

COLLEGE OF HEALTH SCIENCES

Mission, Vision, and Values

Mission: To advance the art and science of healthcare.

Vision: Evolution to excellence in education requires continual pursuit of higher levels of performance and achievement. We seek to challenge undergraduate students with a comprehensive academic program that prepares them for success and leadership in a professional healthcare career. Quality education for students pursuing a career in healthcare professions begins with rigorous study of core sciences such as biology and chemistry. The program of education must further empower students to apply quantitative methods and critical thinking to the practice of healthcare. Strength of character and interpersonal skills essential for work in healthcare-related fields are developed and enhanced through the study of relevant humanities and social science disciplines. Along with traditional lecture and lab courses, the opportunity to perform community service learning projects and independent scholarly research provides important capstone experience in applying concepts and theory learned in the classroom to real-world situations.

Values: Integrity, Ethical Conduct, Empathy, Inter-Personal Collaboration, Social Accountability, Civic-Minded Commitment to Service, Respect for Human Diversity

Educational Philosophy

The philosophy of our academic programs encompasses three goals of competency and personal development which students who pursue careers in biomedical science and healthcare must attain in order to be compassionate practitioners. These competencies broadly include Cognitive Ability and Intellectual Depth, Social and Communication Skills, and Community Engagement/Civic Responsibility.

Cognitive Ability and Intellectual Depth corresponding to command of any subject is best achieved by thoughtful study of the relevant body of knowledge under the guidance of a teacher who is an expert in the field and is well prepared to mentor students. Learning is often a demanding and inscrutable process, but it is known to emerge reliably from the interplay of thoughtful reading, attendance of inspiring lectures, case studies and practice problems, classroom discussion, and assessment. Ultimately, every student must commit to personal engagement in the learning process using methods that work best for the individual. There is no magic substitute for the hard work of studying. However, our faculty members are tasked to use innovative teaching methods and technologies proven to be effective by pedagogical research. Each concentration and every course delivered at CNU has specific learning outcomes that are measured by various forms of assessment. The assessment results are used to make changes that continually improve

upon teaching and the curriculum. The goal of every teacher is not merely to convey a list of facts but to transform novice students into active scholars and ultimately prepare them for life-long learning. Every field of knowledge, especially science, is being constantly revised by discovery through research. Learning a subject does not end with the final exam of the course; it only begins a life's journey.

The goal of acquiring Social and Communication Skills acknowledges the need to communicate effectively. As professionals, we must be proficient in the art of written and verbal communication in order to exchange technical information. Moreover, the best health science in the world loses its purpose unless it can benefit the people who need it. This process involves personal interaction between the healthcare professional and the patient or consumer. The patient must feel free to communicate concerns and the care provider must be able respond effectively. Values beyond mastery of medical science such as empathy and compassion fall within this area. Emotional and cultural understanding must be conveyed along with the delivery of care. These values are difficult to objectify but they fall within the realm of liberal arts, humanities, and social sciences. Courses such as Cultural Anthropology, Sociology, Psychology, Art Appreciation, and Music Appreciation provide context and insights into the complexity and diversity of human behavior. Our students are encouraged to become socially and intellectually well-rounded through the study of human culture and participation in extra-curricular activities.

Community Engagement and Civic Responsibility also lies within with the territory of being a health science professional. People need to live in healthy communities in order to sustain their own good health. Health care professionals play a major role in fostering a healthy society by advocating for policies that promote the conditions, resources, and behavior conducive to social well-being. Our educational program guides students to the rich content of voluntary service and contributing to the greater good through supervised projects that partner with advocacy groups and organizations for the benefit of the community at large.

Learning Outcomes

The goals of the Bachelor of Health Sciences program are defined and assessed by a set of carefully designed Program Learning Outcomes and General Education Learning Outcomes. These outcomes specify the intellectual substance and interpersonal communication skills that our students are expected to demonstrate by the time they graduate.

As overarching educational standards, Program Learning Outcomes (PLOs) define the primary learning agenda and the associated platform of assessment that measures teaching effectiveness and student competency.

Program Learning Outcomes (PLOs)

Upon successful completion of the CNUCHS Bachelor of Science in Health Sciences, students will be able to demonstrate the following 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 competence.

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; BIOL420; BIOL440; BIOL450; BIOL460; BIOL470 BIOL480; COLL310 & COLL320

PLO2: Arts and Humanities (3 cr)

HIST310; HUMN410; PHIL310 & PHLT310

PLO3: Critical and Systemic Thinking (3 cr)

PHIL310; PSYC310; PSYC320; PSYC410; PSYC420; PSYC430 & SOCL410

PLO4: Professional Interaction (3 cr)

COLL420 & COLL220

PLO5: Social Accountability & Community Service (2 cr)

COLL220

PLO Requirement

Courses satisfying a PLO must be completed at CHS. 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.

Curricular Learning Outcomes:

Upon successful completion of the CNUCHS Bachelor of Science in Health Sciences, students will be able to demonstrate the following co-curricular learning outcomes:

1. **Social Awareness and Cultural Sensitivity.**

Demonstrate awareness of and responsiveness to social and cultural differences by adapting behaviors appropriately and using effective interpersonal skills.

2. **Self-Awareness and Learning.** Demonstrate self-awareness through reflection and the development of appropriate plans for self-directed learning and development.

3. **Service and Leadership.** Demonstrate the ability to lead and work collaboratively with others to accomplish a shared goal.
4. **Professionalism.** Demonstrate professional behavior and effective interactions with others.
5. **Oral Communication.** Demonstrate appropriate delivery techniques when communicating materials to an audience.

General Education Learning Outcomes (GELOs)

Upon successful completion of the CNUCHS Bachelor of Science in Health Sciences, students will be able to demonstrate the following general education learning outcomes:

1. **Written Communication.** Demonstrate the ability to write coherent, supported and logically structured prose.
2. **Oral Communication.** Listen and speak effectively in formal communication.
3. **Information Literacy.** Identify and search relevant libraries of information and databases; synthesize information obtained from primary literature using properly referenced citations.
4. **Critical Thinking.** Exercise reasoned judgement to assess technical information and make well-informed decisions using evidence-based approaches.
5. **Scientific Inquiry and Quantitative Reasoning.** Demonstrate knowledge of the complexity of biological systems and chemistry of matter through research with the use of mathematics and statistics in problem solving.
6. **Liberal Arts.** Demonstrate knowledge of diverse human cultures and influences of social forces, economic principles, and human interactions within the framework of social sciences.

The GE Requirements encompass a suite of courses that provide a broad educational framework for students. The GE curriculum at CNU CHS is designed to provide students with a solid foundation for advanced studies and essential skills needed to work effectively in diverse health-related careers. As required by the California Code of Regulations– Title 5– Article 2 on Admissions and Academic Achievement Standards “At least 25 percent of the credit requirements for a Bachelor’s Degree shall be in general education.” Accordingly, the GE courses comprise approximately 36 credit units of the minimum 120 required credits for graduation (30% of total degree credits).

The GE Learning Outcomes are fulfilled by completion of the following courses:

1. **Written Communication (6 cr)**

-ENGL 110 (3 cr); ENGL 110x (3cr) ENG 120 (3 cr) ENGL 120x (3cr)

2. **Oral Communication (3 cr)**

-COMM 110 (3 cr)

3. **Information Literacy (3 cr)**

-ENGL 120 or ENGL 120x (3 cr)

4. Critical Thinking (3 cr)

-ENGL 120 or ENGL 120x

5. Scientific Inquiry and Quantitative Reasoning (14 cr)

-BIOL 110/L (3 cr/1 cr) and CHEM 110/L (3 cr/1 cr);
-MATH 120 (3 cr); MATH 120x 3(cr) & MATH 125 (3 cr),
MATH 125x 3(cr) or MATH 130 (3 cr), MATH 130x 3(cr)

6. Liberal Arts (13 cr)

-Fine Arts (3 cr): ARMU 110 (3 cr), ARMU 120 (3 cr), or
approved Arts elective
-Humanities (3 cr): ANTH 210 (3 cr) or approved
Humanities elective
-Social Sciences (3 cr): ECON 210 (3 cr), GOVT 110 (3 cr),
PSYC 110 3(cr), PSYC 110x 3(cr) SOCL 110 (3 cr), or
approved Social Sciences elective
-Social Accountability and Community Service (6 cr):
COLL 210 (2 cr) and COLL 220 (2 cr)

Note: Approved course electives may be transfer credits including credit awarded by AP/IP exam, transfer courses, course substitution, or a CHS offered course designated as meeting the GE requirement area.

Academic Programs

Overview

The College of Health Sciences (CHS) offers an undergraduate program leading to the Bachelor of Science in Health Sciences (BSHS) degree. CHS has pathways that allow BSHS students to progress to California Northstate University's College of Medicine, College of Pharmacy, and the College of Psychology, provided they maintain certain benchmarks. Pathways are not programs and CHS students must meet the admission criteria of each individual CNU professional school in order to be able to progress. CHS also offers a pathway with CNU Master of Pharmaceutical Sciences (MPS) program.

CHS also offers a curriculum plan 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 his/her academic credentials and application portfolio to those schools – the Pre-Med Post-Baccalaureate coursework (PMPB). The PMPB coursework is not a program and does not lead to a diploma or a degree.

Bachelor of Science (BS)

In the undergraduate Bachelor of Science (BS) in Health Sciences program, students may choose from three concentrations within the program: Human Biology, Biopsychology, and Health Science Administration. Each concentration has a defined curriculum progressing from introductory to advanced courses. All concentrations include the same General Education (GE) requirements that fulfill a common set of learning outcomes spanning communication and critical thinking skills, natural sciences, liberal arts, and the social sciences. Additionally, the three concentrations are aligned with specific options for career paths in healthcare. This comprehensive program delivers a robust university education that prepares graduates to think independently and creatively as well as training them for practical occupations in health science.

Concentrations of Study Descriptions

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.

Human Biology: This concentration is appropriate for students who are seeking focused coursework in biomedical sciences. It is a challenging curriculum that focuses upper division coursework on advanced topics of human biology such as functional anatomy, human genetics, microbiology, immunology, and pharmacology. Students who complete this concentration are expected to be exceptionally well prepared for a variety of professional health programs and employment in a variety of healthcare-related professions.

Biopsychology: This concentration is also appropriate for students headed for professional health programs since it includes many of the same rigorous basic science courses as the Human Biology concentration. However, students following this plan of study choose from a suite of psychology courses in the science of human behavior, mental health and mental illness. Such courses include developmental psychology, cognitive psychology, health psychology, and abnormal psychology. In addition to medical school options, students choosing this concentration will have a strong academic background for graduate schools that provide specialized training and certification for occupations such as clinical psychologists, psychiatrists, and counselors.

Health Science Administration: This concentration is offered for students who wish to work in the administrative side of health care delivery. The curriculum includes introductory science in the first year that is essential for understanding the basics of human biology. The second to fourth years of the curriculum consist of many courses relevant to business and management. Such courses include human resources management, healthcare financing, healthcare regulations and accreditation, and entrepreneurship. Students who complete this concentration will have a strong background in business and science to work as administrators, managers, and sales representatives in hospitals, medical insurance companies, public health agencies, the pharmaceutical sector, health advocacy foundations, and other professions.

Bachelor of Sciences and Doctor of Medicine (BS-MD) Pathways

BS to MD pathways offer high school applicants multiple options to apply the professional Doctor of Medicine (MD) program at CNU College of Medicine (CNUCOM). Some pathways options are designed to allow entering freshmen to complete their pre-medicine coursework and MD in an accelerated time frame if they meet specific criteria to be admitted into CNUCOM. Students accepted into a BS to MD pathway will begin their program of study in the College of Health Sciences (CHS) undergraduate program towards obtaining their BS degree while completing all prerequisite academic coursework to satisfy CNUCOM requirements. These students will work closely with the CHS pre-health advisors to ensure completion of all the required criteria and academic course prerequisites.

These students will also be required to participate in at least one activity per year in the CNU College of Medicine (CNUCOM) campus activity program. The CNUCOM campus activity program is designed to educate pre-medicine students about their future profession through community health service opportunities, specialty career exploration workshops, lab experiences, and special professional education sessions. These pathways offer priority acceptance to the very competitive MD program provided they meet all the CNUCOM admission criteria.

Students have the opportunity to complete their BS degree and MD degree in an accelerated time frame--six to seven years in addition to the traditional eight years.

2+4 BS-MD Pathway

Two Years Undergraduate + Four Years Doctor of Medicine. Students are required to take some classes in summer to fulfill the CNUCOM MD admissions requirements and CNUCHS degree requirements for the Bachelor of Science.

3+4 BS-MD Pathway

Three Years Undergraduate + Four Years Doctor of Medicine. Students have the option to take some classes in summer to fulfill the CNUCOM MD admissions requirements and CNUCHS degree requirements for the Bachelor of Science.

4+4 BS-MD Pathway

Four Years Undergraduate + Four Years Doctor of Medicine. Students have the option to take some classes in summer to fulfill the CNUCOM MD admissions requirements and CNUCHS degree requirements for the Bachelor of Science.

Bachelor of Sciences and Doctor of Pharmacy (BS to PharmD) Pathways

BS to PharmD pathways offer high school applicants two options to enter the professional Doctor of Pharmacy (PharmD) program. Both options are designed to allow entering freshmen to complete their pre-pharmacy coursework and PharmD in an accelerated time frame if they meet specific criteria. Students accepted into a BS to PharmD pathway option will begin their program of study in the College of Health Sciences (CNUCHS) undergraduate program towards obtaining their BS degree while completing all prerequisite academic coursework. These students will work closely with the CNUCHS pre-health advisors to ensure completion of all the required criteria and academic course prerequisites in order to be able to be considered for admission in our College of Pharmacy (CNUCOP).

These students will also be required to participate in at least one activity per year sponsored by CNUCOP. The CNUCOP campus activity is designed to educate pre-pharmacy students about their future profession through community health service opportunities, specialty career exploration workshops, lab experiences, and special professional education sessions. The BS to PharmD pathways offer priority acceptance to CNU PharmD program provided they

meet all the PharmD admission requirements. In addition, students have the opportunity to complete the Doctor of Pharmacy degree in an accelerated time frame--six to seven years instead of the traditional eight years.

2+4 BS-PharmD Pathway

Two Years Undergraduate + Four Years Doctor of Pharmacy. Students are required to take some classes in summer to fulfill the CNUCOP PharmD admissions requirements and CNUCHS degree requirements for the Bachelor of Science.

3+4 BS-PharmD Pathway

Three Years Undergraduate + Four Years Doctor of PharmD. Students have the option to take some classes in summer to fulfill the CNUCOP PharmD admissions requirements and CNUCHS degree requirements for the Bachelor of Science.

3+2 Bachelor of Science to Master of Pharmaceutical Sciences Pathway (BS to MPS)

The 3+2 BS to MPS pathway offers those interested in pursuing a career in the pharmaceutical field the opportunity to complete undergraduate education and earn a Master of Pharmaceutical Sciences (MPS) degree in five years. Students accepted into the 3+2 BS to MPS pathway will begin their program of study in the College of Health Sciences (CNUCHS) undergraduate program towards obtaining their BS degree while completing all prerequisite academic coursework for the Master of Pharmaceutical Sciences. These students will work closely with the CNUCHS pre-health advisors to ensure completion of all the required criteria and academic course prerequisites in order to be able to be considered for admission in the MPS program.

