Biology

Description of the major:

Biology is the study of life in all its diverse forms: bacteria, fungi, algae, protozoa, plants and animals. The Department of Biology at Coastal Carolina University gives students opportunities to explore these various life forms at molecular, cellular, organismic and ecological levels. In addition to core curriculum requirements, a biology major includes 38-40 credit hours in upper-division biology courses, as well as related courses in chemistry and physics.

The student experience:

- Students have access to professors with a broad range of expertise, from the molecular scale to the ecosystem. Faculty have varied research interests that include infectious diseases, circadian rhythms, cellular and molecular biology, plant population genetics, ichthyology (the study of fish), herpetology (the study of reptiles and amphibians), sea bird conservation, stream and wetland ecology, phylogenomics, and neurology.
- Classes take students into both the laboratory and the field. Many laboratories involve outdoor activities and field trips to sites such as Waties Island, wetlands, forests, swamps and the Carolina bays.
- Students have the opportunity to work with faculty on independent research projects. Recent topics have included landscape ecology of golf courses, ecology of the Carolina bays, freshwater ecology, using DNA to determine bird parentage, fungus on beaches, and investigating prions.

Areas of study:

Biology majors choose from three areas of specialization. Students take two courses targeted toward these areas and then select from an additional 18-20 credit hours of upper-level biology courses:

- Cellular/Molecular Biology and Genetics
  - Microbiology
  - Molecular Biology
- Integrative Biology
  - Plant course
  - Animal course
- Ecology, Evolution and Conservation
  - Evolution
  - Conservation Ecology

Beyond the classroom:

Biology majors go on to careers in a variety of areas, including: environmental and medical fields; industrial biologist; zoologist; biomedical engineer; teacher; pharmacologist; clinical researcher; toxicology researcher; biostatistician; botanist; and food and nutrition scientist.

For more information:

- Michael Pierce, Ph.D., department chair, 843-349-6483 or mpiere@coastal.edu
- www.coastal.edu/biology/academicprograms