Comprehensive major in
ECOLOGY AND ENVIRONMENTAL BIOLOGY
UNIVERSITY OF WISCONSIN - EAU CLAIRE UNDERGRADUATE FACT SHEET

INTRODUCTION
The comprehensive major in Ecology and Environmental Biology involves the study of ecological systems from the individual to the ecosystem-level and explores the effects of humans and human society on these systems. Ecologists and environmental biologists frequently play pivotal roles in dealing with various challenges that face society.

WHY STUDY ECOLOGY AND ENVIRONMENTAL BIOLOGY?
- Biological careers can be fascinating and rewarding.
- The major leads to entry-level employment opportunities in environmental research and management in industry and government agencies.
- You will be well prepared to enter graduate studies in behavioral, population, community, or ecosystem ecology and/or environmental science.
- In addition to knowledge of your subject, practical technical skills you will learn will strengthen your ability for problem solving, data analysis using statistics and computational science, and communication of new information.
- Because of the variety of specialties, students with varying aptitudes, backgrounds, and career objectives can succeed in ecology and environmental biology.
- Your knowledge of ecology and environmental biology can be applied to important societal concerns in management of wildlife and fisheries, protection and restoration of habitats, environmental law and policy, and environmental education.

CAREER OPTIONS
Below are just a few examples of the possible paths an ecology and environmental biology graduate might take:
- Earn a graduate degree (M.S. or Ph.D.).
- Become a research technician in environmental consulting.
- Work for a federal, state, or local agency in environmental management, conservation, or planning.
- Work for a governmental or non-governmental organization dedicated to collecting and preserving biodiversity.
- Become an environmental education professional.
- Teach at the secondary level or earn a master's and/or doctorate degree to teach and conduct research at a college or university.
- Communicate complex ecological information in layman's terms as a technical writer or consultant.
- Work in a zoo, aquarium, arboretum, or hatchery.

UW-EAU CLAIRE FACTS AT A GLANCE
- Location: Eau Claire, WI; city pop. 65,000, pop. of metro area 151,000
- Average enrollment: 10,500
- Undergraduates: 10,000
- Graduate students: 500
- International students: 262
- Multicultural students: 847
- Men to women ratio: 7-to-10
- Students studying abroad: 289
- Students doing undergraduate research with faculty/staff: 800+
- ACT composite average: 24+
- Average high school rank: 75%
- Average class size: 28
- Faculty-student ratio: 1-to-22
- Student organizations: 250+
- In-state tuition/fees, room and board (two semesters): $14,991
- Walk across campus: About 10 minutes
- Nickname: Blugolds
- Colors: Navy and Old Gold

THE EAU CLAIRE ADVANTAGE
- Students work with professors who are dedicated and inspirational teachers. Unlike many other public universities, classes are not taught by teaching assistants, and class sizes are small.
- The Department of Biology prides itself in its faculty/student undergraduate collaborative research program. Students have the opportunity to engage in research with faculty in the lab and/or field. Students work on projects across the state and country, and internationally, conduct independent studies, co-author publications, and present results at professional scientific meetings. Such experience is invaluable for pursuing a graduate degree or a career in the discipline.
- UW-Eau Claire is a top-ranked comprehensive university nationwide among comparable university undergraduate biology programs for producing future female Ph.D.s.
- Generous gifts and grants from a variety of foundations and governmental agencies have helped to supply the Department of Biology with new and advanced equipment for innovative instruction.
The Department is housed within Phillips Science Hall, where it occupies the entire third floor. Departmental facilities include six general laboratories and ten specialized laboratories, numerous research labs, three modern greenhouses, an animal care facility, the James Newman Clark Bird Museum and shared access to transmission and scanning electron microscopes, and a geographic information systems (GIS) lab.

The local region is great for field studies due to its abundance of lakes, streams, forests and wildlife areas. Adjacent to the Chippewa River and campus is Putnam Park, a 200-acre scientific natural area. The Biology Department also is associated with the Beaver Creek Citizen Science Center in Eau Claire County, UW System Field Stations, the Gulf Coast Research Laboratory in Mississippi, and the Gerace Field Station in the Bahamas.