Students admitted into the 3+2 BS to MPS pathway are required to meet the following requirements in order to be admitted to the Master of Pharmaceutical Sciences at CNU:

- Successfully complete the MPS pre-requisite coursework
- Maintain a 3.0 GPA in the undergraduate program and be in good standing each semester
- Participate in at least one MPS activity per year while attending CHS
- Submit a primary application to the MPS program
- Submit a supplemental application to the MPS Office of Admission
- Successfully complete the MPS admission interview

3+5 Bachelor of Science to Doctor of Psychology Pathway (BS to PsyD)

The 3+5 BS to PsyD pathway offers those students interested in pursuing a professional degree in clinical psychology (PsyD) the opportunity to complete undergraduate education and earn a Doctor of Psychology (PsyD) degree in eight years. Students accepted into the 3+5 BS to PsyD pathway will begin their program of study in the College of Health Sciences (CNUCHS) undergraduate program towards obtaining their BS degree while completing all prerequisite academic coursework for the Doctor in Psychology. These students will work closely with the CNUCHS pre-health advisors to ensure completion of all

the required criteria and academic course prerequisites in order to be able to be considered for admission in the CNU College of Psychology.

Students admitted into the 3+5 BS to PsyD pathway are required to meet the following requirements in order to be admitted to the Doctor of Psychology at CNU:

- Successfully complete the prerequisite coursework for the COPsy.
- Maintain a 3.2 GPA in the undergraduate program and be in good academic and conduct standing each semester.
- Participate in at least one campus activity each year with the COPsy
- Submit an application through the centralized application service for graduate study in psychology (PsyCAS) and a supplemental application to CNUCOPsy
- Successfully complete the COPsy interview.

Pre-Med Post-Baccalaureate (PMPB) Coursework

The Pre-Med Post-Baccalaureate coursework is designed to enhance the academic credentials and application portfolio of students aiming for a professional degree in the health professions. The post-baccalaureate provides a comprehensive 1-year educational experience that includes coursework in biomedical science and test preparation for medical school admission (i.e., MCAT exam).

Students will complete a minimum of 27 credit hours of advanced undergraduate coursework in the physical and social sciences over the course of two semesters. Students can also enroll in elective courses to engage in a community service learning project or serve as a standardized patient in role-play mode with medical and pharmacy students as supervised by medical school faculty.

Topics covered in career-building workshops for medical school admission include health professions seminars, MCAT exam skill-building and practice testing, application procedures (AMCAS, PHARMCAS), interview coaching, and portfolio fine-tuning. A comprehensive letter of recommendation will be provided for all students who complete the program. Fall admission is open through August 31.

Admission to the College of Health Sciences

Applicant Status Definitions

First-Time College Student: The College of Health Sciences (CHS) defines a first-time college student applicant as one who is either currently enrolled in, or has graduated from, a high school and has not registered in a regular session at any collegiate level institution since high school graduation. An applicant who has completed college courses while in high school or in a summer session immediately following high school graduation is still considered a first-time college student applicant.

Transfer Student: A transfer student applicant is a student who has been a registered student in a regular term at a college, university or in college-level extension classes since graduating from high school. A summer session attended immediately following high school graduation is excluded in this definition. Transfer applicants may not disregard any of their college records or apply for admission as a first-time college student. Students with 24 or more college credits are considered transfer students.

International Student: International student applicants are applicants with citizenship from any country other than the United States of America.

Pre-Med Post-Baccalaureate (PMPB)

The Pre-Med Post-Baccalaureate coursework is designed to enhance the academic credentials and application portfolio of students aiming for a professional degree in the health professions. The post-baccalaureate provides a comprehensive 1-year educational experience that includes coursework in biomedical science and test preparation for medical school admission (i.e., MCAT exam).

In order to be admitted into the Post-Baccalaureate coursework, the applicant must show proof of have earned a bachelor's degree before registering to the College. Students will complete a minimum of 27 credit hours of advanced undergraduate coursework in the physical and social sciences over the course of two semesters. Students can also enroll in elective courses to engage in a community service learning project or serve as a standardized patient in role-play mode with medical and pharmacy students as supervised by medical school faculty.

Topics covered in career-building workshops for medical school admission include health professions seminars, MCAT exam skill-building and practice testing, application procedures (AMCAS, PHARMCAS), interview coaching, and portfolio fine-tuning. A comprehensive letter of recommendation will be provided for all students who complete the program. Fall admission is open through August 31.

College Admission Criteria

The College offers rigorous programs seeking high school graduates who demonstrated notable academic and co-curricular accomplishments, and an interest in serving society

in the health professions. The goal of the admission process is to identify and select applicants that have an excellent chance of success, are most likely to thrive at our campus, and will enhance the university's academic and cultural community.

The CHS Admissions Committee employs a holistic review, relying on both quantitative and qualitative indicators, to admit the most qualified applicants. A holistic review tool, scoring guide and a rubric were jointly developed by the Admissions Committee and the Assessment Committee of the College. The Admissions Committee reviews applications and makes admission recommendations based upon the qualifications of the applicant pool.

Admission Criteria for First-Time College Student

First-Time College student must have earned a high school diploma or equivalent before registering for classes at CNUCHS. Besides the high school diploma requirement, the Admissions Committee has established the following criteria for selecting and enrolling qualified students.

Admission Requirements for Traditional Students

Min HS GPA	2.70
Min SAT (after 03/2016)*	1130
Min ACT	23

Admission Criteria for Transfer Students

Transfer students are those with 24 or more transferrable college credits. Admission of transfer students requires a 2.70 or higher in college coursework.

Admission Requirements for Transfer Students

Min HS GPA	2.70
Min SAT (after 03/2016)*	NA
Min ACT	NA
Interview	NA

*Math and Evidence-Based Reading and Writing (M+ERW) **Math and Reading

Guidelines for Evaluation of Transfer Student Coursework

For applicants seeking to matriculate to CNUCHS as a transfer student from another college or university, the following general standards apply to the acceptance and award of transfer credits:

1. CNUCHS will consider transfer of credit for college-level (not remedial) courses in which the student has earned a minimum grade of "C" (2.0 = "C" Grade Point Equivalent) (4.00 = "A") or higher from accredited colleges and universities.
2. A maximum of 60 credit hours will be considered for transfer from regionally accredited community colleges,

- junior colleges, two-year and/or four-year colleges, and other accredited colleges, with the exception of certain unrecognized programs.
3. Acceptance of any course for transfer credit granted toward the BS is subject to evaluation of the course topic, content, and teaching methodologies/pedagogy by expert faculty in that discipline.
 4. Credit for equivalent courses and/or AP/IB exams 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 or exam credit will provide the greatest benefit.
 5. 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 as CNUCHS for the B.S. degree.
 6. The CHS cumulative grade point average (GPA) is based solely upon coursework taken at CNU.

Types of Transfer Credits NOT Accepted by CNU:

- Courses in which the student earned below "C" (2.0 = Grade Point Equivalent) (4.0 = "A") as the final grade
- Credit awarded by post-secondary schools in the United States that lack candidate status or are not accredited by a regional accrediting association
- Credit awarded by post-secondary schools for life experience
- Credit awarded by post-secondary schools for courses taken at non-collegiate institutions and society workshops (e.g., governmental agencies, corporations, industrial firms, etc.)
- Credit awarded by postsecondary schools for noncredit courses, workshops, and seminars offered by other postsecondary schools as part of continuing education programs

Admission Criteria for International Students

California Northstate University accepts applications from graduates of foreign institutions. California.

Transcripts and coursework from foreign institutions must be evaluated by WES, ECE or IERF. Evaluations must be sent directly to the College of Health Sciences Admissions Office, PharmCAS (for COP), AMCAS (for COM) and must include semester units and letter grades for each course, as well as a cumulative GPA and, if possible, a science GPA. If accepted, the applicant must provide an official copy of their transcript directly to the Office of Admission. If a copy of their official transcript is not received prior to the start of school, the offer of admission will be revoked and the seat will be offered to another candidate.

Applicants who receive their degree from a non-English speaking country will be requested to submit scores from the TOEFL Examination or the TSE. This will not apply, if an additional degree is obtained at a U.S. institution.

- A completed California Northstate University College of Health Science (CNUCHS) Application Form CHS Application.

- A high school diploma (or international equivalent) with a minimum Cumulative GPA of 2.70 on a 4.00 scale.
- Transcripts of all schools attended showing completion of the courses shown below. If the original document is not in English, please include a certified English translation.
 - 4 years of English
 - 3 years of mathematics at the level of Algebra I and higher (4 years recommended)
 - 2 years of laboratory science (3 years recommended)
 - 2 years of social science
- Standardized College Entrance Exam Scores:
 - Official SAT (College Code 7669) or ACT (College Code 7032) dates taken and scores
 - The College of Health Sciences may also take into account the following when considering

Applicants whose native language is not English must provide evidence of English language proficiency by submitting test scores from *one of the following*:

- Test of English as a Foreign Language (TOEFL): minimum 510 paper/88iBT
- International English Language Testing System (IELTS) (Academic): minimum 6.5

Applicants must have the test score sent directly to the College of Health Sciences at:

International Undergraduate Admissions
College of Health Sciences
California Northstate University
2910 Prospect Park Drive
Rancho Cordova, CA 95670

TOEFL: The official TOEFL score report can be sent directly to CNUCHS from the Educational Testing Service. For information about this test and registration procedures, contact ETS at PO Box 6151, Princeton, NJ 08541-6151, USA or visit www.toefl.org.

IELTS: For information about this test and registration procedures, contact the IELTS Office, University of Cambridge Local Examination Syndicate, 1 Hills Road, Cambridge/CB1 2EU, UK or visit www.ielts.org.

Bachelor of Science in Health Sciences (BSHS)

- High school diploma or equivalent (a General Education Development certificate, a California High School Proficiency Examination certificate, other official completion documentation recognized by the state of California) before entering the program.
- Overall GPA of 2.7 (on a 4.0 scale) and completion of the following classes with a grade of C or better
 - 4 years of English
 - 3 years of mathematics (4 recommended)
 - 2 years of natural science (3 recommended)
 - 2 years of social sciences
 - 2 years of a language other than English
- Standardized Test Scores:
 - March 2017 and later SAT: 1130 or higher. Pre-March 2017 SAT: 1050 or higher.

- Math and Chemistry subject area tests are highly recommended.
 - ACT Composite 23 or higher
- Extra-Curricular Accomplishments: Demonstration of service activities in the community and/or school, employment, athletic accomplishments, or other extra-curricular accomplishments.
- Personal Statement: CHS highly recommends that students take the time to consult different resources, like their high school counselor, before writing the personal statement. The personal statement is an important component of the selection process.

Bachelor of Science and Doctor of Medicine Pathways (BS to MD)

These are pathways to the College of Medicine at California Northstate University. Please, note: Pathways are not programs and admission to CNU College of Medicine is not guaranteed. In the 2+ and 3+ pathways, students can complete the Bachelor of Science and MD degrees in six and seven years, respectively, rather than the traditional eight years. Students in these pathways must meet the Technical Standards described on page 31.

2+4 BS to MD Pathway

Admission Requirements for 2+4 BS-MD

Min HS GPA	3.75
Min SAT (after 3/2016)	1400
Min ACT	31
Interview	Required

- High school diploma or equivalent (a General Education Development certificate, a California High School Proficiency Examination certificate, other official completion documentation recognized by the state of California) before entering the program in the fall semester.
- Overall high school GPA of 3.75 or higher (on a 4.0 scale) as well as completion of the following courses with a grade of C or better:
 - 4 years of English
 - 3 years of mathematics (4 recommended)
 - 2 years of natural science (3 recommended)
 - 2 years of social sciences
 - 2 years of a language other than English
- Standardized Test Scores:
 - March 2017 and later SAT: 1400 or higher; Pre-March 2017 SAT: 1360 or higher.
 - Math and Chemistry subject area tests are highly recommended.
 - ACT Composite 31 or higher
- Extra-Curricular Accomplishments: Demonstration of service activities in the community and/or school, employment, athletic accomplishments, or other extra-curricular accomplishments.
- Personal Statement: CHS highly recommends that students take the time to consult different resources, like their high school counselor, before writing the personal statement. The personal statement is an important component of the selection process.
- An interview is required and may occur in-person, on the phone, or through video.

3+4 BS to MD Pathway

Admission Requirements for 3+4 BS-MD

Min HS GPA	3.60
Min SAT (after 3/2016)	1350
Min ACT	29
Interview	NA

- High school diploma or equivalent (a General Education Development certificate, a California High School Proficiency Examination certificate, other official completion documentation recognized by the state of California) before entering the program in the fall semester.
- Overall high school GPA of 3.60 or higher (on a 4.0 scale) as well as completion of the following courses with a grade of C or better:
 - 4 years of English
 - 3 years of mathematics (4 recommended)
 - 2 years of natural science (3 recommended)
 - 2 years of social sciences
 - 2 years of a language other than English
- Standardized Test Scores:
 - March 2017 and later SAT: 1350 or higher; Pre-March 2017 SAT: 1290 or higher.
 - Math and Chemistry subject area tests are highly recommended.
 - ACT Composite 29 or higher
- Extra-Curricular Accomplishments: Demonstration of service activities in the community and/or school, employment, athletic accomplishments, or other extra-curricular accomplishments.
- Personal Statement: CHS highly recommends that students take the time to consult different resources, like their high school counselor, before writing the personal statement. The personal statement is an important component of the selection process.
- An interview is required and may occur in-person, on the phone, or through video.

4+4 BS to MD Pathway

Admission Requirements for 4+4 BS-MD

Min HS GPA	3.50
Min SAT (after 3/2017)	1250
Min ACT	26
Interview	NA

- High school diploma or equivalent (a General Education Development certificate, a California High School Proficiency Examination certificate, other official completion documentation recognized by the state of California) before entering the program in the fall semester.
- Overall high school GPA of 3.50 or higher (on a 4.0 scale) as well as completion of the following courses with a grade of C or better:
 - 4 years of English
 - 3 years of mathematics (4 recommended)
 - 2 years of natural science (3 recommended)
 - 2 years of social sciences
 - 2 years of a language other than English
- Standardized Test Scores:

- March 2017 and later SAT: 1250 or higher. Pre-March 2017 SAT: 1290 or higher.
 - Math and Chemistry subject area tests are highly recommended.
 - ACT Composite 26 or higher
- Extra-Curricular Accomplishments: Demonstration of service activities in the community and/or school, employment, athletic accomplishments, or other extra-curricular accomplishments.
- Personal Statement: CHS highly recommends that students take the time to consult different resources, like their high school counselor, before writing the personal statement. The personal statement is an important component of the selection process.
- An interview is required and may occur in-person, on the phone, or through video.

BS to MD Progression Requirements

Criteria	All Pathways
Min Prog GPA	3.50
Min Prog MCAT	510
Professional Activity	1 per year
Interview	Required
Supplemental Application	Required
Bachelor's degree is NOT required for admission to COM or COP	

Bachelor of Science and Doctor of Pharmacy (BS to PharmD)

These are pathways to the College of Pharmacy at California Northstate University. In the 2+ and 3+ pathways, students can complete the Bachelor of Science and PharmD degrees in six and seven years, respectively, rather than the traditional eight years

Admission Requirements for BS-PharmD Programs

	2+4 BS-PharmD	3+4 BS-PharmD
Min HS GPA	3.20	3.00
Min SAT (after 03/2017)*	1290	1190
Min ACT	27	25
*Math and Evidence-Based Reading and Writing (M+ERW) **Math and Reading		

2+4 BS-PharmD

- High school diploma or equivalent (a General Education Development certificate, a California High School Proficiency Examination certificate, other official completion documentation recognized by the state of California) before entering the program in the fall semester.

