Aquatic and Marine Biology

If you'd rather be on water than on land, this major is for you. Aquatic and marine biology is the study of living organisms in freshwater and ocean environments. Stetson University is uniquely situated in a part of the country replete with springs, rivers, lakes, swamps, salt marsh and ocean ecosystems. Students emerge from Stetson's program well-versed in the issues of both freshwater and marine ecosystems.

A Distinctive Program

1. All students complete a capstone senior research project of their own design. Most undergraduates at large institutions never have the chance to conduct their own research.
2. All students complete a 100-hour internship.
3. The Stetson program covers both freshwater and marine ecosystems. Although most students want to be marine biologists, not every state or community has access to the ocean. Every state and community, however, has freshwater resources. Stetson graduates are better qualified for jobs all over the U.S. due to their broader exposure to the study of water.

Fast Facts

- Number of faculty: 6
- Can you major in this program? Yes
- Can you minor in this program? No
- Emphasis within the major: freshwater and marine ecosystems and the organisms living there
- Popular second majors: environmental science
- Program website: stetson.edu/biology/amb

This department prepares students for careers or advanced study in biological fields, environmental science and conservation, or to pursue careers in health professions such as veterinary medicine.

Academics and Research

Independent research

At Stetson, students work closely with a faculty member on a research project. Students are encouraged to participate in the Stetson Undergraduate Research Experience and to present research data at the Stetson Showcase. Many Stetson undergraduates have the opportunity to attend scientific meetings and some co-author manuscripts with faculty members.

Facilities and opportunities

Most resources are out in the field and include Blue Spring, the St. Johns River and the Atlantic Ocean. Stetson also has an aquatic and marine biology research room, where students can set up their own space for running experiments or processing data. Stetson has a field research location at Lake Beresford, where long-term experiments can be set up, and has partnerships with Blue Spring State Park, Marine Discovery Center, Marine Science Center and the Duke Marine Lab. Students may spend a summer at Duke working on their senior research, or a summer or semester taking courses there. Stetson faculty members also accompany deserving students to scientific meetings so students can make connections and see what being a full-fledged scientist is all about.

Preparation for graduate study

Rigorous coursework and research experiences gained at Stetson not only prepare students for graduate study, they provide them with a significant competitive advantage over others.
Awards and Recognition

Distinguished faculty
Most faculty are research-active and publish regularly. Faculty members have been awarded prestigious teaching awards (nominated by their students) and research awards (nominated by colleagues). Faculty include:

- Derek Barkalow, Ph.D., Rutgers University; cell biology and physiology
- Terry Farrell, Ph.D., Oregon State University; ecology and environmental science
- Melissa Gibbs, Ph.D., University of Delaware; developmental biology and spring fish ecology
- Peter May, Ph.D., University of Florida; vertebrate and insect ecology, ecology, natural history of birds (website)
- Alicia Schultheis, Ph.D., Virginia Tech University; molecular ecology, freshwater macroinvertebrates
- Kirsten Work, Ph.D., University of Oklahoma; aquatic ecology and conservation

Grant-funded research
Students are encouraged to apply for departmental research funds, the Dean's Fund (research and travel funding) and the Stetson Undergraduate Research Experience (summer funding for research projects).

Undergraduate awards and honors
Students can be inducted into the Beta Beta Beta Biology Honorary Society. The department gives the Dorothy L. Fuller Award for Outstanding Senior, Outstanding Research Award and Outstanding Service to the Department Award. Receiving a SURE grant is a huge honor, as are receiving Maris Prizes for presenting the best poster or talk at Stetson Showcase. Stetson aquatic and marine biology students are always well represented in the list of Maris Prizes.

Beyond the Classroom

Internships
Students have interned at Blue Spring State Park, NOAA National Marine Fisheries in Panama City, SeaWorld, Volusia County Environmental Management (Manatee Program and Mosquito Control), Marine Science Center, Volusia County Turtle Patrol and Volusia County Artificial Reef Program, among others.

After Stetson

Diverse careers
Stetson aquatic and marine biology majors are trained to be scientists. Many graduates pursue advanced degrees leading to careers in biological research, environmental science and conservation. Others pursue careers in the health professions.