OREGON COAST COMMUNITY COLLEGE

Aquarium Science Program

Student Handbook

Academic Year 2026–27

Oregon Coast Community College
400 SE College Way, Newport, OR 97366 · 541-867-8501
www.oregoncoast.edu

About This Handbook

The Oregon Coast Community College Aquarium Science Program publishes this student handbook to provide aquarium science degree and certificate students with current information about the program. Changes sometimes occur after the handbook has been printed, which may affect programs, policies, and procedures. The Aquarium Science Program (AQS) will attempt to post important changes and new information on the OCCC or AQS Program website, or on the learning management software Canvas. Students should periodically consult the Dean of Aquarium Sciences for updated information that was not available at the time of publication.

> **This handbook shall not be construed as a contract between the student and the College.**

Welcome to the Aquarium Science Program

Academic Year 2026–27

Dear Aquarium Science Student,

Welcome to the start of your academic pursuit of a degree or certificate in Aquarium Science. We are excited to have you as a student in this unique and challenging program. The reward of earning a degree and eventually gaining employment in the aquatic animal care profession is the ultimate goal of this program. The path of this exciting career begins now and will come to fruition through your hard work and diligent study within the program's courses and practical opportunities.

This Student Handbook has been developed to help you understand the policies, procedures, and expectations of the program. It is important that you read the handbook thoroughly. Once you have read it, please indicate your understanding of its contents by signing the Handbook Acknowledgment (Appendix A), which will be distributed at orientation along with the other forms required by the Aquarium Science Program.

Many of the Aquarium Science Program expectations, policies and procedures described in this handbook have been derived from best practices and standards within the aquatic animal care industry. We are committed to giving you the opportunity to take the first steps on your path to a career in Aquarium Science; we therefore regard you as an aquarium science professional from the moment you enter the program. In turn, we expect you to approach your studies and the activities assigned within the program as a professional with personal integrity, always conducting yourself respectfully and ethically.

Aquarists at all levels need to be caring, not only toward the animals they are assigned to, but also in relating well to people of different backgrounds and cultures. As an aquarist, you need to be able to adapt to change, think critically, solve problems, and respond positively during a crisis. Abiding by the policies and procedures in this handbook will enhance your success in the Aquarium Science Program and prepare you well for your career.

The Aquarium Science faculty, staff and leadership look forward to working with you during your time of study within the program. We congratulate you on this first step in your aquatic animal care career, and we wish you success and enjoyment in your courses.

Sincerely,

On behalf of the faculty and staff of the OCCC Aquarium Science Program,

Dr. Carla Schubiger
Dean of Aquarium Sciences

Steve Vogel
Director of the Teaching Aquarium

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1. Program Overview

1.1 Program Mission and Goals

The Aquarium Science Program (AQS) at Oregon Coast Community College (OCCC) integrates classroom, laboratory, hands-on and real work experiences to develop your aquatic animal husbandry skills. The College offers four educational pathways into the aquatic animal husbandry profession:

- **Associate of Applied Science (AAS) degree** — a 90-credit pathway, and the usual route for students who do not already hold a bachelor's degree or higher in a life science. Students complete their general education requirements first, then the aquarium science core, which runs as a fixed cohort sequence. If you began your AAS in Aquarium Science in 2026, you move into the core sequence in fall 2027, and there is no separate application to do so. (**Note: This is changing for the 2027 application cycle.) Most students complete the AAS in two years, though general education can be taken at your own pace, and some students take longer.
- **Certificate of Completion** — a one-year program (53 credits) for individuals who have already earned a bachelor's degree or higher in a life science.
- **Bachelor of Science (B.S.) in Aquarium Science, Pathway 1** — a four-year degree offered in partnership with Western Oregon University (WOU). Students complete their first three years of foundational coursework (biology, chemistry, earth science and business) at WOU in Monmouth, OR, and apply for the AQS certificate during their third year. If accepted, students then complete their fourth year of career-specific aquarium science training on site at the AQS facility at OCCC in Newport.
- **Bachelor of Science (B.S.) in Aquarium Science, Pathway 2** — a four-year degree offered in partnership with WOU. Students begin with a first year of general education coursework at OCCC in Newport, complete their second and third years at WOU in Monmouth, OR, and apply for the AQS certificate during their third year. If accepted, students then return to OCCC for their fourth and final year of aquarium science training.

Students who complete either B.S. pathway earn their B.S. degree from WOU along with the Certificate of Completion in Aquarium Science from OCCC. Students who successfully complete any of these four pathways will be qualified to work in the aquatic animal husbandry profession.

A high school diploma or GED is not required for admission to the College but is required to receive federal (Title IV) financial aid.

****A change affecting students who begin the AAS in 2027.** From the 2027–28 intake, students will apply during their general education year for a place in the aquarium science core, and those applications will be competitive — the core is limited to 20–24 students per cohort. **This does not affect students who began the AAS in 2026; your place in the fall 2027 core is already secured.** Applicants who are not selected may strengthen their application and apply again in a later cycle, for example through additional volunteering or improved grades, or pursue the Bachelor of Science pathway at Western Oregon University.

1.2 Program Learning Outcomes

Students who successfully complete the AQS Program curriculum will be able to:

1. Effectively communicate, verbally and in writing, scientific concepts, research findings and ideas to professionals and the general public.
2. Maintain, analyze, diagnose and repair life support systems and their components.
3. Perform basic water quality analysis using standard testing equipment.
4. Maintain healthy animals through proper system set-up and monitoring, and accepted animal husbandry practices.
5. Identify physically compromised animals and abnormal animal behaviors.
6. Work within a group to conceptualize, plan, construct and manage environments that promote healthy animals under human care.
7. Apply fundamental knowledge and skills in science, mathematics and communications for success in a professional or academic setting.*
8. Apply foundational knowledge in the natural sciences (e.g., oceanography, animal behavior, comparative animal physiology) and in business and economics (e.g., financial accounting, marketing) to the management and operation of aquatic animal facilities.**

> ***** *Applies to the two-year AAS degree and the two four-year B.S. (WOU partnership) pathways. This outcome does not apply to the one-year Certificate of Completion, which is open only to students who have already earned a bachelor's degree or higher in a life science.*
>
> ****** *Applies to the two four-year B.S. (WOU partnership) pathways. This outcome reflects the foundational science, business and economics coursework completed at Western Oregon University.*

1.3 Program History and Background

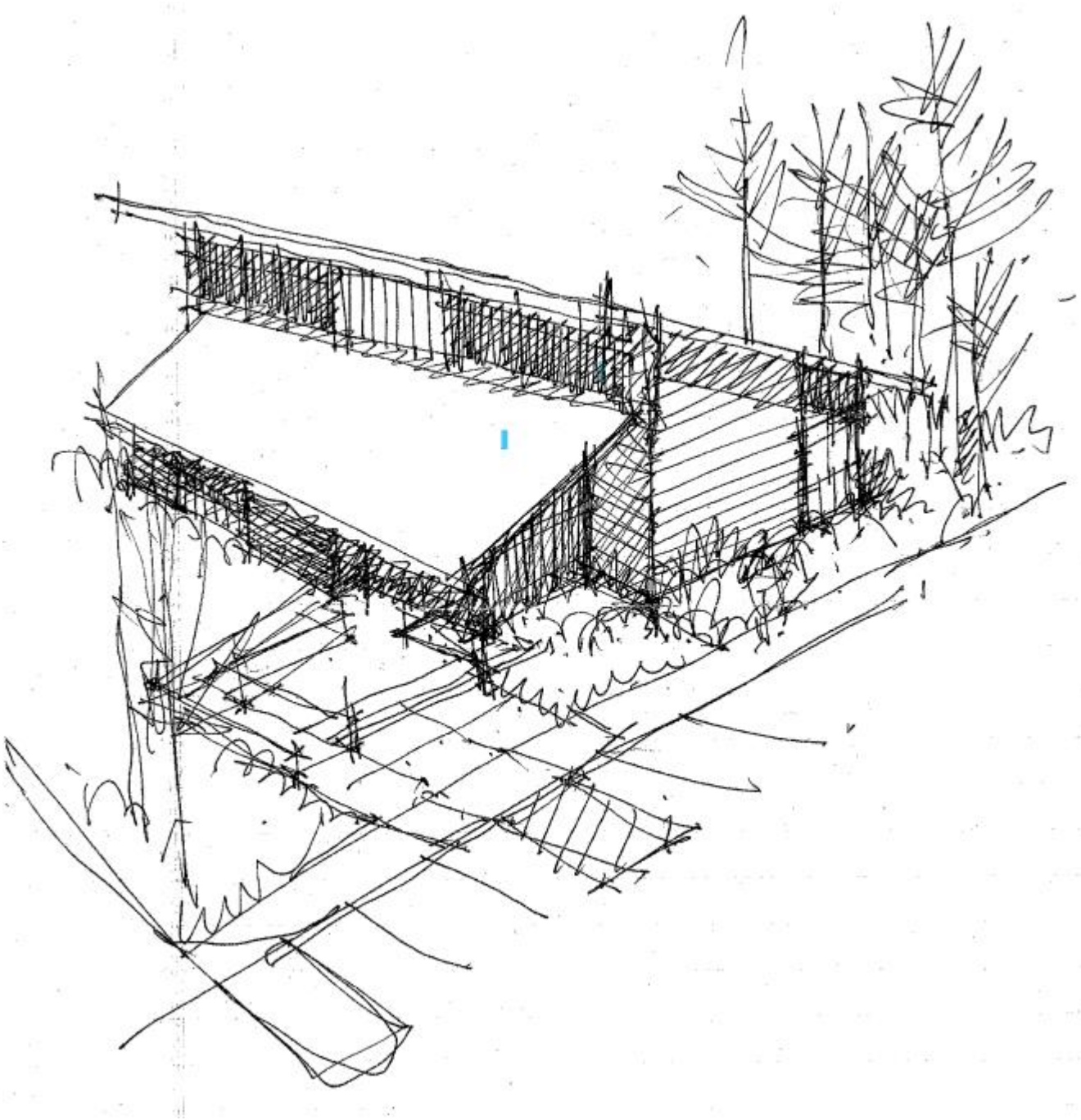
The origin of the Aquarium Science Program lies in the need for skilled workers and the expansion of aquatic animal husbandry facilities. The curriculum was developed with the industry's input and reflects the broad base of skills and knowledge required to be successful in the profession.

In 2001, the College conducted a nationwide survey of the aquatic animal husbandry industry (public aquariums, aquaculture facilities and ornamental fish businesses) and found that:

1. Over half of supervisors reported difficulty hiring skilled personnel, and specific job-related skills and knowledge were most frequently absent in newly hired staff.
2. General education skills in science, math, writing and oral communication were also lacking.
3. For the foreseeable future, new facilities were scheduled to open while established aquariums were expanding or increasing their program offerings.

Because of these factors, the need for skilled personnel remains high. Over 80% of the responding institutions indicated that graduates of this program would be qualified to work at their facility.