- Overall high school GPA of 3.20 or higher (on a 4.0 scale) as well as the following courses passed with a grade of C or better:
 - 4 years of English
 - 3 years of mathematics (4 recommended)
 - 2 years of natural science (3 recommended)
 - 2 years of social sciences
 - 2 years of a language other than English
- Standardized Test Scores:
 - March 2017 and later SAT: 1290 or higher; Pre-March 2017 SAT: 1200 or higher.
 - ACT Composite 27 or higher
- Extra-Curricular Accomplishments: Demonstration of service activities in the community and/or school, employment, athletic accomplishments, or other extra-curricular accomplishments.
- Personal Statement: CHS highly recommends that students take the time to consult different resources, like their high school counselor, before writing the personal statement. The personal statement is an important component of the selection process.

3+4 BS to PharmD

- High school diploma or equivalent (a General Education Development certificate, a California High School Proficiency Examination certificate, other official completion documentation recognized by the state of California) before entering the program in the fall semester.
- Overall high school GPA of 3.00 or higher (on a 4.0 scale) as well as the following courses passed with a grade of C or better:
 - 4 years of English
 - 3 years of mathematics (4 years recommended)
 - 2 years of natural science (3 recommended)
 - 2 years of social sciences
 - 2 years of a language other than English
- Standardized Test Scores:
 - March 2017 and later SAT: 1190 or higher. Pre-March 2017 SAT: 1100 or higher.
 - ACT Composite 25 or higher
- Extra-Curricular Accomplishments: Demonstration of service activities in the community and/or school, employment, athletic accomplishments, or other extra-curricular accomplishments.
- Personal Statement: CHS highly recommends that students take the time to consult different resources, like their high school counselor, before writing the personal statement. The personal statement is an important component of the selection process.

BS to PharmD Progression Requirements

Progression Requirements for BS-PharmD Programs

	2+4 BS-PharmD	3+4 BS-PharmD
Min Prog GPA	3.00	3.00
Prof Activity	1 per year	1 per year
Interview	Required	Required
Supp App	Required	Required
Bachelor's degree NOT required for admission to COM or COP		

Bachelor of Science to Doctor of Psychology (3+5 BS to PsyD)

In the 3+5 BS to PsyD pathway students complete the Bachelor of Science and PsyD degrees in eight years.

Admission Requirements for BS-PsyD Pathway

	3+5 BS to PsyD
Min HS GPA	3.50
Min SAT (after 03/2017)*	1250
Min ACT	26
*Math and Evidence-Based Reading and Writing (M+ERW) **Math and Reading	

- High school diploma or equivalent (a General Education Development certificate, a California High School Proficiency Examination certificate, other official completion documentation recognized by the state of California) before entering the program in the fall semester.
- Overall high school GPA of 3.50 or higher (on a 4.0 scale) as well as the following courses passed with a grade of C or better:
 - 4 years of English
 - 3 years of mathematics (4 recommended)
 - 2 years of natural science (3 recommended)
 - 2 years of social sciences
 - 2 years of a language other than English
- Standardized Test Scores:
 - March 2017 and later SAT: 1250 or higher; Pre-March 2017 SAT: 1200 or higher.
 - ACT Composite 26 or higher
- Extra-Curricular Accomplishments: Demonstration of service activities in the community and/or school, employment, athletic accomplishments, or other extra-curricular accomplishments.
- Personal Statement: CHS highly recommends that students take the time to consult different resources, like their high school counselor, before writing the personal statement. The personal statement is an important component of the selection process.

BS to PsyD Progression Requirements

	3+5 BS to PsyD
Min Prog GPA	3.00
Professional Activity	1 per year
Interview	Required
Supplemental Application	Required
Bachelor's degree NOT required for admission to the College of Psychology	

Bachelor of Science to Master of Pharmaceutical Sciences (3+2 BS to MPS)

In the 3+2 BS to MPS pathway students complete the Bachelor of Science and MPS degrees in five years.

Admission Requirements for BS-MPS Pathway

	3+2 BS to MPS
Min HS GPA	3.00
Min SAT (after 03/2017)*	1190
Min ACT	24
*Math and Evidence-Based Reading and Writing (M+ERW) **Math and Reading	

- High school diploma or equivalent (a General Education Development certificate, a California High School Proficiency Examination certificate, other official completion documentation recognized by the state of California) before entering the program in the fall semester.
- Overall high school GPA of 3.00 or higher (on a 4.0 scale) as well as the following courses passed with a grade of C or better:
 - 4 years of English
 - 3 years of mathematics (4 recommended)
 - 2 years of natural science (3 recommended)
 - 2 years of social sciences
 - 2 years of a language other than English
- Standardized Test Scores:
 - March 2017 and later SAT: 1190 or higher; Pre-March 2017 SAT: 1200 or higher.
 - ACT Composite 24 or higher
- Extra-Curricular Accomplishments: Demonstration of service activities in the community and/or school, employment, athletic accomplishments, or other extra-curricular accomplishments.
- Personal Statement: CHS highly recommends that students take the time to consult different resources, like their high school counselor, before writing the personal statement. The personal statement is an important component of the selection process.

BS to MPS Progression Requirements

	3+2 BS to MPS
Min Prog GPA	3.20
Professional Activity	1 per year
Interview	Required
Primary and Suppl Application	Required
Bachelor's degree NOT required for admission to the College of Psychology	

Advanced Placement (AP) & International Baccalaureate (IB) Credit Evaluation Policy

For students pursuing the Bachelor of Science in Health Sciences, the College of Health Sciences awards credit according to the following guidelines:

1. CNUCHS will accept AP test scores of 3, 4, or 5 for most exams; and IB test scores of 5, 6, or 7 for most exams. Credit hours for AP and IB courses will appear on the student's transcript. Credits for AP and IB courses will not be used in the calculation of the Grade Point Average (GPA) noted on the CNUCHS transcript.
2. A maximum of 60 course credit hours from AP, IB, and/or other institutions can be transferred to CNUCHS.
3. Duplicate credit will not be awarded for equivalent AP/IB test scores or transfer courses.

AP/IB Transfer Credit Tables

Note: the below AP/IB table is subject to change without notice. Questions regarding applicability of credit should be directed to CHS Office of Academic and Student Affairs.

Students are required to submit official test scores for AP and IB courses directly from the testing agency in order to receive consideration for course credit. The Registrar's Office will evaluate the AP and IB credits and grant credit to students based on the attached tables.

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 are advised to carefully research admission requirements before deciding to use AP/IB credits to opt out of required college courses. CHS is prepared to award course credit hours based on the equivalency table in CHS3202 Appendix A Advanced Placement and International Baccalaureate Credit Evaluation Chart.

List of AP courses from: https://aphighered.collegeboard.org/exams				
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	ENGL 110 or General Elective	Written Communication
English: Literature/Composition	3, 4 or 5	3	ENGL 110 or General Elective	Written Communication
Environmental Science	3, 4 or 5	3	Biology Elective	
Comparative Govnm/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 subscore	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				
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.

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 or ECON120	Liberal Arts: Social Science
English A	5, 6, or 7	3	ENGL 110	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 and Southeast and 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 Inquiry: Mathematics
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 evaluated independently.

List of IB curriculum from: <http://www.ibo.org/en/programmes/diploma-programme/curriculum/>

Pre-Medical Post-Baccalaureate (PMPB)

California Northstate University (CNU) offers a Pre-Medical Post-Baccalaureate (PMPB) program for students aiming for an advanced degree in the health professions. This comprehensive learning experience prepares students for admission to professional health schools. In order to be admitted into the Post-Baccalaureate coursework, the applicant must show proof of having earned a bachelor's degree before registering to the College.

The PMPB is a one year program and is suited for students interested in enhancing their knowledge and GPA in the natural and social sciences and/or in increasing their MCAT score. Students must have already completed all pre-requisites for admissions to a professional health school (Medicine, Pharmacy, etc.).

MCAT Review: Intensive MCAT Review is offered in the summer via a partnership with Kaplan, Inc. Students may opt out of the summer review class after consultation with an advisor at CHS.

The PMPB program is offered in a collaborative and supportive environment of the CHS. It also provides students with significant career development counselling, intercultural awareness and communication, and opportunities to interact with faculty from CNU's Colleges of Medicine (COM) Pharmacy (COP).

Admission Requirements

	Medicine-SU19 and later	Pharmacy
Min Overall GPA	3.20	2.60
Min BCPM* GPA	3.00	NA**
Interview	Required	NA
*Biology, Chemistry, Physics, Math (Calculus and Statistics)		
**Min. Science GPA = 2.60		

- Minimum Requirements: The PMPB requires a baccalaureate degree from a U.S.-regionally accredited four-year institution or a non-U.S. equivalent institution. Required minimum coursework is:
 - 2 semesters, 3 quarters or 1 year of English
 - 2 semesters, 3 quarters or 1 year of Biology with laboratory
 - 2 semesters, 3 quarters or 1 year of Inorganic (General) Chemistry with laboratory
 - 2 semesters, 3 quarters or 1 year of Organic Chemistry with laboratory
 - 2 semesters, 3 quarters or 1 year of Physics with laboratory

- 1 Semester or 2 quarters of Mathematics, including calculus and statistics
- Other Recommended Courses:
 - Social sciences
 - Behavioral sciences
 - Languages
 - Anatomy
 - Physiology
 - Biochemistry
 - Microbiology
 - Immunology

PMPB Progression Requirements

Progression Requirements for PMPB

	Medicine SP19 and later	Pharmacy SP19 and later
Min Prog GPA	3.50	3.00
Min Prog MCAT	508	NA
Prof Activity	Rec.	Rec.
Interview	Required	Required
Supp App	Required	Required

When completing the PMPB coursework, students are equipped with sharpened critical thinking, writing, interview skills, and a more robust, competitive application portfolio.

The PMPB offers the following bonuses:

Pre-Med Post-Baccalaureate Bonus: After successfully completing the PMPB coursework, each student's faculty advisor will write a comprehensive letter of recommendation for qualified students who wish to apply to professional school.

Medical School Bonus: Students who successfully complete the PMPB coursework and MCAT score, as shown below, will be guaranteed a Medical College Application Services (AMCAS) interview with the CNU College of Medicine (COM), upon meeting the benchmarks of 3.5 GPA and 508 MCAT score

Pharmacy School Bonus: Students who successfully complete the PMPB coursework with a minimum GPA of 2.60 will be guaranteed a Pharmacy College Application Services (PHARMCAS) interview with CNU College of Pharmacy.

Technical Standards

The Technical Standards describe the essential abilities required of BS-MD and PMPB candidates pursuing a professional medical degree.

- Reasonable accommodation in achievement of the standards is defined under U.S. federal statutes applied to individuals with disabilities. Such accommodations are intended to support the successful completion of all components of the MD degree.

- Standards in five areas must be met by all candidates: Observation, Communication, Motor Function, Cognitive, and Professional.

1. Observation:

- Observe demonstrations and participate in experiments in the basic sciences
- Observe patients at a distance and close at hand.
- Demonstrate sufficient use of the senses of vision, hearing, and smell and the somatic sensation necessary to perform a physical examination.
- Integrate findings based on these observations and to develop an appropriate diagnostic and treatment plan.

2. Communication

- Communicate in verbal and written form with health care professionals and patients, including eliciting a complete medical history and recording information regarding patients' conditions.
- Perceive relevant non-verbal communications such as changes in mood, activity, and posture as part of a physical examination of a patient.
- Establish therapeutic relationships with patients.
- Demonstrate reading skills at a level sufficient to individually accomplish curricular requirements and provide clinical care for patients using written information.

3. Motor Function

- Perform physical examinations and diagnostic procedures, using such techniques as inspection, percussion, palpation, and auscultation.
- Complete routine invasive procedures as part of training, under supervision, using universal precautions without substantial risk of infection to patients.
- Perform basic laboratory tests and evaluate routine diagnostic tools such as EKGs and X-rays.
- Respond in emergency situations to provide the level of care reasonably required of physicians.
- Participate effectively in physically taxing duties over long hours and complete timed demonstrations of skills.

4. Cognitive

- Measure, calculate, analyze, synthesize, extrapolate, and reach diagnostic and therapeutic judgments.
- Recognize and draw conclusions about three-dimensional spatial relationships and logical sequential relationships among events.
- Formulate and test hypotheses that enable effective and timely problem-solving in diagnosis and treatment of patients in a variety of clinical modalities.

- Understand the legal and ethical aspects of the practice of medicine.
- Remain fully alert and attentive at all times in clinical settings.

5. Professionalism

- Demonstrate the judgment and emotional stability required for full use of their intellectual abilities.
- Possess the perseverance, diligence, and consistency to complete the Pre-Med Post-Baccalaureate curriculum and prepare to enter the independent practice of medicine.
- Exercise good judgment in the diagnosis and treatment of patients.
- Complete all responsibilities attendant to the diagnosis and care of patients within established timelines.
- Function within both the law and ethical standards of the medical profession.
- Work effectively and professionally as part of the health care team.
- Relate to patients, their families, and health care personnel in a sensitive and professional manner.
- Participate effectively in physically taxing duties over long work hours, function effectively under stress, and display flexibility and adaptability to changing and uncertain environments.
- Maintain regular, reliable, and punctual attendance for classes and clinical responsibilities.
- Contribute to collaborative, constructive learning environments, accept constructive feedback from others, and respond with appropriate modification.

Student Enrollment Agreement

The Student Enrollment Agreement must be completed and submitted to the college in order to show intent to enroll in the program. The Student Enrollment Agreement is a legally binding contract when it is signed by the incoming student and accepted by the institution.

By signing the Enrollment Agreement, the student is acknowledging that the catalog, disclosures, and information located on the website have been made available to the student to read and review.

Any questions or concerns regarding the Student Enrollment Agreement should be directed to the college or university department.

Catalog, Performance Fact Sheet, and Website

Before signing the Student Enrollment Agreement, the prospective student is strongly urged to visit the University and College website at www.cnsu.edu, and

to read and review the CNU General Catalog and School Performance Fact Sheet (SPFS). The SPFS contains important performance data for the institution. The Catalog contains important information and policies regarding this institution.

Student's Right to Cancel, Withdraw, and Refund

You have the right to cancel the Student Enrollment Agreement until 12:01 AM on the first calendar day after the first classroom instruction session attended, or until 12:01 AM on the eighth calendar day after a student has signed the Enrollment Agreement, whichever is later.

Cancellation shall occur when you give written notice of cancellation to the Admission Office at the University's address shown at the top of the first page of the Enrollment Agreement. You can do this by hand delivery, email, facsimile, or mail. Written notice of cancellation sent by hand delivery, email, or facsimile is effective upon receipt by the University. Written notice of cancellation sent by mail is effective when deposited in the mail properly addressed with postage prepaid.

After the cancellation period described above, you have the right to withdraw from the University at any time. Withdrawal shall occur when you give written notice of withdrawal to the Registrar at the University's address shown at the top of the first page of the Enrollment Agreement. When withdrawing from the college/university, please complete the Official College Withdrawal form available from the Registrar's request form website: <http://www.cnsu.edu/office-of-the-registrar/registrar-services>. Do not use this form to indicate your intent to cancel your enrollment agreement.

For information on refund calculations due to cancellation or college withdrawal, please see the FINANCIAL SERVICES & DISCLOSURES on page 215 of this catalog.

Tuition & Fees

All tuition, fees, expenses, and policies listed in this publication are effective as of June 2020 and are subject to change without notice by California Northstate University.

