ENVIRONMENTAL BIOLOGY HONOURS (B.SC.(AG.ENV.SC.)) (54 CREDITS)

Offered by: Natural Resource Sciences (Faculty of Agricultural and Environmental Sciences)
Degree: Bachelor of Science (Agricultural and Environmental Sciences)
Program credit weight: 54

Program Description

Students can use their electives to complete the Honours program. The courses credited to the Honours program must be in addition to any required or complementary courses taken to satisfy the requirements of the student's Major and Specialization.

In addition to satisfying the Honours requirements, students must apply for the Honours program in March or April of their U2 year. It is the responsibility of the student to find a professor who is willing to support and supervise the research project. No student will be accepted into the program until a supervisor has agreed to supervise the student. Applicants must have a minimum CGPA of 3.3 to enter the Honours program and they must earn a B grade (3.0) or higher in the courses making up the Honours program. Students are required to achieve a minimum overall CGPA of 3.3 at graduation to obtain honours.

The Honours program consists of 12 credits of courses that follow one of two plans listed below.

Students who meet all the requirements will have the name of their program changed to include the word "Honours."

A brief description of the Honours project activities involved will be documented and signed by the Program Director of the student's Major, the supervisor of the Honours project, and the student.

The Environmental Biology Major is about the biology, diversity, and ecology of a broad range of organisms, from plant and vertebrate animals to insects, fungi, and microbes. This Major places a strong emphasis on the ecosystems that species inhabit and the constraints imposed by the physical environment and by environmental change. Environmental Biology has significant field components worked into the course sets, and through this experiential learning, biological diversity, and the ways that species interact with their physical environment in a variety of ecosystems will be studied. The Major makes full use of the unique physical setting and faculty expertise of McGill's Macdonald campus to train students to become ecologists, taxonomists, field biologists, and ecosystem scientists.

Program Prerequisites

Please refer to "Faculty Information and Regulations" > "Minimum Credit Requirements" in this Course Catalogue for information on prerequisites and minimum credit requirements.

Note: For information about Fall 2025 and Winter 2026 course offerings, please check back on May 8, 2025. Until then, the "Terms offered" field will appear blank for most courses while the class schedule is being finalized.

Required Courses (36 credits)

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Course	Title	Credits
AEBI 210	Organisms 1.	3
AEBI 211	Organisms 2.	3
AEBI 212	Evolution and Phylogeny.	3
AEHM 205	Science Literacy.	3
AEMA 310	Statistical Methods 1.	3
ENVB 210	The Biophysical Environment.	3
ENVB 222	St. Lawrence Ecosystems.	3
ENVB 305	Population and Community Ecology.	3
ENVB 410	Ecosystem Ecology.	3
LSCI 204	Genetics.	3
LSCI 211	Biochemistry 1.	3
LSCI 230	Introductory Microbiology.	3

Complementary Courses (18 credits)

6 credits from the following:

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Course	Title	Credits
ENTO 330	Insect Biology.	3
ENVB 301	Meteorology.	3
ENVB 313	Phylogeny and Biogeography.	3
ENVB 437	Assessing Environmental Impact.	3
ENVB 497	Research Project 1.	3
ENVB 498	Research Project 2.	3
ENVB 529	GIS for Natural Resource Management.	3
FAES 300	Internship 2.	3
MICR 331	Microbial Ecology.	3
PLNT 304	Biology of Fungi.	3
PLNT 358	Flowering Plant Diversity.	3
PLNT 460	Plant Ecology.	3
SOIL 300	Geosystems.	3
WILD 302	Fish Ecology.	3
WILD 307	Natural History of Vertebrates.	3
WOOD 441	Integrated Forest Management.	3

Honours Courses

12 credits of Honours Plan A or Plan B:

Honours Plan A

12 credits of Honours research courses in the subject area of the student's Major, chosen in consultation with the Program Director of

the student's Major and the professor who has agreed to supervise the research project.

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Course	Title	Credits
ENVB 401	Honours Research Project 1.	6
ENVB 402	Honours Research Project 2.	6

OR

Honours Plan B

6 credits of Honours project courses in the subject area of the student's Major as well as 6 credits in 400- or 500-level courses, normally selected from the Faculty of Agricultural and Environmental Sciences, in consultation with the Program Director of the student's Major and the professor who has agreed to supervise the project.

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Course	Title	Credits
ENVB 405	Honours Project 1.	3
ENVB 406	Honours Project 2	3

Specialization

At least one specialization of 18-24 credits.

Specializations designed to be taken with the Environmental Biology Major:

- Applied Ecology
- Plant Biology
- Wildlife Biology

Note: For a complete list of specializations offered for students in the Bachelor of Science in Agricultural and Environmental Sciences, refer to "Browse Academic Units & Programs" > "Bachelor of Science (Agricultural and Environmental Sciences) - B.Sc.(Ag.Env.Sc.)" > "Specializations" in this eCalendar. Consult the Academic Adviser for approval of specializations other than those listed above.

Electives

To meet the minimum credit requirement for the degree.