

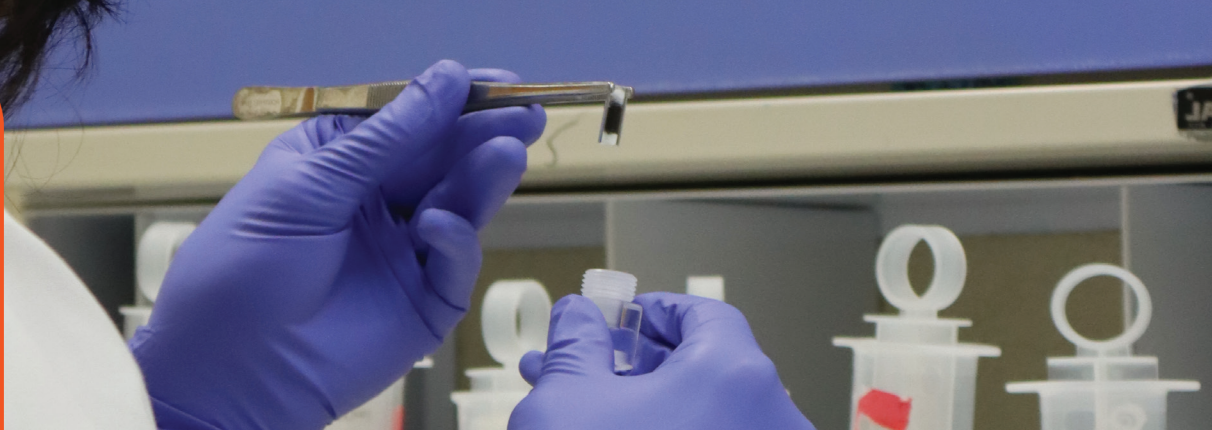
# ECU BIOLOGY

DEPT OF BIOLOGICAL & ENVIRONMENTAL SCIENCES

## Careers with a Biology Degree:

Biological Researcher  
Biologist  
Botanist  
Clinical Laboratory Scientist  
Dentist\*  
Ecologist  
Environmental Scientist  
Fish & Game Warden  
Forester  
Geneticist  
Marine Biologist  
Microbiologist  
Molecular Biologist  
Pathologist  
Pharmaceutical Sales Rep.  
Physical Therapist  
Physician\*  
Physician's Assistant\*  
Teacher  
Toxicologist  
Veterinarian  
Zoologist

\*Biology degree prepares student to apply for advanced degree



The Biology program provides undergraduate training for students interested in the life sciences who may wish to pursue careers or graduate school in this area.

## > Coursework

The faculty and facilities of the program permit the investigation of biology at the sub-cellular, cellular, organismal, population and community levels. Courses taught in the department emphasize scientific principles and concepts. These principles and concepts aid in understanding structure, function, and behavior of the individual organisms, as well as how individual organisms interact within the natural environment.

## > Scholarships for Biology Majors

The Biology program makes scholarships available to qualified students through the following programs:

- Dr. Thomas J. McKnight Scholarship Fund
- Fred and Mary Pfeffer Scholarship
- Carlock Scholarship
- Benny & Rita Edwards Scholarship
- Bill & Sondra Cole Scholarship
- Carl Osborn Memorial Scholarship
- Claude Carter Scholarship
- Don & Jane Kellogg Mathematics & Science Teaching Scholarship
- Don Stafford Science Education Scholarship
- Dr. David Ramsey Pre-Med Scholarship
- Dr. James Clark Scholarship
- Dr. Jim G. Duckett Scholarship
- Francisco-Hatchett Scholarship
- Higginbotham Scholarship
- Heather C. Marco Memorial Scholarship
- Harvey Price Memorial Scholarship
- James A. Thomas Scholarship
- Jim & Jo Conway Scholarship
- Millsap Scholarship for Health Professions
- 1950s Science Fund
- Shana L. Hackworth Memorial Scholarship
- Ramadan Research Internship
- Ramadan Scholarship
- SBC Scholarship
- Delta Dental Scholarship
- Briles Scholarship
- Bays Scholarship



East Central University

1100 E. 14th St.

Ada, Oklahoma 74820



www.ecok.edu/bio • 580-559-5792

# BIOLOGY

## > DEGREE OPTIONS

### BIOLOGY

A Bachelor of Science is designed for students who plan to become practicing biologists in industry or government, or plan to pursue a graduate degree in Biology. This degree program is usually chosen by those students who need pre-professional training before entering the schools of Medicine, Dentistry, Veterinary Medicine or other health-related professional schools or graduate school. The life sciences provide many areas from which students can choose careers. To meet these needs, the Biology program offers a variety of courses and several concentrations.

