

DEPARTMENT OF BIOLOGY

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MAJORS (P. 4)

- Biology Major (Non-emphasis), B.S. (<http://catalog.uwplatt.edu/undergraduate/business-industry-life-science-agriculture/biology/nonemphasis-bs/>)
- Biology Comprehensive Major, B.S. (<http://catalog.uwplatt.edu/undergraduate/business-industry-life-science-agriculture/biology/comprehensive-bs/>)
 - Botany Emphasis
 - Cytotechnology Emphasis
 - Ecology Emphasis
 - Health Sciences Emphasis
 - Molecular/Genetics Emphasis
 - Secondary Education Emphasis
 - Zoology Emphasis

MINORS (P. 4)

- Biology (Non-Teaching) (<http://catalog.uwplatt.edu/undergraduate/business-industry-life-science-agriculture/biology/minor/>)
- Biology (Teaching) (<http://catalog.uwplatt.edu/undergraduate/business-industry-life-science-agriculture/biology/teaching-minor/>)
- Biotechnology (<http://catalog.uwplatt.edu/undergraduate/business-industry-life-science-agriculture/biology/biotechnology-minor/>)

PURPOSE STATEMENT

The UW-Platteville Biology Program provides biology students a fundamental knowledge of biology along with introducing students to the major areas in biology, and providing opportunities to explore these areas. In this endeavor, the program provides students the ability to critically apply biological concepts to the understanding of natural phenomena and to deal with biology-related health, societal and conservation issues. In addition, the UW-Platteville Biology Program prepares students for: healthcare professional programs, veterinary professional programs or advanced study and research in the biological and related sciences, careers in education, biology-related industry or governmental service. The biology program also provides general education courses in the natural sciences to introduce students to scientific investigation, biology, biological concepts and how these affect society. Finally, the biology program provides courses to support other university programs such as agriculture, education, physical education, chemistry, criminal justice and engineering.

STUDENT LEARNING GOALS

1. Our world is filled with a dazzling array of life; these seemingly unique and different organisms have shared features due to their common origin. Our biology majors will **demonstrate knowledge** of the characteristics that unify all living organisms, the forces that shape their diversity, and the structures and functions inherent to different living organisms.
2. Because science is a process used to explore and understand the world around us, our biology majors will **observe, question, hypothesize, test, analyze and develop conclusions** about natural phenomena.
3. Life is complex; understanding this complexity requires interdisciplinary training. As they investigate the natural world, our biology majors will appropriately **integrate knowledge and skills** from chemistry, mathematics, and other liberal arts and sciences.
4. Although some contributions to science are achieved by individual effort alone, most are accomplished when people with diverse perspectives and skills work together. Our biology majors will **engage in scientific inquiry both as individuals and as effective team members**.
5. Without communication, science has no impact. Our biology majors will **use a variety of oral and written means** to convey information to a wide range of audiences.
6. The advancement of scientific knowledge happens within a societal context. Our biology majors will **evaluate interactions between science and society** and the ethical issues surrounding those interactions.

CULTIVATING ATTITUDES

The members of our department feel, as with any endeavor, correct attitudes provide an important complement to a sound knowledge base and skill-set. As a department, we hope to instill in our students a set of attitudes we feel are important for all biologists. We do our best to model the following:

- **enthusiasm** for the science of biology and an **appreciation** for the multitude of ways that biology permeates our society
- a strong **curiosity** for the world around us
- a **respect** for the instruments and objects of our research
- and **integrity**, because without integrity, there is no trust of the individual and, taken to its natural ends, no trust in the field of biology and the process of science.

BIOLOGY REQUIREMENTS AND ACADEMIC STANDARDS

ELIGIBILITY FOR THE BIOLOGY COMPREHENSIVE MAJOR

Any student (new college student, external or internal transfer student) may declare a Biology Major (Non-emphasis) upon entering the program. Students may select an emphasis and pursue a Biology Comprehensive Major only after earning a C- or better in the following foundational courses (or their equivalents): BIOLOGY 1020, BIOLOGY 1650, and BIOLOGY 1750. Students who have specific biology interests, plan on a particular biology career, or those who plan to enter a graduate or professional school generally pursue the Biology Comprehensive Major with an area emphasis, thereby focusing their educational experiences. Students who seek a wider range of biology experiences than defined by an emphasis area may elect to not choose an emphasis area, and instead create their own set of electives that better align with their current or future interests.

