudication within 10 business days after receiving the written report from the investigation team.
3. Students filing a grievance must provide a detailed account of the issue and specific evidence supporting the allegation. When appropriate, the student may suggest a possible approach to resolution.
4. Any information about sanctions is protected by full confidentiality, and any administrative or disciplinary sanctions applied to a faculty, staff, or student will not be disclosed to student(s) filing complaints/grievances.
5. All documents related to student complaints and/or grievances are filed in the Office of the Dean.

## **D. Clinical and Laboratory**

1. Clinical and laboratory procedures are governed by CHS 3302 Clinical and Laboratory Dress Code, CHS 3303 Safe Clinical and Laboratory Practice, and CHS 3305 Protection of Clinical Confidentiality and Practice.

### **DRESS CODE**

1. Personal appearance is expected to be professional and must conform to the dress code and appropriate dress standards as outlined in CHS 3302 Clinical and Laboratory Dress Code Policy.
2. Students on clinical assignments must properly wear the designated clinical uniform in campus activities when required, and in all off campus clinical assignments. A clinical uniform consists of a tunic and pants as designated by CNUCHS. No uniform other than the officially adopted CNUCHS uniform is considered compliant for attending clinical activities on and off campus. Appropriate clinical dress clothing for psych/mental health and public health settings may vary from the usual clinical uniform apparel, with some sites having guidelines for street clothing. Students on clinical assignments must also wear ID badges above the waist, visible to the public, while in clinical work.
3. Students in the laboratory must always wear appropriate personal protective equipment (PPE) that includes appropriate clothing and other protective devices that vary per laboratory

as indicated below in this catalog.

4. Students who fail to fully comply with all dress code mandates will be dismissed from that clinical or laboratory work session, which would not count as an excused absence in any case.

### **Clinical Setting Dress Code Standards**

- a) Uniforms must be freshly laundered and unwrinkled and must not be worn two days in a row without laundering.
- b) Shoes must be clean and comfortable, and must fully enclose the foot and heel, and must be slip and fluid resistant. No sandals, flip flops, open-toed shoes, or fabric shoes (cloth or other absorbent material) are allowed.
- c) Crew socks, ankle/athletic socks must be worn with uniform pants.
- d) Fingernails must be maintained in such a way that the tips of the nails do not extend past the ends of their fingers. Artificial nails/wraps/acrylic overlays or gel and/or gel polish are not permitted in clinical settings.
- e) No jewelry is allowed in clinical settings, except for:
  - i. Rings – one ring is allowed as long as it does not pose a threat to the patients' skin integrity. Please note that a wedding set constitutes one ring. Rings may be worn around the neck on a simple chain if kept under the uniform.
  - ii. Earrings – Preferred not to wear, but one pair of inconspicuous pierced earrings is accepted. Hoops, gauges, or dangling-off-the-earlobe earrings are not allowed.
  - iii. Other piercings – Small nose jewelry studs no larger than two (2) millimeters in diameter or clear studs are permitted. Piercings not located in the ear (except small nose studs) must be removed or covered with clothing while working. Nose rings, eyebrow rings, tongue rings, lip rings, or rings attached to other visible body parts (except ears) by piercing are prohibited.
- f) Hair must be clean and contained away from the face. Long hair must be confined (tie back or put in a bun). Hair should be in a naturally occurring color (i.e. no purple, pink, blue, green, etc.).
- g) Facial hair must be clean and neat. Long beards must be appropriately covered per safety/clinical guidelines.
- h) Good personal hygiene is required. When using deodorant, use only a non-fragrance deodorant. Perfume or cologne is not allowed in the clinical setting. The absence of the odor of cigarette smoking is expected.
- i) Hand to mouth activity in a patient area and nurses' station is a serious breach of the Occupational Safety and Health Administration (OSHA) regulations. Among such activities, it is strictly prohibited: chewing gum, sucking on lozenges, eating food, drinking fluids, applying lipstick or lip balm, etc.
- j) Cell phones and other communication devices must never be in the student's possession during a clinical setting.
- k) Other PPE may be required by the instructor, clinical supervisor, or preceptor, such as gloves, face masks, goggles, bouffant caps, disposable shoe covers, etc. Students are required to comply with all PPE requirements as requested by the course instructor, clinical supervisor, or preceptor.

- l) Visible undershirts must be either white or black. Undergarments are not to be exposed through the uniform.
- m) Tattoos must be covered per clinical site guidelines.
- n) To be completely outfitted for clinical assignments, the student is expected to bring and maintain the following equipment: stethoscope, watch with second hand, pen light, bandage scissors, black ink pen, and hemostat forceps.

### **Laboratory Dress Code Standards**

- a) All people in a laboratory room must wear closed laboratory coats that fully cover their torso and arms.
- b) Shoes must fully enclose the foot and heel and must be slip and chemical resistant. No sandals, flip flops, open-toed shoes, or fabric shoes (cloth or other absorbent material) are allowed.
- c) All people in a laboratory room must wear pants or skirts that fully cover their legs. No shorts, short skirts, short dresses, or capris allowed.
- d) Artificial nails/wraps/acrylic overlays or gel and/or gel polish are not permitted in laboratory rooms.
- e) All people when entering a laboratory room must remove dangling jewelry such as earrings, necklaces, and bracelets.
- f) Hair must be contained away from the face. Long hair must be confined (tie back or put in a bun).
- g) Chewing gum, sucking on lozenges, eating food, drinking fluids, and applying lipstick or lip balm is strictly prohibited in laboratory rooms.
- h) Electronic devices must remain in a personal bag in a designated area; the use of cell phones or any other electronic devices not related to the laboratory is expressly prohibited.
- i) Specific PPEs may be required by the instructor or laboratory manager/supervisor depending on the laboratory and its content. It may include but is not limited to gloves, face masks, goggles, bouffant caps, etc. Students are required to comply with all PPE requirements as requested by the course instructor, clinical supervisor, or preceptor.

### **CLINICAL AND LABORATORY SAFE PRACTICE**

The following rules must be strictly followed by all personnel, including students, when attending a laboratory or clinical activity:

- a) Proper personal protective equipment (PPE) and appropriate apparel must be worn while in the laboratory or clinical setting.
- b) Electronic devices must remain in a personal bag in a designated area; the use of cell phones or any other electronic devices not related to the laboratory or clinical activity is expressly prohibited.
- c) Personal bags must be placed in designated areas, away from laboratory benches and clinical work areas.
- d) Accidents must be immediately reported (burn, cut, spills, broken glass, etc.) to the instructor or clinical supervisor, regardless of how minor the accident seems. All accidents are to be recorded in writing by either the instructor or clinical supervisor.
- e) Chemical waste, biological waste, sharps, and broken glass must be placed in specifically designated containers.
- f) Any rashes or open wounds must be covered with a bandage before commencing laboratory or clinical activities.

- g) Personal work areas and sinks must be cleaned, using the specific cleaning chemical approved for the laboratory or clinical setting, before leaving the room at the end of each laboratory/clinical period.
- h) Hands must be thoroughly washed at the start of a shift, after restroom visit, and before leaving the laboratory or clinical area.
- i) Food or beverages of any sort, including water, must never be brought into the laboratory or clinical area.

### **Laboratory and Clinical Training**

1. Prior to engaging in clinical and laboratory work, students, staff, instructor, or supervisor must complete a CNUCHS-approved general laboratory safety-training course designed to cover the basic rules and procedures to follow when conducting laboratory and/or clinical work to maintain a safe environment.
2. All instructors, technicians, and managers are CITI trained and receive a certificate of completion in handling and disposing hazardous wastes and laboratory accidents.
3. The training mentioned in item 1 above must also cover the procedures to follow in case of an accident or emergency. Students are required to renew the general laboratory safety training at least every year while faculty and staff are required to renew general laboratory safety training at least every three years.
4. As a supplement to the general laboratory safety training as indicated in item 2 above, laboratory course-specific training led by the course instructor or supervisor must be completed at the start of the semester/term where the following must be covered if applicable:
  - a. Specific Personal Protective Equipment (PPE) that is required for the laboratory or clinical course (clothing, safety goggles, safety glasses, gloves, etc.) in order to protect against injury or infection.
  - b. Location of the sharps waste container, glass waste container, biological waste disposal, chemical waste disposal, eye wash station, safety shower, fire blanket, fire extinguisher, laboratory safety information, safety data sheets, chemical and biological spill kits.
  - c. Response to chemical, biological, and/or fire accidents.
  - d. Emergency evacuation routes.
  - e. Reporting of laboratory incidents.

