

# APPLIED FISHERIES CERTIFICATE

## Sitka, e-Learning

The Certificate in Applied Fisheries offers students a broad training and background in fisheries, while also including courses encompassing broad areas of knowledge that support advanced learning. This program is articulated with the A.A.S. in Applied Fisheries and is intended to offer students practical skills and knowledge to enter careers in fisheries. Students may elect a certificate with an Aquaculture or Fisheries Management emphasis. The Certificate requires 3 credit hours of internship.

## Alaskan Aquaculture Emphasis

Requirement	Hours
<b>Minimum Credit Hours</b>	<b>30</b>
General Requirements	10 - 11
Program Requirements	20

Code	Title	Credits
<b>General Requirements</b>		
<i>Written and Oral Communication Skills</i>		
Select one of the following:		3
COMM S111	*Fundamentals of Oral Communication <sup>1</sup>	
COMM S235	*Small Group Communication and Team Building <sup>1</sup>	
WRTG S111	*Writing Across Contexts	
WRTG S212	*Writing and the Professions	
<i>Computational Skills</i>		
Select one of the following:		3 - 4
MATH S105	Intermediate Algebra	
MATH S151	*College Algebra for Calculus	
STAT S200	*Elementary Statistics	
<i>Science Skills</i>		
Select one of the following:		4
BIOL S103	*Biology and Society	
BIOL S104	*Natural History of Alaska	
BIOL S115	*Fundamentals of Biology I	
BIOL S116	*Fundamentals of Biology II	
CHEM S103	*Introduction to General Chemistry	
ENVS S102	*Earth and Environment	
<b>Program Requirements</b>		
FT S120	Fisheries of Alaska	3
FT S122	Alaska Salmon Culture I	3
FT S125 or FT S194	Fish Pathology Lab Fisheries Policy Practicum	1
FT S222	Alaska Salmon Culture II	3
FT S223	Alaskan Aquaculture Lab	1
FT S274	Fish Biology	3
FT S291	Fisheries Internship	3

OCN S101 or FT S270	*Introduction to Oceanography Freshwater Ecology	3
<b>Total Credits</b>		<b>30-31</b>

\* Denotes GER

<sup>1</sup> Grade C 2.00 or better

## Fisheries Management Emphasis

Requirement	Hours
<b>Minimum Credit Hours</b>	<b>30</b>
General Requirements	10 - 11
Program Requirements	20

Code	Title	Credits
<b>General Requirements</b>		
<i>Written and Oral Communication Skills</i>		
Select one of the following:		3
COMM S111	*Fundamentals of Oral Communication <sup>1</sup>	
COMM S235	*Small Group Communication and Team Building <sup>1</sup>	
WRTG S111	*Writing Across Contexts	
WRTG S212	*Writing and the Professions	
<i>Computational Skills</i>		
Select one of the following:		3 - 4
MATH S105	Intermediate Algebra	
MATH S151	*College Algebra for Calculus	
STAT S200	*Elementary Statistics	
<i>Science Skills</i>		
Select one of the following:		4
BIOL S103	*Biology and Society	
BIOL S104	*Natural History of Alaska	
BIOL S115	*Fundamentals of Biology I	
BIOL S116	*Fundamentals of Biology II	
CHEM S103	*Introduction to General Chemistry	
ENVS S102	*Earth and Environment	
<b>Program Requirements</b>		
FT S120	Fisheries of Alaska	3
FT S194 or FT S125	Fisheries Policy Practicum Fish Pathology Lab	1
FT S211	Fisheries Management Techniques	3
FT S212	Fisheries Management Techniques Lab	1
FT S272	Fisheries Management, Law and Economics	3
FT S274	Fish Biology	3
FT S291	Fisheries Internship (Fisheries Technology Internship)	3
OCN S101 or FT S270	*Introduction to Oceanography Freshwater Ecology	3
<b>Total Credits</b>		<b>30-31</b>

\* Denotes GER

<sup>1</sup> Grade C 2.00 or better

1. Students will describe ecological attributes of fish and their habitats.
2. Students will demonstrate sound field sampling techniques.
3. Students will operate safely while participating in program activities and utilizing program equipment.
4. Students will describe the basic principles of salmon enhancement techniques used in Alaskan hatcheries.
5. Students will describe management and legal frameworks within which marine fisheries exist.