

Biology

Major

The introductory Biology program for majors (BI 110) serves as a solid preparation for more advanced study and is a prerequisite for any advanced courses. The second tier of the Biology program includes required courses of Molecular Genetics (BI 207) and Ecology and Evolution (BI 238).

Required Courses

Item #	Title	Credits
BI 110	Biological Investigation	4.0
BI 207	Molecular Genetics	4.0
BI 238	Ecology and Evolution	4.0
	Sub-Total Credits	12

Other Requirements

Students must also complete a minimum of four Biology courses number 200 or higher, including at least one from each of the following categories:

Item #	Title	Credits
	Cellular and Molecular Biology	4.0
BI 306	Developmental Biology	4.0
BI 307	Cell and Molecular Biology	4.0
BI 310	Immunology	4.0
BI 311	Virology	4.0
BI 345	Principles of Microbiology	4.0
	Sub-Total Credits	20
	Organismal Biology	4.0
BI 201	Botany	4.0
BI 206	Vertebrate Zoology	4.0
BI 318	Algae and Fungi	4.0
BI 328	Animal Behavior	4.0
BI 342	Parasitology	4.0
BI 350	Entomology	4.0
	Sub-Total Credits	24
	Systems Biology	4.0
BI 315	Anatomy and Physiology I	4.0
BI 316	Anatomy and Physiology II	4.0
BI 325	Tropical Ecology	4.0
BI 326	Marine Biology	4.0
BI 332	Aquatic Biology	4.0
	Sub-Total Credits	20
	Sub-Total Credits	16

Capstone

In the senior year, all majors complete the program by enrolling in one of the capstone options offered in Biology:

- The two-semester sequence of Research and Analysis I (BI 401) and II (BI 402),
- HS 402 for students interested in the Health Sciences or who need a one semester capstone experience, or
- BI 404 for students who have conducted research or completed an internship supervised by faculty in Biology

Item #	Title	Credits
BI 401	Research and Analysis I	2.0
BI 402	Research and Analysis II	2.0
HS 402	Senior Seminar	4.0
BI 404	Experiential Learning Capstone	3.0-4.0
	Sub-Total Credits	4

Tool Courses

Students should complete as many of the following tool courses as possible before enrolling in 200- 300 level courses. Math: MA 133 is required for CH 110; A course in statistics (e.g. MA 123 or PS 243) is highly recommended.

Three chemistry courses from the following list are required for the major:

Item #	Title	Credits
CH 110	General Chemistry	4.0
CH 203	Organic Chemistry I	4.0
CH 211	Quantitative Analysis	4.0
CH 231	Inorganic Chemistry	4.0
CH 304	Organic Chemistry II	4.0
CH 309	Biochemistry I	4.0
	Sub-Total Credits	12

Additionally, students must take two quantitative electives from the following list:

Item #	Title	Credits
CS 160	Introduction to Computer Science	4.0
CS 170	Introduction to Data Structures	4.0
MA 201	Discrete Mathematics	4.0
MA 213	Calculus I	4.0
MA 223	Calculus II	4.0
PY 181	General Physics I	4.0
PY 182	General Physics II	4.0
PY 201	College Physics I	4.0
PY 202	College Physics II	4.0
	Sub-Total Credits	8
	Total Credits	52