In 2002, the College was awarded a grant from the National Science Foundation to develop the AQS Program. The Oregon Department of Education then approved the specialized curriculum, and the first Aquarium Science student cohort began studies in the fall of 2003. Since that time, students successfully completing and graduating from the program have gained employment in professionally related career positions within the aquatic animal care industry at a rate of over 90%.



1.4 College and Program Faculty and Staff

It takes a village! Below are the main contacts to serve the OCCC student body and you as AQS student.

College Leadership and Student Affairs		
Dr. Marshall Mease Roache President	541-867-8509	occc.president@oregoncoast.edu
Dr. Kristina Holton Vice President of Academic and Student Affairs	541-867-8511	kristina.holton@oregoncoast.edu
Ben Kaufmann Dean of Academic Foundation and Student Success **Student Success Coaches** Tim, Jose, Blake, or Carol	541-867-8512 see homepage	ben.kaufmann@oregoncoast.edu Advising - Oregon Coast CC
Darin Seal Director of Financial Aid **Ace Brewer** Financial Aid Coordinator	541-867-8502	Darin.seal@oregoncoast.edu finaid@oregoncoast.edu ace.brewer@oregoncoast.edu
Mo Cravenock Benefit Navigator& STEP Coordinator (formerly Student Resource Navigator; non-academic support)	541-867-8544	mo.cravenock@oregoncoast.edu
Dana Gallup Student Support Specialist – Testing and Accessibility Services (she answers all questions about accommodations)	541-867-8505	dana.gallup@oregoncoast.edu
Joshua Kamp Student Engagement Coordinator (ask him about student clubs, activities, and associated student government)	541-867-8586	Joshua.Kamp@oregoncoast.edu
Chris Rogers Facilities, Maintenance and Safety Director	541-867-8549	chris.rogers@oregoncoast.edu
Tutoring Center staff College Tutor Coordinator	541-867-8502	tutoring.center@oregoncoast.edu
Aquarium Science Program		
Dr. Carla Schubiger Dean of Aquarium Sciences	541-867-8540 602-350-4520 (txt)	carla.schubiger@oregoncoast.edu
Steve Vogel Director of the Teaching Aquarium	541-867-8509 831-521-9889	steve.vogel@oregoncoast.edu

Trevor Erdmann Aquarium Science Instructor	801-556-8220	trevor.erdmann@oregoncoast.edu
Kevin Clifford Aquarium Science Instructor	541-961-3342	kevin.clifford@oregoncoast.edu
Teaching Aquarium Staff/Mentors		
Claire Smith	530-917-0142	claire.smith@oregoncoast.edu
Sid Stetson	309-269-5607	sid.stetson@oregoncoast.edu
Savannah Dodds	505-610-8826	savannah.dodds@oregoncoast.edu

For questions about admission, progression, accommodations, or any concern that cannot be resolved with an individual listed above, contact the Dean of Aquarium Sciences.

1.5 Industry Partners and Support

The AQS Program draws much of its success from its unique location in Newport, OR and from the relationships it has developed with local, regional and nationwide partners in the aquarium science industry. The program defines the aquarium science industry as those organizations and facilities operating in the fields of public exhibition of live zoological collections for education, conservation and entertainment (public aquariums, zoos, museums and nature centers); private and academic research institutions (colleges and universities); ornamental fish trade businesses and their suppliers and manufacturers; and aquaculture facilities and hatcheries.

Industry representatives have partnered with and supported the AQS Program at various levels of commitment, including course and curriculum development and review, special instruction and guest lectures, internship hosting, job placement and preparation, in-kind donations and monetary support. Listed below are a few of the industry partners who have consistently supported the program in the past and through current operations.

1.5.1 Local and Regional Participants

Oregon Coast Aquarium
2820 SE Ferry Slip Rd., Newport, OR 97365

Hatfield Marine Science Center
2030 SE Marine Science Dr., Newport, OR 97365

Oregon Hatchery Research Center
2418 East Fall Creek Road, Alsea, OR 97324

Oregon Department of Fish and Wildlife — Newport Branch Office
2040 SE Marine Science Dr., Newport, OR 97365

Oregon Sea Grant
29 SE 2nd St., Newport, OR 97365

USDA-ARS Pacific Oyster Genomic Selection (POGS) Program
2030 SE Marine Science Dr., Newport, OR 97365

1.5.2 National Participants (non-exhaustive)

Akron Zoo — Akron, OH
Alaska SeaLife Center — Seward, AK
AquaLogic — San Diego, CA
Aquarium of the Bay — San Francisco, CA
Aquarium of the Pacific — Long Beach, CA
Aquatic Animal Life Support Operators — Lake Buena Vista, FL
Asahi America — Malden, MA
Audubon Nature Institute — New Orleans, LA
Birch Aquarium — San Diego, CA
Blackwater Creek Koi Farm — Eustis, FL
CalAquaria — Ontario, CA
David L. Manwarren Corp. — Rancho Cucamonga, CA

Dynasty Marine Associates — Marathon, FL
Ecoxotic — Vista, CA
Emperor Aquatics — Pottstown, PA
Envision Acrylics — Beaverton, OR
Esherick Homsey Dodge and Davis — San Francisco, CA
Florida Aquarium — Tampa, FL
Fritz Aquatics — Mesquite, TX
Georgia Aquarium — Atlanta, GA
Hach Company — Loveland, CO
Hayward Industrial Products — Pomona, CA
Henry Doorly Zoo and Aquarium — Omaha, NE
Landry's Downtown Aquarium — Denver, CO
Living Coast Discovery Center — Chula Vista, CA
Marine Biological Laboratory — Woods Hole, MA

McRoberts Sales Co., Inc. — Ruskin, FL
Monterey Bay Aquarium — Monterey, CA
Moody Gardens — Galveston, TX
Mote Marine Laboratory — Sarasota, FL
MWH Global — Irvine, CA
Mystic Aquarium — Mystic, CT
National Aquarium — Baltimore, MD
New England Aquarium — Boston, MA
New Era — Thorne, UK
Newport Aquarium — Newport, KY
Oregon Zoo — Portland, OR
Piscine Energetics — British Columbia, Canada
Point Defiance Zoo & Aquarium — Tacoma, WA
Quality Marine — Los Angeles, CA
Ripley's Aquariums — Myrtle Beach, SC; Orlando, FL; Gatlinburg, TN
Riverbanks Zoo and Aquarium — Columbia, SC
RK2 Systems — Escondido, CA
Sea Dwelling Creatures — Los Angeles, CA
SEA LIFE Aquariums — U.S. locations (CA, AZ, TX, MO, MN, NC)
Seattle Aquarium — Seattle, WA
Segrest Farms — Gibsonton, FL
Shark Reef at Mandalay Bay — Las Vegas, NV
Shedd Aquarium — Chicago, IL
South Carolina Aquarium — Charleston, SC
Steinhart Aquarium — San Francisco, CA
Texas State Aquarium — Corpus Christi, TX
Titan Aquatic Exhibits — Phoenix, AZ
Turtle Bay Exploration Park — Redding, CA
Virginia Aquarium and Marine Science Center — Virginia Beach, VA
Walt Disney World, The Seas, EPCOT — Orlando, FL
Waterdog Products Inc. — El Cajon, CA
Zebrafish International Resource Center — Eugene, OR

1.6 Local Advisory Committee

The Local Advisory Committee provides long-term, ongoing support to the successful development of the program and is made up of local and regional aquatic animal care industry leaders in research, small business, aquaculture and public aquaria. The committee meets twice annually to review the program's current status,

content and relevance, and to lend support and ideas to its future development. Recent committee members have included:

- Dr. Tim Miller-Morgan — Veterinarian, Hatfield Marine Science Center
- Dr. Mike Baltzley — Western Oregon University
- Itchung Cheung — Oregon State University
- Kyle Hascall — Life Support, Oregon Zoo
- Micah Buster — Marine Mammal Center, Sausalito
- Trevor Erdmann — Aquarist, Hatfield Marine Science Center
- Jen Krajcik — Hatchery Manager, Oregon Hatchery Research Center
- Cinamon Moffett — Research Program Manager, Hatfield Marine Science Center

1.7 National Visiting Committee

The National Visiting Committee (NVC) is a committee of aquarium science industry professionals that evaluate the program annually. The visit and its schedule of activities normally take place over three weekdays, and most activities are scheduled during regular class times so that they fall within your existing timetable. During this time, NVC members review the Aquarium Science Program's overall structure, including courses, curriculum, program content, recruitment, administration, development, facilities and current students. Several meetings, observations, evaluations and interviews take place over the three days, and on the final day the NVC compiles its findings into a verbal preliminary report. A final written comprehensive report is then developed from those preliminary findings and sent to the Dean of Aquarium Sciences, usually within one to two weeks of the final day of the visit.

The NVC generally comprises up to 10 members invited from within the aquarium science industry and profession, visiting from locations across the United States. The aquarium science industry is defined here as any organization contributing to the development or ongoing care of aquatic animals (mainly fish and invertebrate species) in a professional setting — for example, public aquariums; science and nature centers with live aquarium exhibits or enclosures; aquaculture facilities; associated manufacturing, wholesale and retail facilities; and associated academic and research institutions.

Individual NVC members are generally in leadership positions within their organizations, with managerial and supervisory responsibilities.

Participants vary from year to year, usually with several returning participants and several new members. One returning member is asked to act as Committee Chair for the duration of the event and throughout the year for any follow-up reports or announcements, until the subsequent year's committee is established. The Chair selects other committee members to assist with developing and drafting elements of the final report and is responsible for communicating the final report to the College.

The following individuals participated as NVC members in 2026:

Member	Organization

Member	Organization
Steve Bailey	Frost Museum of Science
Richard Prince	Wonders of Wildlife
Barrett Christie	South Carolina Aquarium
Jennie Janssen	MIAZS
Kyle Hascall	Oregon Zoo
Meghan Olhasso	Monterey Bay Aquarium
James Collins	Segrest Farms
Micah Buster	Marine Mammal Center
Steve Vogel	Oregon Coast Aquarium

1.7.1 Student Expectations and Requirements for the NVC

The NVC participates in orientation, student interviews, program and course evaluations, program application process evaluations, facility evaluations and business meetings. These main business activities are accomplished within the framework of a normal workday, with social activities for professional networking and interaction among students, staff and colleagues occurring in the evenings. Students are invited and **encouraged** to attend up to three professional networking events at various locations off campus during the evenings. These activities are intended to allow students to interact with committee members and other invited guests in an informal setting.

Students are required to participate in mock professional interviews with the committee. The mock interviews take place on the first day of the visit. Interviews are one-on-one and last 30–45 minutes each: twenty minutes should be allowed for interview questions, with a ten-minute initial feedback session at the end of the question-and-answer period. Students are expected to attend the interview sessions they are assigned to as if they were interviewing for a real position. The interviewer will provide feedback on appearance, general demeanor and quality of answers. Résumés from each student will also be provided to the interviewer (preferably beforehand), with an expectation of comment and feedback from the interviewer to the student. Evaluation forms are provided by the College to each interviewer and are completed and given to the Dean of the program at the end of the interview sessions. The AQS Leadership may also schedule individual meetings with students to discuss the feedback and comments received on the interview evaluation forms in the weeks following the committee's visit.