In the tables below, Y1, Y2, Y3, and Y4 indicate the student's year in the program (e.g. Y1 is a first-year student; Y2 is a second-year student, etc.).

Tuition is charged on a full-time, semester basis. Generally, tuition and fees are charged to a student's account thirty (30) days prior to the start of each semester term. The above is based on the assumption that a student will attend each semester term on a full-time basis, which allows for a student to graduate after successfully completing four (4) years of coursework consisting of 120-125 semester credit hours, depending on concentration.

International Students are not charged additional fees or charges associated with vouching for student status.

Payment deadlines, loan obligations, refund calculations due to cancellation and withdraw, and the Student Tuition Recovery Fund (STRF) disclosures are located in *FINANCIAL SERVICES & DISCLOSURES* (page 217).

Effective for the 2019-2020 academic year, a change in tuition charges is applicable to new incoming students enrolled for the 2019-2020 academic year. For continuing students, the tuition charges will remain the same with the exception of the annual estimated tuition and fee increases.

For New First Time Incoming Students beginning enrollment in the 2020-2021 academic year.

2020-2021 Tuition & Fees for Degree Seeking

Tuition & Fees	Amount	Class
Enrollment Fee (nonrefundable)	\$100.00	Y1
*Tuition (<i>new incoming students</i>)	\$46,350.00	Y1,Y2, Y3, Y4
Student Association & Activity Fee	\$200.00	Y1, Y2, Y3, Y4
Technology Fee	\$50.00	Y1, Y2, Y3, Y4
Lab Fee	\$600.00	Y1, Y2
STRF ¹	\$0.00	Y1, Y2, Y3, Y4
Orientation Fee	\$75.00	Y1
Lab Fee and Scholarly Fee	\$375.00	Y3
Graduation Fees ²	\$300.00	Y3 or Y4
Y1 Total Estimated Tuition & Fees per Year ³	\$47,375.00	
Y2 Total Estimated Tuition & Fees per Year ³	\$47,200.00	
Y3 Total Estimated Tuition & Fees per Year ³	\$47,275.00	
Y4 Total Estimated Tuition & Fees per Year ³	\$46,900.00	

*Total Tuition & Fees for the entire 4-year College of Health Sciences undergraduate program estimated at \$189,000 to

\$198,450; see headnote 3 below regarding 3+4 and 2+4 Combined Programs.

Estimated Other Educational Related Costs ⁴	Amount	Class
Health Insurance premium ⁵	\$3,200.00	Y1, Y2, Y3, Y4
MyRecordTracker Fee	\$25.00	Y1, Y2, Y3, Y4
Books and Supplies ⁶	\$1,600.00	Y1, Y2, Y3, Y4
Laptop	\$1,100.00	Y1, Y2, Y3, Y4
Room and Board ⁶	\$25,167.00	Y1, Y2, Y3, Y4
Transportation ⁶	\$4,830.00	Y1, Y2, Y3, Y4
Y1 Total Estimated Cost per Year⁷	\$83,297.00	
Y2 Total Estimated Cost per Year⁷	\$83,122.00	
Y3 Total Estimated Cost per Year⁷	\$83,197.00	
Y4 Total Estimated Cost per Year⁷	\$82,822.00	

¹ The STRF fee is \$0.00 per \$1,000 of institutional charges.

² Covers regalia, graduation dinner, diploma, transcript, etc.

³ Total Tuition and Fees estimated through completion of entire four year traditional undergraduate program; assumes completion within four years prescribed time and 2% to 5% estimated annual tuition increases are not binding on the University. This estimate for students in the 3+4 and 2+4 Combined Programs needs to be adjusted to reflect the Period of Attendance on CNU College of Health Sciences campus, with the Period of Attendance at CNU Colleges of Medicine or Pharmacy based on the tuition and fees while at the latter two Colleges.

⁴ Costs and expenses a student may incur during the applicable year of the program, whether or not paid directly to CNU or CNUCHS. These expenses include estimated out-of-pocket cost of living expenses for the year.

⁵ Provided and charged by outside healthcare insurance plan; optional, estimated, and may increase or decrease based on the number of insured participants and other factors.

⁶ Estimated amount of student's individual housing, food, and transportation costs, not operated by, charged by, or paid to CNU.

⁷ Total Tuition and Fees from first table, plus estimated items from second table that student may incur, including estimated cost of living items not paid to CNU.

2020-2021 Tuition & Fees for Pre-Medicine Post-Baccalaureate Program

Tuition & Fees	Amount
Enrollment Fee (nonrefundable)	\$100.00
Tuition	\$35,336.00
Scholar Activity Fee (nonrefundable upon start of instruction)	\$100.00
Technology Fee (nonrefundable upon start of instruction)	\$50.00

Orientation Fee (nonrefundable upon start of instruction)	\$50.00
Total Tuition & Fees	\$35,636.00

Total cost for tuition and fees for one year of Pre-Medicine Post-Baccalaureate program will be \$35,536.00¹

Estimated Other and Optional Educational Related Costs per year²	Amount
Health Insurance premium ³	\$3,200.00
Books and Supplies (estimate)	\$1,000.00
Room and Board ⁴	\$25,167.00
Transportation ⁴	\$4830.00
Total Estimated Cost per year⁵	\$69,833.00

¹ Based on estimated tuition increase of 2% to 5%. This estimate is not binding on the University.

² Costs a student may incur as part of participation in the applicable year long program, whether or not paid directly to CNU.

³ Optional, estimated, and will increase based on number of insured members.

⁴ Estimated amount of student's individual housing, transportation, and food cost not operated or charged by CNUCHS

⁵ Includes tuition, fees, and other estimated educationally related costs.

For Continuing Students previously enrolled at CHS prior to the 2020-2021 academic year.

2020-2021 Tuition & Fees for Degree Seeking

Tuition & Fees	Amount	Class
Tuition	\$35,336.00	Y2, Y3, Y4
Student Association & Activity Fee	\$200.00	Y2, Y3, Y4
Technology Fee	\$50.00	Y2, Y3, Y4
Lab Fee	\$600.00	Y2, Y3,
Lab and Scholarly Fee	\$375.00	Y3
Graduation Fees ¹	\$300.00	Y3 or Y4
Y1 Total Estimated Tuition & Fees per Year ²	\$36,291.00	
Y2 Total Estimated Tuition & Fees per Year ²	\$36,216.00	
Y3 Total Estimated Tuition & Fees per Year ²	\$36,291.00	
Y4 Total Estimated Tuition & Fees per Year ²	\$35,916.00	

Total Tuition & Fees for the entire 4-year College of Health Sciences undergraduate program estimated at \$183,000 to \$193,000; *see headnote 1 below regarding 3+4 and 2+4 Combined Programs.*

Estimated Other Educational Related Costs³	Amount	Class
Health Insurance premium ⁴	\$3,200.00	Y2, Y3, Y4
Books and Supplies ⁵	\$1,600.00	Y2, Y3, Y4
Room and Board ⁵	\$25,167.00	Y2, Y3, Y4

Transportation ⁵	\$4830.00	Y2, Y3, Y4
My Record Tracker Fee	\$25.00	Y2, Y3, Y4
Laptop ⁵	\$1,100	Y2, Y3, Y4
Y1 Total Estimated Cost per Year⁶	\$72,213.00	
Y2 Total Estimated Cost per Year⁶	\$72,138.00	
Y3 Total Estimated Cost per Year⁶	\$72,213.00	
Y4 Total Estimated Cost per Year⁶	\$71,838.00	

¹ Covers regalia, graduation dinner, diploma, transcript, etc.

² Total Tuition and Fees estimated through completion of entire four year traditional undergraduate program; assumes completion within four years prescribed time and 2% to 5% estimated annual tuition increases are not binding on the University. This estimate for students in the 3+4 and 2+4 Combined Programs needs to be adjusted to reflect the Period of Attendance on CNU College of Health Sciences campus, with the Period of Attendance at CNU Colleges of Medicine or Pharmacy based on the tuition and fees while at the latter two Colleges.

³ Costs and expenses a student may incur during the applicable year of the program, whether or not paid directly to CNU or CNUCHS. These expenses include estimated out-of-pocket cost of living expenses for the year.

⁴ Provided and charged by outside healthcare insurance plan; optional, estimated, and may increase or decrease based on the number of insured participants and other factors.

⁵ Estimated amount of student's individual housing, food, and transportation costs, not operated by, charged by, or paid to CNU.

⁶ Total Tuition and Fees from first table, plus estimated items from second table that student may incur, including estimated cost of living items not paid to CNU.

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. The student will be awarded the highest level of scholarship possible in accordance the criteria listed below. The merit scholarships are awarded each academic year and the student must maintain the listed GPA requirements while enrolled at CHS to continue receiving the scholarship.

2020-2021 Tuition & Fees for Pre-Medicine Post-Baccalaureate Program

Tuition & Fees	Amount
Enrollment Fee (nonrefundable)	\$100.00
Tuition	\$35,336.00
Scholar Activity Fee (nonrefundable upon start of instruction)	\$100.00
Technology Fee (nonrefundable upon start of instruction)	\$50.00
Orientation Fee (nonrefundable upon start of instruction)	\$50.00
Total Tuition & Fees	\$35,636.00

Total cost for tuition and fees for one year of Pre-Medicine Post-Baccalaureate program will be \$35,536.00¹

Estimated Other and Optional Educational Related Costs per year ²	Amount
Health Insurance premium ³	\$3,200.00
Books and Supplies (estimate)	\$1,000.00
Room and Board ⁴	\$24,276.00
Transportation ⁴	\$5,292.00
Total Estimated Cost per year⁵	\$68,404.00

¹ Based on estimated tuition increase of 2% to 5%. This estimate is not binding on the University.

² Costs a student may incur as part of participation in the applicable year long program, whether or not paid directly to CNU.

³ Optional, estimated, and will increase based on number of insured members.

⁴ Estimated amount of student's individual housing, transportation, and food cost not operated or charged by CNUCHS

⁵ Includes tuition, fees, and other estimated educationally related costs.

Scholarships

In the past, several companies have helped California Northstate University students finance their education through scholarships. Some of these companies include: Albertson's, CVS, Pharmacist Mutual Insurance Company, Safeway, SuperValu Drug Stores, and Walgreen's. These scholarships range from \$500 to \$2,000. Criteria for scholarships vary by the specific donor and are usually awarded in the late fall and early spring.

Information regarding various scholarships can be found the College of Health Science's website, healthsciences.cnsu.edu, *Financial Aid, Types of Assistance, Grants and Scholarships* as well as within the Grants and Scholarships section of this catalog, page 215.

General Policies

Orientation and Registration

Mandatory orientation for new students is held during the days preceding the start of classes. The Office of Student Affairs must be notified if a new student is unable to attend scheduled orientation due to illness or emergency.

Registration for classes requires:

1. All admission contingencies be fulfilled.
2. Financial aid clearance from the Financial Aid Officer.
3. Completion of all new student paperwork.

Admission contingencies include a final, official high school transcript evidencing high school graduation, or equivalent, required immunizations, evidence of health insurance coverage, and any other institutional requirements.

New students must submit the *Emergency Contact and Medical Information Form* to the Office of the Registrar by the end of Orientation. To make updates, a new form must be submitted to the Registrar. The Office of the Registrar requires submission of the Authorization to Release Student Records if a student desires to grant a personal third-party (such as a parent, spouse, etc.) access to his/her student record. Please refer to the *Directory Information and Access to Student Records* section of this catalog for more information.

New students should review their local, home, and billing contact information via the Student Portal and update as needed. It is the student's responsibility to maintain valid contact information throughout their enrollment at CNU. Instructions for accessing the Student Portal is sent by the CNU IT department to the student's CNU email address.

The Registrar acting in cooperation with the Office of Academic and Student Affairs at CHS is responsible for managing course registration for incoming freshmen, non-degree seekers, transfer students, PMPB students, and continuing students. The process of course registration for current students continuing into the next semester should be completed by the end of the 14th week of classes (or the 7th week of classes during the summer). The Registrar will enroll students in assigned and previously elected classes prior to the start of each semester. Students must follow all procedures indicated in the "CHS 3127 Course Add/Drop and Withdrawal Policy" in order to add, drop or withdraw from any CHS course.

Students with business, financial, or any 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 (as indicated in the CHS 3127 Course Add/Drop and Withdrawal Policy) to register or make schedule changes.

Address Where Instruction Will Be Provided

Class sessions are conducted at the campus located at 2910 Prospect Park Drive and 2920 Prospect Park Drive, Rancho Cordova, CA 95670 and 9700 West Taron Drive, Elk Grove, CA 95757. Experiential education and clinical rotations and service learning activities are conducted at assigned professional clinical locations and community sites as established by agreement among the student, professional preceptor, and College.

Thermal Camera Use for Temperature Checks

In response to the COVID-19 pandemic and in order to protect the health and safety of all persons on California Northstate University's ("CNU") campuses, CNU has implemented the use of thermal cameras at the entrances to both campuses. These cameras are used to determine if a person seeking entry to one of our buildings is displaying a fever. If after two scans the cameras indicate the person has a fever, entry will be denied to that individual. No exceptions shall be made to this policy. Anyone failing to abide by this policy will be removed from campus. Absences due to failing the thermal camera scan is considered as excused and approved absence for students. Student must communicate with the faculty on record for that session for any required makeup. Failure to complete the required "makeup" will affect the course performance.

Catalog, School Performance Fact Sheet, and Website

Before signing the Student Enrollment Agreement, students are strongly urged to visit the College website at healthsciences.cnsu.edu/ and to read and review the CNU General Catalog and School Performance Fact Sheet (SPFS). The SPFS contains important performance data for the institution. The Catalog contains important information and policies regarding this institution. By signing the Enrollment Agreement, the student is acknowledging that the catalog, disclosures, and information located on the website have been made available to the student to read and review.

Instruction/Course Delivery

The College of Health Sciences utilizes a variety of active learning pedagogical approaches within a classroom setting and through integrated research and teaching.

Research Instruction

The Freshman Research Experience is part of the core curriculum. Student enrolled in freshman biology and chemistry participate in original research projects during the entire first year or course work. The project is called the Interdisciplinary Science Learning and Novel Discovery (ISLaND) project, and is a cross disciplinary innovation where student teams research the relationship between organismal health and environmental variables within a local ecosystem. All students are required to take COLL 310 Research

Methods (a degree requirement) to prepare for other research experiences within the college. Scholarly Projects focuses on the language, ethics, approaches, and challenges of the research processes. Students can participate in a structured independent research experience where the student has the option of:

- Apprenticeship with a faculty research mentor (COLL 490b), or;
- CURE (COLL 320 - Course-Based Undergraduate Research Experience) with different themes, topics, and techniques.

Community Service Learning

Service Learning is a critical learning component that CHS requires of all undergraduate students. CHS offers a unique one-year approach: the first semester combines academic studies, experiential learning, and professional development prior to placement in a community agency. The subsequent semester includes meaningful work in the community with a concurrent course to support students as they move from theory to practice.

Language of Instruction

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

Academic Policies and Procedures

Academic Calendar

The academic calendar consists of two semesters lasting approximately 15 weeks and an 8 week summer term.

Credit Hour Policy

For a 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) (*LEC/SEM*). For courses that include workshop and/or laboratory time, 1 credit is assigned per 3 hours each week of student time spent in this activity (*LAB/EL*).