### **Laboratory Emergency Response**

1. Chemical or Biological spill: The standard operating procedure (SOP) for each type of spill (chemical or biological) is located in the laboratory safety binder in each laboratory and must be followed. Students and personnel who are not trained to clean up chemical or biological spills should leave the room and may return once the spill has been contained and properly cleaned up, and the instructor/supervisor has given permission. If a chemical or biological spill occurs on the skin or PPE of an individual, then the exposure procedure within the safety data sheet should be followed for the given chemical or biological agent.
2. Electrical or Chemical fire: All personnel should evacuate the building by following their designated evacuation route. Only a person who is trained to use a fire extinguisher may attempt to use one, as per established fire safety guidelines.

## **Laboratory Incident Reporting**

All Laboratory incidents requiring emergency response must be reported using the Incident Report Form. Both the assigned instructor/supervisor(s) in addition to the student(s) directly involved in the incident must complete and submit an Incident Report Form, along with appropriate supporting documentation and/or images, to the CHS Safety & Security committee. In addition, the Dean must be notified of all incidents requiring an emergency response. If the incident caused injury or property damage then Incident Report documentation must be submitted within 3 hours of the occurrence of the incident, otherwise the Incident Report documents must be submitted within 3 days. Laboratory incidents that do not require emergency response or result in injury/property damage must be documented and submitted at the end of each semester to the CHS Safety & Security committee for review. Instructors or supervisors are encouraged to identify potential hazards, and work with their immediate supervisor in the laboratory courses they teach to minimize potential incidents before they occur. Any identified hazards must also be reported to the CHS Safety & Security committee for review even if they have already been addressed internally.

## **E. Protection of Clinical Confidentiality and Privacy**

CHS 3305 Protection of Clinical Confidentiality and Privacy governs all HIPAA requirements in clinical settings.

### **1. Confidentiality of Patient Information:**

- a. No one is allowed to access confidential patient information unless that individual (faculty, preceptors, students) is performing, providing, or under training to provide care for a patient.
- b. Confidential information includes, but is not limited to, medical records, personal identifiers, health history, treatment plans, evaluation charts or reports, grades, and any other information obtained during clinical, laboratory, lecture, experiential learning courses, or any other academic activity.
- c. All protected (e.g. HIPAA) information obtained or accessed by students, faculty, staff, or preceptors during clinical, laboratory, lecture, experiential learning, or any other academic activity, must be treated as confidential.

### **2. Protection of Privacy and Security Measures:**

- a. Access to patient protected information is restricted to the course of providing care in service to the patient.
- b. Patient case presentation during clinical rounds shall be conducted in the patient's room or restricted area for patient information protection and privacy.
- c. No individual (student, faculty, or preceptor) shall be allowed to copy or duplicate by any technological means or remove from the patient care setting protected patient information.
- d. Access portal to protected patient information must be logged off at the end of the permissible use.
- e. Adequate security measures must be in place to safeguard protected information, including but not limited to patient information, from unauthorized access, theft, or disclosure. This includes the protection of electronic records with passwords and encryption to prevent unauthorized access.

### **3. Training:**

- a. No individual shall be allowed access to HIPAA information without completing HIPAA training and with a retained record of successful completion of such HIPAA training.

#### 4. Reporting Violations:

- a. Any suspected or actual breaches of confidentiality or privacy must be reported immediately to the compliance officer in charge of such clinical practice setting. Patient's subject to unauthorized disclosure of HIPAA information must be informed of such unauthorized disclosure within 60 calendar days of the discovery of the breach. Failure to protect HIPAA information, and failure to comply with HIPAA policy shall be subject to personnel action including and up to termination of employment, dismissal from education program, and notification to governmental agencies as required by law.

### CHS Course Descriptions in alphabetical order

#### **ANTH 210 Cultural Anthropology (3 cr)**

Cultural anthropology is the systematic study of human culture in different parts of the world. This course surveys the intellectual history of this branch of anthropology and considers the impact of environment, traditions, religion, history and many other factors to cultural diversity.

Prerequisites: sophomore year standing.

Curriculum map: ANTH 210 satisfies GE requirements in the liberal arts/humanities.

#### **ANTH 210x Cultural Anthropology Online (3 cr)**

Cultural anthropology is the systematic study of human culture in different parts of the world. This course surveys the intellectual history of this branch of anthropology and considers the impact of environment, traditions, religion, history and many other factors to cultural diversity.

Prerequisites: sophomore year standing.

Curriculum map: ANTH 210x satisfies GE requirements in the liberal arts/humanities.

#### **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.

Curriculum map: ARMU 110 satisfies GE requirements in the liberal arts/fine arts.

#### **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.

Curriculum map: ARMU 120 satisfies GE requirements in the liberal/fine arts.

#### **ARMU 120x Music Appreciation Online (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.

Curriculum map: ARMU 120x satisfies GE requirements in the liberal arts-fine arts.

### **BIOL 100 Principles of General Biology (1cr)**

An introductory course covering the basic principles of biology in preparation for general biology. Topics include experimental design/hypothesis crafting, scientific writing, evolution, basic physiology, cell biology, genetics, microbiology, and ecology. This is a pass/no pass grade course only.

Prerequisites: None.

Curriculum map: BIOL 100 is an introductory course designed to support success in the general biology course series.

### **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.

Curriculum map: BIOL 110 is a degree requirement for the Bachelor of Science in Health Sciences. It satisfies GE requirements for scientific inquiry and quantitative reasoning in the biology sub-area.

### **BIOL 110L Biology I – Inheritance, Evolution, & Diversity of Life Laboratory (1 cr)**

Companion laboratory course to be taken concomitantly with BIOL110 lecture course, unless student is re-taking only the laboratory after have taken it concurrently with BIOL 110.

Prerequisites: None.

Co-requisite: BIOL110.

Curriculum map: BIOL 110L is a degree requirement for the Bachelor of Science in Health Sciences. It satisfies GE requirements for scientific inquiry and quantitative reasoning in the biology sub-area.

### **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.

Co-requisite: BIOL120L.

Curriculum map: BIOL 120 is a degree requirement for the Bachelor of Science in Health Sciences.

### **BIOL 120L Biology II – Cells & Biomolecules Laboratory (1 cr)**

A co-requisite of BIOL 120 that focuses on current themes and techniques commonly used in cell and molecular biology laboratories.

Prerequisites: BIOL110, BIOL110L, CHEM110.

Co-Requisite: BIOL120.

Curriculum map: BIOL 120L is a degree requirement for the Bachelor of Science in Health Sciences.

### **BIOL 130 Foundations of Biology (3 cr)**

An introductory biology course that provides a foundational background in biomolecules, organism taxonomy, evolution, organ systems, and genetics, with particular focus on relevance to the health professions and allied sciences.



Prerequisite: None.

Curriculum map: BIOL 130 is a prerequisite course for the Bachelor of Science in Nursing and contributes to GE requirement for Scientific Inquiry & Quantitative Reasoning – Biology area.

### **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. No dissection is required.

Prerequisite: BIOL120.

Co-requisite: BIO210L.

Curriculum map: BIOL 210 is a degree requirement for the Bachelor of Science in Health Sciences and the BSN

### **BIOL 210L Human Anatomy Laboratory (1 cr)**

Companion laboratory course to be taken concurrently with BIOL 210 lecture course. Organ dissections (kidney, heart, brain, eye) will be performed by students. Virtual dissections may also be part of the course. 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.

