

COLLEGE OF HEALTH AND NATURAL SCIENCE

Biology

Professors: Rhine Singleton, Jacques Veilleux

Associate Professor: Susan E. Arruda, Leila Jabbour

Assistant Professors: Thomas E. Bennett

A Bachelor of Arts and a Bachelor of Science degree are offered in Biology to traditional students.

A minor is offered in Biology.

The mission of the Biology Department is to develop students' breadth and depth of knowledge in the life sciences. We emphasize skill acquisition, including critical thinking, data analysis and interpretation, use of the primary literature, planning and execution of biological experiments and basic field/laboratory techniques. Students graduating from the Biology program will be able to communicate with biologists and non-biologists alike regarding current societal issues in the life sciences. Successful completion of the degree provides a solid foundation for specialized studies at the graduate level or a broad base of educational experience in preparation for career employment.

The Department of Biology offers a program of study leading to a Bachelor of Arts (B.A.) or Bachelor of Science (B.S.) degree. The basic philosophy of the Department is that a sound undergraduate program should provide either a solid foundation for specialized studies at the graduate level or a broad base of educational experience in preparation for career employment. In keeping with this philosophy, course selection within the major is accorded sufficient flexibility to accomplish the objectives of students desiring to meet entrance requirements of graduate and professional schools, as well as those of students planning to end their formal studies with the Bachelor of Arts or Bachelor of Science Degree. The primary distinction between these two approaches is in the number and specificity of related courses in science and mathematics. In either case, the program provides students with the basic informational content of the life sciences and with the disciplined attitudes, methods, and experiences of biological investigation.

Students who intend to teach Biology in high school should refer to the School of Education for information on the Secondary Teacher Certification program.

Major Requirements

In addition to all graduation requirements, a minimum of 48 credits (Bachelor of Arts) or 56 credits (Bachelor of Science) in the major must be completed successfully.

All Biology majors take the following major requirements (29-30 credits):

BI101-102 Biology I and II (laboratory) (counts toward GLE core) 8 credits

BI211 Genetics (laboratory) 4 credits

BI319 Cellular Biology (laboratory) 4 credits or

BI325 Microbiology (laboratory) 4 credits

BI215 Biology and Health Sciences Seminar 3 credits

BI218 Ecology 4 credits or

BI241 Evolutionary Biology (laboratory) 4 credits

CH101 General Chemistry I (laboratory) 4 credits

CH102 General Chemistry II (laboratory) 4 credits

Two semesters of Math at the MT151 level or above 6-8 credits

(First semester counts as core requirement, second semester counts towards major)

BI460 Internship in Biology or

BI480 Senior Seminar in Biology/Health Sciences or

BI481 Invited Senior Research 3 credits

For the B.S. students must take the following additional 16 credits:

CH211-212 Organic Chemistry I and II (laboratory) 8 credits

PH101-102 General Physics I and II (laboratory) 8 credits

Note: Students wishing to complete the Secondary Teacher Certification should consult with a faculty advisor in the School of Education. These students may substitute ED487 Secondary Student Teaching Seminar (1 credit), and ED492 Secondary Student Teaching (14 credits), for Biology Seminar and Biology Thesis.

Program Courses