Code	Course Type	Code	Course Type
EL	Experiential Learning	LEC	Lecture course
LAB	Laboratory course	SEM	Seminar

Grading

All courses are assigned student performance grades by the teaching faculty according to the following grade point and letter grade convention:

Definition	Grade Points	Definition	Grade Points
A+ 97-100%	4.00	P ≥70%, Pass*	Not in GPA
A 90 - 96%	4.00	NP <70%, No Pass*	Not in GPA
B+ 87 - 89%	3.30	AU Audit	Not in GPA
B 80 - 86%	3.00	I Incomplete	Not in GPA
C+ 77-79%	2.30	W Withdrawal	Not in GPA
C 70-76%	2.00		
D 60-69%	1.00		
F <60.00%	0.00		

Pass/No Pass

A course grade of "P" (Passing Course) will be recorded on student transcripts when students take a course on a Pass/No Pass basis. A "P" grade indicates that the student achieved 70% or higher in the course. A course grade of "NP" (Not Passing Course) indicates that the student earned less than 70% in the course. Courses taken on a P/NP basis will count toward the total hours earned but will not be used to satisfy degree/program completion. "P/NP" grades are not calculated into the GPA, thus, have no effect on the term or cumulative GPA. Undergraduate and PMPB students may take only 10% of their courses with a P/NP grading option—approximately 12 credit hours for undergraduate students and 2-3 credit hours for PMPB students. The P/NP grading option is usually allowed only for courses where a letter grade is not practicable, i.e. Teaching/Research/Student Service Assistant courses or introductory science courses. Students wishing to explore academic disciplines on an elective basis may request a P/NP grading option from the course instructor pending approval by the Office of Academic and Student Affairs.

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) 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.

Incomplete

A course grade of "I" (Incomplete) may be recorded on the student transcript in cases where extenuating circumstances prevent a student from completing assignments or exams by the end of an academic term. Granting a grade of "I" is at the discretion of the instructor of the course. Students must request an incomplete grade within two weeks of the extenuating circumstance by submitting an Incomplete Grade Agreement to the course instructor. If the course instructor approves of the granting of an "I" grade for the course they will complete the Incomplete Grade Agreement and enter an "I" grade for the course. The "I" is then transmitted to the Registrar by the grade submission deadline and the "I" is noted on the transcript for the corresponding course. An "I" grade may be changed to a letter grade upon the completion of the stipulations contained in the Incomplete Grade Agreement within 21 days following the last day of the term. Failure to complete the course within the 21-day extension period will result in a conversion of the "I" to the calculated grade for the course. In cases of valid excuses, students may request an exception to this deadline by completing and submitting a Petition Form.

Course Withdrawal

A course grade of "W" (Withdraw) will be recorded on the student transcript in lieu of an "A-F" letter grade in cases where withdrawal from a course is formally initiated and executed as described according to guidelines of the CHS3127 Course Add/Drop and Withdraw Policy.

Course Auditing

A course grade of "AU" (Audit) will be recorded on a student transcript when a student has been granted permission to audit a course and enrolls in the course. "AU" notations have no grade point value. Students are charged tuition for courses taken as audit. Students may only audit one course per semester and a total of only two courses in their time in the College.

CNU students may audit lecture courses (i.e., attend lectures without receiving credit or calculated grade) only with advance permission of the faculty instructor. The instructor will inform the student of the amount of participation that is expected in the course. Lab courses cannot be audited. The responsibility of course instructors is to first meet the needs of officially registered students. Faculty are not obligated to review work submitted by course auditors.

GPA Calculation

The running and final grade point average (GPA) is calculated according to the following formula where C_1 = credit hours of Course1 and GP_1 = grade points of Course1, etc.:

$$\text{GPA} = \{(C_1 \times \text{GP}_1) + (C_2 \times \text{GP}_2) + \dots + (C_n \times \text{GP}_n)\} \div (\text{Total Credit Hours})$$

Note that GPAs recorded on semester grade reports and transcripts are calculated on the basis of grade point credits from courses taken exclusively at CNU. Scores from Advanced Placement, International Baccalaureate, and college level courses reported and/or transferred as credits toward the CNU degree are listed on the transcript but are not included in the CNU GPA calculation.

Academic Honors

Undergraduate students who earn 12 or more graded semester hours during a semester, or in 6 or more graded hours in the summer, in residence at CHS can qualify for semester honors. The honor is noted on the transcript for the semester it is earned and will receive a recognition letter.

President's List: GPA of 3.75 or higher

Dean's List: GPA of 3.50 or higher

Grade Change Policy

This policy will pertain to faculty who need to change the final grade of a course under certain recognized circumstances.

Course grade changes are permissible under the following circumstances:

1. When a faculty member has issued a grade of Incomplete (I) and the course has subsequently been completed. The "I" grade can be changed to the grade earned.
2. When a grade appeal process results in the legitimate change of grade.
3. When there has been a calculation or procedural error in the posting of a course grade.

To change a student's final grade, the faculty member must complete and sign a CNU Grade Change Request form available from the Office of the Registrar with an explanation of the circumstances for the change and submit it to the Associate Dean of Academic and Student Affairs. The Associate Dean will review the request in accordance with the policy statement outlined above and either approve or deny. If approved, the Associate Dean will sign and submit the completed form to the Office of the Registrar for processing.

Course Grade Appeal Policy

Students are permitted to appeal a final course grade if they believe the assigned course grade is inaccurate based on calculation error by faculty course instructor(s) or actions inconsistent with official published grading policies of the course, College, or University. Grade appeal is regulated by CHS 3120 Course Grade Appeal Policy.

Early Resolution

1. Students using this appeal must communicate questions or disputes regarding the final course grade within 5 business days after the grade posting by discussing the basis of their concerns with the faculty instructor who issued the course grade. Students should obtain a Course Grade Appeal form from the Office of the Registrar, the faculty instructor,

or other College personnel to document the discussion.

4. If the faculty member and the student do not resolve the issue, the student may schedule a follow-up meeting with the appropriate Department Chair for the course in question.

Formal Appeal

1. If the Department Chair and the student do not resolve the issue, the student may initiate a formal grade appeal by completing the Course Grade Appeal form and submitting it to the Associate Dean of Academic and Student Affairs within 5 business days after the meeting with the Department Chair.
2. The grade appeal must address at least one of the following:
 - a. Errors in grade calculation, or
 - b. Unpublished criteria used to calculate the grade, or
 - c. The assigned grade was based on procedures inconsistent with specific course, College or University policies.
3. Students who file a Grade Appeal form must provide the following materials and requests for information:
 - a. A description of their attempt at resolution of the grade dispute with the faculty instructor and Department Chair;
 - b. Evidence of graded assignments, and/or
 - c. Any other relevant materials;
 - d. The Associate Dean of Academic and Student Affairs may request additional materials from the student or faculty instructor.
4. The Associate Dean of Academic and Student Affairs will convene an ad hoc committee of 3 faculty members to review the materials submitted by the student and the faculty instructor. This committee will report their recommendation to the Associate Dean of Academic and Student Affairs.
5. If the Associate Dean of Academic and Student Affairs decides that a grade change is appropriate and necessary, the faculty instructor will be notified within 5 business days after appeal form submission to submit a Grade Change form to the Office of Academic and Student Affairs within 5 business days.
6. If the Associate Dean of Academic and Student Affairs decides that a grade change is inappropriate, the student may appeal the decision to the Dean of the College of Health Sciences. The appeal to the Dean must be submitted within 5 business days after the student is notified of the result of the formal grade appeal. The Dean's decision is final.

Academic Standing and Formal Warning Policy

CHS 3125 Academic Standing and Formal Warning Policy regulates the subject within CHS. The following levels of official standing with the university are applied in cases of academic underperformance:

1. 1st Warning Status: A semester GPA of less than 2.0 (C average) will result in a record of "1st Warning" placed on the semester grade report. The record of 1st Warning will be removed if the student achieves a

- semester GPA of greater than 2.0 for a full course schedule taken the following semester.
- 2nd Warning - Probation status: If a second semester GPA of 2.0 or less follows a semester after 1st Warning, a record of "2nd Warning - Probation" is placed on the semester grade report. This record will also be removed if the student achieves a GPA of greater than 2.0 for a full course schedule taken the following semester.
 3. A third semester of poor performance with a GPA less than 2.0 will result in official separation from the university and termination of the student's enrollment pending the outcome of any appeals for consideration and readmission on a probationary basis. Students in this category will notified via email and official letter of separation at the home address on record.

Course Remediation Policy

CHS 3126 Course Failure Remediation Policy regulates the matter. A grade of D in a course indicates a significant lack of understanding of the content of the course necessary for completion of the academic program. Remediation of D grades will be offered to students at the discretion of the Department Chair and Course Instructor. Student eligibility for course remediation is also subject to verification by the Registrar. The Course Instructor will decide the format of the remediation exam. Students may prepare for the exam using a combination of self-study, tutoring, and meeting with the instructor. A course score of 70% or better after the remediation exam will be reported to the Registrar. If the course is not satisfactorily remediated, the original course grade will remain on the transcript and used in the calculation of the official GPA. The remediation process must be completed within 14 calendar days after the end of the term. Each CHS student is allowed a maximum of 3 course remediation opportunities.

Course Instructors are required to contact students who have earned a final course grade of "D" or lower at the close of each semester for possible grade remediation. Such students are given the option of taking a remediation exam that can be used to convert a grade of "D" to the revised course grade as described above. The remediation exam should be weighted toward course content that was not mastered by the student. The student will be given the opportunity to seek tutoring and to study for a course remediation exam given after the regular close of the semester. However, the study and exam process must be completed within the 14 day remediation period. Course instructors are not necessarily required to be present on campus throughout the full remediation period but are responsible for making necessary arrangements and provisions for the exam process.

Academic Progression Policy

BS in Health Sciences (BSHS)

The BSHS program is designed to be completed in four years. In order for students to progress through this degree program they must meet certain criteria each semester and each academic year. These criteria are both qualitative and quantitative and include:

1. Students must pass all courses that are counted toward degree conferral with a minimum letter grade of C;
2. Students must maintain a cumulative GPA of 2.0; and
3. Students must complete the BSHS degree requirements within six consecutive academic years (150%) from the date of the first day the student begins the program. Students may take up to 20 credits per semester (10 credits during summer term) but may not exceed 188 total credit hours earned.

Students who do not meet the above-listed criteria are considered to not meet academic progression requirements, and will be issued a formal warning and placed on probation until able to meet such requirements. Students not meeting academic progression requirements are expected to repeat courses and/or complete other activities to regain good academic standing status. See the Course Repeat Policy, the Course Failure Remediation Policy, and the Academic Standing and Formal Warning Policy

Students who do not successfully complete a course that is a prerequisite to a course in the next term must take the prerequisite course in the next term it is offered, and will not be able to enroll in the successive course. See the [Course Add/Drop and Withdraw Policy](#).

Students who earn a grade of Incomplete (I) may not enroll in the next course if the course in which the Incomplete was earned is prerequisite to a course in the next term. See the [Grading Convention Policy](#).

Students who take a Leave of Absence for one or more terms will need to enroll in the term following the leave in order to remain in good academic standing. All periods of leave of absence are included in the maximum time frame allowed (150%) to complete the program. See the [Leave of Absence Policy](#).

Students who do not earn at least a C- in a course may be offered the opportunity to remediate that course (or courses). A grade of D (letter grade of 1.0) in a course indicates a significant lack of understanding of the content of the course necessary for completion of the academic program. Remediation of D grades will be offered to students at the discretion of the Department Head and Course Instructor. If a course is remediated, the remediated grade earned will be noted on the official transcript and calculated in the cumulative GPA. If the course is not satisfactorily remediated, the student will need to repeat that course in a subsequent semester. See the [Course Repeat Policy](#) and [Course Remediation Policy](#).

Credit hours from another educational institution accepted as transfer credits into the BSHS program will be included as completed credit hours.

Students who are not academically progressing may not be eligible for financial aid.

BS to MD Pathways Progression

The BS-MD pathway is designed to be completed in either two, three or four years of prerequisite coursework and four years of medical school coursework. In order for students to

progress through this accelerated pathway, they must meet certain criteria each semester and each academic year. These criteria are both qualitative and quantitative and include:

1. Students must pass all courses that are counted toward degree conferral with a minimum letter grade of C;
2. Students must maintain a cumulative GPA of 3.50 in the undergraduate program and be in good academic and professional standing;
3. Students must participate in at least one College of Medicine campus activity per year while attending the College of Health Sciences;
4. Students must submit a Supplemental Application to the College of Medicine Office of Admission upon request;
5. Students must successfully complete the College of Medicine Prerequisites;
6. Students must score a 510 or higher on the MCAT; and
7. Students must successfully complete the MD admission interview.

Students who do not meet the criteria described above will be notified of that status at the end of each term. They are still able to pursue the BS/MS degree and compete for medical school admission. They will be subject to the Progression Criteria for the BS/MS.

BS to PharmD Pathways Progression

The BS-PharmD accelerated pathway is designed to be completed in either two, three or four years of prerequisite coursework and four years of pharmacy school coursework. In order for students to progress through this accelerated pathway, they must meet certain criteria each semester and each academic year. These criteria are both qualitative and quantitative and include:

1. Students must pass all courses that are counted toward degree conferral with a minimum letter grade of C;
2. Students must maintain a cumulative GPA of 3.00 in the undergraduate program and be in good academic and professional standing;
3. Students must participate in at least one College of Pharmacy campus activity per year while attending the College of Health Sciences;
4. Students must submit a Supplemental Application to the College of Pharmacy Office of Admission upon request;
5. Students must successfully complete the PharmD admission interview;
6. Students must successfully complete the College of Pharmacy Prerequisites.

Students who do not meet the criteria described above will be notified of that status at the end of each term. They are still able to pursue the BS/MS degree and compete for pharmacy school admission. They will be subject to the Progression Criteria for the BS/MS.

BS to PsyD Pathway Progression

The BS-PsyD pathway is designed to be completed in three years of prerequisite coursework and five years of clinical psychology school coursework. In order for students to progress through this pathway, they must meet certain criteria each semester and each academic year. These criteria are both qualitative and quantitative and include:

1. Students must pass all courses that are counted toward degree conferral with a minimum letter grade of C;
2. Students must maintain a cumulative GPA of 3.00 in the undergraduate program and be in good academic, conduct and professional standing;
3. Students must keep full-time status (minimum of 12 credits during fall and spring) while at CHS;
4. Students must participate in at least one College of Psychology campus activity per year while attending the College of Health Sciences;
5. Students must submit a Supplemental Application to the College of Psychology Office of Admission upon request;
6. Students must successfully complete the College of Psychology Prerequisites, and;
7. Students must successfully complete the College of Psychology admission interview.

Students who do not meet the criteria described above will be notified of that status at the end of each term. They are still able to pursue the BS/MS degree and compete for psychology graduate school admission. They will be subject to the Progression Criteria for the BS/MS.

BS to MPS Pathway Progression

The BS-MPS pathway is designed to be completed in three years of prerequisite coursework and two years of Master of Pharmaceutical Sciences coursework. In order for students to progress through this pathway, they must meet certain criteria each semester and each academic year. These criteria are both qualitative and quantitative and include:

1. Students must pass all courses that are counted toward degree conferral with a minimum letter grade of C;
2. Students must maintain a cumulative GPA of 3.00 in the undergraduate program and be in good academic, conduct and professional standing;
3. Students must keep full-time status (minimum of 12 credits during fall and spring) while at CHS;
4. Students must participate in at least one Master of Pharmaceutical Sciences activity per year while attending the College of Health Sciences;
5. Students must submit a primary and a supplemental application to the Master of Pharmaceutical Sciences Office of Admission;
6. Students must successfully complete the Master of Pharmaceutical Sciences prerequisites, and;
7. Students must successfully complete the Master of Pharmaceutical Sciences admission interview.

