

Specialization in Restoration Biology

First year

BIOL 1506 Biology I
 BIOL 1507 Biology II
 CHMI 1006 General Chemistry I ¹
 CHMI 1007 General Chemistry II
 MATH 1036 Calculus I ²

MATH 1037 Calculus II *or*
 MATH1057 Linear Algebra I

PHYS 1006 Introductory Physics I *or*
 PHYS 1206 Physics for Life Sciences I (recommended)

PHYS 1007 Introductory Physics II *or*
 PHYS 1207 Physics for Life Sciences II (recommended)

+ 6 credits in Social Sciences and Humanities

Second year

BIOL 2007 Genetics
 BIOL 2026 Introduction to Microbiology
 BIOL 2126 Cell Biology
 BIOL 2306 Diversity of Plants
 BIOL 2306 Diversity of Plants
 BIOL 2356 Principles of Ecology
 BIOL 2726 Diversity of Animals
 CHMI 2426 Organic Chemistry I
 STAT 2126 Introduction to Statistics *or*
 STAT 2246 Statistics for Scientists
+ 6 credits in Social Sciences and Humanities

Third year

BIOL 3327 Experimental Methods in Biology
 BIOL 3376 Restoration Ecology
+ 15 credits from Restoration Biology List A below
+ 3 credits from Restoration Biology List B below
+ 6 credits from any discipline

Fourth year

BIOL 4006 Field Internship and Report *or*
 BIOL 4016 Field Camp and Report *or* equivalent ³
 BIOL 4035 Research and Seminar ⁴
+ 6 credits from Restoration Biology List A below
+ 9 credits from Restoration Biology List B below
+ 6 credits from any discipline

Restoration Biology List A⁵

BIOL 3026 Applied and Environmental Microbiology
 BIOL 3306 Vascular Plant Systematics
 BIOL 3336 Plant Ecology
 BIOL 3746 Animal Ecology
 BIOL 3977 Biodiversity and Conservation
 BIOL 4756 Freshwater Biology
 CHMI 2227 Biochemistry I
 CHMI 2316 Inorganic Chemistry I
 ENVI 3136 Hydrology
 GEOL 3397 Introduction to Soil Science

Restoration Biology List B

BIOL 3006 Evolutionary Biology
 BIOL 3056 Mineral Exploitation and the Biosphere
 BIOL 3067 Winter Ecology
 BIOL 3316 Plant Form and Function
 BIOL 3317 Plant Ecophysiology
 BIOL 3386 Mycology
 BIOL 3706 General Entomology
 BIOL 3927 Forest Entomology
 BIOL 4056 General Limnology
 BIOL 4066 Quantitative Ecology
 BIOL 4216 Ontario University Program in Field Biology I
 BIOL 4217 Ontario University Program in Field Biology II
 BIOL 4316 Advanced Plant Ecophysiology
 BIOL 4336 Plant Geography
 BIOL 4366 Soil Biology
 BIOL 4376 Biology of Liverworts, Mosses and Lichens
 BIOL 4386 Wetland Ecology and Conservation
 BIOL 4396 Current Issues in Environmental Sustainability
 BIOL 4747 Herpetology
 BIOL 4777 Wildlife Management
 BIOL 4907 Fisheries Science for Stressed Ecosystems
 CHMI 3326 Aquatic Chemistry
 GEOG 3036 Air Photo Interpretation
 GEOG 3037 Remote Sensing of the Environment
 GEOG 4056 Introduction to GIS
 PHIL 2215 Environmental Ethics

¹ Applicants lacking 12U-level Chemistry or the equivalent must complete CHMI 1041 prior to taking CMI 1006.

² Applicants with a grade of less than 60% in 12U-level Calculus or the equivalent must complete MATH 1912 prior to taking MATH 1036.

³ Students must consult their academic advisor for a suitable replacement for BIOL 4006 or BIOL 4016. BIOL 4216 may be a suitable replacement.

⁴ A minimum average of 75% is required in all Biology courses, otherwise students must take BIOL 4017 (Literature Review - 3 credits) and another senior Biology course (additional 3 credits from List A or B).

⁵ Students must take at least 21 credits of the 27 credits on List A in third and fourth year. Some courses are offered only every second year. Consult with your specialization advisor. Any remaining course can replace a course in Restoration Biology List B.