### BIOLOGY TEACHER CERTIFICATION

A Bachelor of Science for teacher certification gives a prospective science teacher an appropriate academic background in Biology and Physical Sciences and in the methods of teaching.

### CLINICAL LABORATORY SCIENCE

A Bachelor of Science for Clinical Laboratory Science prepares students to conduct and supervise complex medical tests, clinical trials and research experiments. Students also learn to manage clinical laboratories. The management of these labs would include consulting with physicians or researchers on diagnoses, disease causation, spread of disease and research outcomes. This degree concentration requires three years of prescribed study on campus followed by a year of clinical training in an approved hospital school of clinical laboratory science.

### ECOLOGY

Course work in this program includes a variety of courses that align with the Ecological Society of America 4DE framework. Courses include Zoology, Organic Chemistry, Biostatistics, Comparative Vertebrate Anatomy, Animal Parasitology, Field Methods, Herpetology, Plant Physiology, Wildlife Management, Human Physiology, Ecology and Undergraduate Research. The life sciences provide many areas from which students can choose careers; to meet these needs, the Biology program offers a variety of courses and several concentrations. Graduating with a concentration in Ecology prepares you for a diversity of careers, including research, writing, policy, ngo's, consulting, government and more.

### HEALTH SCIENCES

ECU offers courses that are required for admission to professional schools of Medicine, Dentistry, Optometry, Chiropractic Medicine, Physicians Associate or Veterinary Medicine. Although the pre-professional science student may select any degree major, most successful candidates major in Biology. Course work must be arranged to complete the required work in time for admission exams and application in your own program (usually spring of junior year). For more information, contact the Department of Biology.

### MEDICAL BOTANY

A Bachelor of Science in Medical Botany empowers students to apply course work in Botany, Zoology, Genetics, Physiology, Microbiology, Medical Botany, Entomology and Plant Ecology. It provides flexibility through electives so that many path options are available, all with the goal in mind of students understanding the complex relationship between plants and humans. Ultimately, this deep understanding will enable students to enter graduate school or employment so that they may transform their futures in biotech, agribusiness, pharmacology, medicine, homeopathy, horticulture, law, Native American affairs, research and others into successful futures.

### MOLECULAR BIOLOGY

The Bachelor of Science in Molecular Biology prepares students for graduate research and /or employment in the rapidly growing fields of biotechnology, agribusiness, industry, law enforcement and molecular biology.

**To prepare students for tomorrow's world through a dynamic & diverse learning experience.**

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### Biology

**Dean:** Dr. Ken Andrews

**Chair:** Dr. Mike Bay

**Degree:** Bachelor of Science

**Concentrations:** 7

**Minors:** 2

**Faculty:** 8 full-time & 2 part-time

**Organizations:** 4

**Scholarships:** 25

**Location:** 101 PES Building

### ECU at a Glance

**Undergraduate Enrollment:**  
3,300

**Undergraduate Majors:** 58

**Student to Faculty Ratio:**  
17 to 1

**Average Class Size:** 22

**Faculty with PhDs:** 65%

**States Represented:** 28

**Countries Represented:** 30+

**Year Founded:** 1909

**Campus Size:** 140 acres

**Area Location:** Ada, Oklahoma

### Tiger Spirit

**Mascot:** Roary the Tiger

**School Colors:** Orange & Black

**Student Organizations:** 35+

**Athletics:** NCAA Division II

**Men's:**  
Football  
Baseball  
Basketball  
Cross Country  
Track & Field  
Golf

**Women's:**  
Basketball  
Volleyball  
Softball  
Soccer  
Cross Country  
Track & Field  
Golf