Students who do not meet the criteria described above will be notified of that status at the end of each term. They are still able to pursue the BSHS degree and apply broadly. They will be subject to the Progression Criteria for the BSHS.

Pre-Med Post-Baccalaureate (PMPB)

Students who successfully complete the PMPB program with an overall undergraduate GPA of 3.0 or higher, CNU program GPA of 3.2 or higher, and an MCAT score of 510 or higher will be invited for an interview for admission to the CNU College of Medicine through AMCAS.

Additionally, students who successfully complete the PMPB program curriculum with an overall undergraduate GPA of 2.6 or higher, and CNU program GPA of 2.6 or higher will be offered an invited interview for admission to the CNU College of Pharmacy via PharmCAS.

Transient Student Credit Policy

Transient Students are CHS degree seeking students that are requesting to take courses outside of CHS for credit to apply towards their degree. Students who wish to take courses at another institution must request permission from the CHS Office of Academic and Student Affairs (OASA) using the Transient Student Credit Approval Form, before registering for any course outside CHS. The following criteria must be met for approval to take courses for credit at colleges or universities outside of California Northstate University (CNU):

- Students must have a minimum cumulative CHS grade point average (GPA) of 2.0 and be in good standing with CNU.
- All requests must be approved by the OASA prior to completion of transient coursework in order to transfer credit towards a degree requirement. The student requesting transient coursework is required to submit a syllabus for the requested course to the OASA in order to determine transfer eligibility. Courses must be taken at an accredited institution to be eligible for transfer. See the CHS Transfer Policy (CHS 3203) for more details.
- 1 quarter-system credit is equal to 2/3 of a semester credit.
- The CNU official transcript reflects awarded transfer credit, but not the final grade earned. Courses taken as a transient student will not be calculated in the CHS GPA. Transient work may affect a student's progression in combined degree programs.
- Re-taking courses at other institutions that were initially taken at CNU may satisfy degree requirements, but the CNU course grade and resulting impact on GPA remain unchanged.
- Enrollment status (i.e. full-time/part-time) is determined by CNU credits attempted only. Students enrolled in combined degree programs are required to maintain full-time status.
- Credit limits, allowable final grades, and transfer credit policies are listed in the CNU General Catalog under each college section.
- Students may be approved for transient status for only one course per semester or term.
- Students with accommodations at CHS are not guaranteed accommodations for courses taken outside of CHS. CHS staff, faculty, and resources are not available for support of courses taken outside of CNU.

Degree Requirements for the Bachelor of Science in Health Sciences

The diploma of Bachelor of Science degree in Health Sciences from California Northstate University shall be awarded to a student who has met all of the following criteria:

1. A minimum of 120 credit hours. A maximum of 60 credit hour units from officially transmitted AP/IB courses (CHS Policy 3202) and/or officially transferred from another institution (CHS Policy 3203) with a grade point of 2.0 (letter grade of C or better) may be counted toward this total. At least 60 credit hours must be from courses taken at CNUCHS. Students must earn 36 upper division credit hours towards the Bachelor of Science in Health Sciences from courses taken within CNU. Credit hours from courses with a grade of D, F, AU or W are not counted toward the credit hour minimum for graduation.
2. Pertaining to students in good standing and officially enrolled in combined programs, the CNUCHS will accept transfer credit hours from certain specified courses in the CNU Health Professional programs as substitute credit hours for upper division courses in the CHS curriculum for the BS Degree in Health Sciences. Credit earned at a CNU health professional program to be applied to the BS degree is considered transfer credit and is included in the 60 credit transfer limit.
3. An overall grade point average of 2.0 (letter grade of C) or higher as calculated by the average of all course credit units and grade points for courses taken at CNU.
4. Students must complete all requirements of the degree audit.
5. Students who complete all the course requirements specific to a health sciences area concentration as Human Biology, Biopsychology or Health Science Administration as defined in the Concentration Policy (CHS 3129) may have the area concentration listed on the BS degree diploma as follows: "Bachelor of Science Degree in Health Sciences with a Concentration in Human Biology (Biopsychology, or Health Science Administration)." Students who do not complete all the undergraduate courses specific to the health science concentration area will be awarded the "Bachelor of Science Degree in Health Sciences" without a concentration area listed on the diploma.
6. Students are expected to complete the Bachelor of Science in Health Sciences degree within six years or less after date of admission to the program.
7. Any deviation from these standards must be approved by the Dean after consideration of supporting material. Reasons for the exception must be fully documented.

Degree Honors

Students who complete the BS degree requirements with specified CHS grade point averages (GPAs) will have an Honors designation placed on their transcripts. 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

Commencement

Students and faculty are strongly encouraged to attend commencement and wear the traditional regalia of cap, gown, and academic hood. Honor sashes will be awarded to honor graduates.

Attendance Policy

Students are encouraged to attend all lecture and discussion courses on a regular basis and are required to attend and complete all laboratory sessions and work. The college recognizes that illness and circumstances beyond one's control may cause a student to miss an occasional class. Course instructors are free to set their own attendance policy that may include signing in for each class and a having a portion of the grade dependent on attendance. If a student misses a required laboratory session, the work must be made up in accordance with the schedule and arrangements of the lab instructor. Please read carefully the course syllabus to know instructor's specific attendance requirements.

Formal Excused Absence Policy

A student may request a formal excused absence for personal, legal, emergency, compassionate, professional conferences and functions, or health-related reasons. To protect confidentiality of students, all formally excused absence requests must be initiated in writing and submitted to the Office of Academic and Student Affairs (OASA). Such reasonable requests are normally granted for a period of 1-5 academic days. Absences longer than 5 days may require a student to request a leave of absence or personal withdrawal. Approved formal absence will be communicated to the relevant course instructors who will make necessary accommodations for missed work. Official forms and directions for submitting a Request for Excused Absence are available on the college website or from the Office of Academic Affairs.

Leave of Absence Policy

CHS 3802 policy specifies procedures and rules for students who wish to take a Leave of Absence from the CHS.

A Leave of Absence is defined as a hiatus from college enrollment for one or two semesters. An official Leave of Absence may be approved for reasons in the student's best interest but may not exceed one academic year. The CHS will permit a student on an approved Leave of Absence to return to the College and re-enroll in classes without formal re-application for admission. Non-attendance does not constitute notification of intent to apply for Leave of Absence status. The starting date of Leave of Absence status is the date the Registrar receives the completed and signed Leave of Absence form. Because the curriculum progression is linear and most courses are offered in sequence in either the Fall or Spring semester, it is expected that most Leaves of Absence will be for one year. However, a one-semester Leave of Absence is permissible with the understanding that students may have to take certain courses out of sequence. Students who take a one or two semester Leave of Absence must

consult with the Office of Financial Aid to determine how the leave will affect their eligibility for financial aid. In some cases, students returning from a Leave of Absence may need to reapply for financial aid.

Students in the Pre-Medical Post-Baccalaureate are not permitted to take a leave of absence.

Procedure

Students requesting a Leave of Absence from the College of Health Sciences should fill out a Leave of Absence Form after discussing their decision with their faculty advisor and the Associate Dean of Academic and Student Affairs. The Leave of Absence form must be signed by the student, the faculty advisor, the Associate Dean of Academic and Student Affairs, and the Dean before it is forwarded to the Office of the Registrar for official approval and notation on the transcript.

Course Enrollment Policy

CHS 3803 policy specifies rules and procedures for enrolling in courses at the CHS.

Course Advisement and Enrollment

Incoming students entering college for the first time after completion of high school are automatically enrolled in an appropriate schedule of courses by the Office of the Registrar in consultation with the Director of Admissions. Transfer students are offered assistance in course selection and registration at the time of admission by the Admissions Office and an assigned faculty advisor. Currently enrolled students in the College of Health Sciences are required to meet with their faculty or professional advisor by the end of the 10th week of classes in each semester. At this meeting the faculty advisor is responsible for reviewing current academic progress and advising the student in appropriate selection of courses to be taken in the following semester. Students have the right to choose among optional course electives offered in any given semester within the constraints of course prerequisites stated in the college catalog and course syllabus.

Minimum and Maximum Number of Credit Hours per Semester

A standard load of courses is considered to average 15 credit hours per semester. A minimum of 12 credit hours for fall or spring semester is required to be considered a full time student. A maximum of 20 credit hours per fall or spring semester is allowed. During the summer session a maximum of 10 credit hours is allowed. A student may not enroll in more than 30 total credit hours for the summer and fall terms combined.

Course Auditing

CNU students may audit lecture courses (i.e., attend lectures without receiving credit or transcript documentation) only with advance permission of the faculty instructor. The responsibility of course instructors is to first meet the needs of officially registered students. Faculty are not obligated to review work submitted by course auditors. Students may only audit one course per semester and a total of only two courses in their time in the College. Audited courses will be identified

on the transcripts and the "grade" listed will be an "X". Students are charged tuition for courses taken as audit.

Course Placement Policy

Math Placement

Entering students must take the CHS Mathematics Placement Exam. Students scoring below 60% on the CHS Mathematics Placement Exam will be enrolled in MATH125 Pre-Calculus. Students scoring above 60% will be enrolled in MATH120 Applied Statistics.

English Placement

Incoming students are eligible for the ENGL 110 credits if they satisfy any of the following criteria:

1. A score of 3 or above on the AP (Advanced Placement) English Language and Composition or AP English Literature and Composition Exam. An additional 3 credits can be awarded for English elective credit;
2. A score of 5 or above on IB (International Baccalaureate) English A; or
3. Official transcript record of a 3-unit college-level English composition course equivalent to ENGL 110 with a grade of C or higher.

Students who are awarded credit for ENGL 110 are not excused from taking the English Placement Diagnostic offered by CHS.

Students with 6 or more credit hours of English composition or writing courses with grades of C or better from a community college or four-year university are eligible to be credited with ENGL 110 and 120. The syllabus/syllabi of the qualifying course(s) must be reviewed for approval and one of the courses in question should have included a documented research paper. Students who transfer approved credits equivalent to both ENGL110 and ENGL120 may also be excused from taking the English Placement Diagnostic test if they so choose.

New first-year CHS students who do not meet one of the criteria above are required to take the English Placement Diagnostic Test given before the beginning of the semester to assess reading and writing skills and facilitate appropriate English composition course placement.

Course Repeat Policy

Students may only repeat courses in which they have received a grade of D or F; and, ordinarily, a course may only be repeated once. If a second repeat is desired, the student may petition to the Office of Academic and Student Affairs by describing extenuating circumstances that merit a second repeat attempt. If warranted, the Associate Dean of Academic and Student Affairs may authorize a second course repeat via a signed Exceptions Form. Only six courses (up to 24 credits in the four-year program) may be repeated by any given student. Once a student successfully repeats a previously failed course, revised grade point units for the repeated course are calculated and the original grade points and credit hours for the initial course are removed and the course is marked as "Repeated" on the student transcript.

Course Add/Drop and Withdrawal Policy

The course add, drop and withdraw period allows for course adjustment at each semester or term, in order for students to make the necessary changes in the best interest of his or her academic preferences and curriculum plan. During the add and drop period, students may add (register for) one or more additional courses or drop (cancel registration for) any course except required, faculty sponsored and courses that require community service placement. As stated in the CHS enrollment agreement, tuition is non-refundable for individual dropped classes. The CHS enrollment agreement specifies conditions for pro-rated tuition refund in cases where a student completely withdraws from the college during the academic term as described under the *Student's Right to Withdraw and Refund* policy.

Course add and drop period: Students may add or drop courses up to the end of the 2nd week of classes for fall and spring semesters or by the 5th day of classes for a summer term. If a class is dropped by the end of the 2nd week of classes, or the 5th day of summer term, the record of class enrollment is removed from the transcript.

Limits to course add and drop: Students may add up to four and drop up to four courses per semester and two courses per summer term, provided all requirements set forth in this policy are met. No student can add or drop the same course more than once each semester or term. The Office of Academic Affairs may grant exceptions to this provision if a documented special circumstance arises.

Course withdrawal period: Students may withdraw from a course until the end of the 10th week of classes for fall and spring semesters or the end of the 5th week of classes for a summer term. Course withdrawal is documented by course grade of "W" with no credit noted on the permanent transcript.

Limits to course withdrawal: Students are limited to a maximum of four course withdrawals (up to 12 units in the four-year program). Note that course withdrawal may increase the time of completion to graduation of the standard four-year BS degree program. The Office of Academic Affairs may grant exceptions to this provision if a documented extenuating circumstance arises.

Faculty sponsored courses add, drop, and withdrawal: The COLL 490 course series (COLL 490a: Peer Assistant Learning; COLL 490b: Research Experience, and; COLL 490c: Student Services Assistant) are faculty sponsored courses, since they require previous agreement between faculty and student on a specific plan that is devised on a case-by-case basis. The add, drop, and withdrawal processes for such courses should be authorized by the faculty member.

Add, drop and withdrawal from courses that require community service placement: All service learning courses that require placement with community partners may be added, dropped, or withdrawn only after authorization from the Director of Community Service-Learning and the Office of Academic Affairs.

No request for add and drop is automatically granted. It is effective only after it goes through the approval processes as indicated in this policy. As a result, a student must continue attending the course in which he or she was originally registered, until the add or drop request is reflected in his or her official CAMS schedule.

Note that course withdrawal may increase the time of completion to graduation of the standard four-year BS degree program.

The addition or removal of courses from the current course registration list and transcript is handled by submission of a Course Add/Drop Form or Course Withdrawal Form that must be signed by the student, course instructor, Senior Health Professions Advisor and the Associate Dean of Academic and Student Affairs before it is sent to the Registrar's Office for documentation on the student schedule and transcript.

Academic Integrity and Good Conduct Code of Honor

CHS 3801 Academic Integrity and Good Conduct Policy governs standards of academic integrity and good conduct expected of students, faculty, and staff at the College of Health Sciences. It also establishes the operational plan for reporting and investigation of incidents, procedures of adjudication, and determination of sanctions pertaining to violations of academic integrity and personal misconduct.

The College's Academic Integrity and Good Conduct 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: The College 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 good will 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 teaching students how to model respectful behavior and exemplify good conduct.

Honesty and Integrity: The College is committed to teaching, scholarly activity, and professional growth in a community-based learning environment. Academic honesty and integrity are required in all aspects of education, scholarly activity, research, and service. Members are to be truthful in their 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 work, and off-campus assignments, 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. Acts in violation of the honesty and integrity principle are subject to disciplinary action.

Professionalism: The College abides by high standards of professionalism in learning, teaching, scholarly activity, research, 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 and the broader community. Students, staff 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 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. Among all College members email correspondence should include a formal greeting, an informative subject line, content that is clear, polite and succinct, and a closing courtesy. 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, 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. Acts in violation of the legal standards and ethical behavior principle are subject to disciplinary actions.

