

Biology

Biology is the study of living things. Biologists study life from molecules to ecosystems. At Stetson, students may obtain either a bachelor of science degree or a bachelor of arts degree in biology. In both majors, we stress a hands-on approach to learning.

All biology courses include lab sessions and all students are required to complete a senior research project. In these research projects, students move beyond simply learning what is already known -- they begin to generate new knowledge.

A Distinctive Program

The curriculum prepares students to be scientists by engaging them in scientific experimentation in their first courses. By their second year, biology majors are given the tools to design and analyze their own experiments. By junior year, students are well-prepared to write a formal proposal describing the capstone research project to be completed their final year. The relationships forged between students and mentors during this process are one of the most distinctive elements of the Stetson biology program.

Fast Facts

Number of faculty: 10

Can you major in this program? Yes

Can you minor in this program? Yes

Emphasis within the major: neuroscience, microbiology, freshwater biology, terrestrial ecology, molecular ecology

Popular second majors: chemistry, psychology, environmental science, integrative health science

Program website:

stetson.edu/biology

This department prepares students for professional studies leading to careers in medicine, health care and biotechnology, and for graduate studies in the sciences.

Academics and Research

Independent research

Each student works closely with a faculty member on a senior research project, the capstone experience of the biology major. Typically completed in a faculty member's lab, the research project allows one-on-one interaction between student and professor. After completing the project, students present their research at Stetson Showcase, a daylong symposium. Students may have the opportunity to present their results at a scientific meeting or co-author a manuscript with a faculty mentor. Examples of ongoing projects include:

- Research on the impacts of a South American catfish that is invading local springs
- Neurobiology of taste sensation
- DNA repair mechanisms in microorganisms
- Phylogeography of Florida snails
- A variety of herpetological, ornithological and botanical topics.

Facilities and opportunities

All biology courses have lab sections taught by professors. Classes are small, so each student receives hands-on experience with modern research equipment in Sage Hall Science Center. For classes with a field component, Stetson's central location offers opportunities for study in such places as Ocala National Forest, Canaveral National Seashore, Blue Spring State Park and Lake Woodruff National Wildlife Refuge.

Preparation for graduate study

By graduation, students are familiar with the entire research process, from experimental design to written and oral presentation of results. They also have developed essential lab skills and the confidence to work as a peer with a scientist-mentor. Because faculty members involve undergraduates in their research, most faculty publications include student co-authors.

Awards and Recognition

Distinguished faculty

Two faculty members have been formally recognized for their teaching with Stetson's Hague and McEniry Awards. Our research faculty members are recipients of external funding from local and national agencies such as the National Science Foundation and all are active members of academic societies such as the Society for Neuroscience, Society for Conservation Biology, Ecological Society of America and the Council for Undergraduate Research. We also have an endowed Brown Faculty Fellow. Faculty include:

- [Derek Barkalow](#), Ph.D., Rutgers University; cell biology, physiology
- [Cynthia Bennington](#), Ph.D., West Virginia University; plant population genetics, evolutionary biology
- [Roslyn Crowder](#), Ph.D., University of Alabama at Birmingham; cell and molecular biology
- [Terry Farrell](#), Ph.D., Oregon State University; ecology, environmental science
- [Melissa Gibbs](#), Ph.D., University of Delaware; developmental biology, spring fish ecology
- [Michael King](#), Ph.D., University of Virginia; neuroscience/brain mechanisms underlying behavioral responses to taste input
- [Peter May](#), Ph.D., University of Florida; vertebrate and insect ecology, ecology, natural history of birds ([website](#))
- [Alicia Slater](#), Ph.D., Virginia Tech University; molecular ecology, freshwater macroinvertebrates
- [David Stock](#), Ph.D., North Carolina State University; microbial genetics and ornithology, DNA metabolism
- [Kirsten Work](#), Ph.D., University of Oklahoma; aquatic ecology, conservation

Grant-funded research

Students are encouraged to begin their senior research during the summer between their junior and senior years, particularly as part of the Stetson Undergraduate Research Experience. The SURE program provides funding for equipment, room and board and travel.

Undergraduate awards and honors

The biology department awards a number of prizes to undergraduates, such as the Dorothy L. Fuller Award for Outstanding Senior and Outstanding Research Award. Qualified students also can be inducted into the Beta Beta Beta biology honorary society.

Beyond the Classroom

Internships

Biology majors often have the opportunity to complete summer internships. For example, students who are planning a career in human health can intern with physicians at DeLand's local hospital. Students can also conduct internships at biological field stations, with local/state/federal governmental agencies and/or nonprofit agencies.

More Information



Office of Admissions
421 North Woodland Boulevard, Unit 8378
DeLand, Florida 32723



386-822-7100 or 800-688-0101



admissions@stetson.edu



stetson.edu/admissions

After Stetson

Diverse careers

A Stetson bachelor's degree in biology is good preparation for medical or medicine-related schools or for graduate work. Many biology majors choose employment immediately after graduation, and build careers as laboratory technologists, naturalists, teachers, museum and zoo curators, governmental agricultural experts, environmental consultants, science writers or editors, science photographers, science librarians, and sales people in pharmaceuticals, biomedical supplies or laboratory equipment. Other fields open to biology majors include bio- and genetic engineering, alternative energy resource development, and computer software development. Recent graduates have become educators, laboratory or field technicians, and graduate/professional students at Princeton University, Vanderbilt University and the University of Florida.



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