

## Specialization in Zoology

### First year

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

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/or Humanities*

### Second year

BIOL 2007 Genetics  
 BIOL 2026 Introduction to Microbiology  
 BIOL 2126 Cell Biology  
 BIOL 2356 Principles of Ecology  
 BIOL 2706 Vertebrate Form and Function  
 BIOL 2706 Vertebrate Form and Function  
 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/or Humanities*

### Third year

BIOL 3327 Experimental Methods  
 CHMI 2227 Biochemistry I  
*+ 12 credits from Zoology List A below*  
*+ 6 credits from Zoology List B below* <sup>3</sup>  
*+ 6 credits from any discipline*

### Fourth year

BIOL 4016 Field Camp and Report *or* equivalent <sup>4</sup>  
 BIOL 4035 Research and Seminar <sup>5</sup>  
*+ 9 credits from Zoology List A below*  
*+ 6 credits from Zoology List B below*  
*+ 6 credits from any discipline*

**Zoology List A**<sup>6</sup>

BIOL 2306 Diversity of Plants  
 BIOL 3006 Evolutionary Biology  
 BIOL 3706 General Entomology  
 BIOL 3726 Animal Histology  
 BIOL 3746 Animal Ecology  
 BIOL 3756 Vertebrate Physiology  
 BIOL 4717 Animal Behaviour  
 BIOL 4736 Developmental Biology  
 BIOL 4797 Environmental Physiology

**Zoology List B**<sup>3</sup>

BIOL 2757 Biological Aspects of Human Sexuality  
 BIOL 3117 Infectious Diseases  
 BIOL 3306 Vascular Plant Systematics  
 BIOL 3386 Mycology  
 BIOL 3807 Applied Entomology  
 BIOL 3977 Biodiversity and Conservation  
 BIOL 4066 Quantitative Ecology  
 BIOL 4216 Ontario University Program in Field Biology I  
 BIOL 4217 Ontario University Program in Field Biology II  
 BIOL 4346 Medical Mycology  
 BIOL 4747 Herpetology  
 BIOL 4756 Freshwater Biology  
 BIOL 4777 Wildlife Management  
 BIOL 4807 Advanced Genetics  
 BIOL 4907 Fisheries Science for Stressed Ecosystems  
 CHMI 2427 Organic Chemistry II  
 CHMI 3226 Biochemistry II  
 GEOL 2406 Paleobiology I  
 INTE 3107 Pathophysiology  
 PHIL 2215 Environmental Ethics

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

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

<sup>3</sup> Courses in List B are those recommended for specialization in Zoology. Students may substitute these credits for other third or fourth-year science courses in consultation with their academic advisor.

<sup>4</sup> Students must consult their academic advisor for a suitable replacement for BIOL 4016. BIOL 4216 may be a suitable replacement. BIOL 4016 (or its equivalent) can be taken in third year.

<sup>5</sup> A minimum average of 75% is required in all Biology courses, otherwise students must take BIOL 4017 and another senior Biology course (additional 3 credits from List A or B).

<sup>6</sup> Students must take at least 21 credits from List A in third and fourth years. Some courses are offered only every second year. Consult with your specialization advisor. Any remaining course can replace a course in Zoology List B.