Students are given additional opportunities to provide feedback on the program to the NVC during a question-and-answer session after the interview sessions are complete. This is an opportunity for students to formally interact with the committee and ask questions about the profession and the committee members' experiences in the industry. College staff and faculty are invited to attend this session.

1.8 Admissions and Application Procedure (starting 2027)

Admission to the aquarium science core year follows the program's published Application and Admissions Procedure (public document, effective July 1, 2026), reproduced here in full so that every applicant works from the same information. The procedure applies to the final, certificate-track year of all four program pathways:

- **Certificate:** Aquarium Science Certificate Program (one year; students holding a life sciences degree only)
- **AAS:** Associate of Applied Science in Aquarium Science (first year general education, second year certificate track)
- **Bachelor 1+2+1:** first year at OCCC, second and third years at WOU, fourth year certificate track at OCCC
- **Bachelor 3+1:** first, second and third years at WOU, fourth year certificate track at OCCC

The bachelor pathways are offered in partnership with Western Oregon University in Monmouth and result in a Bachelor of Science in Aquarium Science from WOU together with the Certificate in Aquarium Science from OCCC.

Required Application Materials

All applicants submit the following materials electronically to Aquarium.Science@oregoncoast.edu, as accessible file attachments in PDF or Word format:

- Completed OCCC application (free; only required if you are not yet an OCCC student)
- Completed Aquarium Science Program application
- Résumé, including animal care volunteer or work experience
- Transcripts
- Written answers to the assessment questions (personal statement/essay — see the Written Experiential Assessment below)
- Contact information for two professional or academic references: name and title, physical address, phone number, and email address for each

All materials must arrive by the published application deadline. Incomplete applications are not advanced to the review stage; applications completed after the deadline may be waitlisted at the discretion of the admissions committee. If a submitted attachment cannot be opened, the applicant is contacted to resubmit in an accessible format before the deadline.

Application Cycle and Key Dates

When	Milestone
By February 1	Applications open. Outreach is sent to prior-year inquirers and waitlisted applicants, with invitations to the information sessions.
Mid-January–February	Four virtual (Zoom) information sessions for prospective applicants, led by the AQS Dean. Dates are set by the AQS team.

When	Milestone
1st Friday in March	Application deadline — all required materials must reach Aquarium.Science@oregoncoast.edu by end of day. A one-week extension (to the 2nd Friday in March) may be granted at program discretion; if granted, it is communicated promptly to all applicants with incomplete applications and announced online.
2nd Monday in March	Scoring of submitted application materials begins; late-arriving materials are scored on a rolling basis.
3rd week of March	Interview scheduling begins for selected, prescreened applicants.
4th week of March	Interviews take place, beginning the Monday of spring break; they may continue into the first two weeks of April at the discretion of the admissions team.
Late March	A scholarship notice is sent encouraging all complete and late applicants to apply for OCCC Foundation scholarships (if not already sent with the interview scheduling request).
1st–2nd week of April	The AQS admissions committee reviews application packets and interviews.
End of April	Acceptance letters are sent, including college orientation instructions, next steps (with a reminder of the scholarship deadline) and enrollment instructions. Waitlisted or denied applicants are informed in writing.
May 1	OCCC Foundation scholarship deadline. All applicants, including those still awaiting a decision, are encouraged to apply. All final admissions decisions are communicated before this date.
June 15	Registration deadline — admitted students confirm their seat by registering for fall term and attend an information session with the Success Coaches (two dates in June).
June 30	AAS-track students must complete all non-AQS coursework.

References to "1st Friday," "2nd Monday" and similar mean the first occurrence of that weekday within the month; if the first day of the month is a workday, it counts as week one.

Admissions Outcomes and Notification

Every applicant receives written notification of their admissions status no later than the last week of April. Three outcomes are possible.

Admission

Admitted applicants receive a formal acceptance letter before May 1, including enrollment confirmation instructions, orientation session details, registration deadlines and a final reminder of the OCCC Foundation

scholarship deadline. Admitted students must confirm their seat by registering for fall term no later than June 15.

Waitlist

Applicants who score competitively — including late applicants who score competitively — but are not admitted to the cohort are placed on the waitlist and are considered for seats that open if admitted students do not confirm enrollment. Waitlisted applicants should keep their contact information current through September 1. AAS-track waitlisted applicants are encouraged to begin their non-AQS coursework while awaiting final placement.

Denial

Applicants who are not admitted receive written notification. Where appropriate, the review committee provides individualized recommendations for strengthening a future application. Reapplying in a subsequent cycle is encouraged; applications open each February 1.

Written Experiential Assessment

The Written Experiential Assessment is worth 15–20% of total application points. Program faculty and staff score each response on objective criteria, based on the merit of your individual response — responses are not compared against one another. **Following the formatting and submission instructions below is part of the evaluation.** Applications that do not follow the instructions as written may receive a reduced score: reading and following directions carefully is a professional skill we expect of program students.

Formatting and submission instructions:

- Type your full name and the date at the top of the document.
- Begin each answer with “Response to Question #”, so responses are clearly matched to each question.
- Type responses in Arial or Calibri 12 pt font, double-spaced, left-justified. Do not include watermarks, borders, shading, images, clip art, word art, letterhead, footnotes or decorative elements.
- Aim for detailed, thorough responses. Each answer may be up to approximately 250 words; you do not need to reach the maximum, but responses should be substantive enough to fully address the question.
- **Every response must include at least one specific personal example drawn from your own life experience.** Generic or hypothetical answers that do not reference real experiences will score lower. Reviewers are looking for responses that only you could have written.
- Save the document as a PDF named “lastname_questions.pdf” and email it to Aquarium.Science@oregoncoast.edu.

Assessment Questions

Answer every question. Responses should reflect genuine self-assessment and demonstrate your understanding of, and commitment to, a professional career in aquatic animal husbandry. Write in your own voice and draw from your own experiences — your answers should be specific to your life, not general statements anyone could write.

Question 1 — Career Motivation: Aquarium science is a demanding profession that one deliberately chooses. Describe specifically why you are pursuing aquatic animal husbandry as a career, not just a field of interest. You can talk about specific experiences, observations or realizations that led you to this path, or what drew you to aquatic animal husbandry rather than another area of animal care or biology.

Question 2 — Dealing with Adversity: Describe the most significant challenge you have faced and the steps you took to address it. Include whether you turned to anyone for support, the role that person played, and what you learned about yourself through the process.

Question 3 — Handling Systemic Challenges: Tell us about a time you encountered or witnessed unfair treatment. How did you handle it, what did it teach you, and how has that experience shaped the way you show up for others?

Question 4 — Task Commitment: Describe a situation in which you worked to see a difficult task or commitment through to completion. You can also give examples of how your work ethic and diligence contributed to your success.

Question 5 — Professional Goals and Program Fit: Identify a specific role, facility type or area of specialization within the aquatic animal care field that you are working toward. Explain how the Aquarium Science Program at OCCC fits into your plan to achieve that goal, and describe what you intend to do within the first two years after completing the program.

Questions about the application process can be sent at any time to Aquarium.Science@oregoncoast.edu.

2. Aquarium Science Courses

OCCC offers four pathways in Aquarium Science: a two-year Associate of Applied Science (AAS) degree, a one-year Certificate of Completion, and two four-year Bachelor of Science (B.S.) options offered in partnership with Western Oregon University (WOU). The two-year degree is for individuals who do not have a bachelor's degree or higher in a life science. The one-year certificate is available to individuals who have already earned a bachelor's degree or higher in a life science. The two B.S. pathways combine foundational coursework at WOU in Monmouth with aquarium science training at OCCC in Newport; graduates earn a B.S. from WOU along with the OCCC Certificate of Completion.

Scheduling requirements and limited resources prevent all courses from being offered every term or every year. Course numbers, titles, course and program applicability, prerequisites, instructional format, delivery methods and content may change without notice. Students are advised to consult a Success Coach each term to select courses, create and maintain personal educational plans, and obtain the most current information.

> **Please note:** beginning with the 2027–2028 cohort, the AAS degree will follow a new curriculum map. AAS students will complete their general education requirements in the first year and then join the certificate cohort's course sequence for the aquarium science core in the second year.

2.1 Aquarium Science (AQS) Course Descriptions

AQS 100 — Introduction to Aquarium Science (3 credits)

Weekly contact hours: 2 lecture; 2 lecture/lab
Prerequisites: None
Program requirement: Yes
Term offered: Fall

Examines the history of animal keeping and present-day aquatic animal husbandry industries. Explores the physical, chemical and biological processes occurring in the aquarium environment. Covers the proper set-up and maintenance of home aquaria. Upon completion of the course, a student will be able to: 1) assess the physical, chemical and biological processes occurring in the aquatic environment; 2) create and maintain suitable aquatic habitats; 3) properly use associated tools and equipment; 4) identify employment venues and information resources; and 5) recognize major groupings of fishes and invertebrate species found in the aquarium industry and use appropriate criteria for their selection for aquarium systems.

AQS 110 — Aquarium Science Practicum I (2 credits)

Weekly contact hours: 6 lab
Prerequisites: AQS 100
Program requirement: Yes
Term offered: Winter

Introduces the aquatic animal husbandry work environment and the care of captive aquatic animals. Emphasizes daily animal care and exhibit readiness. Upon completion of the course, a student will be able to: 1) prepare food for the animal collection and clean animal collection areas to industry standards; 2) assist with opening and

closing procedures at the aquatic facility; 3) culture, harvest and distribute live food organisms to the animal collection; 4) interpret exhibits and aquatic animal work areas to facility patrons in a positive and informative manner; 5) identify fish and invertebrate behaviors; and 6) design and implement a fish transport strategy.

AQS 111 — Aquarium Science Practicum II (2 credits)

Weekly contact hours: 6 lab
Prerequisites: AQS 110
Program requirement: Yes
Term offered: Spring

Builds upon the experience gained in AQS 110 (Aquarium Science Practicum I). Involves participation in a higher level of aquatic animal husbandry activities, including animal health procedures, long-term record keeping and life support systems training. Upon completion of the course, a student will be able to: 1) apply aquatic animal husbandry skills with captive aquatic animals; 2) assess operational issues in order to improve animal care; 3) diagram the flow of water from its source to its discharge location; and 4) organize and communicate system and animal observations in a clear, concise manner.

AQS 165 — Current Issues in Aquarium Science (1 credit)

Weekly contact hours: 1 lecture
Prerequisites: None
Program requirement: Yes
Term offered: Spring

Examines the current internal and external factors that affect the operational role and function of zoological facilities with aquatic animal collections. Upon completion of the course, a student will be able to: 1) discuss the benefits that a zoological facility provides to the local community and to society; 2) understand and discuss the role of revenue streams and expenditures within a zoological institution; 3) identify how global or regional conditions outside a zoological organization affect its operations; and 4) understand the role of the Association of Zoos and Aquariums (AZA) and similar organizations in promoting the viability of zoological facilities.

