

Research Opportunities

We encourage undergraduates to conduct research with faculty either for course credit or as paid work.

"The biology honours program at the Mount provided me with an unparalleled learning experience. I was able to apply my classroom knowledge to a real research setting while developing practical skills that I will use for the rest of my career. I would highly recommend the honours program to anyone interested in working as a researcher."

Amanda Griffin (2016)

"My honours degree allowed me to explore my full potential and provided me with invaluable skills in scientific method, experimental design, and writing. I left with the experience necessary to be competitive and successful in my field."

Ashley Martel (2015)

"My experiences as an Honours student at MSVU were phenomenal, and provided me with the amazing opportunity to design and conduct my own research project in a fascinating field of biology. I gained valuable skills including time management, writing, public speaking, and problem solving, all of which have better prepared me for future endeavours."

Christine Hammer (2014)

Annual Biology Awards

Sisters of Charity Award
Dr. Lillian Wainwright Biology Prize
The Department of Biology Award
The Department of Biology Laboratory Award
Sister Lua Gavin Endowed Scholarship

Careers in Biology

- health professions (doctors, nurses, dentistry, etc)
- veterinarian (animal science)
- government and industry research labs
- environmental science
- science communication
- conservation biology
- agriculture
- aquaculture
- biotechnology
- biomedical engineering
- computational biology
- education (science teachers, lab instructors, lecturers, etc)

About Mount Saint Vincent University

At Mount Saint Vincent University in Halifax, Nova Scotia, Canada, we are committed to academic excellence. We are dedicated to the pursuit of knowledge: scholarship, teaching, and intellectual endeavour of the highest quality. Mount Saint Vincent University offers a dynamic, challenging and welcoming environment. More than 4,000 students from across Canada and around the world take advantage of our personalized approach to education and distinctive programs.

Admission

Admission requirements are listed in the Undergraduate Academic Calendar which is available online at www.msvu.ca.



Contact Us

www.msvu.ca/biology

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Department of Biology Mount Saint Vincent University



www.msvu.ca/biology

Meet the Department

Faculty

Dr. Tamara Franz-Ondedaal, Professor
NSERC Chair, Women in Science & Engineering (Atlantic Region)
Primary subjects taught: Human Anatomy and Physiology, Animal Developmental Biology
Field of Research: Vertebrate Skeletal Biology, Evo-Devo

Dr. Gavin Kernaghan, Associate Professor & Academic Advisor
Primary subjects taught: Microbiology, Microbial Interactions
Field of Research: Fungal Ecology, Plant-Fungus Symbioses

Dr. Ron MacKay, Assistant Professor & Chair of Department
Primary subjects taught: Introductory Biology, Evolutionary Biology, Genetics, Cell & Molecular Biology
Field of Research: Evolutionary Genetics

Dr. Mirwais Qaderi, Associate Professor & Honours Coordinator
Primary subjects taught: Plant Biology, Ecology, Environmental Science
Field of Research: Physiological Plant Ecology, Climate Change Biology

Mr. Kevin Shaughnessy, Senior Lab Instructor
Primary labs taught: Introductory Biology, Microbiology, Animal Physiology

Dr. Ulli Hoeger, Assistant Professor, Term Position
Primary subjects taught: Human Anatomy and Physiology, Physiology of Animals, Animal Diversity, Animal Behaviour, Neuroscience

Dr. Sheilagh Martin, Professor Emeritus
Primary subjects taught: Human Anatomy and Physiology

Every year we have a number of dedicated part-time faculty who teach courses in our department. For the current listing, please visit our website at www.msvu.ca/biology.

Support Staff

Mr. Greg Coakley, Technician
Kerri AlSaidi, Administrative Assistant

The Biology Program

Our program introduces students to major concepts in the areas of cell and molecular biology, metabolism, evolution and ecology, and the diversity of life. We encourage critical thinking and problem solving. All students in our department acquire hands-on laboratory techniques and skills in scientific writing and presentation. Some students choose to conduct independent research with faculty. As a sound knowledge of chemistry and statistics is required for a broad understanding of biology, courses in these subjects are required in the Biology program.

Program Offerings

We offer the following options to Science students. See the Undergraduate Academic Calendar at www.msvu.ca for full descriptions of our programs.

Units of Biology courses required are shown in parentheses.

Biology Honours Degree (10.0)
Biology Major (8.0)
Biology Combined Major (6.0)
Biology Concentration (4.0)
Biology Minor (3.0)



A Typical Biology Major Course Plan

See the Undergraduate Academic Calendar at www.msvu.ca for descriptions of courses.

First Year

BIOL 1152 Introductory Biology I
BIOL 1153 Introductory Biology II

Second Year

BIOL 2240 Cell and Molecular Biology
Two of these courses:
BIOL 2203 Plants: Form and Function
BIOL 2204 Animals: Form and Function
BIOL 2207 Microbial Diversity

Third Year

BIOL 3312 General Ecology
Two of these courses:
BIOL 3309 Physiology of Plants
BIOL 3310 Physiology of Animals
BIOL 3322 Animal Developmental Biology
BIOL 3370 Principles of Heredity or BIOL 3372 Molecular Genetics

Additional Biology courses are required as electives. These may be completed in any year.

Other Required Courses

CHEM 1011 General Chemistry I
CHEM 1012 General Chemistry II
CHEM 2401 Organic Chemistry I

MATH 1113 Introductory Calculus I
MATH 2208 Introduction to Statistics I
MATH 2209 Introduction to Statistics II

Two courses in Social Sciences
Two courses in Humanities

A total of 20 units of course work is required for a Bachelor of Science with Major-degree.

Please consult the online Undergraduate Academic Calendar to verify that you have prerequisite for each course selected.