ELIGIBILITY FOR SELECT PRE-PROFESSIONAL PROGRAMS

Enrollment in the Pre-Nursing option is open to any entering student (or internal transfer student). To declare any other option, a student must be eligible for pursuing the Biology Comprehensive Major and must have a minimum overall GPA of 3.0. If a student's overall GPA drops below a 3.0, he or she will automatically be removed from the Pre-Professional Program; if this occurs, a student may appeal one time to the department for re-enrollment in the Pre-Professional Program.

PROGRAM GRADE REQUIREMENTS

A grade of C- or higher is required in all courses taken to fulfill specific requirements of the biology major. This includes ENGLISH 1130 and ENGLISH 1230, as well as courses taken in other disciplines toward an emphasis.

Prerequisite Courses

In order to maintain enrollment in any biology course with identified prerequisite requirements, a student must successfully complete the required prerequisite(s). Students who register for a biology course that includes prerequisite requirements will be automatically un-enrolled from the course if they do not successfully complete the prerequisites.

BIOLOGY CORE REQUIREMENTS

ALL biology majors must complete core courses in the following three areas:

Course	Title	Credits
Required Biology Core Courses		
BIOLOGY 1020	BioQuest: Foundations for College Success	1
BIOLOGY 1650	The Unity of Life	5
BIOLOGY 1750	The Diversity of Life	5
BIOLOGY 2420	Fundamentals of Biological Investigations	3
BIOLOGY 3330	Genetics	3
BIOLOGY 3450	Ecology and Evolution	3
Required Biology Capstone Experience		
BIOLOGY 4970 or BIOLOGY 4990	Senior Thesis Capstone Course: From Atoms to Ecosystems - The Study of Life	1
Required Supporting Courses		
CHEMISTRY 1140	General Chemistry I	4
CHEMISTRY 1240	General Chemistry II	4
MATH 1830	Elementary Statistics	3
Total Credits		32

Students who expect to enter professional or graduate school should consider taking additional courses in mathematics, chemistry, physics, sociology, psychology and philosophy. Academic advisers will guide you in the selection of these courses.

PRE-PROFESSIONAL PROGRAMS

The following pre-professional programs are administered and advised through the UW-Platteville Biology Department:

PRE-CHIROPRACTIC

Amanda Trewin
241 Gardner
608.342.1527

PRE-CYTOTECHNOLOGY

Mark Levenstein
240 Gardner
608.342.1331

PRE-DENTISTRY

John Peterson
242 Gardner
608.342.7329

PRE-MEDICAL TECHNOLOGY

Mark Levenstein
240 Gardner
608.342.1331

PRE-MEDICINE

Rich Dhyanchand
340 Gardner
608.342.6155

PRE-NURSING

Amanda Trewin
241 Gardner
608.342.1527

PRE-OCCUPATIONAL THERAPY

Amanda Trewin
241 Gardner
608.342.1527

PRE-OPTOMETRY

John Peterson
242 Gardner
608.342.7329

PRE-OSTEOPATHY

Rich Dhyanchand
340 Gardner
608.342.6155

PRE-PHYSICAL THERAPY

Amanda Trewin
241 Gardner
608.342.1527

PRE-PHYSICIAN ASSISTANT

Rich Dhyanchand
340 Gardner

608.342.6155

PRE-PODIATRY

Rich Dhyanchand
340 Gardner
608.342.6155

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- Biotechnology Minor (<http://catalog.uwplatt.edu/undergraduate/business-industry-life-science-agriculture/biology/biotechnology-minor/>)

FACULTY AND LECTURERS

Additional information about the Faculty and Lecturers below may be found in the Faculty and Academic Staff (<http://catalog.uwplatt.edu/faculty-academic-staff/>) section of this catalog.

Anderson, Noah J.

Cornett, Catherine A.

Dhyanchand, Richard

Doyle-Morin, Rebecca

Frieders, Elizabeth M.

Haasl, Ryan

Huebschman, Jeffrey J.

Klavins, Sharon D.

Levenstein, Mark E.

Olson, David J.

Peterson, John

Peterson, Vikki A.

Schmitz, Ryan T.

Siddiqui, Mohammed A.

Stankovich, Wendy S.

Trewin, Amanda L.

Weber, Wayne C.

Wright, Kristopher K.