University of Minnesota Crookston



Ask questions, make observations, evaluate evidence, and solve problems through coursework, an internship, and research projects in Biology. With our experiential, technology-driven approach, you'll gain a broad understanding of the biological sciences as well as the applied skills needed to succeed in the sciences, whether that leads you to the biotech industries or to graduate school and/or professional school.

Some golden nuggets to consider...

RESEARCH OPPORTUNITIES

Students have the opportunity to engage in research with faculty through the Undergraduate Research Opportunity Program (UROP), Crookston Student Research and Creative Works Fund.







CAREER PATHS

- Research
- Research Assistant
- Health Care
- Environmental and Conservation Management
- Education
- Forensic Scientist
- Biotechnology
- Continue on to graduate school and/or professional school

PROGRAM FEATURES

- Field trips and small-sized labs allow for more hands-on experience
- Most of our courses and labs are taught by professors with a doctorate who are focused primarily on student education; students are never taught by anyone with less than a master's degree
- Students have the opportunity to attend and present at scientific conferences.
- Faculty involve undergraduate students in research projects on a regular basis, either through our Undergraduate Research Opportunities Program (UROP) grants or outside funding
- Biology is a broad science degree that can be used to go anywhere within the science field
- Students can prepare to pursue a master's degree and/or medical, professional school afterward

Small Campus. Big Degree.

PROGRAM REQUIREMENTS & CURRICULUM

BIOLOGY CORE REQUIREMENTS: 38 CREDITS

BIOL 1009H - Honors: General Biology [BIOL SCI, PEOPLE/ENV] (4.0 cr)

BIOL 1805 - Nature of Life (2.0 cr)

BIOL 2032 - General Microbiology (4.0 cr)

BIOL 3022 - Principles of Genetics (3.0 cr)

BIOL 3027 - Cell Biology (3.0 cr)

BIOL 3122 - Evolution (3.0 cr)

BIOL 3822 - Techniques in Molecular Biology (4.0 cr)

BIOL 3899 - Pre-Internship Seminar (0.5 cr)

BIOL 3900 - Internship (1.0-2.0 cr)

BIOL 3901 - Post-Internship Seminar (0.5 cr)

BIOL 4101 - Biology Seminar (1.0 cr)

NATR 3374 - Ecology [BIOL SCI] (4.0 cr)

WRIT 3303 - Writing in Your Profession (3.0 cr) BIOL 2012 - General Zoology (4.0 cr)

or BIOL 2022 - General Botany (3.0 cr)

CHEMISTRY CORE REQUIREMENTS: 21 CREDITS

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)

CHEM 2310 - Organic Chemistry Laboratory I (2.0 cr)

CHEM 2311 - Organic Chemistry Laboratory II (2.0 cr)

CHEM 3021 - Biochemistry (3.0 cr)

MATH & PHYSICS CORE REQUIREMENTS: 15 CREDITS

MATH 1150 - Elementary Statistics [MATH THINK] (3.0 cr)

MATH 1271 - Calculus I [MATH THINK] (4.0 cr)

PHYS 1101 - Introductory College Physics I [PHYS SCI] (4.0 cr)

PHYS 1102 - Introductory College Physics II [PHYS SCI] (4.0 cr)

LIBERAL EDUCATION REQUIREMENT

COMP 1011 - Composition I [COMMUNICAT] (3.0 cr)

COMP 1013 - Composition II [COMMUNICAT] (3.0 cr)

SPCH 1101 - Public Speaking [COMMUNICAT] (3.0 cr)

TECHNOLOGY REQUIREMENT

Students must take 3 credits from the following courses.

CA 1xxx or CA 2xxx or CHEM 3022 - Chemical Analysis in the Biological and Environmental Sciences (4.0 cr) or MATH 1150 -Elementary Statistics [MATH THINK] (3.0 cr)

BIOLOGY MAJOR ELECTIVES

Take 10 - 12 credit(s) from the following:

· AGRO 3030 - Research Techniques in Agriculture and Natural Resources (3.0 cr)

· AGRO 3230 - Introduction to Plant Pathology (3.0 cr)

· ANSC 3203 - Animal Anatomy and Physiology (4.0 cr) · ANSC 3304 - Reproduction, Al, and Lactation (4.0 cr)

· BIOL 2103 - Human Anatomy and Physiology I (4.0 cr)

· BIOL 2104 - Human Anatomy and Physiology II (4.0 cr) · BIOL 3131 - Plant Physiology (3.0 cr)

· BIOL 3140 - Histology (4.0 cr)

· BIOL 3464 - Mammalogy (3.0 cr)

· BIOL 3466 - Ornithology (3.0 cr)

· BIOL 3722 - Limnology (3.0 cr)

· BIOL 3994 - Undergraduate Research (1.0-3.0 cr)

· BIOL 4361 - Developmental Biology (4.0 cr)

· GEOL 1001 - Introductory Geology [PHYS SCI, PEOPLE/ENV] (3.0 cr)

· HSCI 1123 - Fundamentals of Nutrition [BIOL SCI] (3.0 cr)

· MATH 1272 - Calculus II (4.0 cr)

· NATR 3364 - Plant Taxonomy (3.0 cr)

· SOIL 1293 - Soil Science (3.0 cr)

· AGRO 2573 - Entomology (3.0 cr)

or NATR 2573 - Entomology (3.0 cr)

OPEN ELECTIVES

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





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