Rochester Campus

Health Sciences B.S.

UM Rochester

UMR Chancellor's Office

- Program Type: Baccalaureate
- Requirements for this program are current for Fall 2018
- Required credits to graduate with this degree: 120
- Required credits within the major: 83 to 93
- Degree: Bachelor of Science

Rochester students majoring in the health sciences will receive an integrated education across the biological sciences, the physical sciences, the quantitative sciences, the social sciences, and the arts and humanities. Students must complete at least 120 credits, including at least 80 credits in the major. All courses in the major must be taken A-F, unless the course is only offered S-N.

The health sciences BS program prepares students for post baccalaureate education in a broad spectrum of health science related fields and for graduate programs in the sciences, social sciences, and humanities; health profession careers, including certificate programs in the health sciences; professional schools in the health sciences; and entry-level science and laboratory positions in industry, government agencies, and universities.

Program Delivery

This program is available:

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

Admission Requirements

A GPA above 2.0 is preferred for the following:

- 2.50 transferring from outside the University

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 including writing and liberal education courses. For more information about University-wide requirements, see the liberal education requirements.

Program Requirements

Students are required to take 3 semester(s) of Spanish or approved alternate language.

All students are required to complete campus-wide requirements for liberal education and writing. UMR liberal education is integrated into the curriculum throughout the four years and follows the liberal education requirements on the UMTC campus, except that UMR requires all five themes. Writing and communication follows a writing-integrated curriculum and is incorporated throughout the curriculum across all courses.

In addition to the requirements below, students are required to create a personalized capstone. As part of the capstone, students write a proposal that requires them to list credit bearing activities, reflect upon their holistic experience, and express how their capstone endeavors align with their personal and professional goals. It may be possible, in some unique cases, for specially approved capstones to fulfill or waive program requirements.

Foundational Courses

BIOL 2311 - Integrative Biology [BIOL, TS] (4.0 cr)
BIOL 2331 - Anatomy and Physiology I [BIOL] (4.0 cr)
CHEM 1331 - Chemical Structures and Properties [PHYS] (4.0 cr)
CHEM 1333 - Chemical Reactivity [PHYS] (4.0 cr)
CLI 1711 *{Inactive}*(1.0 cr)
CLI 1712 - Personal Development and Career Exploration (1.0 cr)
CLI 3522 - Community Collaboratory (3.0 cr)
CLI 2713 - Career Development and Career Skills in the Health Sciences (1.0 cr)
ENGL 1433 - Introduction to Literature [LITR] (3.0 cr)
MATH 1161 - Introduction to Statistics [MATH] (3.0 cr)
PHIL 1431 *{Inactive}*[AH] (3.0 cr)

PHYS 1251 - Physics I [PHYS] (4.0 cr)
PUBH 2561 - Introduction to Public Health [GP] (3.0 cr)
SOC 1571 - Introduction to Sociology [SOCS, DSJ] (3.0 cr)
WRIT 1511 *{Inactive}*(1.0 cr)
WRIT 1512 *{Inactive}*(2.0 cr)

Additional Required Coursework

Ethics

PHIL 1441 - Introduction to Ethics [CIV, AH] (3.0 cr)
or SOC 1641 *{Inactive}*[CIV] (3.0 cr)

Communication

COMM 2511 - Communication Methods (3.0 cr)
or COMM 2711 - Communication in Professional Contexts (3.0 cr)

Language

SPAN 1521, SPAN 1522, SPAN 2521 can be replaced by a Spanish proficiency exam or an approved alternative language assessment.

SPAN 1521 - Spanish I (3.0 cr)
SPAN 1522 - Spanish II (3.0 cr)
SPAN 2521 *{Inactive}*(3.0 cr)
or an approved alternate language

Quantitative Reasoning

Take 2 or more course(s) from the following:

- MATH 1110 *{Inactive}*[MATH] (3.0 cr)
- MATH 1111 *{Inactive}*[MATH] (3.0 cr)
- MATH 1171 - Calculus I [MATH] (4.0 cr)
- MATH 2161 - Biostatistics [MATH] (3.0 cr)
- MATH 2171 - Calculus II [MATH] (4.0 cr)

Upper Division

Take 3 or more course(s) from the following:

Biological and Physical Sciences

Take 1 or more course(s) from the following:

- BIOC 3321 - Biochemistry (3.0 cr)
- BIOL 3332 - Anatomy and Physiology II (4.0 cr)
- BIOL 3311 - Genetics [BIOL, TS] (3.0 cr)
- BIOL 3344 - Microbiology [ENV] (4.0 cr)
- BIOL 4312 - Advanced Topics in Molecular and Cellular Biology and Genetics (4.0 cr)
- BIOL 4342 - Neuroscience (3.0 cr)
- BIOL 4364 - Immunology (3.0 cr)
- CHEM 4331 - Chemical Biology (3.0 cr)
- CHEM 4333 - Physical Chemistry (3.0 cr)

•Humanities, Public Health and Social Sciences

Take 1 or more course(s) from the following:

- ENGL 3471 - Gender and Sexuality Studies [DSJ] (3.0 cr)
- ENGL 3481 - Society, Science, and Science Fiction [TS] (3.0 cr)
- PHIL 3437 - History and Philosophy of Science [HIS] (3.0 cr)
- PHIL 3441 - Ethics of Medicine and the Sciences [AH, CIV] (3.0 cr)
- PSY 3510 - Human Development across the Lifespan (3.0 cr)
- PSY 3512 - Principles of Abnormal Psychology (3.0 cr)
- PSY 4512 - Social Psychology (3.0 cr)
- PUBH 3531 - Health Policy & Systems [GP, SOCS] (3.0 cr)
- PUBH 3561 - Environmental Health and Environmental Justice [ENV, SOCS] (3.0 cr)
- PUBH 4561 - Introduction to Epidemiology (3.0 cr)
- SOC 3531 *{Inactive}*[GP, SOCS] (3.0 cr)
- SOC 3571 - Drugs and Society [DSJ, SOCS] (3.0 cr)
- SOC 3581 - Medical Sociology and Technology [SOCS, TS] (3.0 cr)

Capstone

Proposal & Reflection

CLI 3712 - Capstone Proposal Writing (2.0 cr)
CLI 4713 - Capstone Reflections (1.0 cr)
or CLI 4711 *{Inactive}*(1.0 cr)
CLI 4712 *{Inactive}*(1.0 cr)

Activities

Student must complete a minimum of 6 additional credit hours of upper division (3xxx+) coursework. These credits cannot be used to satisfy any other program requirements.

Information current as of April 26, 2024

Pre-PA Pathway

Students should choose the following courses, normally options within the BSHS degree, to prepare for PA Master's programs: BIOC 3321; BIOL 3332, 3344 & 4364; CHEM 2231 & 2333; MATH 1110 & 1111; and PSY 1511, 3510 & 3512. In addition, the following courses are recommended: BIOL 3311; additional upper division physiological sciences courses such as cellular biology or virology; and a research methodology course.