Eastern Connecticut State University’s biology major program enables students to learn the basic principles that govern processes at all levels of biological organization and to develop the critical thinking skills required to understand the consequences of those processes. The biology program at Eastern stresses an undergraduate “hands-on” approach to education. Eastern biology undergraduates receive the full-time attention of their professors, all of whom have Ph.D. degrees from top universities. Unlike larger universities where graduate students teach many of the classes, biology professors at Eastern teach both the lectures and the laboratories.

Biology faculty members believe that students should spend as much time working in the laboratory or field as they do in lectures. Therefore, virtually all biology courses include a laboratory or field component. Students are also encouraged to undertake an independent research project.

The biology major prepares students for positions in government, industry and education in fields such as biotechnology, cell and molecular biology, microbiology, population biology, marine biology, and plant and animal ecology. The comprehensive program provides students with the background required for graduate studies in biology; medical, dental, nursing, and veterinary schools, and programs in other health-related areas.

The program allows students to acquire hands-on experience with current techniques such as DNA and protein analysis and scientific instrumentation. Students have the opportunity to use fieldwork techniques in a variety of terrestrial, freshwater and marine environments. Each year, the department offers a course in tropical biology, alternating between Costa Rica and the Bahamas. A field course in Desert Ecology and Biogeography was recently added to the biology curriculum.

**CAREER OPTIONS**

Find a cure for cancer! Study orchids in the Brazilian rainforest! Conduct experiments in space as a biologist-astronaut! These are just some of the exciting career opportunities that could start with a bachelor’s degree in biology. Others include:

- Physician
- Physician’s assistant
- Nurse
- Dentist
- Veterinarian
- Laboratory technician
- Optometrist
- Secondary school educator
- College educator
- Biotechnologist
- Forensic biologist
- Microbiologist
- Marine biologist
- Computational biologist
- Cell biologist
- Ecologist
- Wildlife biologist
- Botanist
- Conservation biologist
- Entomologist
Eastern’s 174,000-square foot science building opened in fall 2008. It achieved LEED Silver Certification for its advanced environmental design and construction. It houses modern laboratories with state-of-the-art scientific equipment for instruction and research. Modern laboratory facilities include a dedicated imaging center with a confocal microscope, cell and tissue culture labs, a multi-suite vivarium, and facilities to study plant and animal physiology. The Science Building also boasts a modern greenhouse with a spacious headhouse and four separate bays, each equipped with environmental sensors and weather station to dynamically control lighting, temperature, and humidity.

**STUDENT SUCCESS**

Graduates of Eastern’s biology program are currently employed by many organizations, including Alexion Pharmaceuticals, Bristol-Meyers-Squibb, Harvard University, Kinetic Biomedical, Pfizer, Sacred Heart University, State of Connecticut Departments of Environmental Protection and Public Health, UConn, University of Connecticut Health Center, and Windham Community Memorial Hospital.

Our graduates have been accepted into prestigious graduate programs at Boston University, Cornell University, Dartmouth, Duke University, Tufts University, University of Connecticut, University of Massachusetts Medical School, University of Michigan, University of North Carolina-Chapel Hill, Virginia Tech, Wesleyan University, Yale University, and the Karolinska Institute in Sweden.

**BIO 320 TROPICAL BIOLOGY**

This course is a 10-12 day field ecology experience in the tropics, alternating between San Salvador Island, Bahamas, and Costa Rica. Island biogeography, tropical ecology, as well as natural history of marine and terrestrial fauna and flora are studied.

**BIO 365 DESERT ECOLOGY AND BIOGEOGRAPHY**

This course introduces students to the unique desert ecosystems in the Great Basin, Mojave, and Sonoran deserts of the North American Southwest. Studies focus on environmental factors and biotic interactions that shape the diversity and distribution of arid-adapted plant and animal communities.