Crookston Campus

Health Sciences Pre-Professional B.S.

Math, Science and Technology

Academic Affairs

- Program Type: Baccalaureate
- Requirements for this program are current for Fall 2017
- Required credits to graduate with this degree: 120
- Required credits within the major: 71
- This program requires summer terms.
- Degree: Bachelor of Science

The BS in health sciences provides students with the prerequisite knowledge and skills required for admission to professional programs in chiropractic, dentistry, medicine, occupational therapy, pharmacy, physical therapy. Admission is competitive and specific admission requirements, including courses and experiences, vary by professional program and institution. Completion of the BS does not guarantee admission to professional programs at the University of Minnesota or other universities. The course requirements shown are common to similar programs at other institutions; however, students are advised to check with their specific professional program to be sure all prerequisite courses are met. Most professional programs have additional admission requirements, and students are advised to contact the program(s) to which they plan to apply to identify all admission requirements.

Program outcomes: Graduates will explain and reconstruct the scientific method and apply this mode of inquiry in a laboratory setting; explain and apply basic principles of biology in a work setting; demonstrate teamwork skills; apply, critique, and synthesize protocols from current literature; demonstrate and critique effective communication skills orally and in writing; formulate proper data collection and analysis methods; interpret and practice professional and ethical behavior related to biological research; identify, provide examples, differentiate, and integrate current biology techniques into their scientific investigations; and produce evidence of their ability to be admitted into health science professional programs.

Program Delivery

This program is available:

- via classroom (the majority of instruction is face-to-face)

Admission Requirements

For information about University of Minnesota admission requirements, visit the Office of Admissions website.

General Requirements

All students are required to complete general University and college requirements. For more information, see the graduation requirements.

Program Requirements

Students must complete 40 upper division credits. Students work with their advisor to develop a program of study that meets their health science educational goals (pre-chiropractic, pre-dentistry, pre-medicine, pre-occupational therapy, pre-pharmacy, pre-physical therapy).

Program Requirements

A maximum of two D grades are allowed for core courses required in the program and technology requirements. This includes grades earned at UMC or transferred in from another institution.

Required Courses - 71 credits

BIOL 2012 - General Zoology (4.0 cr)
BIOL 2032 - General Microbiology (4.0 cr)
BIOL 2103 - Human Anatomy and Physiology I (4.0 cr)
BIOL 2104 - Human Anatomy and Physiology II (4.0 cr)
BIOL 3022 - Principles of Genetics (3.0 cr)
BIOL 3027 - Cell Biology (3.0 cr)
CHEM 1061 - Chemical Principles I [PHYS SCI, PEOPLE/ENV] (3.0 cr)
CHEM 1062 - Chemical Principles II (3.0 cr)
CHEM 1065 - Chemical Principles I Laboratory [PHYS SCI, PEOPLE/ENV] (1.0 cr)
CHEM 1066 - Chemical Principles II Laboratory (1.0 cr)
CHEM 2301 - Organic Chemistry I (3.0 cr)
CHEM 2302 - Organic Chemistry II (3.0 cr)

Information current as of March 29, 2024

CHEM 2310 - Organic Chemistry Laboratory I (2.0 cr)
CHEM 2311 - Organic Chemistry Laboratory II (2.0 cr)
CHEM 3021 - Biochemistry I (3.0 cr)
HSCI 3899 - Pre-Internship Seminar (0.5 cr)
HSCI 3900 - Internship (1.0 - 2.0 cr)
HSCI 3901 - Post-Internship Seminar (0.5 cr)
HSCI 4301 - Capstone: Problem Solving in Health Care Teams (1.0 cr)
HSM 4210 - Health Care Law and Biomedical Ethics (3.0 cr)
PHYS 1102 - Introductory College Physics II [PHYS SCI] (4.0 cr)
PSY 1093 - Lifespan Development [HI/BEH/SSC] (3.0 cr)
PSY 3604 - Abnormal Psychology (3.0 cr)
SOC 3937 - Social Gerontology: Elders in American Society (3.0 cr)
WRIT 3303 - Writing in Your Profession (3.0 cr)
Choose one of the following:
BIOL 3140 - Histology (4.0 cr)
or BIOL 4361 - Developmental Biology (4.0 cr)

Liberal Education Requirements

A minimum of 40 liberal education credits are required. Students must complete the 10 goal areas of the Minnesota Transfer Curriculum with the following specific liberal education courses required.
BIOL 1009H - Honors: General Biology [BIOL SCI, PEOPLE/ENV] (4.0 cr)
COMP 1011 - Composition I [COMMUNICAT] (3.0 cr)
COMP 1013 - Composition II [COMMUNICAT] (3.0 cr)
MATH 1150 - Introduction to Statistics [MATH THINK] (3.0 cr)
MATH 1271 - Calculus I [MATH THINK] (4.0 cr)
PHIL 1001 - Introduction to Philosophy [HUMANITIES, ETH/CIV RE] (3.0 cr)
PHYS 1101 - Introductory College Physics I [PHYS SCI] (4.0 cr)
PSY 1001 - General Psychology [HI/BEH/SSC] (3.0 cr)
COMM 1101 - Public Speaking [COMMUNICAT] (3.0 cr)
Choose one of the following:
ENGL 3001 - World Culture and Literature [HUMANITIES, GLOB PERSP] (3.0 cr)
or HUM 3310 - Culture and Technology [HUMANITIES, GLOB PERSP] (3.0 cr)
Choose one of the following:
SOC 1001 - Introduction to Sociology [HI/BEH/SSC, HUMAN DIV] (3.0 cr)
or SOC 1102 - Cultural Anthropology [HI/BEH/SSC, GLOB PERSP] (3.0 cr)

Technology Requirement

Students must take 3 credits from the following courses. (If applicable, the course selected from below may be used to satisfy both the program and technology requirements.)
CA 1xxx
or CA 2xxx
or CHEM 3022 - Fate and Analysis of Chemicals (4.0 cr)
or MATH 1150 - Introduction to Statistics [MATH THINK] (3.0 cr)

Open Electives

Students must take enough open electives credits to satisfy the 120 credit graduation requirement.