Violations of Academic Integrity:

Attempts to be dishonest or deceptive in the performance of academic work whether in or out of the classroom/lab, 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: a) Cheating on Assignments or Exams. Any attempt by a student to alter her/his performance on an assignment or examination in violation of the understood ground rules. I. Communicating answers with another person during an exam. II. Preprogramming a device to contain answers or other

unauthorized information for exams. III. Use of unauthorized materials, prepared answers, written notes, or concealed information during an exam. IV. Sharing answers unless specifically authorized by course instructor. V. Tampering with an exam after it has been graded and returning it in an attempt to earn more credit. b) Plagiarism I. Buying, stealing or borrowing a paper or portions of a paper. II. Hiring another to write a paper. III. Claiming authorship of written material not so authored. IV. Lack of attribution of cited material. V. Using a source too closely when paraphrasing. VI. Changing key words or phrases but retaining essential content of the source. VII. Including citations to non-existent or inaccurate information about sources. VIII. Reusing large portions of a work produced in one class for submission in another class. IX. Including proper citation but the paper includes almost no original work. X. Citing sources that do not exist. XI. Purposefully misinterpreting a source or citing a source out of context. XII. Claiming personal credit for research performed by others. XIII. Claiming participation on a team project while not participating on the project. c) Additional Actions of Academic Misconduct I. Furnishing false information in the context of an academic assignment. II. Theft or destruction of academic materials owned by CNUCHS or a member of the CNUCHS community. III. Contamination of laboratory samples or altering indicators during a practical exam, such as moving a pin in a dissection specimen for an anatomy course. IV. 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. V. Failure to identify one's role in an academic incident. VI. Fabrication or alteration of information or data and presenting it as legitimate. VII. Providing false or misleading information to an instructor or any other College official. VIII. Forgery of an instructor's signature on a letter of recommendation or any other document. IX. Violation of course rules.

Violations 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 students, colleagues, and members of the broader community outside the College. The list is not exhaustive as there are many additional forms. 1. 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. 2. Bullying: Repeated acts of aggression by an individual with greater power targeted toward a weaker individual. 3. Cyberbullying: Willful and repeated taunting, threatening, harassing, or intimidation inflicted through the medium of electronic text. 4. Sexual misconduct: Sexual discrimination, sexual harassment, sexual assault, interpersonal violence and stalking. 5. Harmful behavior: Action that threatens the health and/or safety of another person. 6. 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. 7. Stalking: A course of conduct directed at a specific person that would cause a reasonable person to fear for the person's safety of the safety of others. 8. Disruptive conduct: Inappropriate actions that have the potential to interfere or

disrupt student learning, research, administration or other authorized activity. Attempt to violate any College rule. 9. 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. 10. Firearms, dangerous materials and prohibited items: Possession, use or display of any firearm, dangerous material that could be used as a weapon. 11. Additional actions of personal and professional misconduct a) Slander, libel or defamation. b) False accusation of misconduct, forgery, alteration, or misuse of any College document, record, or identification. Providing a College official 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 one's self, others in the university community, or the academic process. h) Unauthorized entry, use, or occupancy of College facilities. i) Any behavior that violates federal, state or local laws, of any University/College or formal affiliate policy or rule.

Personal Accountability and Expectations

All students, faculty, and staff of the CNUCHS community are required to follow this Academic Integrity and Good Conduct Code of Honor. We are all personally responsible and accountable for maintaining an environment and culture of respect, honesty, integrity, legal and ethical behavior, and professionalism. This environment and culture is to be extended off campus when it involves a CNUCHS-related matter or a member of the CNUCHS community, including, but not limited to clients, preceptors, and volunteer sites participating in the CNUCHS experiential education program. It is understood that teamwork is necessary for ensuring and sustaining an environment and culture that support these core principles and related values.

As such, it is expected that all students, faculty, and staff of CNUCHS shall:

- Embrace the Academic Integrity and Good Conduct Code of Honor and its standards of expected behavior
- Uphold the Code of Honor in daily life both on and off-campus
- Promote the Code of Honor in an environment and culture of respect, honesty, integrity, legal and ethical behavior, and professionalism
- Report Academic Integrity and/or Good Conduct violations to the appropriate faculty and administrators
- Seek appropriate advice if unsure or in doubt
- Cooperate with investigations of violations of this Code of Honor

Possible Disciplinary Actions for Violations of the Academic Integrity and Good Conduct Policy and Code of Honor

Actions include but are not limited to: 1. Written warning or censure 2. Loss of assignment credit 3. Special assignment such as attending a workshop, writing a paper, etc 4. Disciplinary probation 5. Suspension from classes for a semester 6. Delayed graduation 7. Restriction from University and/or College activities or functions 8. Restitution to repair or compensate for loss or damages 9. Holds on transcripts 10. Notation on transcript of academic dishonesty or violation of good conduct 11. Dismissal from the College.

Non-Retaliation

CNUCHS does not tolerate retaliation against individuals who report dishonest, illegal, unethical, unprofessional, hateful, or otherwise inappropriate acts. Anyone who retaliates against reporting or whistle-blower individuals is in violation of the Code of Honor and is subject to appropriate disciplinary action for that violation including suspension and termination of employment or enrollment.

Complaint/ Grievance Policy

California Northstate University College of Health Sciences (CNUCHS) is committed to serving students by providing a rigorous academic program and the appropriate student services to promote success upon graduation. If students are dissatisfied with a decision, act, or condition at CNUCHS that is evidence-based, regarding negative, unjust, arbitrary, or discriminatory treatment they are encouraged to seek a remedy. Also see the *Discrimination* and *Sexual Harassment and Sexual Violence* Policies.

Early Resolution

Students who have a complaint relating to a College or University issue may wish to first discuss the matter with the relevant person or office. If this is not possible or the student is uncomfortable with a direct approach, the student may discuss the issue with a university official such as a faculty member, Director, or other neutral party. If the issue is not resolved through such an informal approach, the student may file an official written grievance using the Student Complaint or Grievance Form as soon as possible after the occurrence.

Formal Grievance

For grievances of an academic nature, students should direct their appeal to the Senior Associate Dean of Academic Affairs. See the Student Complaint or Grievance Form.

For grievances non-academic in nature, students should direct their appeal to the Associate Dean of Student Affairs. See the Student Complaint or Grievance Form.

Students filing an official written grievance must identify the specific College or University Policy that has been allegedly violated, cite specific evidence supporting the allegation, and suggest a possible approach to resolution.

As appropriate, the Senior Associate Dean for Academic Affairs or the Associate Dean for Student Affairs will convene an ad hoc committee of 3 faculty members or Directors. This committee will examine the grievance and recommend a remedy to the Senior Associate Dean or Associate Dean. The

appropriate Associate Dean will provide a written response to the student with proposed resolution within 21 calendar days after receiving the written complaint. If the student is dissatisfied with the resolution, a further appeal can be made to the Dean of the College of Health Sciences within 7 calendar days after the formal written resolution. The Dean is charged with investigating the matter by examining all the relevant evidence. Upon due consideration, the Dean shall issue a final decision documented in a letter to the student and the relevant individuals involved in the matter. The Dean's decision is final.

A record of formal student complaints and their resolutions will be maintained by the Dean's Office.

For complaints related to accreditation standards, please see Accreditation Information on page 10 of this catalog.

Petition for Admission to or Change in Pathways

CHS students may petition to be admitted into pathways or to switch to other pathways, after they have completed one year of academic coursework or at least one fall and one spring semester of residence at CHS. Petitions are only accepted once a year, at the end of the spring semester. The deadline to submit the full petition is the 1st Friday in June of each year. Petitioner will be notified of the decision by the 1st week of August of each year. CHS 3805 Petition for Admission to Pathways Policy governs the petition process.

Petition is a very competitive process, and as such it has no guarantee to be approved. The CHS Admissions Committee reviews all petition materials and makes a decision based on a combination of factors outlined below.

The first step for students interested in petition is to arrange a meeting with a Health Professions Advisor at CHS (no later than May 1st of the year the student is petitioning) to discuss the process and get information on how to complete all petition forms and steps. The general requirements for students to be reviewed when petitioning to be admitted into or change pathways are:

1. Academic feasibility – an analysis of the student's GPA at CHS against the required GPA for the pathway the student is petitioning to be admitted into. An analysis of the coursework required for the desired pathway, against the coursework already taken by the student.
2. Academic and conduct good standing – an analysis of the student's history of academic integrity and good conduct, both outstanding and resolved. Any outstanding academic integrity and good conduct mark may represent automatic denial of the petition.
3. Evaluation from faculty – student is required to be formally evaluated by three CHS faculty: one being the student's faculty advisor, one from a faculty in the Department of Science and Mathematics, and one from the Department of Humanities and Social Sciences. All faculty evaluations are confidential and are delivered in a sealed envelope directly to CHS Admissions Committee.

4. Personal petition statement – CHS Admissions Committee will look into the 1-page personal statement that should cover the student's experiences (inside and outside academia) as well as idiosyncratic characteristics that are relevant to the petition process, as far as the student's perspective as to why they have the potential to succeed in the pathway he/she is petitioning into.

Please note that the CHS Admissions Committee may approve a petition for a pathway different from the one a student has petitioned into. A student may petition more than once, as long he/she has met the residency requirements. CHS will not release any rank position for any student as a result of petition approval or denial; petition process is voluntary and strictly confidential.

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 or instructor approval.

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 or instructor approval.

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 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: BIOL110 if not taken concurrently)

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, or instructor approval.

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: BIOL120 if not taken concurrently

Curriculum map: BIOL 120L is a degree requirement for the Bachelor of Science in Health Sciences

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, or instructor approval.

Curriculum map: BIOL 210 is a degree requirement for the Bachelor of Science in Health Sciences.

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: BIOL210 (if not taken concurrently).

Co-requisite: BIOL 210.

Curriculum map: BIOL 210L is a degree requirement for the Bachelor of Science in Health Sciences.

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, or instructor approval.

Curriculum map: BIOL 220 is a degree requirement for the Bachelor of Science in Health Sciences.

BIOL 220L Human Physiology Laboratory (1 cr)

Companion physiology laboratory course to be taken concurrently with BIOL220 lecture course. This course provides a hands-on experience in applying physiological concepts and practices in addressing human health.

Prerequisites: BIOL210, BIOL210L, & BIOL220 (if not taken concurrently).

Curriculum map: BIOL 220L is a requirement for the following pathways: 3+4 BS-MD, 4+4 BS-MD, 3+5 BS-PsyD, and 3+2 BS-MPS.

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 or instructor approval.

Curriculum map: BIOL 230 is a requirement for the following pathways: 2+4 BS-MD, 3+4 BS-MD, 4+4 BS-MD, 3+4 BS-PharmD, and 3+2 BS-MPS.

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.

Curriculum map: BIOL 240 is a requirement for the following pathways: 2+4 BS-MD, 3+4 BS-MD, 4+4 BS-MD, 3+4 BS-PharmD, and 3+2 BS-MPS.

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.

Curriculum map: BIOL 240x is a requirement for the following pathways: 2+4 BS-MD, 3+4 BS-MD, 4+4 BS-MD, 3+4 BS-PharmD, and 3+2 BS-MPS.

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 instructor approval.

Curriculum map: BIOL 310 is a requirement for the following pathways: 4+4 BS-MD, 3+4 BS-MD, 2+4 BS-PharmD, 3+4 BS-PharmD, and 3+2 BS-MPS. It fulfills the Program Area Requirement for Core Sciences and Mathematics.

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: BIOL310 if not take together

Curriculum map: BIOL 310L is a requirement for the following pathways: 4+4 BS-MD, 3+4 BS-MD, 2+4 BS-PharmD, 3+4 BS-PharmD, and 3+2 BS-MPS. It fulfills the Program Area Requirement for Core Sciences and Mathematics.

BIOL 320 Medical Microbiology & Epidemiology (3 cr)

A continuation of microbiology discussed in BIOL320 with a specific focus on microorganisms associated with infectious diseases of biomedical concern such as influenza, measles, methicillin-resistant staphylococcus, and HIV-AIDS. Epidemiology is the study of how microbial infections originate and spread within a population, and how they are contained.

Prerequisites: BIOL310 or instructor approval

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 and the principles that define the relationship between diet and good health.

Prerequisites: CHEM310 or instructor approval

Curriculum map: BIOL 330 is an elective course. It fulfills the 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 instructor approval.

Curriculum plan: BIOL 340 is a requirement for the 4+4 BS-MD pathway and a prerequisite for the 3+2 BS-MPS. BIOL 340 also 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 instructor approval.

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: BIOL120 & CHEM120

Curriculum map: BIOL 410 is a requirement for the 3+5 BS-PsyD pathway. It 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: BIOL120.

Curriculum map: BIOL 420 satisfies the Program Area Requirements for Core Sciences and Mathematics, and is a required course for the following pathways: 4+4 BS-MD, 3+4 BS-MD, and 2+4 BS-MD.

BIOL 430 Pharmacology (3 cr)

This course surveys major classes of drugs in clinical use and also introduces the science of modern drug discovery. A drug is broadly defined as any chemical that affects physiological function. Drugs that have been clinically tested and approved for human use are also powerful chemical tools used to manage symptoms and treat disease. The science of pharmacology is concerned with mechanisms of drug action at various levels from the whole organism to the cellular level to molecular interactions.

Prerequisites: BIOL220 & CHEM310, or instructor approval

Curriculum map: BIOL 430 is a requirement for the following pathways: 2+4 BS-PharmD, 3+4 BS-PharmD, and 3+2 BS-

MPS. It fulfills the Program Area Requirement for Core Sciences and Mathematics.

BIOL 440 Pathophysiology (3 cr)

Pathology refers to the general study of disease. The science of pathophysiology seeks to understand the physiological bases of the origin and progression of disease. This course also covers advanced methods used to detect and diagnose diseases such as histological examination of tissue samples and biochemical analysis of biomarkers.

Prerequisites: BIOL220 & BIOL420 or instructor approval.

Curriculum map: BIOL 440 is an elective course. It fulfills the 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: BIOL 110 or instructor approval.

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.

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.

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 instructor approval.

Curriculum map: BIOL 480 fulfills the Program Area Requirement for Core Sciences and Mathematics.

CHEM 100 Principles of General Chemistry (1 cr)

A course introducing the basic principles of chemistry in preparation for general chemistry. Topics include basic atomic 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: CHEM110 if not taken concurrently

Curriculum map: CHEM 110L 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 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

Curriculum map: CHEM 120 is a degree requirement for the Bachelor of Science in Health Sciences and a prerequisite for all pathways except BS to PsyD.

CHEM 120L General Chemistry II Laboratory (1 cr)

Companion laboratory course to be taken concurrently with CHEM120 lecture course.

Prerequisite: CHEM120 if not taken concurrently

Curriculum map: CHEM 120L is a degree requirement for the Bachelor of Science in Health Sciences and a prerequisite for all pathways except BS to PsyD.

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

Curriculum map: CHEM 210 is a prerequisite for all pathways except BS to PsyD.

CHEM 210L Organic Chemistry I Laboratory (1 cr)

Companion laboratory course for 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.

Co-requisite: CHEM210.

Curriculum map: CHEM 210L is a prerequisite for all pathways except BS to PsyD.

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

Curriculum map: CHEM 220 is a prerequisite for all pathways except BS to PsyD.

CHEM 220L Organic Chemistry II Laboratory (1 cr)

Companion laboratory course for organic chemistry lecture. 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: CHEM220 if not taken concurrently.

Curriculum map: CHEM 220L is a prerequisite for all pathways except BS to PsyD.

CHEM 220R Organic Chemistry II Recitation (1 cr)

A companion course to the second semester of a two semester course in organic chemistry. The recitation course will focus on reinforcing the conceptual frameworks and developing a greater understanding of the topics covered in CHEM 220. In addition, emphasis will be placed on improving

approaches to studying and exam taking strategies.

Prerequisite: CHEM 210;

Co-requisite: CHEM 220

Curriculum map: CHEM 220R is recommend 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 or instructor approval

Curriculum map: CHEM 310 fulfills the Program Area Requirement for Core Sciences and Mathematics. It is also a prerequisite for the 4+4 BS to MD pathway. It fulfills the Program Area Requirement for Core Sciences and Mathematics.

