

Biology with Ecology Concentration

Major

The ecology concentration within the biology major is intended for students interested in conservation biology, ecology, or environmental biology. To complete the biology major with a concentration in ecology, students take the three required Biology core courses (BI 110, BI 207, and BI 238), complete a biology capstone course (BI 401 and BI 402, or BI 404) in their final year, and choose a total of four electives from two categories:

Required Courses

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

Capstone

Complete a biology capstone course in their final year (BI 401 and BI 402, or BI 404).

Item #	Title	Credits
BI 401	Research and Analysis I	2.0
BI 402	Research and Analysis II	2.0
BI 404	Research Experience Capstone	3.0-4.0

Electives

Choose a total of four electives from two categories:

Item #	Title	Credits
Two Organismal Biology Courses from this list:		8.0

Two Organismal Biology Courses from this list:

BI 201	Botany	4.0
BI 206	Vertebrate Zoology	4.0
BI 318	Algae and Fungi	4.0
BI 342	Parasitology	4.0
BI 350	Entomology	4.0
Two Ecology Courses from this list:		8.0
BI 325	Tropical Ecology	4.0
BI 326	Marine Biology	4.0
BI 328	Animal Behavior	4.0
BI 332	Aquatic Biology	4.0

Tool Courses

Student majoring in biology with an ecology concentration must also take the required tool courses in Chemistry.

Three courses chosen from the following:

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

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 or PY 201		4.0

General Physics I or College Physics I

PY 181	General Physics I	4.0
PY 201	College Physics I	4.0
PY 182 or PY 202		4.0

General Physics II or College Physics II

PY 182	General Physics II	4.0
PY 202	College Physics II	4.0

A course in statistics (e.g., MA 123 or PS 243) is strongly recommended; MA 133 is a prerequisite for CH 110 but is not required for the major.

Total Credits		52
----------------------	--	-----------