## Graduation Requirements:

- A minimum 2.0 average in all biology courses required for this major
- A minimum of 32 credits at or above the 30000-level completed at a Purdue campus
- At least one 50000-level Biology course other than BIOL 50000 or 54200
- 124 Total Credits

### Biology:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 12100</td>
<td>BIOL 12100 Diversity, Ecology and Behavior</td>
<td>2 cr.</td>
<td>fall</td>
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<tr>
<td>BIOL 13100</td>
<td>BIOL 13100 Development, Structure, and Function of Organisms</td>
<td>3 cr.</td>
<td>spring</td>
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<tr>
<td>BIOL 13500</td>
<td>First Year Biology Lab</td>
<td>2 cr.</td>
<td>(both)</td>
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<tr>
<td>BIOL 23100</td>
<td>BIOL 23100 Cell Structure and Function</td>
<td>3 cr.</td>
<td>fall</td>
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<tr>
<td>BIOL 23200</td>
<td>Laboratory in Biology III: Cell Structure and Function</td>
<td>2 cr.</td>
<td>(fall)</td>
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<tr>
<td>BIOL 24100</td>
<td>BIOL 24100 Genetics and Molecular Biology</td>
<td>3 cr.</td>
<td>spring</td>
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<tr>
<td>BIOL 24200</td>
<td>Laboratory in Genetics and Molecular Biology</td>
<td>2 cr.</td>
<td>(spring)</td>
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<tr>
<td>BIOL 28600</td>
<td>Intro. to Ecology and Evolution</td>
<td>2 cr.</td>
<td>(spring)</td>
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<td></td>
<td>or BIOL 29500, Intro. To Evolution &amp; Ecology</td>
<td>2 cr.</td>
<td>(fall)</td>
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<tr>
<td>BIOL 58000</td>
<td>Evolution</td>
<td>3 cr.</td>
<td>(spring)</td>
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<tr>
<td>BIOL 58500</td>
<td>Ecology</td>
<td>3 cr.</td>
<td>(fall)</td>
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#### One of these four options:

- A. BIOL 32800 Principles of Physiology (4 cr.; spring)
- B. BIOL 36600 Principles of Development (4 cr.; spring)
- C. BIOL 39500 Macromolecules (3 cr.; fall)
- D. BIOL 43800 General Microbiology (3 cr.; fall) and BIOL 43900 Microbiology Lab (2 cr.; fail)

#### One of these two options:

- A. Research (BIOL 49400 or 49900; (1 cr.; both))
- B. BIOL 591003 Field Ecology (4 cr.; alternate fall)

#### One of these six courses:

- A. BIOL 591003 Field Ecology (4 cr.; alternate fall)
- B. BIOL 59200 Evolution of Behavior (3 cr.; spring)
- C. BIOL 59500 Animal Communication (3 cr.; alternate fall)
- D. BIOL 59500 Ecological Statistics (3 cr.; fall)
- E. BIOL 59500 Sensory Ecology (3 cr.; alternate spring)
- F. BIOL 59700 Sex and Evolution (3 cr.; alternate fall)

#### Two courses from the following:

- BIOL 43800 General Microbiology (3 cr.; fall)
- BIOL 43900 Microbiology Lab (2 cr.; fall)
- BIOL 44400 Human Genetics (3 cr.; fall)
- BIOL 48300 Environmental & Conservation Biology (3 cr.; spring)
- BIOL 49300 Intro. to Ethology (3 cr.; fall)
- BIOL 591003 Field Ecology (4 cr.; alternate fall)
- BIOL 59200 Evolution of Behavior (3 cr.; spring)
- BIOL 59500 Animal Communication (3 cr.; alternate fall)
- BIOL 59500 Ecological Statistics
- BIOL 59500 Sensory Ecology
- BIOL 59700 Sex and Evolution (3 cr.; alternate fall)
- AGEC 52500 Environmental Policy Analysis (3 cr.; spring)
- ANTH 53500 Foundations of Biological Anthropology (3 cr.; fall)
- ANTH 53600 Primate Ecology (3 cr.; spring)

