APPLIED FISHERIES, A.A.S.

Sitka, e-Learning

The Associates of Applied Science (A.A.S.) provides students with a broad educational and practical foundation in the fields of fisheries management and aquaculture. Students will be prepared for entry level employment in federal and state agencies, hatcheries, and the private sector. This program is offered via both distance and local course options. Successful graduates who work closely with academic advisors will have the option to continue on to Bachelors of Science (B.S.) in Fisheries and Ocean Sciences through UAS or UAF. Program assessment plans and student learning outcomes are posted at the Program Assessment website (https://uas.alaska.edu/provost/academic-affairs/assessment/).

The A.A.S. in Applied Fisheries requires a minimum of sixty credit hours and a GPA of 2.50. Of the 60 credits, students must complete 20 credits at the 200 level or above. Students must complete 6 credit hours of internship.

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**General Education Requirements**

**Written Communication Skills**

- WRTG S111 *Writing Across Contexts* 6
- WRTG S212 *Writing and the Professions* 3

**Oral Communication Skills**

- COMM S111 *Fundamentals of Oral Communication* 3
- or COMM S235 *Small Group Communication and Team Building* 3

**Computational Skills**

- MATH S105 or MATH S151 *College Algebra for Calculus* 4

**Science**

Select one of the following: 4

- BIOL S103 *Biology and Society*
- BIOL S104 *Natural History of Alaska*
- BIOL S115 *Fundamentals of Biology I* 2
- BIOL S116 *Fundamentals of Biology II*
- CHEM S103 *Introduction to General Chemistry*
- ENVS S102 *Earth and Environment*

**Major Requirements**

- FT S120 Fisheries of Alaska 3
- FT S211 Fisheries Management Techniques 3
- FT S212 Fisheries Management Techniques Lab 1
- FT S222 Alaska Salmon Culture I 3
- FT S223 Alaskan Aquaculture Lab 1
- FT S270 Freshwater Ecology 3
- or FISH F446 - FRESI 3
- FT S272 Fisheries Management, Law and Economics 3
- FT S274 Fish Biology 3
- or FISH F427 - ICHT 3
- FT S291 Fisheries Internship 6
- OCN S101 *Introduction to Oceanography* 3
- or MSL F211 - INTRO 3

**Select 11 credits of the following:**

- BA S166 Small Business Management
- FT S125 Fish Pathology Lab
- FT S188 Basic Scuba Diving
- FT S194 Fisheries Policy Practicum (Fisheries Technology Practicum)
- STAT S200 *Elementary Statistics*
- Advisor approved electives

Any of the science GERs not taken above

**Total Credits** 60

* Denotes GER
1. Grade C 2.00 or better
2. Students interested in pursuing a bachelor's degree should take BIOL S115 and MATH S151.

1. Students will demonstrate sound knowledge of fish and their habitats (UAS competencies in information literacy and critical thinking).

   a. Students will identify common commercial species of Alaska and understand their habitat needs.
   b. Students will describe water as an environment for life.
   c. Students will convey fishery information to faculty and classmates.

2. Students will have sound field sampling techniques (UAS competencies in quantitative skills, critical thinking, computer usage and communication).

   a. Students will collect, analyze, and present fisheries data utilizing standard methodologies.
   b. Students will describe the importance of following protocols and techniques, utilizing good field data collection techniques and data recording techniques.
   c. Students will describe methodologies and protocols; practice good data management skills; summarize and communicate findings.
   d. Students will discuss the importance of correct data collection and analysis.
3. Students will operate safely while participating in program activities and utilizing program equipment (UAS competency in professional behavior).
   
   a. Students will identify methods for reducing injury in the field and lab setting.
   
   b. Students will discuss safe operating procedures for equipment; assess field conditions to determine safety guidelines to follow.
   
   c. Students will discuss the importance of promoting safety for self and others and equipment.

4. Students will understand the basic principles of salmon enhancement techniques used in Alaskan hatcheries (UAS competencies in quantitative skills and critical thinking).
   
   a. Students will describe the basic process involved in fish rearing.
   
   b. Students will take part in “hands-on” procedures to ensure successful output of fish.
   
   c. Students will describe attributes of Salmon Culture facilities in Alaska.

5. Students will understand the management and legal frameworks within which marine fisheries exist (UAS competencies in communication, information literacy and computer usage).
   
   a. Students will describe the legal and regulatory framework of marine fisheries in Alaska.
   
   b. Students will describe the current status of marine fisheries statewide.
   
   c. Students will describe the social and economic value of Alaska fisheries to the state of the nation.