AQS 173 — Water Chemistry in Aquatic Systems (4 credits)

Weekly contact hours: 3 lecture; 2 lecture/lab
Prerequisites: AQS 100, BI 201, MTH 95
Program requirement: Yes
Term offered: Winter

Covers water chemistry dynamics in aquatic systems, including laboratory safety, occupational safety, the nitrogen cycle, salinity, dissolved oxygen, acid/base chemistry, pH and pH buffering, ozone chemistry, coliform bacteria testing, working knowledge of spectrophotometers and other laboratory techniques, proper handling and disposal of water quality (WQ) reagents, management of conservative and non-conservative salts, dilutions, molarity, stoichiometry, and basic calcifying invertebrate chemistry and husbandry. Upon completion of the course, a student will be able to: 1) express, orally or in writing, the basic elements of water chemistry in aquatic systems and the ideal ranges for WQ parameters in different types of aquatic systems; 2) demonstrate a working knowledge of how WQ parameters outside recommended ranges affect the health of the system and the

animals living in it, and express this orally, graphically and in writing; 3) interpret water chemistry parameters and develop a plan to safely manipulate and proactively manage these values in order to maintain system and animal health; and 4) understand how water quality affects natural aquatic ecosystems.

AQS 215 — Biology of Captive Fish (4 credits)

Weekly contact hours: 3 lecture; 2 lecture/lab

Prerequisites: BI 103 or instructor consent

Program requirement: Yes

Term offered: Fall

Examines the diversity, anatomy, physiology, sensory biology and behavior of freshwater and marine fishes and the constraints placed upon them in a controlled environment. Upon completion of the course, a student will be able to: 1) identify basic external and internal anatomical features of fishes; 2) identify fish species using a dichotomous key; 3) recognize the immense diversity and variation among living fishes; 4) describe the effects of key factors in the captive controlled environment on respiration, metabolism, immune response, food assimilation, growth, reproduction and behavior; 5) understand the influence of stress on fish physiology, health and behavior; 6) describe osmoregulatory processes of marine and freshwater fishes; and 7) develop and conduct a study of captive fish behavior.

AQS 216 — Elasmobranch Husbandry (2 credits)

Weekly contact hours: 2 lecture

Prerequisites: AQS 100 or instructor consent

Program requirement: Yes

Term offered: Spring

Explores the history of captive shark and ray management, current regulations, legislation and conservation of elasmobranchs. Emphasizes the requirements associated with keeping a healthy population of elasmobranchs. Upon completion of the course, a student will be able to: 1) identify commonly kept species of elasmobranchs (sharks, skates and rays); 2) identify proper nutrition, commonly encountered health conditions and common behavior associated with elasmobranchs in captive environments; 3) discuss factors necessary for the safe handling, immobilization and transport of elasmobranchs; and 4) discuss factors influencing long-term success in keeping elasmobranchs in controlled captive environments.

AQS 220 — Biology of Captive Invertebrates (4 credits)

Weekly contact hours: 3 lecture; 2 lecture/lab

Prerequisites: Standard prerequisites WR 115, RD 115 and MTH 95 or equivalent placement test scores; AQS 100, BI 201, BI 202; or instructor consent

Program requirement: Yes

Term offered: Spring

Presents the life history and captive care requirements of aquatic invertebrates commonly cultured and kept in the aquatic animal industry. Upon completion of the course, a student will be able to: 1) recognize and identify internal and external features of commonly kept and cultured aquatic invertebrates; 2) discuss the important physiological characteristics of aquatic invertebrates, including reproduction, locomotion and osmoregulation;

3) describe the natural life history of commonly kept and cultured aquatic invertebrates; 4) identify the husbandry requirements for selected aquatic invertebrates; and 5) design a culture system suitable for selected aquatic invertebrates.

AQS 226 — Biology of Diverse Captive Species (2 credits)

Weekly contact hours: 1 lecture; 2 lecture/lab

Prerequisites: Enrollment in the AQS Program or instructor consent

Program requirement: Yes

Term offered: Winter

Examines the basic husbandry and system requirements of a broad range of phyla found in public aquariums, research collections and other zoological collections. Highlights the specialized needs of selected invertebrate and fish species and introduces students to the challenges and considerations of reptile, amphibian, avian and marine mammal husbandry. Upon completion of the course, a student will be able to: 1) understand the basic husbandry requirements of diverse captive species with specialized needs; 2) discuss the broad taxonomic groups represented in public aquarium collections; 3) identify high-risk stages in the life history of selected species; 4) determine and describe a suitable habitat for selected species; 5) prescribe an appropriate husbandry protocol for selected species; and 6) relate legislative and husbandry issues to the care of diverse captive species.

AQS 232 — Reproduction and Nutrition of Aquatic Animals (4 credits)

Weekly contact hours: 3 lecture; 2 lab

Prerequisites: AQS 100, AQS 215, AQS 220 or consent of instructor

Program requirement: Yes

Term offered: Winter

Presents the reproductive strategies of fishes and invertebrates in a controlled environment and the manipulation of environmental and physiological parameters that initiate reproduction. Provides the fundamentals of nutrition as well as the nutritional requirements of selected aquatic animals throughout their life history. Presents industry standards for food handling and HACCP requirements. Upon completion of the course, a student will be able to: 1) identify common reproductive strategies of selected fishes and invertebrates; 2) construct an environmental protocol to induce gamete maturation in commonly cultured fishes and invertebrates; 3) apply rearing techniques for the care of offspring of commonly cultured fishes and invertebrates; and 4) formulate a suitable dietary and feeding program for aquatic animals.

AQS 240 — Life Support System Design and Operation (4 credits)

Weekly contact hours: 3 lecture; 3 lecture/lab

Prerequisites: AQS 100; AQS 215 corequisite

Program requirement: Yes

Term offered: Fall

Examines the role of life support systems in maintaining a balanced, stable aquatic environment. Covers how to design, construct, maintain and troubleshoot semi-closed, closed and open systems. Upon completion of the course, a student will be able to: 1) identify water quality parameters affected by life support systems and relate

the use of associated equipment to the evaluation of aquatic environments; 2) identify the functions and relationships of life support system components in maintaining a balanced aquatic system; 3) size and select appropriate life support system components and equipment for an aquatic system; 4) troubleshoot and remedy faulty life support system components; 5) diagram the flow of water from its source to its discharge location; and 6) design and build an aquatic life support system.

AQS 245 — Animal Husbandry in a Research Capacity (2 credits)

Weekly contact hours: 2 lecture

Prerequisites: Enrollment in the AQS Program or instructor consent

Program requirement: Yes

Term offered: Fall

Examines the use of fish in research as well as the regulatory and ethical issues associated with this practice. Common procedures, protocols and research methodology — such as husbandry, anesthesia, biopsy, blood draws, minor surgeries, field study, behavioral techniques and euthanasia — are presented. Upon completion of the course, a student will be able to: 1) explain the role of the Institutional Animal Care and Use Committee, or a similar entity responsible for monitoring the quality of animal care at a research facility; 2) distinguish between animal rights and animal welfare perspectives; 3) develop a standard operating procedure for the transport, acclimation, quarantine, feeding and husbandry of a healthy population of fish for research purposes; 4) discuss the responsibilities of the aquarist or animal husbandry technician as they relate to fish husbandry and welfare; and 5) implement measures to reduce workplace hazards.

AQS 252 — Exhibits and Interpretation (3 credits)

Weekly contact hours: 2 lecture; 2 lecture/lab

Prerequisites: AQS 100, AQS 215, AQS 220, AQS 240 or instructor consent

Program requirement: Yes

Term offered: Spring

Introduces the principles of exhibit development and interpretive presentations. Covers projects in exhibit planning, performing interpretive presentations and writing interpretive pieces. Emphasizes the process of developing exhibits and interpretation from conceptual statement through fabrication, performance or publication. Upon completion of the course, a student will be able to: 1) serve as a contributing member of an exhibit planning team, supporting the process of creating an exhibit and the roles of others on the team; 2) apply the principles of interpretation to the programs that husbandry staff are frequently asked to perform; 3) identify criteria, considerations and components for the design and implementation of aquarium tanks, lighting, interior tank habitats and live animal collections; 4) write effective interpretive material for exhibits, newsletters and brochures; 5) describe what makes an effective exhibit, and evaluate exhibits and interpretation using industry-standard criteria; and 6) apply industry-related information resources to the design and development of aquarium exhibits and interpretation.

AQS 270 — Fish and Invertebrate Health Management (4 credits)

Weekly contact hours: 3 lecture; 2 lecture/lab

Prerequisites: AQS 100, AQS 215, AQS 220, AQS 240 or instructor consent. A sound working knowledge of basic mathematics is also required, as the course involves routine calculation of doses, concentrations, dilutions and treatment volumes.

Program requirement: Yes

Term offered: Winter

Examines the common techniques and rationale for fish and invertebrate health management. Reviews common infectious and non-infectious diseases and disease management strategies for captive fish and invertebrates. Upon completion of the course, a student will be able to: 1) identify the common signs of disease in fish and invertebrates; 2) describe the common infectious and non-infectious diseases associated with captive aquarium fish; 3) demonstrate proper use and maintenance of laboratory instrumentation; 4) demonstrate proper necropsy and sample collection techniques; 5) formulate a health management and biosecurity plan based upon the results of diagnostic testing, water quality measurements and professional consultation; and 6) perform common treatment methodologies.

AQS 295 — Aquarium Science Internship (12 credits)

Weekly contact hours: 40 lab

Prerequisites: All AQS core curriculum required courses or consent of the Dean of Aquarium Sciences

Program requirement: Yes

Term offered: Spring (degree); Summer (degree and certificate)

Provides the experience of the daily diligence, responsibilities and rewards of the aquatic animal husbandry profession at an aquatic animal facility. Presents daily animal care and facility readiness routines, assisting life support staff and animal health management professionals, and evaluation of operational aspects of the facility. Upon completion of the course, a student will be able to: 1) apply aquatic animal husbandry skills with aquatic systems and captive aquatic animals; 2) evaluate and participate in the delivery of aquatic animal nutrition, sanitation and biosecurity programs at an aquatic animal care facility; 3) enter data and extract information within record keeping systems and databases used by the industry; 4) discuss historic and current animal health management of captive aquatic animals within an aquatic animal care facility; 5) evaluate and participate in the delivery of a water quality management program within an aquatic animal care facility; 6) identify the components, configuration and operational requirements of life support systems within an aquatic animal care facility; and 7) identify and discuss aquarium exhibits with regard to their design, thematic delivery and operational requirements at an aquatic animal care facility.

3. College Campus Resources

OCCC makes available an array of services to assist students. Descriptions of these services are available in the College Catalog and on the OCCC website (https://oregoncoast.edu/) under **Students**. The following are a few examples of these services.