Prerequisite: BIOL120.

Co-requisite: BIOL 210.

Curriculum map: BIOL 210L is a degree requirement for the Bachelor of Science in Health Sciences and the BSN

### **BIOL 220 Human Physiology (3 cr)**

The science of human physiology addresses how the body functions at a mechanistic level. A systems-based approach is used to examine the detailed function of the major organs and compartments of the body.

Prerequisites: BIOL210 & BIOL210L.

Curriculum map: BIOL 220 is a degree requirement for the Bachelor of Science in Health Sciences and the BSN.

### **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.

Co-requisite: BIOL220.

Curriculum map: BIOL 220 is a degree requirement for the BSN.

### **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.

Prerequisite: BIOL120.

### **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: BIOL120, CHEM120.

### **BIOL 240x Essentials of Biochemistry Online (3 cr)**

Essentials of Biochemistry online 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: BIOL120, CHEM120.

### **BIOL 310 General Microbiology (3 cr)**

This course is a general introduction to the history, structure, metabolism, genetics, and ecology of microscopic life forms including viruses, bacteria, protozoa, fungi, and algae. In addition, the relationship of microorganisms to mammalian disease, immunology, agriculture and industry will be explored.

Prerequisite: BIOL120, or Post Baccalaureate standing.

Co-requisite: BIOL310L.

Curriculum map: It fulfills the BSHS Program Area Requirement for Core Sciences and Mathematics. BIOL310 is a degree requirement for the BSN.

### **BIOL 310L General Microbiology Laboratory (1 cr)**

A companion laboratory course designed to be taken concurrently with BIOL310. This course will emphasize the development of techniques used in the detection, isolation, and identification of both harmless and pathogenic microorganisms.

Prerequisites: BIOL120.

Co-requisite: BIOL310.

Curriculum map: It fulfills the BSHS Program Area Requirement for Core Sciences and Mathematics. BIOL310L is a degree requirement for the BSN.

### **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 Post Baccalaureate standing.

Curriculum map: BIOL 320 is an elective course. It fulfills the Program Area Requirement for Core Sciences and Mathematics.

### **BIOL 330 Human Nutrition (3 cr)**

This course describes the nutrient requirements of the human body, the principles that define the relationship between diet and good health, and nutrition considerations for patient care.

Prerequisites: BIOL120, or Post Baccalaureate standing.

Curriculum map: BIOL 330 is a degree requirement for the Bachelor of Science in Nursing, and an elective course for the Bachelor of Science in Health Sciences. It fulfills the BSHS Program Area Requirement for Core Sciences and Mathematics.

### **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 Post Baccalaureate standing.

Curriculum plan: BIOL 340 satisfies the program area requirements for Core Sciences and Mathematics.

### **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 Post Baccalaureate standing.

Curriculum map: BIOL 350 is an elective course. It fulfills the Program Area Requirement for Core Sciences and Mathematics.

### **BIOL 410 Neuroscience (3 cr)**

Neuroscience is the study of the cellular and molecular basis of nervous system function. 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) as well as the pathogenesis of neurodevelopmental, neuropsychiatric and neurodegenerative diseases.

Prerequisites: BIOL110, BIOL120, CHEM110, CHEM120, or Post Baccalaureate standing.

Curriculum map: BIOL 410 fulfills the Program Area Requirement for Core Sciences and Mathematics.

### **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. BIOL 210 and CHEM 310 are highly recommended to be taken before this course.

Prerequisites: BIOL110, BIOL120, CHEM110, CHEM120, or Post Baccalaureate standing.

Curriculum map: BIOL 420 satisfies the Program Area requirements for Core Sciences and Mathematics.

### **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, BIOL240 or BIOL240x or CHEM310, or Post Baccalaureate standing.

Curriculum map: BIOL 430 fulfills the Program Area Requirement for Core Sciences and Mathematics.

### **BIOL 440 Pathophysiology (3 cr)**

This course provides an overview of common disorders for each major body system, from a biomedical perspective. The focus of organ systems physiology is designed to integrate advanced physiology with pathophysiology and clinical implications across the life span. This course incorporates organ systems function and dysfunction, from cellular to integrated organ levels, including the genetic basis of disease. An understanding of alterations in biological processes that affect the body's dynamic equilibrium or homeostasis will be discussed, allowing students to differentiate abnormal physiologic functions that result in illness.

Prerequisites: CHEM120 or CHEM130, BIOL 210, BIOL220, BIOL310 (may be taken concurrently), or Post Baccalaureate standing.

Curriculum map: BIOL 440 is an elective course for the BSHS degree and a degree requirement for the BSN degree. It fulfills the BSHS Program Area Requirement for Core Sciences and Mathematics.

### **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 Post Baccalaureate standing.

Curriculum map: BIOL 450 is an elective course. It fulfills the Program Area Requirement for Core Sciences and Mathematics.

### **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: BIOL 110 and BIOL 110L, or Post Baccalaureate standing.

Curriculum map: BIOL 460 is an elective course. It fulfills the Program Area Requirement for Core Sciences and Mathematics.

### **BIOL 470 Integrated Biological Problem Solving (3 cr)**

Students will work each week to enhance critical thinking skills required by working through integrated biological problems. Students will be expected to integrate their knowledge of the basic sciences including cell biology, biochemistry, immunology, genetics, and pharmacology in order to solve clinically based biological science problems. It is recommended to take BIOL 240 as a preparation for this course.

Prerequisites: CHEM210 & BIOL220, or Post Baccalaureate standing.

Curriculum map: BIOL 470 is a required course for all BS-MD pathways. It fulfills the Program Area Requirement for Core Sciences and Mathematics.

### **BIOL 480 Biomechanics of Human Movement (3 cr)**

An integrative examination of human positional anatomy and behavior focusing on limb biomechanics, economy, efficiency and energetics. Experimental and field data are introduced in the context of different theoretical approaches to the study of human movement. In combination with lectures, readings and problem sets, students conduct observational and experimental exercises.

Prerequisites: BIOL 210, or Post Baccalaureate standing.

Curriculum map: BIOL 480 fulfills the Program Area Requirement for Core Sciences and Mathematics.

### **BIOT 210 Introduction to Biotechnology (3 cr)**

This course provides an introduction to the current field of biotechnology through a broad coverage of topics including cell and molecular biology, biochemistry, bioinformatics, genetics, genomics, proteomics, and others. This course covers contemporary biotechnology techniques and applications, the business of biotechnology, integration of ethical issues, coverage of important regulatory considerations, and career guidance.

Prerequisites: BIOL110, BIOL110L, BIOL120, BIOL120L

Recommended Preparation: BIOL230 and BIOL240

Curriculum Map: BIOT210 is required for the concentration in Biotechnology.

### **BIOT 310 Ethical Concerns in Biotechnology (3 cr)**

Competent, successful health practitioners understand the ethical and social impacts of advancements in medicine as well as comprehending the scientific and technical aspects. BIOT310 will provide students with experience in effectively communicating complex information to multiple audiences, professional and lay, while simultaneously engaging with the moral dilemmas that abound relating to clinical trials, informed consent, genetic manipulation, non-human animal testing, and technology transfer. Lessons from historical cases will inform class discussion and serve as a foundation for future deliberations – in the course and beyond. Students will unravel the interconnections between research and therapy as well as the ethical challenges accompanying each. Readings will draw from ethics, history, and the life and social sciences, and projects will encourage students to see human consequences of technical choices.

Prerequisites: ENGL120, BIOT210

Curriculum Map: BIOT310 is required for the concentration in Biotechnology.

### **BIOT 320 OMICS in Biotechnology Research (3 cr)**

This course introduces the usage of several Omics technologies in the field of medical biotechnology research. The students will get knowledge of various Omics technologies, as well as their benefits and drawbacks. Prerequisites: BIOL110 and BIOL120

Curriculum Map: BIOT320 is required for the concentration in Biotechnology.

### **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.

Curriculum map: Preparatory course for students who will take General Chemistry.

