



ZOOLOGY

OUR PROMISE TO YOU

Kentucky Wesleyan is the only small, private college in the state of Kentucky that offers a zoology program. our high-caliber program and small calsses attract students from around the country who seek careers in the areas of wildlife resources, wildlife conservation, fisheries biology, etc.

As a zoology student, you will:

- Be well prepared for competitive employment opportunities at the state and federal level or in the private sector.
- Work with a variety of living systems from invertebrates to vertebrates and from aardvarks to zebras.
- Develop an appreciation for the complexity and majesty of the living world.

GET INVOLVED

The Wesleyan Fellows program will enrich your college experience and enhance your career opportunities. This grand-based work-study program encourages creative thinking and resourceful problem-solve, and you will gain valuable knowledge and skills with a Wesleyan professor or an off-campus supervisor as your mentor. For more information on Wesleyan Fellows, visit kwc.edu/wesleyan-fellows.

EXCEPTIONAL PREPARATION

We encourage students to engage in summer research or internship programs, such as internships in the Florida Keys, Hawaii, and Walt Disney World. Many of our students also work as interns at the Western Kentucky Raptor Center in Owensboro. Relevant experiences like these have led to jobs at the Houston Zoo, International Animal Welfare, and conservation groups in Europe and Southeast Asia.



CAREERS

- Animal rehabilitator
- Animal trainer
- Aquarist
- Conservation officer
- Game warden
- Naturalist
- Park ranger
- Research technician
- Zookeeper

Contact Admissions:
270-852-3120
admissions@kwc.edu

find yourself

Courses Offered

Kentucky Wesleyan education is all about preparing you to pursue a productive career and a full, meaningful life. Each major offers unique courses designed to get you ready for a professional career in that field of study. Below, learn more about some of the courses you can expect to take with this major:

ZOO 302 – Ichthyology **4 Semester Credit Hours**

Students will learn fish taxonomy, morphology, identification, physiology, behavior, ecology, etc. Students will also learn about some aspects of fisheries biology, public aquaria, and field techniques.

ZOO 306 – Entomology **4 Semester Credit Hours**

The general nature and structure of insects will be studied. Emphasis will be on habitats, life cycles, sampling techniques, exotic species, and the use of keys to identify insects to family. This is a laboratory and field course; field trips are required.

ZOO 308 – Comparative Vertebrate Anatomy **4 Semester Credit Hours**

This is a course examining the evolution of vertebrate form and function using the established discipline of comparative morphology. Laboratory dissection, comparison of adaptive strategies, and phylogenetic relationships are emphasized.

ZOO 311 – Animal Behavior **3 Semester Credit Hours**

An in-depth look at the biological and psychological mechanisms that explain why and how animals behave as they do. Course will focus on many important topics in the field of animal behavior, including foraging, predator avoidance/defense, mating, and habitat selection.

ZOO 312 – Parasitology **4 Semester Credit Hours**

A study of the principles of parasitism and other aspects of parasite biology using human parasites as models. Parasites causing human disease will be studied with emphasis on the occurrence, transmission, reservoirs, and methods of control.

ZOO 314 – Marine Mammals **4 Semester Credit Hours**

An overview of the biology of marine mammals with an emphasis on their evolution, anatomy, behavior, ecology, and conservation. Course focuses on the classification, systematics, physiology, and population structure of marine mammals, includes field experience with a trip to the Gulf of Mexico.

ZOO 315 – Invertebrate Zoology **4 Semester Credit Hours**

Students will further develop their knowledge and understanding of multicellularity, patterns of reproduction, patterns of development, species concepts, trophic levels, community structure, biodiversity, taxonomy, phylogeny, and evolution of invertebrates.

Scan me to discover more
information about your major
and the others we offer!



ZOO 316 – Vertebrate Zoology **4 Semester Credit Hours**

This course will provide the opportunity for students to survey the classes and major orders of an extremely "successful" group of animals. We will study the evolutionary history, morphological/physiological/behavioral adaptations, habitats, and conservation of these organisms. In addition, students will gain experience using a dichotomous key to identify those species they are most likely to encounter in western Kentucky.

ZOO 390 – Topics in Zoology **1-3 Semester Credit Hours**

An in-depth study of a sub-discipline in zoology. The instructor and biology faculty will determine the course subject for a given semester. Examples of subjects include animal behavior, ornithology, herpetology, mammalogy, etc.

ZOO 400 – Independent Study **1-3 Semester Credit Hours**

An opportunity for the zoology major to carry out a research project (library, laboratory and/or field) under the supervision of a Biology Program faculty member.

ZOO 401 – Directed Student Research **1-3 Semester Credit Hours**

An opportunity for the upper-level zoology student to carry out research (library, laboratory, and/or field) under the direction of a Biology Program faculty member.

ZOO 402 – Zoological Internship **1-3 Semester Credit Hours**

An opportunity to gain hands-on practical experience. Student accepted in a zoological internship at a zoological outlet (with permission from instructor) will apply theories and skills learned in the classroom to the real-world environment.

ZOO 406 – Evolution **3 Semester Credit Hours**

Students will become familiar with mechanisms of micro- and macro-evolutionary change; patterns embedded in the history and diversity of life; consequences of evolution to molecular, developmental, and ecological systems.

ZOO 414 – Ecology **4 Semester Credit Hours**

This course includes advanced study of: functions provided by ecosystems of the world, as well as the underlying ecological interactions that result in such functions; the flow of energy through trophic interaction; and the physical template guiding ecological interactions.