COLL 100 Student Success Seminar (2 cr)

The purpose of this course is to guide first-year students in a successful transition from high school to college. Topics include review of academic policies, university services, copyright laws and plagiarism, university etiquette, strategies for studying and test-taking, career advising, help resources, and balancing social life with academics.

Prerequisites: none

Curriculum map: COLL 100 is a degree requirement for the BSHS.

COLL 105 Healthcare Student Success Seminar (1 cr)

The purpose of this course is to guide first-year 2+4 pathways students in a successful transition from high school to college. Students will: participate in several self-reflection activities; acquire college learning skills; examine careers in the healthcare industry; learn about resources available to them and policies that affect them.

Prerequisites: none

Curriculum map: COLL 105 is a prerequisite for all 2+4 pathways as well as for the 3+5 BS to PsyD.

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 100 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 as well as a prerequisite for all pathways. It also applies

towards the General Education requirements in the liberal arts- service learning.

COLL 215 Foundations of Service Learning Seminar (1 cr)

Students will engage in group reflections about community engagement topics through conversation circles, and guest speakers from diverse communities will share their experiences

Prerequisites: Have taken or currently enrolled in COLL 210.

Curriculum map: COLL 215 is an elective course for students engaged in the 2+4 Pathways, and a required course for students pursuing BSHS and all other Pathways.

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 as well as a prerequisite for all pathways. 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 or equivalent.

Curriculum map: COLL 310 is a degree requirement for the BSHS and a prerequisite for all pathways. 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 and a prerequisite for all pathways. 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: junior year standing or instructor approval
Curriculum map: COLL 420 is a degree requirement for the BSHS and a prerequisite for all pathways. 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 PMPB.

Curriculum map: COLL 430 is an elective course recommended for students enrolled in the PMPB coursework and for all students who want to deepen their experience in the field of service learning related to healthcare professions. It 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 and faculty sponsorship

Curriculum map: COLL 490a is an elective course.

COLL 490b Research Experience (1-3 cr)

COLL 490b provides students with training and engagement in academic research. Students receive official credit on their transcripts for work as research assistants in faculty research groups. Students electing this course must be approved by a faculty member who will supervise the research activity. The course may be taken more than once, but no more than 2

units may be applied to degree or program requirements. Over the course of the semester, 45 hours of work must be completed during the semester to earn the equivalent of 1 credit unit. Grading: P/NP only.

Prerequisites: COLL 310, CITI training certificate and faculty sponsorship.

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: Approval from the Office of Academic and Student Affairs and faculty/staff sponsorship.

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 110 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 required of all students who did not meet the Developed Category of the English 110 Writing Assessment Rubric.
Co-requisite: ENGL110
Curriculum map: ENGL 110L is an elective course required for those students who did not meet the Developed Category on the English placement test.

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 (minimum AP score of 3 and minimum IB score of 5)
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 and is a prerequisite for all BS to MD and BS to PharmD pathways

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 and is a prerequisite for all BS to MD and BS to PharmD pathways.

ENGL 120L English 120 Composition II Writing Lab (1 cr)

English 120 Composition Writing Lab gives students the opportunity to strengthen their academic writing skills in a supportive and interactive environment. Students will focus on creating coherent and organized prose through review and application of grammar, sentence and paragraph construction, thesis formulation, and vocabulary development. Enrollment in ENGL120L is required of all students who did not meet the Developed Category of the English 120 Writing Assessment Rubric.
Co-requisite: ENGL120
Curriculum map: ENGL 120L is an elective course required for those students who did not meet the Developed Category on the English placement test.

ENGL 310 Professional Communication Seminar (2 cr)

This course is an elective option for students who wish to improve written and oral communication skills useful for advancement in the health professions. The course focuses on building reading, writing, and oral skills in a variety of contexts, including written composition of personal statements for medical school applications, interview techniques, and critical reasoning skills applicable to reading comprehension of literature on standardized tests such as the MCAT exam.
Prerequisites: ENGL110 or ENGL120, or instructor approval
Curriculum map: ENGL 310 is an elective course.

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.

HIST 310 History of Medicine (3 cr)

Beginning with crude concepts of how the body works as developed by Hippocrates, this course will follow the story of how medicine evolved from myth and superstition into a modern science.

Prerequisites: sophomore year standing or instructor approval

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: none

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: ENGL120.

Curriculum map: HUMN 410 satisfies the Program Area Requirement for Arts & Humanities and is a prerequisite for the 4+4 BS to MD and 3+5 BS to PsyD pathways.

MATH 120 Applied Statistics (3 cr)

This course provides a comprehensive overview of basic statistics concepts and their application to biomedical sciences. It explains general principles of data analysis and statistical terminology. At the end of the course students will be able to carry out basic statistical analysis and to interpret the results.

Prerequisites: none

Curriculum map: MATH 120 contributes to GE requirement for Scientific Inquiry & Quantitative Reasoning - Math area and is a prerequisite for all pathways except for the 3+2 BS to MPS pathway. MATH 120 is also a prerequisite for COLL 310.

MATH 120x Applied Statistics Online (3 cr)

This course provides a comprehensive overview of basic statistics concepts and their application to biomedical sciences. It explains general principles of data analysis and statistical terminology. At the end of the course students will be able to carry out basic statistical analysis and to interpret the results.

Prerequisites: none

Curriculum map: MATH 120x contributes to GE requirement for Scientific Inquiry & Quantitative Reasoning - Math area and is a prerequisite for all pathways except for the 3+2 BS to MPS pathway. MATH 120 is also a prerequisite for COLL 310.

MATH 125 Pre-Calculus (3 cr)

This course reviews and elaborates upon mathematics essential for the study of calculus. Specific topics include polynomials, trigonometric functions, exponential and logarithmic functions, infinite series, and complex numbers. This course is required to be taken by students who need a thorough review of this material as determined by performance on a mandatory math placement exam given to all first-year students before the start of the Fall semester. Students who do well on the placement exam may skip this course and enroll directly in MATH130 Differential and Integral Calculus offered in the Spring.

Prerequisites: none.

Curriculum map: MATH 125 is an elective course, or a required course for those freshmen who performed below 60% in the Math Placement Test.

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. This course is required to be taken by students who need a thorough review of this material as determined by performance on a mandatory math placement exam given to all first-year students before the start of the Fall semester.

Students who do well on the placement exam may skip this course and enroll directly in MATH130 Differential and Integral Calculus offered in the Spring.

Prerequisites: none.

Curriculum map: MATH 125x is an elective course, or a required course for those freshmen who performed below 60% in the Math Placement Test.

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 and is a prerequisite for all BS to MD and BS to PharmD pathways.

MEDS 410 Standardized Patients Clinical Experience (2 cr)

This course is designed to introduce pre-medical students to the clinical experience from the patient's perspective, and provide an introduction to medical research. Students will have the valuable opportunity to interact with medical students, clinical faculty members and community healthcare professionals. The course consists of both didactic lectures and experiential learning. The didactic training focuses on communication, ethics, culture competency, related medical terminology and case studies. Experiential learning is in the form of role-play as standardized patients. This unique clinical experience will prepare students to better understand the needs of patients in patient centered health care, provide a foundation of the healthcare and environment in the U.S., introduce students to health profession administration, and overall enrich the pre-professional student experience.

Prerequisites: none.

Curriculum map: MEDS 410 is an elective course, recommended to PMPB students. Satisfies the program area requirements for the professionalism.

MEDS 420 Standardized Patients Clinical Experience (2 cr)

This course is a continuation of MEDS 410, for those students who want to have a deeper experience in understanding the patient needs in patient centered healthcare.

Prerequisites: MEDS 410

Curriculum map: MEDS 420 is an elective course, recommended to PMPB students. Satisfies the program area requirements for the professionalism.

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

Curriculum map: PHIL 310 satisfies the Program Area Requirement for Arts and Humanities and is a requirement for all pathways, except for the 3+2 BS to MPS.

PHLT 310 Global Health (3 cr)

This course examines the status of human health and systems of healthcare delivery across the world. Reasons for disparity in availability health services and outcomes are critically analyzed. The role of international organizations dedicated to improvement of global health is also covered.

Prerequisites: junior year standing or instructor approval

Curriculum map: PHLT 310 is an elective course. Satisfies the Program Area Requirements for Arts and Humanities and Critical and Systemic Thinking.

PHLT 320 Healthcare Policy (3 cr)

Current healthcare policy is examined in light of recent research and debate and the following question is asked: What policies and procedures work best to keep the human population healthy?

Prerequisites: junior year standing or instructor approval

Curriculum map: PHLT 320 is an elective course. Satisfies the program area requirements for arts and humanities.

PHLT 410 Mental Health Services (3 cr)

The tragedy and realities of mental illness require special health services. This course covers issues specific to this field of health care including psychiatric treatment, depression, suicide, drug addiction, alcoholism, and neurodegenerative diseases such as Alzheimer's disease.

Prerequisites: senior year standing or instructor approval

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 instructor approval

Curriculum map: PHYS 210 is a requirement for all pathways, except for the 3+5 BS to PsyD pathway.

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: PHYS210 if not taken concurrently

Curriculum map: PHYS 210L is a requirement for all BS to MD pathways.

PHYS 220 Physics II (3 cr)

A continuation of PHYS210 that covers electromagnetism, electronics, solid-state physics, quantum theory, nuclear physics, particle physics, and relativity.

Prerequisites: PHYS210 or instructor approval

Curriculum map: PHYS 220 is a requirement for all BS to MD pathways.

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: PHYS220 if not taken concurrently

Curriculum map: PHYS 220L is a requirement for all BS to MD pathways.

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. It also a requirement for the BS to PharmD pathways as well as a prerequisite for the 3+5 BS to PsyD pathway.

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. It also a requirement for the BS to PharmD pathways as well as a prerequisite for the 3+5 BS to PsyD pathway.

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

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

Curriculum map: PSYC 310 satisfies the Program Area Requirement for Critical and Systemic Thinking.

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

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

Curriculum map: PSYC 410 is a prerequisite for the 3+5 BS to PsyD pathway. It also 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

Curriculum map: PSYC 420 is a prerequisite for the 3+5 BS to PsyD pathway. It also 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: none

Curriculum map: PSYC 430 is a requirement for the 4+4 BS to MD and 3+5 BS to PsyD pathways. In addition, PSYC 430 is a prerequisite for the 3+4 BS to PharmD pathway. It 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: instructor approval.

Curriculum map: SOCL 410 is a requirement for the 3+5 BS to PsyD pathway. It satisfies the Program Area Requirement for Critical and Systemic Thinking.

CHS 2020-2021 Academic Calendar

Summer Term: 06/08/20 – 08/28/20

Event	Start Date	End Date	Day of the Week
Orientation (New Students)	06/08/20	06/09/20	Monday & Tuesday
Academic Session Begins	06/10/20		Wednesday
Course Add/Drop Deadline	06/15/20		Monday
Summer Break	07/01/20	07/31/20	
Last Day of Instruction	08/26/20*		Wednesday
Final Exams	08/27/20	08/28/20	Thursday & Friday
Final Grades Due	09/01/20		Tuesday
Remediation Period	09/02/20	09/15/20	
Summer Remediation Grades Due	09/16/20		

*Classes should run from Monday through Friday from August 3 to 26.

09/07 – Labor Day

FALL 2020

Fall Semester: 09/10/20 – 12/19/20

Event	Start Date	End Date	Day of the Week
Orientation (New Students)	09/10/20	09/11/20	Thursday & Friday
Academic Session Begins	09/14/20		Monday
Course Add/Drop Deadline	09/14/20	09/25/20	
Thanksgiving Break (No Classes)	11/26/20	11/27/20	Thursday & Friday
Last Day of Instruction	12/15/20		
Final Exams	12/16/20	12/19/20	Wednesday to Saturday
Final Grades Due	12/22/20		Tuesday
Winter Break	12/23/20	01/15/21	
Remediation Period	12/28/20	01/11/21	
Fall Remediation Grades Due	01/13/21		Wednesday

SPRING 2021

Spring Semester: 01/19/21 – 05/14/21

Event	Start Date	End Date	Day of the Week
Orientation (New Students)	01/14/21	01/15/21	Thursday & Friday
Academic Session Begins	01/19/21		Tuesday
Course Add/Drop Deadline	01/19/21	01/29/21	
Spring Break (No Classes)	03/15/21	03/19/21	Monday - Friday
Last Day of Instruction	05/07/21		
Final Exams	05/10/21	05/14/21	Monday - Friday
Graduation Clearance Day	05/14/21		Friday
Graduation Ceremony	05/15/21		Saturday
Final Grades Due	05/19/21		Wednesday
Remediation Period	05/17/21	05/28/21	
Spring Remediation Grades Due	06/01/21		Thursday

UNIVERSITY HOLIDAYS

Holiday	Date	Holiday	Date
Independence Day	07/03/20 (observed)	Martin Luther King	01/18/21
Labor Day	09/07/20	President's Day	02/15/21
Thanksgiving	11/26 and 11/27/2020	Memorial Day	05/31/21

CHS 2021-2022 Academic Calendar

SUMMER 2021

Summer Semester: 06/09/2021 – 07/30/2021			
Event	Start Date	End Date	Day
Orientation (New Students)	06/07/2021	06/08/2021	Monday & Tuesday
Academic Session Begins	06/09/2021		Wednesday
Course Add/Drop Deadline	06/15/2021		Tuesday
Last Day of Instruction	07/28/2021		Wednesday
Final Exams	07/29/2021	07/30/2021	Thursday & Friday
Final Grades Due	08/02/2021		Monday
Remediation Period	08/02/2021	08/16/2021	
Summer Remediation Grades Due	08/20/2021		Friday

FALL 2021

Fall Semester: 08/23/2021 – 12/10/2021			
Event	Start Date	End Date	Day
Orientation (New Students)	08/19/2021	08/20/2021	Thursday & Friday
Academic Session Begins	08/23/2021		Monday
Course Add/Drop Deadline	09/03/2021		Friday
Last Day of Instruction	12/03/2021		Friday
Final Exam Week	12/06/2021	12/10/2021	Monday - Friday
Final Grades Due	12/15/2021		Wednesday
Winter Break	12/15/2021	01/14/2022	
Remediation Period	12/11/2021	12/24/2021	
Fall Remediation Grades Due	12/31/2021		Friday

SPRING 2022

Spring Semester: 01/18/2022 – 05/13/2022			
Event	Start Date	End Date	Day
Orientation (New Students)	01/13/2022	01/14/2022	Thursday & Friday
Academic Session Begins	01/18/2022		Tuesday
Course Add/Drop Deadline	01/28/2022		Friday
Spring Break	03/14/2022	03/18/2022	Monday - Friday
Last Day of Instruction	05/06/2022		Friday
Final Exam Week	05/09/2022	05/13/2022	Monday - Friday
Graduation Clearance Day	05/13/2022 (tentative)		Friday
Graduation Ceremony	05/14/2022 (tentative)		Saturday
Final Grades Due	05/18/2022		Wednesday
Remediation Period	05/14/2022	05/27/2022	
Spring Remediation Grades Due	06/03/2022		Thursday

UNIVERSITY HOLIDAYS

Holiday	Date	Holiday	Date
Independence Day	07/05/2021 (Observed)	Martin Luther King	01/17/2022
Labor Day	09/06/2021	President's Day	02/21/2022
Thanksgiving	11/25/2021 – 11/26/2021	Memorial Day	05/30/2022