



# Biology, M.S.

If you are interested in studying life, it would be hard to find a place with a greater diversity of organisms and ecosystems to choose from than Cal Poly Humboldt. The University is surrounded by relatively pristine biological habitats that provide a wealth of challenging opportunities for study at the master's level by the aspiring biologist, botanist, or zoologist. These habitats are home to thousands of different animals, plants, and fungi, many of which are unique to northwestern California.

## Experience Your Learning

Field opportunities include the Marine Lab (a short drive from the campus), the Arcata Community Forest behind campus, and a 90-foot ocean going research vessel, RV Coral Sea.

Each graduate student accepted into the program automatically becomes a member of the Biology Graduate Student Association. The association actively participates with the department in sponsoring a lecture series that features widely respected university teachers and researchers from around the country.

Graduate students have participated in the Cal Poly Humboldt CIRM Bridges program. The paid internship hosted by prestigious institutions supports students from diverse backgrounds and is committed to improving human health through stem cell research and gene therapy.

There are a number of teaching associate positions available to graduate students through the Biology department. Assignments typically include teaching one lab each semester.

Labs on campus are equipped for biotechnology, scanning and transmission electron microscopy, mammalogy, genetic analysis, including DNA sequencing, and computer modeling.

### Did you know?

- Our graduate program is part of the Western Regional Graduate Program, allowing students from the Western United States and territories to pay in-state tuition.
- Outstanding natural environments include ocean and estuarine areas, undeveloped coastal dunes, redwood forests, alpine and subalpine forests, and state and national parks and forests.
- Aboard our 90-foot ocean going research vessel, the R/V Coral Sea, students collect and analyze marine plants and animals in their natural environments.



# Academics & Options

## Biology, M.S.

Graduate students in the Master of Science program in the Biological Sciences can choose to pursue investigations with an emphasis in the laboratory, forests, marine habitats, or a variety of other settings.

With an optional emphasis on training secondary school teachers in California, a master's degree in Biology can also be combined with a California Teaching Credential to expand on knowledge and skills that will allow graduates to compete for jobs on both the national and international level.

## Get Involved

### Activities and Organizations

**Biological Sciences Seminar Series:** Every semester we host a series of seminars from widely respected scholars and researchers from labs and universities around the country. Topics have included microbial networks in the skins of Brazilian frogs, evolution of the parrotfish beak, innovations in early land plants, and cancer stem cells. Seminars are open to all students.

**Biology Graduate Student Association:** Graduate students accepted into the program automatically become a member. The association helps sponsor the lecture series and hosts an annual mini-symposium where students, faculty, and staff share their research interests with informative presentations.

**The Greenhouse Club:** Students participate in greenhouse activities that include propagating plants, practicing integrated pest management, and basic horticulture skills. The plants propagated by students are sold by students, and the funds go to support club activities and the basic needs of the greenhouse.

### Jobs, Internships, and Conferences

**California State University Student Research Competition:** The annual event promotes excellence in undergraduate and graduate research and scholarly and creative activity by recognizing outstanding student accomplishments throughout the 23 campuses of the CSU.

## Careers

Favorable opportunities can be expected for biological scientists with advanced degrees. Employment in the life sciences is expected to grow due to recent advances in genetic research, advances in biological technology, and efforts to conserve the environment.

- Field Technicians
- Ecologists
- Microbiologists
- Physiologists
- Marine Biologists
- Geneticists
- Cellular and Developmental Biologists
- Biotechnology/Bioinformatics Researchers
- Naturalists
- Environmental Consultants



**[Cal Poly Humboldt] gave me a solid foundation in biology spanning the tree of life. The coursework was rigorous and, I would argue, unparalleled in its organismal breadth. Importantly, I was also given opportunities to apply what I learned in my courses to scientific research. This prepared me for graduate school and a career as a scientist, which I would never have considered if not for my mentors in the department."**

**Kelly Matsunaga** ('12, Botany), Assistant Professor and Curator, University of Kansas