ECOLOGY, EVOLUTION AND ENVIRONMENTAL BIOLOGY

Graduation Requirements:
- A minimum 2.0 average in all biology courses required for this major
- A minimum of 32 credits at or above the 300-level completed at a Purdue campus
- At least one 500-level Biology course other than BIOL 54200
- 120 Total Credits

BIOLOGY:
1. BIOL 12100  Biology I: Diversity, Ecology and Behavior  (2 cr.; fall) or BIOL 19500  Biodiversity, Ecology & Evolution  (3 cr.; fall)
2. BIOL 13100  Biology II: Development, Structure, and Function of Organisms  (3 cr.; spring) or BIOL 19500  Organismal Development & Physiology  (3 cr.; spring)
3. BIOL 13500  1st Year Biology Lab  (2 cr.; both) or BIOL 14501  1st Year Biology Lab w/Neuro Research Project  (2 cr.; fall)
   IT 22600  Biotechnology Lab  (2 cr.; fall)
4. BIOL 23100  Biology III: Cell Structure and Function  (3 cr.; fall)
5. BIOL 23200  Laboratory in Biology III: Cell Structure and Function  (2 cr.; fall)
6. BIOL 24100  Biology IV: Genetics and Molecular Biology  (3 cr.; spring)
7. BIOL 24200  Laboratory in Genetics and Molecular Biology  (2 cr.; spring)
8. BIOL 28600  Intro. to Ecology and Evolution  (2 cr.; spring)
9. Intermediate Biology Selective: Choose one of these eight options:
   A. BIOL 32800  Principles of Physiology  (4 cr.; spring)
   B. BIOL 36700  Principles of Development  (2 cr.; spring) plus BIOL 36701 Principles of Development Laboratory  (1 cr.; spring)
   C. BIOL 39500  Macromolecules  (3 cr.; fall)
   D. BIOL 41500  Intro. to Molecular Biology  (3 cr.; fall)
   E. BIOL 41600  Viruses & Viral Diseases  (3 cr.; spring)
   F. BIOL 42000  Eukaryotic Cell Biology  (3 cr.; fall)
   G. BIOL 43600  Neurobiology  (3 cr.; fall)
   H. BIOL 43800 General Microbiology  (3 cr.; fall)
10. BIOL 58000  Evolution  (3 cr.; spring)
11. BIOL 58500  Ecology  (3 cr.; fall)
12. Ecology Selective I:
   A. Research  (BIOL 49400 or 49900; 1 cr.; both)
   B. BIOL 59100  Field Ecology  (4 cr.; alternate fall)
13. Ecology Selective II: One of these five courses:
   A. BIOL 59100  Field Ecology  (4 cr.; alternate fall)
   B. BIOL 59200  Evolution of Behavior  (3 cr.; spring)
   C. BIOL 58705  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)
14. Biology Selective: One course (not being used for #13 above) 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 58705  Animal Communication  (3 cr.; alternate fall)
   BIOL 59100  Field Ecology  (4 cr.; alternate fall)
   BIOL 59200  Evolution of Behavior  (3 cr.; spring)
   BIOL 59500  Ecological Statistics  (3 cr.; fall)
   BIOL 59500  Sensory Ecology  (3 cr.; alternate spring)
   BIOL 59700  Sex and Evolution  (3 cr.; alternate fall)
   AGEC 52500  Environmental Policy Analysis  (3 cr.; spring)

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

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 for #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.

Other requirements are on the back of this page.
CHEMISTRY

1. **General Chemistry:**
   1. CHM 12901 *General Chemistry with a Biological Focus* (5 cr.; fall)

2. **Organic Chemistry Selectives:** (Must choose one option)
   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. **Chemistry Selective:** (must choose one of the eight options)
   A. **Analytical Chemistry**
      1. BCHM 22100 *Analytical Biochemistry* (3 cr.; both)
      2. CHM 22400 *Introductory Quantitative Analysis* (4 cr.; spring)
      3. CHM 32100 *Analytical Chemistry I* (4 cr.; fall)
   B. **Biochemistry**
      1. BCHM 56100 *General Biochemistry I* (3 cr.; both)
      2. CHM 33900 *Biochemistry: A Molecular Approach* (3 cr.; spring)
      3. CHM 53300 *Introductory Biochemistry* (3 cr.; fall)
   C. **Physical Chemistry**
      1. CHM 37200 *Physical Chemistry* (4 cr.; spring)
      2. CHM 37300 *Physical Chemistry* (3 cr.; fall)

PHYSICS Selectives: One of these two options:

1. PHYS 23300 *Physics for Life Sciences I* (4 cr.; both) and PHYS 23400 *Physics for Life Sciences II* (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)

UNIVERSITY CORE and 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 6-22 credits

* Students who select 12901 for General Chemistry must also select CHM 33900 and 33901 for the Chemistry Selective. Students who end up with Special Case approval for some other Gen Chem courses may choose the other Chem Selective options.