

Fisheries

School of Fisheries and Ocean Sciences
 Fisheries Program
 907-474-7289
www.sfos.uaf.edu/academics/

B.S. Degree

Minimum Requirements for Degree: 130 credits

The fisheries undergraduate program offers broad basic education and training, preparing graduates to work in management, law enforcement, public information, business administration and education. The program provides a solid foundation for graduate study for students contemplating careers in research, administration, advanced management or teaching. The undergraduate program is offered only on the UAF Fairbanks and Juneau campuses.

With a number of subarctic streams and lakes within easy reach, Fairbanks offers an excellent location for the study of Interior Alaska aquatic habitats. Access to the marine environment from the Fairbanks campus is in Prince William Sound and Cook Inlet.

The Juneau Center, School of Fisheries and Ocean Sciences, houses the UAF fisheries science program near the Auke Bay National Marine Fisheries Service Laboratory north of Juneau. The Juneau Center has freshwater and seawater wet labs, computer labs and ready access to marine and freshwater habitats. The Fishery Industrial Technology Center, located in Kodiak, has new facilities for work in harvest technology, seafood technology, seafood biochemistry and microbiology.

Fisheries students in Fairbanks and Juneau have an opportunity to associate with personnel of federal and state conservation agencies and these agencies hire students for summer fieldwork. Bachelor of science candidates are strongly urged to obtain work experience in fisheries with public resource agencies or private firms. Faculty members can help students contact potential employers. Fisheries undergraduate students are asked each fall to describe their work experience of the previous year.

Major — B.S. Degree

- Complete the general university requirements. (See page 124. As part of the core curriculum requirements, complete MATH F200X or F272X.)
- Complete the B.S. degree requirements. (See page 129. As part of the B.S. degree requirements, complete STAT F401 or STAT F402.)
- Complete the following fisheries core requirements:*

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| BIOL F115X—Fundamentals of Biology I** | 4 |
| BIOL F116X—Fundamentals of Biology II** | 4 |
| BIOL F271—Principles of Ecology | 4 |
| BIOL F310—Animal Physiology | 4 |
| BIOL F362—Principles of Genetics | 4 |
| BIOL F473W—Limnology (4) | |
| or MSL F411—Current Topics in Oceanographic Research (3) | |
| or BIOL F476—Ecosystem Ecology (3) | |
| or BIOL F483—Stream Ecology (3) | 3 – 4 |
| CHEM F105X—General Chemistry** | 4 |
| CHEM F106X—General Chemistry** | 4 |
| ECON F200—Principles of Economics (4) | |
| or ECON F235—Introduction to Natural Resource Economics (3) | |
| or ECON F201—Principles of Economics I: Microeconomics (3) | |
| and ECON F202—Principles of Economics II: Macroeconomics (3) | |
| or ENGL F414W—Research Writing (3) | 3 – 4 |
| FISH F101—Introduction to Fisheries | 3 |
| FISH F288—Marine and Freshwater Fishes of Alaska | 3 |
| FISH F315—Fisheries Techniques | 4 |
| FISH F425—Fish Ecology | 3 |
| FISH F427—Ichthyology | 4 |
| FISH F490—Experiential Learning Internship | 1 |
| FISH F487W,O—Fisheries Management | 3 |
| MSL F111X—The Oceans** | 4 |
| PHYS F103X—College Physics** | 4 |
| STAT F200X—Elementary Probability and Statistics | 3 |
| STAT F401—Regression & Analysis of Variance | 4 |
| or STAT F402—Scientific Sampling | 3 |
- Complete 12 credits of electives* from Fisheries, Biology or Natural Resource Management (of which 7 credits must be upper division).
- Complete 4 credits of electives* from Chemistry, Geology or Physics.
- Complete 4 upper-division credits of other electives*.
- Minimum credits required126

* Student must earn a C grade or better in each course.

** Courses completed in the fisheries core may be used to meet the core natural sciences or B.S. degree natural science requirements but not both.

Note: Fisheries majors are encouraged to reinforce their fisheries qualifications by earning a minor in a program related to fisheries. Some examples are biology, business management, chemistry, economics, mathematics, natural resources management (animal science), northern studies, statistics or wildlife.



Baccalaureate Core Requirements

All degrees (e.g. B.A., B.S., etc.) require additional courses.
Refer to specific degree and program requirements.

COMMUNICATION (9)

Complete the following:

ENGL F111X (3) _____
ENGL F190H may be substituted.

Complete one of the following:

ENGL F211X OR ENGL F213X (3) _____

Complete one of the following:

COMM F131X OR COMM F141X (3) _____

PERSPECTIVES ON THE HUMAN CONDITION (18)

Complete all of the following four courses:

ANTH F100X/SOC F100X (3) _____
ECON F100X OR PS F100X (3) _____
HIST F100X (3) _____
ENGL/FL F200X (3) _____

Complete one of the following three courses:

ART/MUS/THR F200X, HUM F201X OR ANS F202X (3) _____

Complete one of the following six courses:

BA F323X, COMM F300X, JUST F300X, NRM F303X,
PS F300X OR PHIL F322X (3) _____

OR complete 12 credits from the above courses PLUS

- two semester-length courses in a single Alaska Native language or other non-English language OR
- three semester-length courses (9 credits) in American Sign Language taken at the university level.

MATHEMATICS (3)

Complete one of the following:

MATH F103X, MATH F107X, MATH F161X OR
STAT F200X (3 – 4) _____
** No credit may be earned for more than one of MATH F107X or F161X.*

OR complete one of the following*:

MATH F200X, MATH F201X, MATH F202X,
MATH F262X OR MATH F272X (4) _____
**Or any math course having one of these as a prerequisite.*

NATURAL SCIENCES (8)

Complete any two (4-credit) courses:

ATM F101X (4) _____
BIOL F100X (4) _____
BIOL F103X (4) _____
BIOL F104X (4) _____
BIOL F111X (4) _____
BIOL F112X (4) _____
BIOL F115X (4) _____
BIOL F116X (4) _____
CHEM F100X (4) _____
CHEM F103X (4) _____
CHEM F104X (4) _____
CHEM F105X (4) _____
CHEM F106X (4) _____
GEOG F205X (4) _____
GEOS F100X (4) _____
GEOS F101X (4) _____
GEOS F112X (4) _____
GEOS F120X (4) _____
GEOS F125X (4) _____
MSL F111X (4) _____
PHYS F102X (4) _____
PHYS F103X (4) _____
PHYS F104X (4) _____
PHYS F115X (4) _____
PHYS F116X (4) _____
PHYS F175X (4) _____
PHYS F211X (4) _____
PHYS F212X (4) _____
PHYS F213X (4) _____

LIBRARY AND INFORMATION RESEARCH (0 – 1)

Successful completion of library skills competency test OR
LS F100X or F101X prior to junior standing (0 – 1) _____

UPPER-DIVISION WRITING AND ORAL COMMUNICATION (0)

Complete the following:

Two writing intensive courses designated (W) (0) _____
One oral communication intensive course designated (O) (0) _____
OR two oral communication intensive courses designated (O/2), at the upper-division level (see degree and/or major requirements) (0) _____

TOTAL CREDITS REQUIRED 38 – 39