

(updated 08/21/2024)

Completed

Required Courses

(fall/spring)

(fall/spring)

(fall/spring) NOTE: Taken after BIOL2000

One from the following:

BIOL3050 Genetics (fall only) 4 cr

BIOL3060 Introduction to Genetics (summer only)

BIOL3150 Introduction to Genomics (spring only)

One from the following:

BIOL3030 Comparative Vertebrate Physiology (fall only)

BIOL3320 Developmental Biology (spring only)

BIOL4110 Ornithology (not offered in AY24-25)

BIOL4330 Human Physiology with Lab (spring only) 4 cr

BIOL4450 Behavioral Ecology (spring only)

BIOL4540 Neuroscience (fall only)

(see the listing on reverse side)

NOTE: Undergraduate Research can be used to satisfy the Advanced Experience requirement and to contribute three credits toward the major if the student completes two semesters in the same laboratory.

See the reverse page for a listing of biology electives. For those who wish to focus their studies in a specific area, courses are categorized by concentration (see superscript). Concentrations, while providing more in-depth coverage around a single topic, are not officially recognized on a transcript and are not required for the Biology Major. More information on how selected electives form the basis of a concentration is available on the Biology Department website.

\_\_\_\_ General Chemistry 1 & 2 with Labs (CHEM1109-1110; 1111-1112)  
\_\_\_\_ Organic Chemistry 1 with Lab (CHEM2231-2233)  
\_\_\_\_ Organic Chemistry 2 with Lab (CHEM2232-2234) OR  
Biological Chemistry (BIOL4350)\*

\_\_\_\_ Calculus 1 (MATH1100) or equivalent

\_\_\_\_ Choose three from the following list  
Calculus 2 (MATH1101)  
MATH courses 2000 level or higher  
Statistics (BIOL2300, ECON1151, MATH4427, PHCG3560)\*\*  
Intro Physics 1 (calculus-based) with Lab (PHYS2100)  
Intro Physics 2 (calculus-based) with Lab (PHYS2101)  
Research Methods in Organismal Biology (BIOL3140)\*  
Population Genetics (BIOL 4250)\*  
Computer

*Fall 2024*

- <sup>3</sup>Comparative Vertebrate Physiology (BIOL3030)
- <sup>2</sup>Cell Biology (BIOL3040)
- <sup>4</sup>Genetics (BIOL3050)
- <sup>3</sup>Research Methods in Organismal Biology (BIOL3140)\*
- <sup>1</sup>Virology (BIOL4090)
- <sup>2, 3</sup>Inflammation and Disease (BIOL4120)
- <sup>1</sup>Microbiology (BIOL4140)
- <sup>4</sup>Introduction to Bioinformatics (BIOL4200)
- <sup>3</sup>Human Anatomy with Lab (BIOL4260)
- <sup>2, 3</sup>Metabolic Regulation and Human Disease (BIOL4290)
- <sup>1</sup>Vaccination and Immunity (BIOL4440)
- <sup>2, 3</sup>Neuroscience (BIOL4540)

*Spring 2025*

- <sup>2</sup>Cell Biology (BIOL3040)
- <sup>1</sup>Foundations of Microbiology (BIOL3090)
- <sup>4</sup>Introduction to Genomics (BIOL3150)
- <sup>3</sup>Ecology in a Changing Climate (BIOL3200)
- <sup>2</sup>Developmental Biology (BIOL3320)
- <sup>3</sup>Deep Sea Biology (BIOL4030)
- <sup>4</sup>Population Genetics (BIOL4250)\*
- <sup>3</sup>Human Physiology with Lab (BIOL4330)
- <sup>1, 2, 3</sup>Biological Chemistry (BIOL4350)
- <sup>2, 4</sup>Molecular Biology (BIOL4400)
- <sup>3</sup>Behavioral Ecology (BIOL4450)
- <sup>2</sup>Cancer Biology (BIOL4510)
- <sup>1, 4</sup>Principles of Immunology (BIOL4570)