

Department of Biology

Wondering what courses to take?

Common First Two Years (BSCH MAJ BIOL)

Year One:

F	Introductory Biology of Cells (BIOL-102)
FW	Calculus (MATH-122 or 121 or 120)
FW	General Chemistry (CHEM-112 or 116)
W	Introductory Biology of Organisms (BIOL-103)

Plus 4 elective courses

Year Two:

F	Diversity of Life I (BIOL-201)
F	Mendelian & Molecular Genetics (BIOL-205)
F	Data Management (BIOL-243)
FW	2nd year Chemistry
W	Diversity of Life II (BIOL-202)
W	Evolutionary Genetics (BIOL-206)

Plus 3 elective or concentration courses

Year Three:

F	Population & Evolutionary Ecology (BIOL-302) <u>OR</u>
W	Community & Ecosystem Ecology (BIOL-303)
	<i>and</i>
F	Cell Biology (BIOL-330) <u>OR</u>
W	Gene Structure & Function (BCHM-218)
	<i>and</i>
F	Animal Physiology (BIOL-339) <u>OR</u>
W	Plant Physiology (BIOL-341) <u>OR</u>
F	Comparative Biochemistry (BIOL-334)

Plus 7 elective or concentration courses

Year Four:

Students have the option of completing:

- i) **Research Thesis Project** (BIOL-537) or
- ii) **Advanced Honours Seminars** (BIOL-500-536)

Plus elective or concentration courses

Research Honours Thesis Project (BIOL-537) - Capstone undergraduate experience, which offers complete immersion in the research process. Thesis students design and execute their own projects by working in our laboratories with faculty, graduate students, and other research personnel. Students experience all elements of research including identification of the scientific question, experimental design, poster and oral presentations, a written thesis, and a formal defense

F (fall term), W (winter term), FW (both fall and winter terms)

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Looking for suggestions?

Ecology & Evolutionary Biology stream--suggested courses: Cell Biology (BIOL-330), Field Studies (BIOL-307), Macroevolution (BIOL-440), Natural Selection/Microevolution (BIOL-439), Conservation Biology (BIOL-422).

Plant Sciences stream--suggested courses: Ecology (BIOL-302), Plant Physiology (BIOL-341), Genomics (BIOL-331), Techniques in Molecular Biology (BIOL-404), Plants for People (BIOL-315).

Integrated Animal Biology stream--suggested courses: Ecology (BIOL-302), Animal Physiology (BIOL-339), Animal Behaviour (BIOL-321), Environmental Physiology of Animals (BIOL-322), Cell Biology (BIOL-330), Cellular Basis of Adaptation (BIOL-431), Neuroethology (BIOL-445).

Genetics and Molecular Biology stream--suggested courses: Ecology (BIOL-302), Molecular Biology (BCHM-218), Cell Biology (BIOL-330), Analytical Genomics (BIOL-331), Techniques in Molecular Biology (BIOL-404), Molecular Genetics of Development (BIOL-430), Molecular Genetics (BIOL-441).

Suggested First Year Electives

GEOL-107	History of Life
PSYC-100	Psychology
PHYS-107	Introductory Physics
ENGL-110	Introduction to English Literature
ENGL-168/169	Modern Literature in English
GEOL-105	Environmental Geology
GPHY-100	Geography and the Environment

For more information, including detailed information on requirements for biology degree programs as well as biology courses that can be used to fill option courses in upper years, please refer to the Faculty of Arts and Science Calendar.