> **Start with Student Affairs.** Whatever you need — advising, financial aid, accommodations, food and basic-need support, tutoring, or help with a problem you are not sure who to take to — check in with Student Affairs first. They will connect you with the right person or service. You do not need to work out in advance which office handles your situation, and you do not need to explain yourself to more than one person to get help.
>
> **Mental health support.** The College does not provide mental health counseling on campus, but county and national services are available to you, several of them 24 hours a day. Section 3.10 lists them. You are welcome to ask Student Affairs or the Student Resource Navigator for help at any point, and you do not need to be in crisis to do so.

3.1 Student Resource Navigator

If one thing in this chapter is worth remembering, it is this. The College has a staff member whose entire job is helping students deal with the problems that sit **outside** the classroom but end up ending people's studies anyway. The Student Resource Navigator (SRN) is that person, and the service is free.

The Navigator works on non-academic barriers to finishing your degree or certificate, including food and housing insecurity, physical health, mental and emotional health, childcare, and finding employment flexible enough to fit around your studies. Practically, the Navigator will sit down with you, work out which federal, state and local benefit programs in Lincoln County you qualify for, help you through the application process, and connect you with services on campus and across the county.

Any student enrolled in a credit-seeking course may use this service. You do not need to be failing, in crisis, or in any particular kind of difficulty to ask. To get started, complete the Basic Needs Assistance Request form — it takes about four minutes — or call in at the Student Affairs office on the Central County Campus. The form and current contact details are on the Student Resource Navigator pages of the College website.

Student Resource Navigator	541-867-8544, https://oregoncoast.edu/student-services/student-life-wellbeing/student-resource-navigator/
Student Affairs (if the Navigator is unavailable)	541-867-8501
Where to find them	Student Affairs office, Central County Campus, Newport

> Aquarium science is a demanding, largely full-time program, and problems with money, housing, health or childcare are the most common reasons capable students do not finish. Raising them early, with the Navigator or with the Dean of Aquarium Sciences, gives everyone the most room to help. Please do not wait until you are considering withdrawing.

3.2 Academic Advisement

OCCC offers academic advising to students through the Student Affairs department. All aquarium science students should meet with a Success Coach in Student Affairs on a regular basis to ensure that graduation requirements are being completed in a timely fashion. It is recommended that students meet with a Success Coach each term before registering for the subsequent term. https://oregoncoast.edu/get-started/advising/

3.3 Bookstore

Students may purchase textbooks and supplies at the College bookstore, known as Your College Store (YCS), located just off the Commons at the Central County Campus in Newport. In addition to textbooks and class supplies, YCS carries Oregon Coast clothing and scrubs. The store also offers food and beverages, including fresh sandwiches, hot soup, wraps, salads, healthy snacks and drinks. Each term during finals week, the bookstore holds a used-book buy-back for textbooks that are needed for the next term.

3.4 Computer Labs

The computers in the library and the Commons are available to all students. In addition, there is a printer available for free printing.

3.5 Student Accessibility Services

The College provides a variety of support services to students with disabilities. All such services are elective and must be requested by the student. Any aquarium science student who requires accommodation for any type of disability should make an appointment with Student Affairs; accommodations and accessibility services are coordinated by Dana Gallup, the College Student Support Specialist (541-867-8505; see the contact directory in section 1.4). If your accommodation affects how you sit exams, see section 4.2.4. All information provided by students about disabilities is treated in a confidential manner. https://oregoncoast.edu/student-accessibility-services/

3.6 Financial Aid

Any student needing financial assistance should contact Student Affairs. Loans, scholarships and awards specifically designated for aquarium science students are available through this office.

3.7 Health Insurance

The Aquarium Science Program recommends that all incoming students carry some type of health insurance. Preventive measures such as immunizations are a student responsibility. Students are *not* covered by the College for health and accident insurance.

3.8 Job Search and Placement

OCCC does not provide a formal job placement service. However, many resource materials are available in the library for résumé writing and interviewing techniques.

The AQS Program aims to forward open positions to students during the spring and summer terms, as vacancies in the industry tend to cluster around that period. Do not rely on this alone — start looking yourself. Good places to begin are the AZA job board (for public aquariums, zoos and other AZA-accredited facilities), LinkedIn and Indeed. Setting up job alerts on these sites early in your final year costs nothing and means opportunities come to you.

3.9 Library Services

The library contains a collection of on-site materials that focus on courses taught at OCCC, as well as an interlibrary loan service capable of locating materials throughout Oregon and the world and having them sent to OCCC. Computers are available to access library materials, electronic information resources, the internet and word processing programs. AQS students are usually granted courtesy access to the library at Hatfield Marine Science Center (established during AQS 245).

3.10 Mental Health and Crisis Support

The College does not provide mental health counseling on campus. A range of county and national services is available to you instead, and several of them operate 24 hours a day. You do not need to be in crisis to use them, and you do not need to go through the College first.

Lincoln County Health and Human Services provides mental health services to adults, children and families from clinics in Newport, Lincoln City and Waldport. These services are provided regardless of insurance coverage or income.

If you need help now — available 24 hours a day

Service	Contact
988 Suicide & Crisis Lifeline	Call or text **988**
Lincoln County Crisis Line	**1-800-266-0288**
Veterans Crisis Line	Call **988**, then press 1, or text **838255**
Military Helpline	**1-888-457-4838** (text MIL1 to 839863, weekdays 2–6 PM)
Medical emergency	**911**

Lincoln County Health and Human Services clinics

Clinic	Phone
Newport	541-574-5960
Lincoln City	541-265-4196
Waldport	541-265-0567

Other support lines

Service	Contact
Domestic violence, abuse and sexual assault — child and adult hotline	1-855-503-7233
Lincoln County Victims' Assistance	541-265-3462
Bias Response Hotline	1-844-924-2427 (1-844-924-BIAS)

> The Student Resource Navigator and Student Affairs can also help you find a counselor or healthcare provider in the community, check what your insurance or the Oregon Health Plan covers, and work through the practical side of arranging care. If you would rather speak to someone in the AQS Program first, the Dean of Aquarium Sciences can help you make contact.

Contact details for these services change from time to time. The most current list is maintained on the Student Resource Navigator pages of the College website.

3.11 Shark Shack

The Shark Shack is OCCC's student resource pantry, offering free groceries, toiletries and other basic-need items to currently enrolled students. It operates on a no-questions-asked basis: you do not need to demonstrate need, apply, or explain why you are there. The Shark Shack was established and is stocked with the help of student volunteers from the Associated Student Government.

The Shark Shack is located around the corner from the Student Affairs booth at the Central County Campus in Newport (room 103) and in the Commons area in Lincoln City. Current opening hours are posted at the Shack and are available from Student Affairs. Donations of non-perishable food and unopened toiletries are welcome, and aquarium science students are encouraged both to use the resource when they need it and to contribute when they can. If food or housing costs are a continuing pressure rather than a one-off, ask to speak with the Student Resource Navigator, who can check what longer-term assistance you qualify for.

> Aquarium science coursework is demanding and leaves limited room for paid work (see section 7.6.1). If money is tight at any point in the program, please use the Shark Shack — that is exactly what it is there for.

3.12 Student Clubs and Organizations

Several clubs on campus are open to aquarium science students who wish to be involved in student activities. The Associated Student Government of OCCC is open to all students. Membership of a student club or organization can also benefit students with the prospect of scholarships and awards. For the current list of active clubs, see the Campus Life pages on the College website or visit the Club Fair held in the fall term. Students may also propose a new club at any time; Student Affairs can explain how.

Phi Theta Kappa Honor Society

Phi Theta Kappa is an international honor society specifically for community college students. At OCCC, the clubs work on service and community projects in tandem, and PTK students are asked to support the work of the other groups at the school.

In addition to social and service projects, the organization makes over $90 million of scholarship money available each year, much of which is limited to members. During fall term, scholarships open for those planning to transfer to a four-year college or university in the following fall term; each spring, a similar application opens for students who will be returning to a community college in the following fall. An invitation to join the honor society is emailed to eligible students at the start of each term.

For more information, please contact Dana Gallup: dana.gallup@oregoncoast.edu

"Waves" Literary & Art Journal

Waves is an annual literary and art journal published each spring. The journal features writings and artwork contributed by Oregon Coast Community College students, faculty and staff. Please email your writing, photos, or photos of your art to the editors each spring.

The annual Waves Publication Party is held each June in the Patrick O'Connor Community Room at OCCC's Central County Campus in Newport. Students and community members are welcome to attend.

For more information, please contact Patrick Misiti: patrick.misiti@oregoncoast.edu

3.13 Sea Fans

The Sea Fans club is an OCCC Aquarium Science student organization established by aquarium science students who wanted to become more active within the College and the community. Sea Fans membership is available to all students enrolled at OCCC. Throughout the year, students enrolled as aquarium science majors receive notification of upcoming student social gatherings, volunteer activities, fundraising events and scholarship offerings. The club is governed by its members through student-elected officers chosen in the fall term, and faculty and staff serve as advisors. The Sea Fans club is a great place to meet people, have fun and practice your leadership skills. Sea Fans is listed among the College's official student clubs; current activities can be confirmed with an AQS instructor, a club officer, or the Campus Life pages on the College website.

3.14 Tutoring Services

Tutoring assistance is available. Please complete a Tutor Request form at https://oregoncoast.edu/tutoring-services/ and submit it to the Tutoring Center, Room 52 at OCCC's Central Campus.

College Tutor Coordinator	Tutoring Center staff
Phone	541-867-8505
Email	Dana.gallup@oregoncoast.edu

Mathematics Tutoring

Dedicated mathematics tutoring is available to aquarium science students through the Tutoring Center. Several AQS courses — particularly AQS 173 (Water Chemistry in Aquatic Systems) and AQS 240 (Life Support System Design and Operation) — require confident work with units, dilutions, molarity, stoichiometry, flow rates and turnover calculations. Students who would like to strengthen these skills, or who are working toward the MTH 95 prerequisite, are strongly encouraged to arrange math tutoring early in the term rather than waiting until an

assignment is due. Requests are made using the same Tutor Request form; indicate the course and the specific topics you would like help with.

3.15 Writing Center

Assistance with writing is available. Current contact details for the writing center are normally published on the College website; if you cannot find them there, ask Student Affairs. Your aquarium science instructor may not have the current information, so Student Affairs is the quicker route.

4. Aquarium Science Program Policies, Expectations and Standards

Students enrolled in the Aquarium Science Program are expected to read, understand, and comply with the policies set out in this handbook, in addition to the OCCC policies that can be found at https://oregoncoast.edu/about/governance/academic-policies/. Policies specific to the AQS Program — covering the classroom, the facility, the labs and general conduct — are included below. Some of these policies may also be found in the general OCCC Student Handbook. AQS students are expected to act in accordance with the policies herein while maintaining a high standard of professional ethics and academic integrity.

