

SIMPSON COLLEGE

BIOLOGY

BIOLOGY MAJOR

COURSE REQUIREMENTS:

All majors planning graduate education should consider one course in logic plus one course in nonfiction or technical writing. Students will complete ten courses plus a capstone as follows:

Core Organismal Course

- Biol 110 Principles of Biology I w/lab

Core Molecular Course

- Biol 111 Principles of Biology II w/lab

Cellular/Molecular Emphasis (Choose at least one)

- Biol 251 Microbiology w/lab
- Biol 270 Basic Genetics w/lab
- Biol 285 Developmental Biology w/lab
- Biol 334 Cellular Biology
- Biol 341 Immunology
- Biol 360 Molecular Genetics w/lab

Ecological Emphasis (Choose at least one)

- Biol 245 General Entomology w/ lab
- Biol 253 Principles of Ecology w/lab
- Biol 275 Behavioral Ecology w/lab
- Biol 350 Mammalogy w/lab
- Biol 358 Freshwater Ecology w/ lab

Structural/Functional Emphasis (Choose at least one)

- Biol 225 Human Physiology w/lab
- Biol 230 Comparative Vertebrate Anatomy w/lab
- Biol 235 Embryology w/lab

Electives in Biology (Choose two courses)

- Any combination of 200 and 300-level biology courses, to include at least one 300-level course. However, no more than one course taken in directed study, independent research or May Terms can be counted toward the biology major.

Required Chemistry Courses:

- Chem 101 Bonds and Structures I w/lab
- Chem 201 Organic Chemistry I w/lab

Required Physics Courses: Choose one of the following:

- Phys 151 Principles of Physics I w/lab
- Phys 191 General Physics I w/lab

Capstone - Choose one of the following:

- Bio 370 Biochemistry Seminar
- Bio 371 Environmental Science Capstone
- COOP 319 Internship (Requires Department Chair Approval)
- Bio 398 Independent Research

Highly Recommended: A course in statistics is recommended for students planning to attend professional or graduate school. All majors planning graduate education should consider one course in logic plus one course in nonfiction or technical writing.

BIOLOGY MINOR

COURSE REQUIREMENTS:

Choose one of the following:

- Biol 110 Principles of Biology I w/lab
- Biol 111 Principles of Biology II w/lab

Choose one of the following:

- Biol 110 Principles of Biology I w/lab
- Biol 111 Principles of Biology II w/lab
- Biol 103 Environmental Issues w/lab
- Biol 104 Human Biology w/lab
- Biol 145 Introductory Plant Biology w/lab

Choose three or more courses from with the following guidelines:

- 200 or 300 -level biology courses (two of which may not be used also for environmental science or physical education majors) to include at least one 300-level course and no more than one May Term in biology taken for a letter grade. At least one of these courses must be a laboratory course.