Fisheries

College of Fisheries and Ocean Sciences

Department of Fisheries (https://www.uaf.edu/cfos/academics/departments/fisheries/) 907-474-7289

Department Overview

The Department of Fisheries is Alaska's leader in undergraduate and graduate fisheries education. The fisheries program is located in Fairbanks and Juneau, with additional faculty in Anchorage and Kodiak. Faculty and students conduct research in diverse fisheries disciplines, including genetics, biology and ecology, aquaculture, statistics, population dynamics, fisheries oceanography, economics, anthropology, seafood science and technology, fisheries management, marine policy and resource conservation. Research is conducted on a wide variety of species of fish, invertebrates, and marine mammals. Laboratory and field projects are conducted in freshwater and marine environments statewide from Southeast Alaska to the Arctic. Much of this research is focused on pressing fishery issues involving collaborations with state and federal management agencies, private organizations, fishery-dependent communities, and Alaska Native tribes and organizations.

B.A., Fisheries

The undergraduate program in the College of Fisheries and Ocean Sciences offers students a comprehensive education and training in fisheries biology, ecology, human dimensions, and related fields. Alongside rigorous scientific coursework, students engage in internships or research projects with professionals from various organizations, including local, state, federal, tribal, university, and private sectors.

The B.A. degree in fisheries equips graduates for careers in fishing, seafood processing, marketing, business, community development, tribal organizations, subsistence research, social sciences, and other human dimensions of fisheries. Typically, fisheries graduates find employment with governmental agencies and nongovernmental organizations in areas such as fisheries business administration, policy, education, social science, rural development, and extension. The program also lays a strong foundation for graduate study, preparing students for advanced research, management, administration, and teaching roles.

Minimum Requirements for Fisheries and Marine Sciences Bachelor's Degree: 120 credits

Learn more about the bachelor's degree in fisheries (https://uaf.edu/academics/programs/bachelors/fisheries.php), including an overview of the program, career opportunities and more.

B.S., Fisheries and Marine Sciences

The undergraduate program in the College of Fisheries and Ocean Sciences offers students a broad education and training in fisheries biology, ecology, marine biology, oceanography, and related fields. In addition to rigorous scientific coursework, students engage in internships or research projects with professionals from various organizations, including local, state, federal, tribal, university, and private sectors.

The B.S. degree in fisheries and marine sciences prepares graduates for careers as professionals in fisheries and aquatic management, research, conservation, education, policy, and industry organizations. Typically, graduates secure employment with governmental agencies, nongovernmental organizations, and academic institutions, both in Alaska and throughout North America. The program also provides a solid foundation for pursuing related graduate studies that will enable entry into careers in advanced research, management, administration, and teaching roles.

The undergraduate program is administered through the Troth Yeddha' Campus in Fairbanks, and all fisheries and marine sciences courses (excluding field courses) are offered via distance education to accommodate students in outlying areas.

Minimum Requirements for Fisheries and Marine Sciences Bachelor's Degree: 121 credits

Learn more about the bachelor's degree in fisheries and marine sciences (https://uaf.edu/academics/programs/bachelors/fisheries-marine-sciences.php), including an overview of the program, career opportunities, and more.

M.S., Ph.D., Fisheries

Fisheries graduate students take classes and undertake research on a diverse set of fisheries-related topics. Program strengths include quantitative fisheries science, fisheries management and human dimensions, and biology and ecology. Students are typically based in Juneau or Fairbanks, but most courses are video-delivered to locations throughout Alaska.

Students at each location are engaged in a wide variety of research topics in marine and freshwater ecosystems. All locations have excellent laboratory facilities, access to pristine environments and healthy fisheries, and strong connections to local and tribal partners, state and federal agency scientists and managers, as well as participants in commercial, sport and subsistence fisheries.

Most students are supported as research assistants for some or all of their tenure. Agencies such as the National Atmospheric and Oceanic Administration, the U.S. Fish and Wildlife Service, and the Alaska Department of Fish and Game are collaborators on research projects and employ many of our graduates.

Minimum Requirements for Fisheries Degrees: M.S.: 30 credits; Ph.D.: 36 credits

M.M.P., Marine Policy

The design and implementation of effective Marine Policy entails quantitative and qualitative analyses relevant to the oversight and management of marine resources: the study of the potential and actual social, economic, legal, environmental, and ecological consequences of alternative policies; an objective exploration of what is, what was, and what could be. Graduates of this program will have the skills and knowledge necessary to conduct forward-looking analyses to predict the outcomes of management actions and retrospective analyses of actual management outcomes.

The curriculum includes foundational and capstone courses in marine policy, an internship, and requirements in four key areas: (1) Living Marine

Resources and their Management, (2) Analytic Methods, (3) Law and Policy, and (4) Economics, Development, and Sustainability. Students may select from over 70 courses that fulfill the breadth and concentration requirements. Courses are drawn from the Alaska Native Studies, Anthropology, Arctic and Northern Studies, Biology, Cross-cultural Studies, Economics, Fisheries, Geography, Homeland Security and Emergency Management, Marine Biology, Natural Resource Management, Political Science, Public Administration, Rural Development, and Statistics programs at UAF and UAS. Most of these courses are offered through synchronous or asynchronous modalities, making this degree program accessible to students throughout Alaska and worldwide.

The Master of Marine Policy (MMP) degree is jointly offered by UAF and UAS, with UAF as the lead institution for applications and program administration. MMP Graduates receive a diploma indicating that the degree is awarded jointly by UAF and UAS. Applications for admission to the MMP program will be processed through UAF. Enrolled students may select from various required and elective courses offered by UAF or UAS. Most of these courses can be taken in person or remotely via synchronous or asynchronous modalities. UAF tuition and fees apply to courses taken through UAF, while UAS tuition and fees apply to courses taken through UAS. MMP program students are advised by the program coordinators.

Minimum Requirements for Marine Policy M.M.P.: 30 credits

Programs

Degrees

- B.A., Fisheries (https://catalog.uaf.edu/bachelors/fisheries-ba/)
- B.S., Fisheries and Marine Sciences (https://catalog.uaf.edu/bachelors/ fisheries-bs/)
- M.M.P., Marine Policy (https://catalog.uaf.edu/masters/marine-policy/)
- M.S., Fisheries (https://catalog.uaf.edu/masters/fisheries/)
- Ph.D., Fisheries (https://catalog.uaf.edu/phd/fisheries/)

Minor

• Minor, Fisheries (https://catalog.uaf.edu/minors/fisheries/)