### **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: None.

Co-requisite: CHEM110L.

Curriculum map: CHEM 110 is a degree requirement for the Bachelor of Science in Health Sciences and a prerequisite for all pathways except BS to PsyD. It satisfies GE requirements for scientific inquiry and quantitative reasoning-chemistry.

### **CHEM 110L General Chemistry I Laboratory (1 cr)**

Companion laboratory course to be taken concurrently with CHEM110 lecture course.

Prerequisite: None.

Co-requisite: CHEM110.

Curriculum map: CHEM 110L is a degree requirement for the Bachelor of Science in Health Sciences and fulfills prerequisites for all pathways except BS to PsyD. It satisfies GE requirements for scientific inquiry and quantitative reasoning-chemistry.

**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.

Co-requisite: CHEM120L.

**CHEM 120L General Chemistry II Laboratory (1 cr)**

Companion laboratory course to be taken concurrently with CHEM120 lecture course.

Prerequisite: CHEM110 and CHEM110L.

Co-requisite: CHEM120.

**CHEM 130 Foundations in General, Organic, and Biological Chemistry (3 cr)**

This course provides broad introductions to general, organic, and biological chemistry. Throughout the course students will explore the scientific method, measurements, atomic structure, radioactivity, ionic and covalent compounds, reactions, oxidation-reduction, solutions, acids and bases, organic compounds, and biological macro-molecules.

Prerequisite: None.

Co-requisite: None.

Curriculum map: CHEM 130 is a prerequisite course for the Bachelor of Science in Nursing and contributes to GE requirement for Scientific Inquiry & Quantitative Reasoning – Chemistry area.

**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.

Curriculum map: Preparatory course for students who will take Organic Chemistry.

**CHEM 210 Organic Chemistry I (3 cr)**

This course introduces the major concepts in organic chemistry including nomenclature, structure, properties, reaction mechanisms, synthesis and spectroscopy. The format of the course focuses on providing a foundational understanding of organic molecules, mechanisms, and reactions in order to develop students' critical thinking skills and prepare them for more in depth investigation of organic molecules in CHEM 220 and biological molecules and reactions in CHEM 310.

Prerequisites: CHEM120 and CHEM120L.

Co-requisite: CHEM210L.

**CHEM 210L Organic Chemistry I Laboratory (1 cr)**

Companion laboratory course to be taken concurrently with Organic Chemistry I (CHEM210). Students will explore principles and techniques of organic chemistry while developing proper safety and laboratory skills. Focus is placed on separation, purification, and characterization techniques including extraction, distillation, chromatography, optical activity, recrystallization, and spectroscopy.

Prerequisite: CHEM120 and CHEM120L.

Co-requisite: CHEM210.

**CHEM 220 Organic Chemistry II (3 cr)**

The second semester of a two semester course in organic chemistry. The second semester will expand upon organic reactions and organic synthesis in connection with aromatic and carbonyl containing molecules. In

addition, it will explore radical chemistry and pericyclic reactions and mechanisms. Spectroscopic data will be utilized throughout the course to support the reactions and mechanisms discussed.

Prerequisites: CHEM210 and CHEM210L.

Co-requisite: CHEM220L.

### **CHEM 220L Organic Chemistry II Laboratory (1 cr)**

Companion laboratory course to be taken concurrently with CHEM 220L/. The focus is on having students further explore reactions and mechanisms discussed in the lecture through hands-on synthesis experience while developing proper safety and laboratory techniques. Spectroscopy will be used throughout to aid in the understanding of the reactions performed and mechanisms they go through.

Prerequisites: CHEM210 and CHEM210L.

Co-requisite: CHEM220.

### **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 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: CHEM 220.

Curriculum map: CHEM 220R is recommended to those students who need reinforcement of the topics covered in CHEM220.

### **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.

Curriculum map: CHEM 310 fulfills the Program Area Requirement for Core Sciences and Mathematics.

### **COLL 100A Healthcare Student Success Seminar A (2 cr)**

This course assists students with their transition to college. The course aims to increase student engagement and motivation, improve academic performance, expand cultural competence, and provide information on best practices utilized by effective college students pursuing careers in the health professions.

Prerequisites: None.

Curriculum map: COLL 100 is a degree requirement for first-time college students in the Bachelor of Science in Health Sciences.

### **COLL 100B Healthcare Student Success Seminar B (1 cr)**

This course completes the COLL 100 series. It is a required companion course to COLL 100A Healthcare Student Success Seminar A. The course continues to build in the principles presented in COLL 100A to provide skills for long term academic and social success.

Prerequisites: COLL100A.

Curriculum map: COLL 100 is a degree requirement for first-time college students in the BSBS.

### **COLL 110X Medical Terminology (2 cr)**

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.

Prerequisite: None.

Curriculum map: COLL 110x is an elective course recommended to all students who want to familiarize themselves with medical jargon.

### **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.

Curriculum map: COLL 210 is a degree requirement for the BSHS. It also applies towards the General Education requirements in the liberal arts- service learning and the Program Area Requirement for Social Accountability and Community Service.

### **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: COLL 210.

Curriculum map: COLL 220 is a degree requirement for the BSHS. It also applies towards the General Education requirements in the liberal arts-service learning. It fulfills the Program Area Requirements for Social Accountability and Community Service, and Professionalism.

### **COLL 310 Scholarly Project I/Research Methods (3 cr)**

This course introduces students to the research methodologies applied to both natural and behavioral sciences. Students will be exposed to the research process from topic selection to the communication of results/findings. Topics include problem statements, research questions and hypotheses, ethical issues in research, literature review, research design, data collection and analyses, and reporting research findings.

Prerequisites: MATH 120 Applied Statistics.

Curriculum map: COLL 310 is a degree requirement for the BSHS. It fulfills the Program Area Requirement for Critical and Systemic Thinking.

### **COLL 320 Scholarly Project II (3 cr)**

Research methods introduced in COLL310 are used to design and execute an independent research project.

Prerequisites: COLL 310.

Curriculum map: COLL 320 is a degree requirement for the BSHS. It fulfills the Program Area Requirement for Critical and Systemic Thinking.

### **COLL 420 Leadership (3 cr)**

This course asks the question: What type of leader are you? Through reflection, group presentations, and other engaging and interactive projects, students will have the opportunity to develop as a leader. Additionally, students will draw connections between their strengths as a leader and their future success in the health field.

Prerequisites: at least junior year standing, or Post Baccalaureate standing.



Curriculum map: COLL 420 is a degree requirement for the BSHS. It fulfills the Program Area Requirement for Professionalism.

### **COLL 430 Service Learning for Health Care Professionals (3 cr)**

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: COLL210 and COLL220 or Post Baccalaureate standing.

Curriculum map: COLL 430 is an elective course that fulfills the Program Area Requirements for Social Accountability and Community Service, and Professionalism.

### **COLL 489 PAL Education Seminar (1 cr)**

This is a 7-week long, hybrid course required for students who are interested in becoming a peer learning assistant (PAL) for all CHS courses. It is focused on how to effectively facilitate a lecture, laboratory, hold a recitation session, and/or lead a study group. Key learning theories, teaching techniques and methods, ethics and professionalism, and cooperative learning are discussed, among other topics.

Prerequisites: Have taken 12 credits at CHS or 25 college credits outside CHS.

Curriculum Map: COLL 489 is an elective course.

### **COLL 490a Peer-Assistant Learning (1-3 cr)**

Students may elect to receive official credit on their transcripts for work as peer learning assistants in lecture and/or laboratory courses or for tutoring other students who need additional support. This is a faculty-sponsored course. Faculty sponsor will supervise the PAL activity. Four hours of work must be completed per week for the semester (6 hours per week during summer) 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: COLL 489, faculty sponsorship, and administrative approval.

Curriculum map: COLL 490a is an elective course.

