INTRODUCTION
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 solutions to many problems facing our civilization from human health and disease to loss of biodiversity and environmental quality. The UW-Eau Claire biology program is designed to provide students the opportunity to integrate, interpret and translate biological phenomena and environmental observations and then use this information to make meaningful decisions.

WHY STUDY BIOLOGY?
- Biological careers can be fascinating and rewarding.
- Biologists frequently play a pivotal role in dealing with various challenges that face society.
- Students considering a biology major are often interested in serving the medical needs of people, working with fish and wildlife, conserving and restoring habitats, teaching biology, or discovering new facts through research or writing about biological aspects of plants, animals and microbes.
- Because of the variety of specialties, students with varying aptitudes, backgrounds and career objectives can succeed in biology.
- This major is an exceptional foundation for careers in human biology, ecology, environmental biology, and cell and molecular biology as well as applied areas such as forestry, wildlife management, and biotechnology.
- The standard major is an excellent foundation for students planning to attend medical, dental, veterinary, chiropractic, optometry, physical/occupational therapy, and physician’s assistant school.

BIOLOGY STANDARD MAJOR, Liberal Arts, at least 36 credits:
The standard biology major allows a student to choose advanced courses of interest after the biology core is completed. It is excellent preparation for a career in human health sciences, ecology, environmental sciences, plant or animal biology, cell/molecular biology or as preparation for graduate studies.

Biology core:
Biol 221 Foundations of Biology I
Biol 222 Foundations of Biology II
Biol 223 Foundations of Biological Inquiry
Biol 321 Ecology
Biol 323 Genetics

No specific advanced courses are required in the standard biology major. Thus, the student can take advanced coursework in many areas of biology depending upon one’s interest.

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: 650
- International students: 228
- Multicultural students: 939
- Men to women ratio: 6-to-10
- Students studying abroad: 289
- Students doing undergraduate research with faculty/staff: 800+
- ACT composite average: 24
- Average high school rank: 72%
- Average class size: 28
- Faculty-student ratio: 1-to-22
- Student organizations: 250+
- In-state tuition/fees, room and board (two semesters): $15,797
- Walk across campus: About 10 minutes
- Nickname: Blugolds
- Colors: Navy and Old Gold

Numerous courses are offered in the following areas:
- Organismal Form and Function
- Cell & Molecular Biology
- Anatomy & Physiology
- Plant Biology
- Animal Biology
- Ecology & Field Biology
- Environmental Biology
- Wildlife Biology

Second programs taken by Biology, Liberal Arts majors:
Students must complete a second program, either a multidisciplinary minor, a minor offered by another department (24 credits), or a certificate (12-18 credits).

Other departmental minors commonly taken by biology majors are as follows. But minors in other departments are certainly possible.
Art
Chemistry
Computer Science
Geography
Geology
Mathematics
Physics
Psychology
Spanish

Multidisciplinary minors include:
Computational Science
Environment, Society, and Culture
Environmental Science
Global Studies
Marine Science
Neuroscience
Pre-Professional Health Science
Women’s Studies

PRE-PROFESSIONAL PROGRAMS:
Pre-professional programs are offered in pre-medicine, pre-dentistry, pre-veterinary, pre-optometry, pre-physical therapy, pre-chiropractic, and pre-physician’s assistant. These are programs of study designed to provide the necessary coursework for admission into a professional school.
These programs are NOT MAJORS, and students must choose an appropriate major such as biology, chemistry, or another field to graduate from UW-Eau Claire.

CAREER OPTIONS
Below are just a few examples of the possible paths a biology graduate might take:

- Earn a M.S. &/or Ph.D. to teach and conduct research at a college or university.
- Become a research scientist in zoology, botany and other areas.
- Earn certification as a medical professional such as physician, physician's assistant, physical therapist, dentist, veterinarian or chiropractor.
- Work for a governmental or non-governmental organization as a researcher, technician, manager, or planner.
- Earn accreditation as a medical illustrator and use artistic skills to design websites, make prostheses, and create images for textbooks or scientific journals.
- Communicate complex ecological information in layman's terms as a technical writer or consultant.

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, 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 system 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 Department also is associated with the Beaver Creek Citizen Science Research Center in Eau Claire County, the 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.
- Student organizations include Biology Club, The Conservationists, Beta Beta Beta Biology Honor Society, and the Pre-Professional Health Club.

HIGH SCHOOL PREPARATION
Successful completion of high school courses in English, algebra, geometry, physics, chemistry and biology are especially important for students interested in attaining a degree in 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.

FRESHMAN COURSE WORK
Sample First-Year Program:

FALL SEMESTER

<table>
<thead>
<tr>
<th>COURSE #</th>
<th>CREDITS</th>
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<tbody>
<tr>
<td>Biol 221 – Foundations I</td>
<td>4</td>
</tr>
<tr>
<td>(Math 109 is a pre– req; Chemistry is a co-requisite)</td>
<td></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>
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<tr>
<td>Liberal education course</td>
<td>3</td>
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SPRING SEMESTER

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<thead>
<tr>
<th>COURSE #</th>
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</thead>
<tbody>
<tr>
<td>Biol 222 – Foundations II</td>
<td>3</td>
</tr>
<tr>
<td>Biol 223 – Foundations of Inquiry</td>
<td>2</td>
</tr>
<tr>
<td>Chem 104 - General Chem II</td>
<td>4</td>
</tr>
<tr>
<td>Writing 114 - College Writing or a course in mathematics*</td>
<td>4-5</td>
</tr>
<tr>
<td>Liberal education course</td>
<td>3</td>
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FOR MORE INFORMATION

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

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