

# 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

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

## Capstone

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

<b>Item #</b>	<b>Title</b>	<b>Credits</b>
BI 401	Research and Analysis I	2.0
BI 402	Research and Analysis II	2.0
BI 404	Experiential Learning Capstone	3.0-4.0
	Sub-Total Credits	4

## Electives

Choose a total of four electives from two categories:

<b>Item #</b>	<b>Title</b>	<b>Credits</b>
<b>Two Organismal Biology Courses from this list:</b>		<b>8.0</b>

### 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
Sub-Total Credits		8
<b>Two Ecology Courses from this list:</b>		<b>8.0</b>
BI 325	Tropical Ecology	4.0
BI 326	Marine Biology	4.0
BI 328	Animal Behavior	4.0
BI 332	Aquatic Biology	4.0
Sub-Total Credits		16
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## 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:

<b>Item #</b>	<b>Title</b>	<b>Credits</b>
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

Two quantitative electives from the following list:

<b>Item #</b>	<b>Title</b>	<b>Credits</b>
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

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.

	<b>Total Credits</b>	<b>52</b>
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