General Information

The biological sciences department at ETSU offers well-balanced programs leading to the degrees of Bachelor of Science and Master of Science. ETSU provides an excellent natural setting for field-oriented biological studies. Few locations in the country have the diversity of fauna and flora found in this ecologically rich region. The Quillen College of Medicine provides an additional resource for students interested in areas of biology related to medicine and human health. The recent find of the Gray Fossil Site and the creation of the Quillen Museum of Natural History provide new educational opportunities and research opportunities in paleobiology.

The department's area of emphasis reflects those of a heavily diversified faculty. Members of other departments participate in joint programs. All major areas of biology are represented with extensive class offerings at both the undergraduate and graduate levels.

The biological sciences department is housed in modern facilities in Brown Hall. Faculty members maintain laboratory facilities for research, and the department provides such centralized facilities as a transmission electron microscope, a scanning electron microscope, a completely equipped dark room, environmental chambers, chromatographic and electrophoretic equipment, ultracentrifuges, physiological instruments, tissue culture facilities, herbarium, and vertebrate and invertebrate museum collections. The Shall Valley Research Educational and Conservation Consortium provide a number of educational and research opportunities. Access to nearby lakes, rivers, and mountains afford the student first-hand field experiences.

The biological sciences faculty is dedicated to the academic training of students for advanced academic training. The department also provides educational and research opportunities in paleobiology. To provide the student with the best possible educational opportunities as well as to prepare the student for advanced academic training, the department also provides valuable services for the Northeast Tennessee community.

FACULTY RESEARCH INTERESTS

Our faculty is a large group representing all the major areas of the biological sciences. All faculty members hold terminal or doctorate degrees.

Department of Biological Sciences

Ahmad, Zulfikar (Biochemistry)
Alspaugh, Fred (Ecology, Ornithology)
Jones, Thomas (Behavioral Ecology)
Joplin, Karl (Developmental Entomology)
Karsai, Istvan (Theoretical Ecology)
Kumar, Dhirendra (Biochemistry)
Laughlin, Thomas (Population Genetics)
Levy, Foster (Population Genetics)
Liu, Yusheng (Paleobiology)
McDowell, Timothy (Plant Systematics)
McIntosh, Cecilia (Biochemistry)
Miller, Hugh (Cell Biology)
Moore, Darrell (Neuroethology)
Nelson, Diane (emeritus; Ecology)
Pyles, Rebecca (Vertebrate Morphology)
Roberson, J. Leonard (Developmental Biology)
Stewart, James (Developmental Biology)
Yampolsky, Lev (Evolutionary Genetics)
Zawada, Michael (Chair; Paleobiology)

Microbiology

(Health Sciences)
Chakraborty, Ranjan
Currie, W. David
Forseman, Allan
Gallagher, Michael
Lampson, Bert
Mustain, Eric
Osborne, John
Powars, Laraine
Williams, Burt

Adjunct Faculty

Breuel, Kevin
Cabello, Olga
Champney, W. Scott
Donaldson, James
Ernst-Fonberg, Mary Lou
Franklin, Jay
Gardiner, Robert
Han, Zhuhua
Johnson, David
Kaverina, Ekaterina
Musich, Phillip
Robinson, Mitchell
Schubert, Blaine
Siensky, Michael
Zou, Yue

Library

The Sherrod Library contains more than a half million volumes and over 2,000 current periodicals. It has many biological reference collections and offers a number of electronic resources. Interlibrary loan services make most library materials available even if they are not on the library shelf. The library stacks are open, making books and periodicals easily accessible. Study cubicles and carrels are available.

www.etsu.edu/etsu/librariescasp

Facilities

The Department of Biology maintains well-equipped teaching and research laboratories with a wide variety of modern equipment. In addition to what is currently held in the Department the University makes available a variety of expensive research equipment, including:

Electron Microscopy Core Facility
Molecular Biology Core Facility
Laser Scanning Confocal Microscope Facility
Luminex Lab
MAP 100
Flow Cytometer
Division of Animal Resources

The biological sciences faculty is dedicated to the academic training of students and the advancement of scientific thought and endeavors through research and teaching. The objectives of the department are to provide the academic background and basic skills essential for professional career opportunities as well as to prepare the student for advanced academic training. The department also provides valuable services for the Northeast Tennessee community.
UNDERGRADUATE EDUCATION

Our department offers various opportunities for undergraduate students at ETSU. In courses, concentration, research opportunities, honors programs and club meetings, we've got you covered.

Undergraduate Program of Study

Biology Major—The Department of Biological Sciences offers programs of study leading to a major in biology. Students are required to take the university general education requirements, the departmental core and upper level courses in areas of: biodiversity, molecular, organismal, and population in addition to electives from specialized courses appropriate to their selected interest within the major. Students may choose between three curricula with a concentration in either biology (or standard biology with a minor), biochemistry or educational biology.

Students must be mindful that they are required to take writing, oral and technology intensive courses.

To ensure a broad-based understanding of biology, the undergraduate degree in biology requires that students take courses in four areas of study: molecular, organismal, population, and biodiversity.

Coconcentration

Our biology students have the option of choosing one of three concentrations: biology, biochemistry and education. Biology students may also choose the standard biology major with a minor.

Research

We strongly encourage undergraduate students, especially those who will continue their education, to take a research class.

Honor Students

Through the Honors Program in Biological Sciences, students may take advanced-level courses. Applications for this program are on our website.

Student Activities

Outside of class, members of our student body may join Beta Beta Beta (Tri-Beta, which is also an honor society specific to our department) http://www.tri-beta.org, the Tennessee Academy of Science http://www.mtsu.edu/tnacadsc, and the Sigma Xi Research Society http://www.sigmaxi.org. Journal clubs, information fairs, student gatherings and seminars.

www.etsu.edu/biology  ETSU Department of Biological Sciences  Box 70703 Johnson City, TN 37614-1710