### **COLL 490b Research Experience (1-3 cr)**

COLL 490b provides the opportunity to engage in research with faculty following the apprenticeship concept, while applying their previous experiences and academic background to research. This is a faculty sponsored course and as such faculty must sponsor student participation after an evaluation of the student's research background. Registration is not open directly to the student; faculty must request registration from the Office of Academic and Student Affairs. The course may be taken for no credit or for 1 to 3 credits, more than once, however no more than 2 credits may be applied towards a degree at CNUCHS. A total of 45 hours of effective research work must be completed to earn the equivalent to 1 credit unit. Grading: P/NP only.

Prerequisites: COLL 310, CITI training certificate, faculty sponsorship, and administrative approval.

Curriculum map: COLL 490b is an elective course.

### **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 the Office of Academic and Student Affairs to work with a faculty or a staff member, based on a specific project. Four hours of work must be completed per week for the semester (6

hours per week during summer) 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: Faculty/staff sponsorship and administrative approval.

Curriculum map: COLL 490c is an elective course.

### **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.

Curriculum map: COMM 110 meets GE requirements for the oral communication area, and is a prerequisite for the BS to PharmD pathways.

### **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.

Curriculum map: ECON 210 satisfies GE requirements for the Liberal Arts-Social Sciences area, is a prerequisite for the BS to PharmD pathways.

### **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.

Curriculum map: ECON 220 satisfies GE requirements for the Liberal Arts-Social Sciences area, is a prerequisite for the BS to PharmD pathways.

### **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: High school English with a grade of B or better.

Curriculum map: ENGL 110 contributes to GE requirements for the Written Communication area.

### **ENGL 110x English Composition I (3 cr)**

The 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: High school English with a grade of B or better.

Curriculum map: ENGL 110x contributes to GE requirements for the Written Communication area.

### **ENGL 110L English Composition I Writing Lab (1 cr)**

This Writing Lab course 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 ENGL110L is determined by student performance on the English Placement Exam.

Co-requisite: ENGL110.

### **ENGL 110Lx English Composition I Writing Lab – Online (1 cr)**

This course 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 rhetorical and style skills, grammar, sentence and paragraph construction, and workshops of existing writing assignments. Enrollment in ENGL110L is determined by student performance on the English Placement Exam.

Co-requisite: ENGL110.

### **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.

Prerequisites: ENGL 110 or equivalent.

Curriculum map: ENGL 115 is an elective course for those students interested in advancing their research writing skills.

### **ENGL 120 English Composition II (3 cr)**

This is a writing intensive course in which students will receive instruction in advanced principles of expository writing. Throughout the course students will hone their skills in a variety of genres of research-based writing, including analysis, explanation, and argument. This course is intended to prepare and introduce students to what reading and writing professionals do in their disciplines and majors.

Prerequisite: ENGL110 or equivalent.

Curriculum map: ENGL 120 contributes to GE requirements for the Written Communication, Information Literacy, and Critical Thinking areas.

### **ENGL 120x English Composition II Online (3 cr)**

This is a writing intensive course in which students will receive instruction in advanced principles of expository writing. Throughout the course students will hone their skills in a variety of genres of research-based writing, including analysis, explanation, and argument. This course is intended to prepare and introduce students to what reading and writing professionals do in their disciplines and majors.

Prerequisite: ENGL110 or equivalent.

Curriculum map: ENGL 120 contributes to GE requirements for the Written Communication, Information Literacy, and Critical Thinking areas.

### **ENGL 120L English Composition II Writing Lab (1 cr)**

This course 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 rhetorical and style skills, grammar, sentence and paragraph construction, and workshops of

existing writing assignments from ENGL 120 or other classes. Enrollment in ENGL 120L is required for all students who did not meet the minimum requirements in the English placement exam.

Co-requisite: ENGL120.

### **ENGL 120LX English Composition II Writing Lab Online (1 cr)**

This course 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 rhetorical and style skills, grammar, sentence and paragraph construction, and workshops of existing writing assignments from ENGL 120 or other classes. Enrollment in ENGL 120L is required for all students who did not meet the minimum requirements in the English placement exam.

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: ENGL120, or Post baccalaureate standing.

Curriculum map: ENGL 310 is an elective course that fulfills the Arts and Humanities Program Area.

### **ENGL 320 Writing in the Health Sciences (3 cr)**

This course exposes students to a variety of writing that they can be expected to participate in during their role as a health professional. This course builds upon ENGL 120 to broaden students' academic writing that focuses on creating coherent and organized prose through writing and rhetorical analysis of selected works.

Prerequisites: ENGL 120.

Curriculum map: ENGL 320 is an elective course that fulfills the Arts and Humanities Program Area Requirement.

### **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.

Curriculum map: GOVT 110 is an elective course and is applied towards Liberal Arts Social Sciences area.

### **HSCI 410 Healthcare Informatics (3 cr)**

This course will introduce informatics principles, methods and formulas to nurses and other healthcare professionals. Students will become familiar with the definitions of various healthcare statistics; the use of data for financial, clinical, and quality management activities; recognize the importance of accuracy and validity of data and outcomes; use computerized and manual methods of computing and presenting statistical data; and examine regulatory, accreditation, and vital statistics reporting.

Prerequisites: NURS200

Curriculum Map: HSCI 410 is an elective course for the BSHS and a degree requirement for the BSN.

### **HSCI 430 Healthcare Policy (3 cr)**

This course will introduce the nurse to today's changing health care environment. Students will develop a global understanding of healthcare leadership and political activism, as well as the complex business and financial issues that drive many actions in the health system. Discussions include conflict management,

health economics, lobbying, the use of media, and working with communities for change. Students will be prepared to play a leadership role in the four spheres in which nurses are politically active: the workplace, government, professional organizations, and the community.

Prerequisites: NURS200

Curriculum Map: HSCI 410 is an elective course for the BSHS and a degree requirement for the BSN.

### **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: ENGL110 or Post Baccalaureate standing.

Curriculum map: HIST 310 is an elective course and satisfies Program Area Requirements the Arts & Humanities area.

### **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.

Curriculum map: HUMN 210 is an elective course, and its credits apply towards the GE requirements Liberal Arts - Humanities area.

### **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: None.

Curriculum map: HUMN 220 is an elective course and its credits apply towards the GE requirements Liberal Arts - Humanities area.

### **HUMN 225 The Music of Change: A Social and Cultural Exploration (3 cr)**

In this course, styles of protest music are studied and analyzed for historical, cultural, political, and social significance. Students survey music of the 19th, 20th, and 21st centuries for style, form, lyrics, context, and expression in order to instill deeper musical and cultural understanding. Students will also learn how to use the styles and literary techniques present in music to create their own pieces. Emphasis is placed on becoming a more knowledgeable and discerning listener and practitioner.

Prerequisites: None.

Curriculum map: HUMN 225 satisfies GE requirements in the Liberal Arts - Fine Arts.

### **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 and ENGL120.

Curriculum map: HUMN 410 satisfies the Program Area Requirement for Arts & Humanities.

### **MATH 110 College Algebra (3 cr)**

MATH 110 is a course focused on the concept of functions and their applications in solving real world problems. The symbolic, numerical, graphical, and narrative representations of functions are discussed in detail. Emphasis is placed on solving problems symbolically, numerically, and graphically while understanding the connections among these methods in interpreting and analyzing results. The course will cover linear, quadratic, polynomial, rational, exponential, and logarithmic functions.

Prerequisites: None.

Curriculum map: MATH 110 is a prerequisite course for the Bachelor of Science in Nursing and contributes to GE requirement for Scientific Inquiry & Quantitative Reasoning - Math area.

### **MATH 120 Applied Statistics (3 cr)**

This course emphasizes the understanding, interpretation, and application of statistical methods and concepts to problems of interest for health science professionals. This course covers key statistical concepts which include: descriptive and inferential statistics. normal distribution, standardization and standard errors, measures of central tendency and variability, hypothesis testing, statistical significance and confidence intervals, correlation, contingency tables, differences between group means (t- tests and ANOVA), regression and chi-square.

Prerequisites: None.

Curriculum map: MATH 120 contributes to GE requirement for Scientific Inquiry & Quantitative Reasoning - Math area.