4.1 General Program Policies

4.1.1 Faculty Office Hours

Each full-time Aquarium Science instructor is available for five office hours per week. These hours are posted each term on the course syllabus, and appointments should be made through the instructor. Students may make appointments at times other than office hours if the need arises. Full-time instructors are available to respond to student emails or phone messages during business hours throughout the school term. Part-time instructors are not required to hold set office hours each week but may post them on their course syllabi. Part-time instructors can be contacted by email or through the class Canvas site throughout the school term to arrange meeting appointments.

4.1.2 Faculty and Student Communication

Students can shape the program and affect the curriculum through formal and informal evaluation methods, such as course satisfaction surveys. Students with an individual concern are encouraged to bring it to the Dean of Aquarium Sciences, who will work with them to resolve it. Students may also raise a concern directly with the faculty member involved and may request that the Dean of Aquarium Sciences or an uninvolved faculty member be present for the discussion. Concerns that remain unresolved may be pursued through the College's student complaint procedure (see section 4.2.6).

4.1.3 Absence and Tardiness

Students are expected to attend all classes and required AQS events, to report on time, and to submit all written work on time. Required AQS events include, but are not limited to, student orientation, facility meetings and National Visiting Committee student events (see section 1.7.1 for further details). In the Aquarium Science Program, a high positive correlation has been demonstrated between regular attendance and satisfactory grades. Absence or lateness may therefore interfere with a student's progression in the program.

While it is general College policy that students can only be evaluated on academic performance, for AQS students participation in AQS facility maintenance is a program requirement. Students who continually arrive late for or miss mandatory sessions may be subject to disciplinary action, up to and including dismissal from the program. Only strongly extenuating circumstances for lateness or absence from mandatory sessions will be considered in deciding whether to dismiss a student.

> **Canvas is the official channel.** Class announcements, schedule changes, husbandry rotations, mandatory event notices and course information are posted on Canvas. The AQS facility does not maintain a

> noticeboard for this purpose, and information is not distributed by any other route. **You are responsible for checking Canvas regularly — at least once every weekday during the term — and for acting on what is posted there.** Not having seen a Canvas announcement is not an accepted reason for missing a mandatory session or deadline. If you have trouble accessing Canvas, contact your instructor or Student Affairs immediately rather than waiting.

If absence or lateness is unavoidable, students are expected to follow the procedures for reporting it as outlined in this handbook and in the course syllabus. An inappropriately reported absence or lateness will be regarded as unexcused, as will absence or lateness for reasons considered to be subject to control and planning by students (for example, transportation, alarm clocks, work schedules or childcare). Students are responsible for the content of any classes, orientations or skill demonstrations missed, whatever the reason for the absence or lateness.

4.1.4 Children and Pets

To provide an effective educational environment for adults and to ensure the safety of children on campus, students are not allowed to bring children to classes, nor are they permitted to leave children unattended anywhere in the College or on College property.

Students who bring children to class will be informed that they cannot attend class with children present. The College will take action in respect of persons not cooperating with these procedures. All persons attending classes must be registered and officially enrolled (on the class roster). Animals present must be for legitimate instructional purposes or authorized as service animals.

4.1.5 Emergency First Aid

Although CPR and first aid classes may be made available for student participation and certification, Oregon Coast Community College does not require, nor does it expect, that students in the Aquarium Science Program will provide emergency first aid to staff, students or visitors on its campuses. In an emergency, your first action should always be to call 911 and notify College personnel.

If you do choose to assist, Oregon's Good Samaritan law (ORS 30.800) limits civil liability for a person who renders emergency medical assistance voluntarily, in good faith and without expectation of payment: a claim arising from that assistance may generally only be brought where the person is alleged and proved to have been grossly negligent. This protection is not unlimited, and this handbook is not legal advice. Act only within the limits of your training and stop when trained responders take over.

4.1.6 Injury and Illness

For any condition — for example, an illness, injury, prescription medication or surgery — that could affect a student's ability to safely perform animal care or class work while maintaining their own safety, a statement will be required from a physician or licensed primary health care provider stating that the student is medically cleared to perform animal care responsibilities without restriction. If the physician identifies required restrictions, faculty will review the medical release form information provided and determine whether the student can continue in practicum, lab or class work experiences. The student must provide the Dean of Aquarium Sciences or the instructor with a copy of the medical release by the timeframe specified by the instructor.

Contagious Illness

Aquarium science students work in close quarters, share tools and workspaces, and handle animal collections that are themselves vulnerable to introduced pathogens. If you are unwell — particularly with a fever, a persistent cough, vomiting or diarrhea, or any other sign of a contagious illness — do not attend class or enter the AQS facility. Notify your instructor in advance, following the absence reporting procedure in section 4.1.3; illness reported properly is an excused absence, and staff will cover your husbandry duties.

If you are recovering and well enough to return but may still be infectious — for example, in the days after a respiratory illness — wear a well-fitting face mask, wash your hands frequently, and keep your distance from others where the work allows. Coming in sick puts your classmates, the staff and the animal collection at risk, and it is neither expected nor rewarded here.

Students must report all accidents or events that could endanger their health occurring during practicum and classroom training to the instructor, mentor, AQS leadership or the College immediately. If life threatening, call 911 immediately, and then inform the above. The instructor will assist the student in obtaining treatment, if required, and in completing the required forms in accordance with institutional and OCCC policy.

Students enrolled in AQS 110 and AQS 111 are covered by the college's liability insurance while participating in off-campus academic activities, provided they are performing work required for the completion of the program and its courses (and course outcomes).

4.1.7 Medical Conditions and Program Participation

There are numerous medical conditions that may not be compatible with some of the duties of a professional aquarist, including injury, allergies, and pregnancy. Students should notify Student Affairs if a physician places any restrictions on practicum or classroom performance. Faculty and College staff will review the medical information provided by the physician or licensed health care provider and determine how best the student can continue in practicum and lab experiences.

4.1.8 Employment Opportunities While in the Aquarium Science Program

Students may be presented with job opportunities, particularly within their field of study, while participating in the Aquarium Science Program. Although this is strongly discouraged by AQS faculty and personnel, the program recognizes that accepting job opportunities while still enrolled is within a student's personal right to pursue. However, AQS faculty, staff and other personnel will not act on any student's behalf to secure a job opportunity — by means of advocacy, recommendation or reference to a prospective employer — if such an opportunity takes the student away from active enrollment status as an Aquarium Science Program participant.

AQS faculty, staff and other personnel may act on a student's behalf to assist with job opportunities, by way of advocacy, recommendation or reference, if the opportunity is part-time in nature and does not interfere with the student's studies, or if it supports fulfilment of the internship assignment required to complete the program. Students should not assume that any AQS staff member will act as a reference for scholarship applications, internships or part-time employment. Always discuss your application with anyone you wish to list as a reference.

AQS students who seek employment during their time in the program should note the following:

1. When students are employed by an institution or individual, they become an employee of that agency or individual and come under the rules and regulations, liability insurance and other requirements of that employer. During that employment, the student does not come under the jurisdiction of the College and is considered an agent of the institution by which they are employed.
2. The professional liability insurance for aquarium science students carried by the College does not cover employment.
3. Students who plan to work during the program need to be aware that it is virtually impossible to work full time and successfully complete the program.
4. While recognizing that some students may need to work while enrolled in the program, Aquarium Science faculty nevertheless cannot adjust classroom sessions, lab sessions or off-campus practicum requirements to accommodate student work schedules.
5. Aquarium Science classes, labs and practicums typically involve 20–30 hours of attendance per week, plus an additional 40–60 hours of study, assignments, and animal care and maintenance at the Aquarium Science building. Meeting these requirements typically means that students will need to adjust employment and family responsibilities.

4.1.9 FERPA and Release of Educational Information

In compliance with the Family Educational Rights and Privacy Act (FERPA), Oregon Coast Community College releases only very limited student information. All aquarium science students should be aware that some confidential information may be posted or shared. Each student may be required to sign a Use of Image and Information Authorization Form prior to beginning their studies. Information posted and shared may include the student's name at physical locations on campus, on the Canvas site, on the website and at practicum assignment locations. Contact information may be shared with fellow students and College faculty and staff through standard mail, email and related documents. Images may be posted or shared for the purpose of promoting and communicating about the program on the College's website, on Canvas class sites and in physical postings related to the AQS Program.

For more information, see the Student Records Policy and Procedures in the Student Handbook or visit the College website at https://oregoncoast.edu/student-services/transcripts/ .

4.1.10 Insurance

Students are not covered by health and accident insurance provided by the College. The College does provide limited liability coverage for student illnesses or injuries that result directly from activities required by course objectives at off-campus practicum sites. This coverage is not available for on-campus laboratory activities. Student health insurance is highly recommended.

4.1.11 Non-Discrimination and Non-Harassment

Oregon Coast Community College is committed to maintaining a learning and working environment that is free of harassment for all people. It is therefore a violation of College policy for any student or employee to engage in harassment (including sexual harassment) of any other College student or employee based on personal characteristics, including but not limited to race, religion, color, gender, sexual orientation, national origin, age, marital status, parental status, veteran status or disability. Any student, employee or organization with a

substantiated violation of this policy will be subject to disciplinary action, including possible suspension, expulsion or dismissal.

The College has regulations and procedures to disseminate this policy, to train supervisors, to provide channels for complaints, to investigate all complaints promptly and carefully, to develop and enforce appropriate sanctions for offenders, and to develop methods to raise awareness and sensitivity among all concerned. Students subject to any harassment or discrimination should contact the Title IX Coordinator, Dr. Kristina Holton, Vice President for Academic & Student Affairs (541-867-8511, kristina.holton@oregoncoast.edu) or the Director of Human Resources, Joy Gutknecht (541-867-8515).

4.1.12 Sexual Harassment and Title IX

OCCC prohibits sexual harassment and gender-based misconduct. These matters are governed by the College's Gender-Based and Sexual Misconduct Policy (AP 3434), published at oregoncoast.edu/title-ix-policy/, which controls over any summary given here. https://oregoncoast.edu/title-ix-policy

Reports may be made at any time to the Title IX Coordinator, Dr. Kristina Holton, Vice President for Academic & Student Affairs (541-867-8511, kristina.holton@oregoncoast.edu), or to the Deputy Coordinators: Robin Gintner, Vice President of Administrative Services (541-867-8516), and Joy Gutknecht, Director of Human Resources (541-867-8515).

Making a report does not by itself start an investigation. Supportive measures — such as counseling referrals, schedule or course adjustments, and mutual no-contact arrangements — are available free of charge whether or not a formal complaint is filed. Where a formal complaint proceeds, both parties have the right to an advisor of their choice and to appeal, and no discipline is imposed unless responsibility is determined at the conclusion of the process. Retaliation against anyone who reports or participates in a Title IX process is prohibited.

