

Biology

Biology is the science of life in all its forms, from the simplicity of a one-celled organism to the complexity of the human body. Like all living things, the field of biology is dynamic, constantly growing, rapidly changing and replete with new discoveries and advances. The Biology Department at Illinois Wesleyan University provides students with a superior undergraduate education across a variety of biological fields. Students can then parlay that education into a variety of career opportunities, including medicine, research, education, and law.

Why Biology at Illinois Wesleyan?

- Provides the necessary background for admission to schools of medicine, dentistry, veterinary medicine, physical therapy, environmental science, osteopathy, pharmacy, optometry, or paramedical programs.
- IWU's medical school acceptance rate averages over 90 percent, compared to 50 percent nationally.
- Provides preparation for positions in research and industrial laboratories.
- Emphasizes study at the molecular/cellular, organismal and population/community levels of organization.
- Provides students with a broad introduction to the principles of all important areas of modern biology.
- Includes discipline-specific offerings such as animal physiology, developmental biology and microbiology.
- Provides complementary foundational courses in math, chemistry and physics.
- Provides opportunities to take advanced seminar and research-oriented courses such as advanced ecology, experimental zoology, neurophysiology and molecular genetics.
- Enables students to examine their knowledge from many perspectives — ethical, social, political and psychological.

Learning from a Quality Faculty

- **David Bollivar (Chair)**, *Associate Professor of Biology, Ph.D. — Indiana University*
Studies the molecular biology and biochemistry of tetrapyrrole biosynthesis and has recently received a National Science Foundation grant.
- **Elizabeth Balsler**, *Associate Professor of Biology, Ph.D. — Clemson University*
Research interests focus on the biology of invertebrate animals; has affiliations at the Smithsonian Marine Station and the University of Washington Marine Lab.
- **Jonathan Dey**, *Professor of Biology, Ph.D. — Duke University*
Studies the taxonomy and distribution of lichens in eastern North America.



A Sampling of Courses Offered by Biology

Natural History of Illinois
Evolution
Comparative Chordate Anatomy
Conservation Biology
Invertebrate Zoology
Plant Anatomy and Physiology
Microbiology
Experimental Zoology
The Marine Realm
Molecular Genetics
The Microbial World
Biostatistics and Experimental Design
Behavioral Ecology
Cellular and Molecular Biology
Parasitology
Animal Physiology
Neurophysiology
Biochemistry

Recent May Term Courses in Biology

Tropical Ecology in Costa Rica
(travel course)
Athletes Pushing Their Limits
Field Ornithology



“The Biology Department at Illinois Wesleyan provides students with exposure to the fundamental concepts in biology. We also provide a strong foundation

- **Given Harper**, *Professor of Biology, Ph.D. — Illinois State University*
Conducts research on pesticide contamination of birds and wildlife and has been awarded a grant from the National Science Foundation.
- **Robert Hippensteele**, *Professor of Biology, Ph.D. — University of California, Berkeley*
Studies microvascular physiology and neurophysiology.
- **William Jaeckle**, *Associate Professor of Biology, Ph.D. — University of Southern California*
Research projects examine aspects of the reproduction, life history, development and ecology of invertebrate animals.
- **Edgar Lehr**, *Assistant Professor of Biology, Ph.D. — Goethe University*
Research is devoted to the biodiversity of amphibians and reptiles in Peru and Rwanda.
- **Loni Walker**, *Associate Professor of Biology, Ph.D. — The Ohio State University*
Studies the effect of gravity on growth and development in mosses and has been awarded grants from NASA and the National Science Foundation.
- **Brian Walter**, *Assistant Professor of Biology, Ph.D. — University of Illinois at Urbana-Champaign*
Researches the developmental mechanisms that produce morphological variations between groups of fishes.

Putting Learning into Practice

- The Center for Natural Science Learning and Research (CNS) houses state-of-the-art facilities, including eight biology teaching labs and eight faculty/student research labs.
- Lab equipment includes molecular-techniques instrumentation, a scanning electron microscope, and a research grade compound microscope, capable of differential interference contrast, phase contrast, and epifluorescence microscopy.
- Many students obtain summer fellowships that allow them to do research at medical research centers, including the Houston Medical Center and Mayo Clinic, as well as major research institutions such as Harvard, the Smithsonian Institution and the University of Chicago.
- Students considering medicine as a career may participate in a May Term externship, experiencing the medical field firsthand by working with alumni and other professionals in a variety of health-care environments.
- Recent alumni include individuals pursuing careers in marine biology, molecular genetics, physiology, ecology, secondary education and many specialties of medicine.
- Approximately 80 percent of IWU's biology graduates continue their education in medical or graduate programs, attending institutions such as the University of Chicago, the University of Pennsylvania, Yale University and Duke University.

for future study by offering students a broad curriculum and the opportunity to take courses that delve deeply into specific topics. Our goal is to provide students with the fundamental knowledge and skills that they need to be successful upon graduation.

Students have the opportunity to work with faculty on scientific research projects that can lead to publication in scientific journals. Many of our students also take advantage of the opportunity to become assistants for their peers, enhancing their understanding of biology. Students and faculty work together closely and form strong, lasting relationships.”

Dr. David Bollivar

Associate Professor of Biology and
Department Chair



For Further Information, Write or Call:

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