Biology


About the major:
Biology is the science of “life.” It includes an array of subdisciplines such as ecology, evolution, botany, zoology, genetics, microbiology, and molecular biology. Biological expertise is a vital component of the work required to solve the many problems facing our civilization, including those related to; human health and disease, loss of biodiversity, and environmental quality. A UWEC biology major is designed to provide students the opportunity to work first hand with practicing scientists on biological phenomena, and then use this information to make meaningful decisions.

Majors:
- Biology, Liberal Arts (standard)
- Biology (comprehensive)
  - Ecology and Environmental Biology Emphasis
  - Microbiology Emphasis
  - Organismal Biology Emphasis

Minors:
- Biology, General or Teaching
- Environmental Science
- Marine Science
- Pre-Professional Health Science

Core requirements for biology majors:
- BIOL 221 (Foundations of Biology I) 4 credits lecture and lab
- BIOL 222 (Foundations of Biology II) 3 credits lecture
- BIOL 223 (Foundations of Biological Inquiry) 2 credits lab

Students intending to pursue a pre-professional program (pre-dentistry, pre-medicine, pre-optometry, and pre-physician’s assistant, pre-veterinary medicine) need to know that these programs are NOT majors. Pre-professional students often choose one of the biology majors to meet their program requirements, however, a student can choose ANY major.

Required GE or University courses:
GE credits required for Categories IB and II are met with courses in the major and satisfy the College of Arts and Sciences BS degree requirements.

Category IA:
- ENGL 305, 308, 312, 313, or 314 (Scientific Communication/Rhetoric courses) is recommended for many students.

Category IB:
- Math 114 (Calculus I)

Category II:
- BIOL 221, 222, 223, CHEM 103/104 (or 115) (recommended PHYS 211/212)

Category III:
- No specific requirements

Category IV:
- PHIL 306, 320, or 355 recommended

Category V:
- CS 170 recommended

These courses do not count for the major:
- BIOL 100 (General Biology)
- BIOL 130 (Human Sexual Biology)
- BIOL 151 (Biology of Humans)
- BIOL 180 (Conservation of the Environment)
- BIOL 181 (Conservation of the Environment Lab)
- BIOL 182 (Ecosystems of Latin America)
- BIOL 195 (Plants and Society)
- BIOL 196 (Human Nutrition)
Helpful Tips
Students pursuing a biology major start at different levels of readiness, particularly with respect to math and chemistry skills.

- Math 109 (Algebra for Calculus) is a prerequisite for BIOL 221
- CHEM 103 can be taken concurrently with BIOL 221
- Students are strongly encouraged to take Math 112 (Precalculus Mathematics) or Math 113 (Trigonometry), if necessary, for preparation for Math 114 (Calculus I). Math 114 is required for any biology major and is a prerequisite for many chemistry and physics courses.
- Starting one’s first semester with a course in chemistry, biology, math, and general education III or IV is desirable, but requires a high level of maturity, in addition to the necessary math placement. It is better to spread these courses out if a student is not prepared to study efficiently for long hours.
- Beginning students should plan to work no more than 10 hours per week. A Biology major is very intensive and requires a great deal of time for study (40-50 hours per week).
- Biol 180 is required for the environmental science minor and for the Biology teaching major.
- Join organizations such as the Biology Club, a Pre-professional club, Molecular Movement, or The Conservationists depending upon specific interests.

Contact information:
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UW-Eau Claire respects individual differences.
This guide complements rather than substitutes for individual advising.
For instructions about how to declare this major:
www.uwec.edu/Registrar/student/chgofmajor/index.htm