Students participate in seminars featuring presentations by researchers in ecology and environmental biology. E&EB student organizations include Biology Club, The Conservationists, and Beta Beta Beta Biology Honor Society.

HIGH SCHOOL PREPARATION

Successful completion of high school courses in English, algebra, geometry, physics, chemistry and biology are especially important for students interested in ecology and environmental biology.

All students who enroll at UW-Eau Claire are required to have a minimum of 17 college preparatory units including:

- 4 years of English (at least 3 composition and literature)
- 2 years of a foreign language
- 3 years of math* (algebra, geometry, 1 advanced college preparatory math)
- 3 years of natural science
- 3 years of social science (1 must be world or American history)
- 2 additional units of course work

*Students interested in a biology major should have 4 years of HS math. Students who have not had sufficient HS math may be required to complete appropriate coursework prior to starting biology courses at UWEC. Entry level college math course is determined by score on mathematics placement test taken prior to summer orientation.

ECOLOGY & ENVIRONMENTAL BIOLOGY COMPREHENSIVE MAJOR: 60 credits

This major provides extensive exposure to topics in ecology, field biology, and biological conservation. It is intended for students who are interested in field research, environmental monitoring and management, or natural resource conservation, or who desire strong preparation for graduate programs in ecology, environmental biology, or related fields.

FRESHMAN COURSE WORK

Sample First-Year Program:

FALL SEMESTER

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<thead>
<tr>
<th>COURSE #</th>
<th>CREDITS</th>
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<tbody>
<tr>
<td>Biol 221 – Foundations I</td>
<td>4</td>
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<tr>
<td>(Math 109 is a pre– req; Chemistry is a co-requisite)</td>
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<tr>
<td>Chem 103 - General Chem I or Chem 115 - Chem. Principles</td>
<td>4-6</td>
</tr>
<tr>
<td>Writing 114 - College Writing or a course in mathematics*</td>
<td>4-5</td>
</tr>
<tr>
<td>General education course</td>
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SPRING SEMESTER

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<tr>
<th>COURSE #</th>
<th>CREDITS</th>
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<tbody>
<tr>
<td>Biol 222 – Foundations II</td>
<td>3</td>
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<tr>
<td>Biol 223 – Foundations of Inquiry</td>
<td>2</td>
</tr>
<tr>
<td>Chem 104 - General Chem II or Chem 213 – Quant. Analysis</td>
<td>4</td>
</tr>
<tr>
<td>Writing 114 - College Writing or a course in mathematics*</td>
<td>4-5</td>
</tr>
<tr>
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ADVANCED COURSES IN E&EB INCLUDE:

- Biol 300 Genetics
- Biol 311 General Entomology
- Biol 325 Taxonomy of Vascular Plants
- Biol 328 Conservation Biology
- Biol 338 Vegetation Ecology
- Biol 340 Ornithology
- Biol 345 Invertebrate Zoology
- Biol 356 Wisconsin Wildlife

- Biol 375 Limnology & Aquatic Ecology
- Biol 383 Biostatistics
- Biol 410 Mammalogy
- Econ 268 Environmental Economics
- Geog 270 Land Use Issues & Problems
- Geog 335 Geographic Inform. Systems
- Geog 350 Soils and the Environment
- Geog 361 Environmental Hazards
- Geog 375 Environmental Quality
- Geog 378 International Environmental Problems & Policy
- Phil 320 Environmental Ethics
- ENPH 210 Environmental Health
- ENPH 480 Environmental Law

FOR MORE INFORMATION

DEPARTMENT OF BIOLOGY

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E-mail: admissions@uwec.edu

UW-Eau Claire’s web site is www.uwec.edu

Check out the biology web site at www.uwec.edu/biology

For general information about the campus, contact:

ADMISSIONS OFFICE

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