

Aquarium Science

aquarium.chemeketa.edu

The Aquarium Science program offers a comprehensive two-year Associated of Applied Science (AAS) degree and a one-year certificate that is open only to individuals who already possess a bachelor's degree in a life science area. Both the certificate and the AAS provide theory and practical experience designed to prepare students for a career in aquatic animal husbandry.

This program is taught at Oregon Coast Community College, and enrollment is limited. For additional information, contact Bruce Koike, the Aquarium Science program director, at 541.574.7130 or visit www.occ.ccc.or.us/aquarium or www.aquarium.chemeketa.edu.

Students who successfully earn a degree or certificate will be qualified to work in the aquatic animal husbandry profession. They may be eligible for positions as aquarist, aquatic biologists, or keeper. Potential employment opportunities include public zoos and aquariums, ornamental fish retailers and wholesalers, aquaculture businesses, fish hatcheries, research programs, marine educational centers, state and federal natural resource agencies, as well as self-employment.

Program outcomes

Students completing the certificate will:

- Accurately communicate, verbally and in writing, scientific concepts, research findings and ideas to professionals and the general public.
- Maintain, analyze, diagnose, and repair life support systems and their components.
- Perform basic water quality analysis using standard testing equipment.
- Maintain healthy animal populations by applying industry standards and practices to aquarium set-up, monitoring, and animal care.
- Identify healthy, physically compromised animals and abnormal animal behaviors.
- Work as a member of a team to conceptualize, plan, construct, and manage environments that promote healthy fishes and invertebrates.
- Work as a team member to conduct research with animal husbandry or life support systems.

Students completing the AAS will:

- Accurately communicate, verbally and in writing, scientific concepts, research findings, and ideas to professionals and the general public.
- Maintain, analyze, diagnose, and repair life support systems and their components.
- Perform basic water quality analysis using standard testing equipment.
- Maintain healthy animal populations by applying industry standards and practices to aquarium set-up, monitoring, and animal care.
- Identify healthy, physically compromised animals and abnormal animal behaviors.
- Work as a member of a team to conceptualize, plan, construct, and manage environments that promote healthy fishes and invertebrates.

Aquarium Science Certificate of Completion

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$950; class fees, \$442; equipment and supplies, \$400; and travel and living expenses during the internship. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

You may earn a Certificate of Completion in Aquarium Science by successfully completing the required 51 credit hours with a grade of "C" or better in all courses. This program is only open to individuals who possess a bachelor's degree or higher in a life science area. You will need to complete 132 hours of practicum and 400 hours of field internship.

Course	Title	Credit Hours
Term 1		
AQS100	Introduction to Aquarium Science.....	3
AQS215	Biology of Captive Fish.....	4
AQS240	Life Support System Design and Operation.....	4
AQS245	Animal Husbandry in a Research Capacity.....	2
PE185SA	Scuba Diving—Beginning.....	1
Term 2		
AQS110	Aquarium Science Practicum 1.....	2
AQS226	Biology of Diverse Captive Species.....	2
AQS232	Reproduction and Nutrition of Aquatic Animals.....	4
AQS252	Exhibits and Interpretation.....	4
AQS270	Fish and Invertebrate Health Management.....	4
Term 3		
AQS111	Aquarium Science Practicum 2.....	2
AQS165	Current Issues in Aquarium Science.....	1
AQS216	Elasmobranch Husbandry.....	2
AQS220	Biology of Captive Invertebrates.....	4
Term 4		
AQS275	Aquarium Science Internship.....	12

Aquarium Science Associate of Applied Science

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$1,500; class fees, \$692; equipment and supplies, \$400; and travel and living expenses during the internship. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

You may earn an Associate of Applied Science degree in Aquarium Science by successfully completing the required 90 credit hours with a grade of "C" or better in all courses. You will need to complete 132 hours of practicum and 400 hours of field internship.



Course	Title	Credit Hours
Term 1		
AQS100	Introduction to Aquarium Science	3
B1101	General Biology (or higher).....	4
CA118F1	PowerPoint Basics I	1
MTH095	Intermediate Algebra+ (or higher)	4
PSY104	Psychology in the Workplace+	3
Term 2		
AQS110	Aquarium Science Practicum I	2
B1102	General Biology (or higher).....	4
CA118B1	Excel Basics I	1
CHI10	Foundations of General, Organic and Biochemistry (or higher)	5
PE185SA	Scuba Diving-Beginning.....	1
WR121	English Composition—Exposition+ (or higher).....	3
Term 3		
AQS111	Aquarium Science Practicum 2	2
AQS165	Current Issues in Aquarium Science.....	1
AQS216	Elasmobranch Husbandry	2
AQS220	Biology of Captive Invertebrates.....	4
B1103	General Biology (or higher).....	4
WR227	Technical Writing	3

Term 4		
AQS215	Biology of Captive Fish.....	4
AQS240	Life Support System Design and Operation.....	4
AQS245	Animal Husbandry in a Research Capacity.....	2
CA118C1	Access Basics I	1
SP111	Fundamentals of Public Speaking (or higher)	3

Term 5		
AQS226	Biology of Diverse Captive Species	2
AQS232	Reproduction and Nutrition of Aquatic Animals.....	4
AQS252	Exhibits and Interpretation.....	4
AQS270	Fish and Invertebrate Health Management.....	4
	Aquarium Science Elective*	3

Term 6		
AQS275	Aquarium Science Internship.....	12

+Meets related instruction requirement.

***Aquarium Science electives:**

AQS151A	Special Projects in Aquarium Science.....	1
AQS151B	Special Projects in Aquarium Science.....	2
AQS151C	Special Projects in Aquarium Science.....	3
AQS187	Scientific Diving.....	1
B1100	Orientation to Marine Life of the Oregon Coast	3