4.1.13 No-Show and Drop Procedure

Oregon Coast Community College has a no-show and drop procedure. If a student does not attend orientation and the first class session or does not contact the instructor prior to missing the first class session, the student may be dropped at the discretion of the Dean of Aquarium Sciences. If a student is dropped under this procedure, the student will be mailed a notice giving the date they were dropped, the course number and name, and the instructor's name. **Note:** this may affect a student's eligibility for tuition assistance if they are a veteran, receiving financial aid or sponsored by an agency.

4.1.14 Transportation

Students are responsible for their own transportation to and from school, lab locations and practicum facilities. Some practicum facilities may require 30 minutes or more of travel time to and from campus. Students may also have the opportunity to share rides with classmates when this does not interfere with their assignments.

4.1.15 Volunteerism

The residents of Lincoln County have been active proponents of supporting the community college and the development of the Aquarium Science Program. In appreciation, the program would like to support the county

by contributing volunteer time. Volunteering is highly valued and encouraged for students at Oregon Coast Community College. At least three hours of volunteer time per quarter is strongly encouraged.

Areas of possible volunteerism include:

- **AQS activities:** Sea Fans, fundraisers, and AQS facility and campus tours
- **Non-aquarium science College activities:** student government, other campus clubs and organizations
- **Non-College activities:** Loyalty Day Parade, Marine Science Day, World Oceans Day
- **External facilities and organizations:** Oregon Coast Aquarium, Hatfield Marine Science Center, Surfrider Foundation and similar organizations

4.1.16 Substance Abuse

Substance abuse — either using or being under the influence of alcohol or other drugs — and illegal activity — the possession, distribution, manufacture, transfer, sale or offering for sale of alcohol or any narcotic, hallucinogen, stimulant, sedative or similar drug other than in accordance with legal requirements — are strictly prohibited on College-owned and College-controlled property, and while representing the College in any capacity, including during off-campus practicum and internship assignments. Aquarium Science students engaging in such conduct may be subject to disciplinary action under the College's Student Conduct policy (Administrative Policy chapter 5, oregoncoast.edu/about/governance/administrative-policy/), up to and including dismissal from the program.

> *Students who need assistance in dealing with a substance use problem should seek out the Student Resource Navigator in the College's Student Affairs Office for referral to an alcohol and drug counselor.*

1. All allegations of illegal activity related to chemical substances will be referred to the Vice President of Academic & Student Affairs(VPASA) for investigation. The VPASA will consult with the Aquarium Science leadership, faculty and staff about the status of the student in the program while the investigation is conducted. If the investigation reveals that the student engaged in illegal activity on College-owned or College-controlled property, or while representing the College in any capacity, the student may be subject to disciplinary action, up to and including dismissal from the program.
2. In all aspects of providing animal care, aquarium science students must perform safely and effectively. They are therefore responsible for avoiding potential adverse effects on their behavioral, physical, emotional and mental states that could result from the use of drugs, whenever and wherever taken, including alcohol and any over-the-counter or prescription medications. Students who are authorized to use marijuana for medical reasons under the Oregon Medical Marijuana Act must submit a copy of their current registry card to the Dean of Aquarium Sciences. Authorized use of marijuana for medical reasons does not relieve students of the responsibility to perform safely and effectively when providing animal care. Students are encouraged to notify faculty if they are taking medications that may have an adverse effect on classroom performance, so that faculty may help students manage potential problems.
3. Based on the established agreements of the Aquarium Science Program with practicum sites, it is the duty of an instructor or the student's immediate supervisor to dismiss a student from the practicum setting if there is any question of the student's ability to function safely and responsibly in animal care. These agreements recognize the right of practicum sites to exclude students who exhibit unsafe or irresponsible

behavior. Such exclusion could mean that a student would not be able to achieve course outcomes and could therefore not continue in the Aquarium Science Program.

4. Performance, behavior, appearance or breath odor may suggest the use of alcohol or other drugs. Examples of signs that may indicate substance use include those listed below.
    - a change in a person's behavior
    - bloodshot eyes
    - emaciation or unusual weight loss
    - tremor, especially in the early morning
    - dilated or constricted pupils
    - slurred speech
    - inappropriate or unusual emotional responses
    - altered or impaired gait
    - breath odors
    - repeated tardiness or absence
    - diminished work performance, including mental functioning
    - accidents or near-misses involving equipment
5. When indications of substance use are detected while a student is engaged in activities on campus, the student will be required to explain the findings. At the discretion of the Aquarium Science faculty and staff, such explanations may need to include the report of testing of body fluids for chemical substances. In consultation with the leadership of the Aquarium Science Program, faculty and staff will decide whether and what disciplinary action is appropriate. At a minimum, the student will be directed to read this policy again. Any further indications of substance use will require that the student undergo immediate testing for the presence of alcohol or other chemical substances. Test results will be used to review the student's status in the program.
6. When indications of substance use by a student are detected in a practicum setting, the student will be suspended from the practicum component of the program and required to undergo immediate testing for the presence of alcohol or other chemical substances. The Aquarium Science faculty and the Dean of Aquarium Sciences will review the student's program status. Factors considered in this review include whether the student exhibited unsafe performance or irresponsible behavior in animal care and whether test results are positive.
7. Possible outcomes of the review of a student's status in the program include continuation in the program with an action plan to prevent recurrence of the problem, continuation in the program on probation, or dismissal. Any of these decisions can be appealed using the process outlined in the College's *Student Rights and Responsibilities* document, a copy of which is available at the Student Affairs office.
8. Before being permitted to continue in the program, the conditions listed below apply.
    a. Students must undergo, at their own expense (including testing), evaluation by a qualified drug and alcohol abuse counselor.

b. Students must permit the counselor to document to the Dean of Aquarium Sciences that such an evaluation has been done and, if test results were positive, that a treatment plan has been developed.

c. Students must sign an agreement to follow the program's substance use policy and any treatment and monitoring program prescribed by the counselor, including submitting to random drug testing.

d. Students must agree that the counselor may document to the Aquarium Science leadership, every two weeks, the student's ongoing abstinence and continued participation in treatment and rehabilitation.

e. Other conditions may be specified for a student's continuation in the program based on the circumstances of the situation.

After being permitted to continue in the program:

f. Students must demonstrate safe, responsible and effective care of animals at all times.

g. Students must comply with the conditions of probation or be dismissed from the program.

9. Testing for substance use consists of conducting laboratory tests on samples of the student's blood, breath or urine, whichever is appropriate, to detect alcohol and other chemical substances. Whenever possible, students must provide the sample needed for testing within 60 minutes of the time the practicum was suspended. Collection and testing of body fluid specimens will employ procedures that maintain the integrity of the specimens. Students are responsible for arranging their own transportation for testing.

Testing required by the Aquarium Science Program to corroborate or refute a suspicion of substance use will be arranged and paid for by the program. Payment for any subsequent testing is the responsibility of the student. Test results will be reported directly to the Dean of Aquarium Sciences by the testing facility.

Refusal to comply with required testing procedures may result in disciplinary action, up to and including dismissal from the program.

Students found to have positive test results will either be placed on probation, subject to the conditions for continuation on probation outlined above or dismissed from the program.

10. Practicum or class time missed while the requirements and procedures of this policy are implemented will be regarded as set out below.

When laboratory tests for substance use are positive, or when a student is shown to have engaged in illegal activity, time missed will be regarded as unexcused absence. There is no obligation on Aquarium Science faculty to offer make-up time (see section 4.1.3, Absence and Tardiness).

When laboratory tests are negative and a student is cleared of an allegation of illegal activity, the student will be provided with opportunities to make up missed practicum time, assignments and missed class content. Students are expected to take advantage of these opportunities to demonstrate their achievement of the course outcomes.

Notwithstanding the above, there are limits on the amount of missed time that can be accommodated. Any protracted time needed to implement this policy — for example, obtaining consents and samples for testing,

reporting results, or assembling documentation required for continuation on probation — may require that a student withdraw from the program.

11. Students may choose to withdraw from the program to manage and control a substance use problem. Students who withdraw, as well as students dismissed for substance use, may be permitted to return to the program on condition that they provide documentation to the Dean of Aquarium Sciences that abstinence has been maintained for a period of six months prior to returning. Students who return to the program after withdrawal or dismissal for substance use will be on probation with the conditions outlined above. The process and conditions outlined in section 4.1.17 (Re-Entry) apply here also.
12. Students are encouraged to report concerns regarding the safety or impairment of another student to Aquarium Science faculty, staff, or program leadership. Reports may be made anonymously.

4.1.17 Re-Entry

Re-entry is defined as re-entering the Aquarium Science Program as an Oregon Coast Community College aquarium science student at some point other than the beginning of the program. A request to re-enter usually occurs when a student has been absent from the program due to suspension or withdrawal.

1. Any student who seeks readmission to the program must follow the application procedures and program requirements in effect at the time of re-entry. Because aquarium science courses must be taken as a whole, re-entering students are required to meet all requirements for the course of re-entry, even if this means repeating previously completed coursework. Re-entry is based on space available, College resources and an assessment of the student's current knowledge and ability to be successful.
2. A student is eligible for re-entry if all curriculum courses required in the term or terms prior to the term of entry have been completed and are current where time limits apply.
3. Applications for entry at any point in the year other than the beginning of the program must be submitted to the Dean of Aquarium Sciences.
4. Students who have not attained a grade of C in any aquarium science course more than once, or who have failed to earn a C in two separate aquarium science courses, or who withdrew while not in good standing more than once, will not be considered for re-entry or admission to the program.
5. If a student is dismissed from the program because of serious or multiple breaches of safety or professionalism, the student will not have the option of re-entry to the program.

When considering any application for re-entry, advanced placement or transfer, faculty will discuss and prioritize the request for entry into the available spaces based on the following criteria:

Category	Definition
Category 1	Returning students who were in good standing in both the lecture and practicum portions of the course.
Category 2	Returning students who were in good standing in the practicum portion of the program, but whose individual lecture averages were below 75%.
Category 3	Returning students who were in good standing in the lecture portion of the course, but who were not in good standing in the practicum portion of the program (they

Category	Definition
	were not meeting one or more critical benchmarks for practicum).
Category 4	Returning students who were not in good standing in either the lecture or the practicum portion of the course.

> **Good standing** in the lecture portion means that the student's individual test average was 75% or above. Good standing in practicum means that the student was meeting all practicum competencies for that point in the program.

Should there be more requests for re-entry than spaces available, re-entry will be offered to the student placed in the highest category with the highest GPA in aquarium science courses taken prior to the course from which the student exited the program.

4.2 Classroom Policies

4.2.1 Academic Integrity

Graduates of the Aquarium Science Program are expected to perform in a manner that reflects the standards defined by the aquarium science profession. For this reason, the expected conduct outlined below should be viewed as necessary preparation for the role that the student will assume when entering the profession.

Interactions in class, practicum and internship settings are to reflect professionalism and civility, as evidenced by caring, fairness, respect, acceptance of responsibility and trustworthiness. Class and practicum should be treated as a work setting. Unexcused absence and tardiness to classes, laboratory sessions, field trips, practicum assignments and internship assignments are unacceptable and may result in disciplinary action, poor grades or dismissal from the program. Students are expected to arrange absences with instructors, practicum mentors and internship supervisors with a minimum of 24 hours' advance notification where possible, unless the absence or tardiness is due to an emergency or unexpected late illness.

