Overview

Field Biology

The Franklin College Biology Department is an emerging leader in field biology training among liberal arts colleges of the Midwest. The combination of personal instruction, engaging field experiences, meaningful research opportunities and beautiful natural areas make Franklin College an exceptional place for students to begin their journey as future natural resource scientists.

Courses

We offer a wide array of coursework that is at the same time rigorous and engaging. Options include: Zoology, Botany, Ecology, Plant Communities, Ornithology, Conservation Biology, Animal Behavior, Field Biology, and Environmental Ethics. All of these courses are designed to provide a fresh look at classical theory and contemporary issues. Many of these courses include field-based labs in which students seine fish, survey herbaceous plants, mist net birds, live-trap mammals, measure trees, plant wetland seeds, collect GPS data, conduct radio telemetry, sample soil, and much more.

Field Biology Facilities

Hougham Woods—a 32-acre woodland that was donated to the college by Mr. Mac McNaught of Franklin Tech Park. This mature forest sits 2 miles east of campus and provides numerous opportunities for students to learn about plant communities, wildlife, and invasive plant management.

Urban Forest in Grizzly Park—A recently planted 3-acre urban forest that hosts representatives of over 20 different native tree species. Students actively participate in planning, planting, maintenance, and monitoring.

The Wetlands in Grizzly Park—Native wetlands where students assist in seeding, invasive plant management and monitoring.

The Franklin College Greenhouse—A greenhouse where student workers gain experience in horticulture.

GIS Computing Lab—A brand new GIS computing lab where students learn software and spatial analysis skills.

Museum—A museum that houses a teaching collection of thousands of vertebrates. Student workers gain experience in the preparation of birds and mammals.

Herbarium—An herbarium that houses a collection of North American plants and offers opportunities for students to gain skills in the preparation and maintenance of plant specimens.

A small collection of live animals that provides students with the opportunity to develop skills in animal care.

A live Dermestid beetle colony that is used in the preparation of our zoology skull collection and offers students the opportunity to gain experience in museum curation skills.

Field Biology Faculty

Dr. Alice Heikens’ interest in endangered species, native plants, and natural resource management began with her undergraduate research on a federally endangered plant, Alabama snow wreath. She has a B.S. and M.S. in biology from the University of Central Arkansas and a Ph.D in botany from Southern Illinois University.

Dr. Heikens collaborates with various federal, state, and not-for-profit organizations on research and management projects. Her students have presented research on floristic inventories and plant ecology studies at state and national conferences. Dr. Heikens is developing a three-acre forest at Franklin College that replicates the native forests that were found in Indiana before European settlement. She also serves as the chair of the Greenscape Committee and the sponsor for the EARTH student organization.

Dr. O’Neal holds a bachelor’s degree in biology from Anderson University and master’s and doctoral degrees from the University of Illinois Urbana-Champaign. He joined the Biology Department in 2010, where he teaches ecology, zoology, animal behavior, ornithology, and field biology.

Dr. O’Neal and his students are actively involved in studies of migratory ducks, nesting marshbirds, radar aerocology, northern saw-whet owls, and white-tailed deer. He is currently a member of The Wildlife Society, the Indiana Academy of Science, and Ducks Unlimited. He also serves as an advisor for Franklin Outdoors, a student organization focused on hunting and fishing. During the summer, Dr. O’Neal works as an environmental consultant in the field of wetland science. He and his wife, Andrea, have three young daughters and love to travel, garden, and spend time outdoors.

About Franklin College

Franklin College prepares graduates, through the liberal arts, to think independently, to lead responsibly, and to serve with integrity in their professions, their communities, and the world.

Founded in 1834, Franklin College is a residential four-year undergraduate liberal arts institution with a scenic, wooded campus located 20 minutes south of downtown Indianapolis. The college prepares men and women for challenging careers and fulfilling lives through the liberal arts, offering its approximately 1,000 students 36 majors, 39 minors and 11 pre-professional programs. In 1842, the college began admitting women, becoming the first coeducational institution in Indiana and the seventh in the nation. Franklin College maintains a voluntary association with the American Baptist Churches USA.
Research

At Franklin College, we believe students learn science best by being active participants in the scientific process of gaining knowledge. Every student is encouraged to participate in an existing faculty research project or develop a new project of their own. Funding for these projects is available through competitive internal grants as well as external grants. Many of our students have presented their research at state and national conferences.

Recent research topics:
- Migratory Birds on Radar
- Plant Species Inventory
- Nesting Marshbirds
- Franklin College Tree Survey
- Northern Saw-Whet owls
- American Golden-Plovers
- Migratory Waterfowl
- Beechdrops
- Water Quality
- White-Tailed Deer
- Wildlife Disease
- Ducks
- Puttyroot Orchids

Travel

Each spring the Biology Department offers a “Field Biology” course that culminates in a week-long field trip to a unique ecosystem. Students spend the first part of the semester learning about the study area and then spend a week immersed in the natural history and ecological analysis of local animal and plant communities at the field site.

Dr. Alice Heikens leads a trip to The Great Smoky Mountains. Students that have traveled to the Smokies have documented their experiences on a series of webpages.

Dr. Ben O’Neal leads a trip to the Mississippi Delta region of Louisiana. Students interact every day with professional biologists and land managers to learn about oil spill recovery, hurricane response, agriculture, and hypoxia. Activities include kayaking, hiking, bird watching, fishing, crabbing, and duck banding.

Other Field Biology recent travel opportunities and internships include Hawaii, Bahamas, Costa Rica, Minnesota and Alaska.

Internships

- Muscatatuck National Wildlife Refuge
- Central Indiana Land Trust (not-for-profit)
- Johnson County GIS Computing Lab
- Audubon Center of the Northwoods Wolf Program
- Raptor Rehabilitation Center
- Hamilton County Soil and Water Conservation District
- Butler Herbarium

Conference Presentations

- National Natural Areas Conference
- National Conference of Undergraduate Research
- Indiana Academy of Science
- Indiana State Wildlife Society
- Southern Indiana Conservation Conference
- Butler Undergrad Research Conference

Funding

- Holman Endowed Scholarship in Field Biology and Zoology
- Franklin College Endowed Undergraduate Field Biology Research Scholarship
- External Grants
  - Sycamore Audubon Society
  - Illinois Ornithological Society
  - Muscatatuck Wildlife Society
  - Indiana Dept of Natural Resources—Division of Forestry

Tree Campus USA

In 2013, Franklin College earned Tree Campus USA® recognition. Tree Campus USA is a national program launched in 2008 by the Arbor Day Foundation and Toyota. It honors colleges and universities and their leaders for promoting healthy trees and engaging students and staff in the spirit of conservation. To obtain this distinction, Franklin College has met the five core standards for sustainable campus forestry required by Tree Campus USA, including establishment of a tree advisory committee, evidence of a campus tree-care plan, dedicated annual expenditures for its campus tree program, an Arbor Day observance and the sponsorship of student service-learning projects.