### **MATH 120x Applied Statistics Online (3 cr)**

This online course emphasizes the understanding, interpretation, and application of statistical methods and concepts to problems of interest for health science professionals. This course covers key statistical concepts which include: descriptive and inferential statistics. normal distribution, standardization and standard errors, measures of central tendency and variability, hypothesis testing, statistical significance and confidence intervals, correlation, contingency tables, differences between group means (t- tests and ANOVA), regression and chi-square.

Prerequisites: None.

Curriculum map: MATH 120x contributes to GE requirement for Scientific Inquiry & Quantitative Reasoning - Math area.

### **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. Enrollment in MATH125 is determined by student performance on the Math Placement Exam.

Prerequisites: None.

Curriculum map: MATH 125 fulfills the General Education Area of Scientific Inquiry and Quantitative Reasoning-Math area.

### **MATH 125x Pre-Calculus Online (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. Enrollment in MATH125 is determined by student performance on the Math Placement Exam.

Prerequisites: None.

Curriculum map: MATH 125x fulfills the General Education Requirements of Scientific Inquiry and Quantitative Reasoning- Math area.

### **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.

Curriculum map: MATH 130 satisfies GE requirement for Scientific Inquiry & Quantitative Reasoning - Math area.

### **MATH 130x 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.

Curriculum map: MATH 130x satisfies GE requirement for Scientific Inquiry & Quantitative Reasoning - Math area.

### **MATH 140 Discrete Mathematics for Biological Problems (3 cr)**

This is a hybrid course focused on the study of mathematical structures that are countable or otherwise distinct and separable. Examples include combinations, graphs, and logical statements.

Prerequisites: BIOL110, BIOL110L, BIOL120, BIOL120L, MATH125.

Curriculum map: This is an elective course for the BSHS degree and required for the Biotechnology concentration.

### **MEDS 410a Standardized Patients Clinical Experience A (3 cr)**

MEDS 410a is a combined experiential and seminar course. Students undertake the role of standardized patients in medical education, embodying patients' symptoms, life histories and illness concerns during real-time scenarios with medical students and their faculty preceptors. In seminar students learn to recognize, interpret and represent patient care through study of Narrative Medicine by listening to and telling the complex and unique stories of illness. Students have the opportunity to experience and understand what being a patient with illness is as they develop skills in patient centered health care.

Prerequisites: Senior status with faculty approval, or Post Baccalaureate Standing.

Curriculum map: MEDS 410a is an elective course. Satisfies the program area requirements for professionalism.

### **MEDS 410b Standardized Patients Clinical Experience B (3 cr)**

MEDS 410b is a combined experiential and seminar course. Students undertake the role of standardized patients in medical education, embodying patients' symptoms, life histories and illness concerns during real-time scenarios with medical students and their faculty preceptors. During the seminar portion students learn to recognize, interpret and represent patient care through study of Narrative Medicine by listening to and telling the complex and unique stories of illness. Students have the opportunity to experience and understand what being a patient with illness is as they develop skills in patient centered health care.

Prerequisites: Senior status with faculty approval, or Post Baccalaureate Standing.

Curriculum map: MEDS 410b is an elective course. Satisfies the program area requirements for professionalism.

### **NURS 200 Introduction to Professional Nursing (3 cr)**

This course is designed to introduce students to the art and science of the profession of nursing through historical perspectives, concepts and current issues that are foundational to nursing as an evolving profession. The nursing process, professional scope and standards, role performance, nursing competencies, licensure, professional organizations, certifications and legal aspects are examined.

Prerequisites: Student must have been admitted into the BSN Program.

Curriculum map: NURS 200 is a required foundational course for BSN students.

### **NURS210 Pharmacology (3cr)**

NURS210 is a 3-unit course on pharmacology relevant to the practice of nursing. The study of drugs includes their indication(s) of use, mechanism of action, patient response(s) to the effect of the drugs, monitoring the effect(s) of drugs on patient, the safe and appropriate of drugs, management of adverse drug reactions and toxicity, contraindication(s) of use, drug-drug interaction(s), food-drug interaction(s), instructions on how the drugs are administered and proper storage of drugs, and rules and regulations affecting the control, use, storage of the drugs. For each drug class, the pharmacological profile and class effects will be discussed. In this course, students will learn to develop interprofessional working relations with physician and pharmacist, collaborate to develop patient care plan, outcome criteria, implementation of the plan, and exercise critical thinking to ascertain appropriate drug response. Where it is necessary, this course may briefly review certain requisite knowledge that is foundational to the learning of pharmacology.

Prerequisites: NURS200

Curriculum map: NURS210 is a degree requirement of the BSN.

### **NURS 220 Fundamentals in Nursing (3 cr)**

Foundational nursing competencies and techniques are accomplished in this course. Students will be introduced to basic nursing knowledge and concepts that provide a working foundation of compassionate, evidence-based, collaborative care and will develop critical thinking abilities in the role of communicator, educator, and caregiver. Students will develop fundamental competencies in maintaining a safe and hygienic environment, medical asepsis and infection control, principles of body mechanics and mobility, basic gastrointestinal and urinary care, oxygen therapy and airway management, and calculation of drug doses and safe administration.

Prerequisites: NURS 200

Co-requisite: NURS 220CL

Curriculum map: NURS 220 is a degree requirement course for BSN students.

### **NURS 220CL Fundamentals in Nursing - Clinical (1 cr)**

Students will apply theory, critical thinking, and the nursing process to gain mastery of selected fundamental competencies through practice in the skills/simulation lab. Students will be required to demonstrate mastery



and competency in nursing skills and procedures required for the fundamentals for professional nursing practice. This course requires 48 hours of clinical experience.

Prerequisites: NURS 200

Co-requisite: NURS 220

Curriculum map: NURS 220CL is a degree requirement course for BSN students.

### **NURS 230 Health Assessment in Nursing (4 cr)**

This course prepares students to complete a health history and gain the knowledge and skills to complete a physical exam and system assessments on individuals across the lifespan. In addition, students will appreciate cultural variations, demonstrate psychosocial sensitivity and knowledge of genetic and nutritional assessment.

Prerequisites: NURS 200

Co-requisite: NURS 230CL

Curriculum map: NURS 230 is a degree requirement course for BSN students.

### **NURS 230CL Health Assessment in Nursing - Clinical (1 cr)**

In this course students will complete a health history and gain the knowledge and skills to complete a physical exam and system assessments on individuals across the lifespan. In addition, students will appreciate cultural variations, demonstrate psychosocial sensitivity and knowledge of genetic and nutritional assessment. Students will practice skills to complete systems exams, demonstrate competency, and document findings. This course requires 48 hours of clinical experience.

Prerequisites: NURS 200

Co-requisite: NURS 230

Curriculum map: NURS 230CL is a degree requirement course for BSN students.

### **NURS 300 Ethics in Nursing (3 cr)**

The emphasis is on the role of the nurse in providing nursing care grounded in ethical principles to the healthcare setting. Increased leadership and autonomy in the nursing profession comes with increased responsibility, particularly ethical responsibility. This course provides the student with a foundational knowledge of ethics, ethical reasoning, and decision-making strategies to navigate the difficult ethical situations encountered on a daily basis. Decision-making models, rationales for decisions, and various topics related to ethical patient care are provided in this course, satisfying the competencies needed for successful professional practice.

Prerequisites: NURS 210, NURS 220/220CL, NURS 230/230CL.

Curriculum map: NURS 300 is a degree requirement course for BSN students.

### **NURS 310 Adult Health I (5 cr)**

Application of Nursing theory and evidenced based practice in caring for adults across the lifespan with acute and chronic health conditions in acute and sub-acute health care settings. Geriatric content is integrated into both theory and clinical. Emphasis is placed on the delivery of safe, patient-centered, team-based care integrating knowledge of pathophysiology and pharmacotherapy, developmental theories, and the human response to illness. The emphasis is on the role of the nurse in providing compassionate, ethically driven care to the healthcare setting.

