

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 500 or 542
- 124 Total Credits

BIOLOGY:

1. BIOL 121 Biology I: Diversity, Ecology and Behavior (2 cr.; fall)
2. BIOL 131 Biology II: Development, Structure, and Function of Organisms (3 cr.; spring)
3. BIOL 195T First Year Biology Lab (2 cr.; both)

4. BIOL 231 Biology III: Cell Structure and Function (3 cr.; fall)
5. BIOL 232 Laboratory in Biology III: Cell Structure and Function (2 cr.; fall)
6. BIOL 241 Biology IV: Genetics and Molecular Biology (3 cr.; spring)
7. BIOL 242 Laboratory in Genetics and Molecular Biology (2 cr.; spring)
8. BIOL 286 Introduction to Ecology (2 cr.; spring)

9. One of these three options:
 - A. BIOL 395G Principles of Physiology (3 cr.; fall)
 - B. BIOL 395Y Principles of Development (4 cr.; spring)
 - C. BIOL 438 General Microbiology (3 cr.; fall) **and** BIOL 439 Microbiology Lab (2 cr.; fall)

10. BIOL 580 Evolution (3 cr.; spring)
11. BIOL 585 Ecology (3 cr.; fall)

12. One of these two options:
 - A. Research (BIOL 394 or 494 or 499; (1 cr.; both))
 - B. BIOL 591 Field Ecology (4 cr.; alternate fall)

13. One of these three courses:
 - A. BIOL 592 Evolution of Behavior (3 cr.; spring)
 - B. BIOL 595G Animal Communication (3 cr.; alternate fall)
 - C. BIOL 597 Sex and Evolution (3 cr.; alternate fall)

14. Seven credits of the following:

BIOL 438	General Microbiology (3 cr.; fall)	BCHM 561 ¹	General Biochemistry (3 cr.; both)
BIOL 439	Microbiology Lab (2 cr.; fall)	C E 350	Environmental Engineering (3 cr.; both)
BIOL 444	Human Genetics (3 cr.; fall)	C E 352	Biological Principles of Environmental Engineering (3 cr.; both)
BIOL 455	Animal Physiology (3 cr.; spring)	ENTM 500	Fundamentals of Entomology (3 cr.; fall)
BIOL 483	Environmental & Conservation Biology (3 cr.; fall)	FNR 488	Global Environmental Issues (3 cr.; fall)
BIOL 493	Intro. to Ethology (3 cr.; fall)	FNR 501	Limnology (3 cr.; fall)
BIOL 591	Field Ecology (4 cr.; alternate fall)	FNR 542	Ecology and Management of Declining, Rare, and Endangered Species (2 cr.; alternate spring)
BIOL 592	Evolution of Behavior (3 cr.; spring)	FNR 547	Vertebrate Population Dynamics (3 cr.; fall)
BIOL 595G	Animal Communication (3 cr.; alternate fall)	FNR 581	Ecological Impact Analysis (3 cr.; fall)
BIOL 597	Sex and Evolution (3 cr.; alternate fall)	POL 523	Environmental Politics and Public Policy (3 cr.; fall)
AGEC 525	Environmental Policy Analysis (3 cr.; spring)	SOC 533	Environmental Sociology (3 cr.; spring)
ANTH 535	Foundations of Biological Anthropology (3 cr.; fall)		
ANTH 536	Primate Ecology (3 cr.; spring)		

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

¹ BCHM 561 may count as a chemistry elective or as a biology elective but not both.

Other requirements are on the back of this page.

CHEMISTRY

1. CHM 115 General Chemistry (4 cr.; both)
2. CHM 116 General Chemistry (4 cr.; both)
3. One of these three options:
 - A. CHM 255 Organic Chemistry (3 cr.; both) and CHM 255L Organic Chemistry Lab (1 cr.; both) and CHM 256 Organic Chemistry (3 cr.; both) and CHM 256L Organic Chemistry Lab (1 cr.; both)
 - B. CHM 261 Organic Chemistry (3 cr.; fall) and CHM 263 Organic Chemistry Lab (1 cr.; fall) and CHM 262 Organic Chemistry (3 cr.; spring) and CHM 264 Organic Chemistry Lab (1 cr.; spring)
 - C. CHM 257 Organic Chemistry (4 cr.; both) and CHM 257L Organic Chemistry Lab (1 cr.; both) and one of:
CHM 333 Principles of Biochemistry (3 cr.; both) or BCHM 307 Biochemistry (3 cr.; both)
4. One of these seven options:
 - A. BCHM 221 Analytical Biochemistry (3 cr.; both)
 - B. CHM 224 Introductory Quantitative Analysis (4 cr.; spring)
 - C. CHM 321 Analytical Chemistry I (4 cr.; fall)
 - D. BCHM 561¹ General Biochemistry I (3 cr.; both)
 - E. CHM 533 Introductory Biochemistry (3 cr.; fall)
 - F. CHM 372 Physical Chemistry (4 cr.; spring)
 - G. CHM 373 Physical Chemistry (3 cr.; fall)

PHYSICS

One of these two options:

1. PHYS 220 General Physics (4 cr.; both) and PHYS 221 General Physics (4 cr.; both)
2. PHYS 172 Modern Mechanics (4 cr.; both) and PHYS 272 Electric and Magnetic Interactions (4 cr.; both)

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 - 30 credits