BCHM 561003 General Biochemistry (3 cr.; both)
CE 35000 Environmental Engineering (3 cr.; both)
CE 35200 Biological Principles of Environmental Engineering (3 cr.; both)
ENTM 50000 Fundamentals of Entomology (3 cr.; fall)
FNR 48800 Global Environmental Issues (3 cr.; fall)
FNR 50100 Limnology (3 cr.; fall)
FNR 50500 Molecular Ecology & Evolution (3 cr.; alternate spring)
FNR 54200 Ecology and Management of Declining, Rare, and Endangered Species (2 cr.; alternate spring)
FNR 54700 Vertebrate Population Dynamics (3 cr.; fall)
FNR 58100 Ecological Impact Analysis (3 cr.; fall)
POL 52300 Environmental Politics and Public Policy (3 cr.; fall)
SOC 53300 Environmental Sociology (3 cr.; spring)

Other courses may be considered for this elective requirement (#14). See your advisor for more information.

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1. BIOL 43800 may be used for requirement #9 or for requirement #14, but not both.
2. Research must be in the lab of a Biology Department Ecology faculty member, or have the approval of a Biology Department Ecology faculty member.
3. BIOL 59100 may be used #12, #13, or #14. It may be used for #12 and #13, or #12 and #14. It may not be used for #13 and #14.
4. BCHM 56100 and CHM 53300 may count as a chemistry elective or as a biology elective, but not both.

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Other requirements are on the back of this page.
CHEMISTRY
1. CHM 11500 General Chemistry (4 cr.; both)
2. CHM 11600 General Chemistry (4 cr.; both)

3. One of these three options:
   1. CHM 25500 Organic Chemistry (3 cr.; both) and CHM 25501 Organic Chemistry Lab (1 cr.; both) and
   CHM 25600 Organic Chemistry (3 cr.; both) and CHM 25601 Organic Chemistry Lab (1 cr.; both)
   2. CHM 26505 Organic Chemistry (3 cr.; fall) and CHM 26300 Organic Chemistry Lab (1 cr.; fall) and
   CHM 26605 Organic Chemistry (3 cr.; spring) and CHM 26400 Organic Chemistry Lab (1 cr.; spring)
   3. CHM 25700 Organic Chemistry (4 cr.; both) and CHM 25701 Organic Chemistry Lab (1 cr.; both) and one of:
      CHM 33300 Principles of Biochemistry (3 cr.; both) or BCHM 30700 Biochemistry (3 cr.; both)

4. One of these seven options:
   A. BCHM 22100 Analytical Biochemistry (3 cr.; both)
   B. CHM 22400 Introductory Quantitative Analysis (4 cr.; spring)
   C. CHM 32100 Analytical Chemistry I (4 cr.; fall)
   D. BCHM 56100 General Biochemistry I (3 cr.; both)
   E. CHM 53300 Introductory Biochemistry (3 cr.; fall)
   F. CHM 37200 Physical Chemistry (4 cr.; spring)
   G. CHM 37300 Physical Chemistry (3 cr.; fall)

PHYSICS
One of these two options:
   1. PHYS 22000 General Physics (4 cr.; both) and PHYS 22100 General Physics (4 cr.; both)
   2. PHYS 17200 Modern Mechanics (4 cr.; both) and one of the following two choices:
      A. PHYS 27200 Electric and Magnetic Interactions (4 cr.; both) or
      B. PHYS 24100 Electricity and Optics (3 cr.; both) and PHYS 25200 Electricity and Optics Laboratory (1 cr.; spring)

COLLEGE OF SCIENCE CORE REQUIREMENTS
Composition and Presentation; Teambuilding and Collaboration; Language and Culture; Great Issues; General Education;
Multidisciplinary Experience; Mathematics; Statistics; Computing (see handout).

FREE ELECTIVES
Approximately 0 - 23 credits