Prerequisites: NURS 210, NURS 220/220CL, NURS 230/230CL.

Co-requisite: NURS 310CL

Curriculum map: NURS 310 is a degree requirement course for BSN students.

### **NURS 310CL Adult Health I Clinical (6 cr)**

Through direct clinical experiences, students will develop the psychomotor and critical thinking/judgement skills to provide safe, patient-centered, team-based care to adults across the lifespan incorporating geriatrics. The emphasis is on the role of the nurse in providing care to the healthcare setting. Students will perform the clinical skills that meet both agency and Evidence-Based Practice guidelines required for nursing practice under the supervision of clinical faculty member and the assigned staff nurse. This course requires 288 hours of clinical experience that includes both immersive simulation on campus and acute and long-term care settings in the community.

Prerequisites: NURS 210, NURS 220/220CL, NURS 230/230CL.

Co-requisite: NURS 310

Curriculum map: NURS 310CL is a degree requirement course for BSN students.

### **NURS 320 Adult Health II (4 cr)**

This course builds on the integrated knowledge and competencies from Nursing of Adults I, across the life span. Geriatric content is integrated into both theory and clinical. Students will care for increasingly complex and chronically ill clients in acute and sub-acute settings. Emphasis is placed on the delivery of safe, patient-centered, team-based care incorporating health promotion, disease prevention and patient/family education.

Prerequisites: NURS 310 and NURS 310CL.

Co-requisite: NURS 320CL

Curriculum map: NURS 320 is a degree requirement course for BSN students.

### **NURS 320CL Adult Health II - CLINICAL (4 cr)**

Through direct clinical experiences, students will develop the psychomotor and critical thinking/judgement skills to provide safe, patient-centered, team-based care to adults across the lifespan incorporating geriatrics. The emphasis is on the role of the nurse in providing care in the healthcare setting. Students will perform the clinical skills that meet both agency and evidence-based practice guidelines required for nursing practice under the supervision of clinical faculty member and the assigned staff nurse. This course requires 192 hours of clinical experience that includes both immersive simulation on campus and direct patient care in acute and non-acute care settings in the community.

Prerequisites: NURS 300 and NURS 310/310CL.

Co-requisite: NURS 320

Curriculum map: NURS 320CL is a degree requirement course for BSN students

### **NURS 330 Evidenced-Based Practice (3 cr)**

Baccalaureate prepared nurses must incorporate team-based evidenced-based care derived from the best available scientific evidence to inform clinical judgements. Nurses need to understand the research process to gain competency to critically read, evaluate, and apply research findings into practice. By understanding the research process, students can formulate clinical questions and appraise the literature to advance quality care and healthcare improvement. In this course, students are introduced to qualitative, quantitative approaches, research design, and data collection methods.

Prerequisites: NURS 200

Curriculum map: NURS 330 is a degree requirement course for BSN students.

### **NURS 340 Psychiatric/Mental Health Nursing (3 cr)**

Students will gain competency to promote therapeutic use of self in communication patterns. Using the nursing process, interventions for acute and chronic psych/mental health conditions focus on interdisciplinary collaboration, teaching-learning, and behavioral change to promote health promotion, disease prevention, and care of individuals and families of diverse and cultural backgrounds. Nursing care and interventions of special populations: homelessness, substance abuse, addiction, and mental health disorders over the lifespan are examined. Students will concurrently complete supervised clinical practice hours with a clinical faculty member in a psych/mental health setting. Emphasis will be placed on the role of the nurse in providing holistic care.

Prerequisites: NURS 320 and NURS 320CL.

Co-requisite: NURS 340CL

Curriculum map: NURS 340 is a degree requirement course for BSN students.

### **NURS340CL Psychiatric/Mental Health Nursing Clinical (1 cr)**

Students will gain competency to promote therapeutic use of self in communication patterns. Using the nursing process, interventions for acute and chronic psych/mental health conditions focus on interdisciplinary collaboration, teaching-learning, and behavioral change to promote health promotion, disease prevention, and care of individuals and families of diverse and cultural backgrounds. Nursing care and interventions of special populations: homelessness, substance abuse, addiction, and mental health disorders over the lifespan are examined. Students will concurrently complete supervised clinical practice hours with a clinical faculty member in a psych/mental health setting. Emphasis will be placed on the role of the nurse in providing holistic care. This course requires 48 hours of clinical experience that includes both immersive simulation on campus and direct patient care in acute and non-acute care settings in the community.

Prerequisites: NURS320 and NURS320CL

Co-requisite: NURS340

Curriculum Map: NURS340CL is a degree requirement of the BSN.

### **NURS 350 Maternal-Child Nursing (3 cr)**

This course requires the integration of theory and evidence-based practice to maternal and newborn nursing. Family-centered care provides the framework for this course. In addition, students will participate in competency-based simulated learning experiences to gain evidence-based clinical judgment in the care of Antepartum, Intrapartum, and Postpartum women with acute conditions. Newborn simulated experiences will focus on the delivery of the newborn and evidence-based judgment in initial care and assessment. The focus will be on health promotion, disease prevention, and family-centered care of diverse populations.

Prerequisites: NURS 320 and NURS 320CL.

Co-requisite: NURS 350CL

Curriculum map: NURS 350 is a degree requirement course for BSN students.

### **NURS 350CL Maternal-Child Nursing - Clinical (1 cr)**

This course provides maternal and newborn care experiences in acute and ambulatory care settings. Family-centered care provides the framework for this course. In addition, students will participate in competency-based simulated learning experiences. Emphasis will be placed on the role of the nurse in providing holistic care. This course requires 48 hours of clinical experience that includes both immersive simulation on campus and direct patient care in acute and non-acute care settings in the community.

Prerequisites: NURS 320 and NURS 320CL.

Co-requisite: NURS 350

Curriculum map: NURS 350CL is a degree requirement course for BSN students.

### **NURS 360 Pediatrics Nursing (3 cr)**

This course provides pediatric clinical care experiences in acute, chronic, and/or a variety of other settings, including both acute and non-acute settings, such as schools or ambulatory care settings. Family centered care provides the framework for this course. In addition, students will participate in competency-based simulated learning experiences. This course requires 48 hours of clinical experience that includes both immersive simulation on campus and direct patient care in various acute and non-acute care settings in the community.

Prerequisites: NURS 320 and NURS320CL

Co-requisite: NURS 360CL

Curriculum Map: NURS360 is a degree requirement for the BSN.

### **NURS 360CL Pediatrics Nursing – Clinical (1 cr)**

This course provides pediatric clinical care experiences in acute, chronic, and/or a variety of other settings, including both acute and non-acute settings, such as schools or ambulatory care settings. Family centered care provides the framework for this course. In addition, students will participate in competency-based simulated learning experiences. This course requires 48 hours of clinical experience that includes both immersive simulation on campus and direct patient care in various acute and non-acute care settings in the community.

Prerequisites: NURS320 and NURS320CL

Co-requisite: NURS 360

Curriculum Map: NURS 360CL is a degree requirement for the BSN.

### **NURS370 Public Health Nursing (2 cr)**

This course is designed to assist the student to meet the Scope and Standards for Public Health Nursing to become eligible to apply for a Public Health Nurse Certificate. These 17 standards provide a broad scope of practice to assess, diagnose, identify, plan, implement, and evaluate a public health and community-based intervention plan. The health of the community and populations within the community is the focus of the course. Students will apply nursing and public standards to promote health, prevent disease and restore the health of population groups.

Prerequisites: NURS 320 and NURS 320CL

Co-requisite: NURS 370CL

Curriculum Map: NURS370 is a degree requirement for the BSN.

### **NURS370CL Public Health Nursing – Clinical (2 cr)**

This practicum will provide students with a population-based focus to identify the healthcare needs of the population to better meet the healthcare needs of patients, families, and the community. Guided by course outcomes students will complete experiential learning in multiple settings and develop an EBP public health community-based assessment plan to improve the health of a population.

Prerequisites: NUR S320 and NURS 320CL

Co-requisite: NURS 370

Curriculum Map: NURS 370CL is a degree requirement for the BSN.

### **NURS420 Nursing Leadership (3 cr)**

This course emphasizes leadership and management theories and practice. This course will provide students with the tools they need to develop leadership skills, delegation, and patient advocacy.

Prerequisites: NURS 340, NURS 340CL, NURS 350, NURS 350CL, NURS 360, NURS 360CL, NURS 370, NURS 370CL

Co-requisite: NURS 420CL

Curriculum Map: NURS 420 is a degree requirement for the BSN.**NURS420CL Nursing Leadership –**

### **Clinical (4 cr)**

The clinical activities in this course will focus on leadership, management, and the student's professional identity in all aspects of the professional nurse. Clinicals are scheduled with selected nurses in a variety of settings. This course requires 192 hours of clinical experience that includes both immersive simulation on campus and direct patient care in acute care settings in the community.

Prerequisites: NURS 340, NURS 340CL, NURS 350, NURS 350CL, NURS 360, NURS 360CL, NURS 370, NURS 370CL Co-requisite: NURS 420

Curriculum Map: NURS 420CL is a degree requirement for the BSN.

### **NURS 490 Capstone (3 cr)**

This course requires that senior nursing students demonstrate mastery of knowledge learned in liberal arts, sciences, as well as nursing courses. This course will facilitate the student's transition into professional practice by exploring trends and issues in professional nursing including the delivery and management of care within the context of legal, ethical, and evidenced-based practice. The course requires the design and execution of a capstone research project following university guidelines for degree completion.

Prerequisites: NURS 350/350CL, NURS 360/360CL, NURS 370/370CL and Senior status.

Curriculum map: NURS 490 is a degree requirement course for BSN students.

### **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, or Post Baccalaureate standing.

Curriculum map: PHIL 310 satisfies the Program Area Requirement for Arts and Humanities.

### **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 Post Baccalaureate standing.

Curriculum map: PHLT 310 is an elective course. Satisfies the Program Area Requirements for Arts and Humanities.

### **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: at least junior year standing, or Post Baccalaureate standing, or administrative approval.

Curriculum map: PHLT 320 is an elective course. Satisfies the program area requirements for Critical and Systemic Thinking.

### **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 Post Baccalaureate standing.

Curriculum map: PHLT 320 is an elective course. Satisfies the program area requirements for arts and humanities.

### **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 MATH130x.

### **PHYS 210L Physics I Laboratory (1 cr)**

Physics I laboratory complements the Physics I lecture course by providing hands-on experience with experimentation in physics. It includes experiments that seek to understand physical processes including motion, force, inertia, friction, gravity, energy, power, momentum, impulse, angular momentum, harmonic motion, fluid mechanics, wave phenomena, and optics.

Prerequisites: MATH130 or MATH130x.

Co-requisite: PHYS210.

### **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.

Co-requisite: PHYS220L.

### **PHYS 220L Physics II Laboratory (1 cr)**

Physics I laboratory complements the Physics I lecture course by providing hands-on experience with experimentation in physics. It includes experiments that seek to understand physical processes including thermodynamics, electrostatics, electricity, circuits, capacitance, magnetism, wave phenomena, and modern physics.

Prerequisites: PHYS210.

Co-requisite: PHYS220.

### **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.

Curriculum map: PSYC 110 satisfies GE requirement for the Liberal Arts – Social Sciences area.

### **PSYC 110x General Psychology Online (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.

Curriculum map: PSYC 110x satisfies GE requirement for the Liberal Arts area.

### **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 or PSYC110x.

Curriculum map: PSYC 220 satisfies GE requirement for the Liberal Arts social sciences area.

### **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 or PSYC110x or Post Baccalaureate standing.

Curriculum map: PSYC 310 satisfies the BSHS Program Area Requirement for Critical and Systemic Thinking. PSYC310 is a degree requirement for the BSN.

### **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 or PSYC110x or Post Baccalaureate standing.

Curriculum map: PSYC 320 satisfies the Program Area requirement for Critical and Systemic Thinking.

### **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: PSYC 110 or PSYC110x or Post Baccalaureate standing.

Curriculum map: PSYC 410 satisfies the Program Area Requirement for Critical and Systemic Thinking.

### **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 or PSYC110x or Post Baccalaureate standing.

Curriculum map: PSYC 420 satisfies the Program Area requirement for Critical and Systemic Thinking.

### **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.

Prerequisites: PSYC110 or PSYC110x or Post Baccalaureate standing.

Curriculum map: PSYC 430 satisfies the Program Area Requirement for Critical and Systemic Thinking.

### **SEMR 410 Health Professions Seminar I (1 cr)**

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.

Curriculum map: SEMR 410 is an elective course.

### **SEMR 420 Health Professions Seminar II (1 cr)**

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.

Curriculum map: SEM 420 is an elective course.

### **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.

Prerequisites: None.

Curriculum map: SOCL 110 satisfies the GE requirements for Liberal Arts – Social Sciences area.

### **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: SOCL110 and Junior status, Post Baccalaureate standing.

Curriculum map: SOCL 410 satisfies the Program Area Requirement for Critical and Systemic Thinking

## **COLLEGE OF HEALTH SCIENCES**

### **CHS Administration**

For a current listing of people, titles and contact information, please visit:

<https://healthsciences.cnsu.edu/directory/>

### **Heather M. Brown, PhD**

Dean

### **Francisco Leite, PhD**

Associate Dean of Academic and Student Affairs  
Professor of Health Sciences Education

### **Rikki Corniola, PhD**

Assistant Dean of Curriculum and Assessment  
Associate Professor of Biomedical Sciences



**Damon Meyer, PhD**

Assistant Dean of Faculty Affairs and Pedagogy  
Associate Professor of Molecular Genetics

**Allan Ancheta, PhD**

Assistant Dean of Admissions

**Mang Xiong, MPH**

Executive Assistant to the Dean  
Staff Supervisor

**Faculty (Alphabetical Order – Last Name)**

**Reem Olaby, PhD**

Assistant Professor of Biology and Biotechnology

**Faik Bouhrik, MS**

Lecturer of Physics

**Jill Dahlman, PhD**

Assistant Professor of English

**Rosemary Effiong, PhD**

Associate Professor of Chemistry

**Erin Freed, PhD**

Assistant Professor of Psychology & Sociology

**Machelle Gavron, MS**

Lecturer of Chemistry

**Parisa Jazbi, PhD**

Assistant Professor of Molecular Biology

**Peter Katz, PhD**

Assistant Professor of Humanities

**Kristopher (Kit) Keane, PhD**

Assistant Professor of Physiology

**Tereza Joy Kramer, PhD**

Assistant Professor of Service Learning

**Emily Mills Ko, PhD**

Assistant Professor of Biotechnology & Neurology

**Elizabeth Lozano, PhD**

Assistant Professor of Psychology and Sociology

**Emily Mills-Ko, PhD**

Assistant Professor of Biotechnology and Neurology

**Marguerite Phillips, MA**

Lecturer of Communication, Leadership & Student Success

**Gloria Poveda, PhD**

Assistant Professor of Service-Learning

**Mehul Rangwala, MBA**

Adjunct Faculty, Mathematics and Statistics

**Ravi Ranjan, PhD**

Assistant Professor of Anatomy and Physiology

**Elizabeth Ryder-Baxmeyer, MFA**

Lecturer of English and Music

**Nicholas Valley, PhD**

Associate Professor of Chemistry

**Frances S. Wise, PhD**

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Faculty of English and Student Success

**Katherine Whitcome, PhD**

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Associate Professor of Biological Anthropology

**Christopher Wostenberg, PhD**

Science and Mathematics Department Chair

Associate Professor of Chemistry

**Staff (Alphabetical Order – Last Name)**

**Katie Caswell**

Laboratory Manager

**Dalton McNeely**

Coordinator Academic Affairs and Student Life

**Stephanie Rangel**

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**John Su**

Laboratory Technician, Biology

Science Outreach Coordinator