4.2.2 Policy Regarding Cheating and Plagiarism

As stated in the policies related to academic integrity, students are expected to practice academic honesty. Instructors have the responsibility of planning and supervising all academic work to encourage honest and individual effort, and of taking appropriate action if instances of academic dishonesty are discovered.

Honesty

Honesty is a professional characteristic vital to the practice of safe husbandry and is expected of all students. In academic, practicum and internship settings, the AQS student is expected to demonstrate integrity and truthfulness in all activities. In the academic setting, breaches usually involve presenting the work of others as one's own by cheating or plagiarizing. In the practicum and internship setting, breaches appear when personal or others' errors are not reported.

Cheating

Cheating is an act defined as gaining unfair academic advantage through duplicity, deception or dishonest activity. Cheating especially relates to taking exams or obtaining assistance from another person or any data

source other than one's own personal knowledge. It also includes giving information, materials or other work to another person in a way that facilitates falsification of that person's knowledge or work. Suspected violations are handled under the College's Academic Integrity policy (AP 5540, published at oregoncoast.edu/about/governance/academic-policies/). The faculty member will meet with the student, give them the opportunity to explain, and document any violation using the Academic Integrity Concern Form. Consequences are determined by the faculty member and may include a warning, redoing the assignment, a failing grade or zero on the assignment or exam, a lower or failing course grade for repeated violations, and/or initiation of the student conduct process. Students may appeal a faculty member's decision in writing to the Vice President of Academic & Student Affairs (VPASA) within five business days; the VPASA's decision is final. Grievous or repeated violations may lead to further sanctions up to and including expulsion from the College.

The term "cheating" includes, but is not limited to:

- having or using unauthorized materials during any test situation;
- looking at another student's work during any test situation;
- changing answers on a returned quiz, assignment or exam in order to claim that there had been a grading error;
- discussing the content of any test with individuals who have not yet taken it;
- turning in work that was generated or partially generated by other individuals (unless specifically allowed by an instructor), or by the same individual in the same or a prior term (unless specifically allowed by an instructor);
- obtaining prior or current exams without the instructor's permission; and
- plagiarism.

Plagiarism

Plagiarizing is defined as presenting as one's own the ideas or words of another, from any print, electronic or other source, without reference or credit to the source. The term "plagiarism" refers to the use, either intentional or unintentional, of another person's words or ideas without giving credit to that person. It can include actions such as buying or borrowing an entire paper or assignment from someone (including from an electronic source such as the internet), or copying phrases, sentences, ideas or large sections of text from any source without using quotation marks appropriately or without citing the source. Faculty will check papers for plagiarism. The department will individually evaluate instances of plagiarism and assign a penalty, such as a failing grade for the assignment or the course, or other disciplinary action.

Copyright Violations

The unauthorized use of copyrighted materials from any source, including but not limited to print and electronic media, is an act of academic dishonesty. Copyright violators are subject to legal penalty. Contact the Dean of Instruction or the Director of Library and Media Services for a complete copy of OCCC's copyright policy.

4.2.3 Canvas

Canvas is an integral part of all aquarium science courses, and access to a computer — at home or at the College — is required **on a daily basis**. Required quizzes and assignments completed outside the classroom typically use

the various tools of Canvas. Students are expected to have access to a personal computer or similar device with internet access in order to use the Canvas site and to perform assigned coursework, unless otherwise arranged with the instructor. Students without access to a personal computer or similar device can use designated College computers on campus during College operating hours.

4.2.4 Testing Policies

Exams will be given as scheduled. Test-taking times will be strictly adhered to; students arriving late will submit their test when time is called. **Students are required to notify the course instructor BEFORE the exam is given if they are unable to take the exam or to arrive on time.** The instructor's contact information is given at the beginning of the course and is located in the class syllabus. Students must make arrangements to take missed exams with the instructor within a timeframe determined by the instructor. Students who repeatedly arrive late for or miss exams may endanger their progression in the program.

Using the College Testing Center

The Testing Center is not restricted to students with documented accommodations. It proctors exams for students with approved accommodations, for students who have missed an in-class examination, and for distance education courses. If you would work better in a quiet, low-distraction room, ask — but note that space is limited and priority goes to accommodated and make-up testing.

If you want to sit an exam in the Testing Center, the following applies:

- **It must generally be at the same time as the exam is scheduled in class.** The Testing Center is not a way to sit the exam on a different day.
- **Tell your instructor well in advance** — early in the term where possible, and never on the day of the exam.
- **You book the Testing Center yourself.** Contact Dana Gallup, Student Support Specialist, on 541-867-8505 to arrange your session. Your instructor does not do this for you, and the booking is not made simply by telling them.
- **Book early.** Seats are limited, reservations are required and walk-ins are not accepted, so a late request may not be able to be accommodated.
- Bring valid photo identification. Food and drink are not permitted in the testing room, and personal items must be stored in the lockers provided.

> If you have approved accommodations, arrange them with Dana Gallup before your first exam rather than in the week it falls due — accommodations cannot be applied retrospectively to an exam you have already sat.

4.2.5 Grading Policies

The grading system for Aquarium Science Program courses is based on letter grades. Some aquarium science courses include lab and lecture components. *Students must earn a C or higher to apply a course to the AQS degree or certificate.* Students who fail to earn a C must retake the class, which in most cases will extend the student's time of study by a year. Failure to earn a C on the second attempt, or failure to earn a C in two

separate courses, will result in suspension from the Aquarium Science Program (see section 4.1.17 for the re-entry procedure).

Lecture and lab grades are based on points achieved in tests, quizzes and graded written assignments, with an average of 70 percent required to pass the course. Details for determining the course score used to assign a course letter grade are contained in course materials. The following are the course score ranges for course letter grades:

Letter grade	Course score
A	90 – 100%
B	80 – 89.99%
C	70 – 79.99%
D	Below 70%

4.2.6 Grievance Procedure

When there is a difference of opinion regarding the implementation of College procedures, policies or decisions, or an unprofessional interaction between a student and an employee, students may use the College's student complaint procedure (AP 5530), published at https://catalog.oregoncoast.edu/grievance-procedurestudent-complaints#:~:text=complaints. In outline: students are encouraged first to seek informal resolution with the individual involved or their supervisor, within ten working days of the event. If the student prefers not to do so, or the issue is not resolved, the student may file a formal complaint using the Student Complaint Form, available online and at the Student Affairs counter, within ten working days. The Student Complaint Committee, chaired by the Dean of Academic Foundations and Student Success, issues a written decision; its decision may be appealed to the Vice President for Academic & Student Affairs, whose decision is final. Deadlines can be extended by mutual agreement, and accessibility accommodations are taken into account. This procedure does not apply to sexual harassment, sexual misconduct or discrimination — those go to the Title IX Coordinator (see section 4.1.12).

4.2.7 Incompletes

Incompletes are rarely assigned in aquarium science courses because of the limited time available for a student to complete course requirements before the next term. According to College policy, students are not allowed to register for the next course in a sequence if the prior course objectives were not met. An incomplete will therefore be considered on an individual basis.

5. AQS Facility

5.1 Background and History

The Aquarium Science building was constructed in 2010 and opened for classes in the fall of 2011. This 9,200 square foot facility, located at the Oregon Coast Community College campus in Newport, was built with State and Lincoln County funds. The AQS building is designed to be a teaching facility and laboratory that mimics the organization and set-up of working spaces typical of a public aquarium facility. Spaces include a water quality lab, a teaching lab, an animal holding lab, a food preparation lab, a life support room and a workshop. A brief description of each of these areas is given below.

The facility was built with operational and energy efficiency in mind, using recirculating heat and solar panels. It is equipped to support both freshwater and marine systems. Seawater is made on site, and both cold and warm water lines run throughout the building. The key intention of the AQS facility is to provide an environment in which Aquarium Science students can gain the knowledge and hands-on skills that will assist them in the aquarium science industry.

5.2 Area Descriptions

5.2.1 Lobby (Student Lounge)

The AQS lobby is equipped with tables and chairs that provide students with an area to study, meet other students, start lab sessions and work on projects between classes. Food and drink are not allowed outside the lobby area.

5.2.2 Water Quality Lab

The water quality lab was established to support the testing and monitoring of water quality and animal health. The lab is equipped with dissecting microscopes, compound microscopes, balances, and water quality testing equipment and reagents. The main courses that use the water quality lab are Introduction to Aquarium Science (AQS 100), Water Chemistry in Aquatic Systems (AQS 173), Biology of Captive Fish (AQS 215), Biology of Captive Invertebrates (AQS 220), Reproduction and Nutrition of Aquatic Animals (AQS 232), and Fish and Invertebrate Health Management (AQS 270).

5.2.3 Food Prep Lab

The food prep lab is designed to instruct students in the proper storage, preparation, handling and delivery of aquatic animal food items and supplementation. The lab also supports food preparation for animals kept in aquaria throughout the facility. It is lined with stainless steel counters containing deep sinks and storage cabinets, and is equipped with a freezer, refrigerator, cutting boards, knives, blenders and various other items to aid in the preparation and storage of food for aquarium animals. The main courses that use this area include Introduction to Aquarium Science (AQS 100), Biology of Captive Fish (AQS 215), Reproduction and Nutrition of Aquatic Animals (AQS 232), and Fish and Invertebrate Health Management (AQS 270).

5.2.4 Live Culture Area

The live culture area is part of the food prep lab and allows for the culturing of live food items, such as algae and rotifers, for animals kept in aquaria throughout the facility. This area is also equipped with environmental system water lines and central aeration supplied from the life support room. Various culture vessels and equipment specific to rearing live food items are kept here. Courses that use the live culture area include Biology of Captive Invertebrates (AQS 220) and Reproduction and Nutrition of Aquatic Animals (AQS 232).

5.2.5 Life Support Systems Room

The Life Support Systems (LSS) room is located at the far east end of the building. The LSS room is accessible only to AQS program personnel, through designated external doors. Students may access the LSS room only under the supervision or authorization of facility personnel or instructors. The room is equipped with water containment vessels, each holding designated environmental water quality parameters for the make-up supply of warm freshwater, warm saltwater and cold saltwater aquarium systems. Water lines from each of the containment vessels are labeled and run to supply locations throughout the facility. The LSS room also contains a water reclamation system, an ozone generator, and a centralized air blower, which supplies low-pressure air to various locations throughout the facility. Although not designed as an instructional space for classes, the LSS room supports demonstration activities for Life Support System Design and Operation (AQS 240).

5.2.6 Animal Holding Lab

The animal holding room is the largest room in the building. It is equipped with centralized environmental system water lines and aeration from the LSS room, as well as drains and power. Water, air and power are all supplied from overhead in order to allow a flexible layout and use of space. The room contains both freshwater and marine aquaria, which AQS students and facility personnel maintain and care for. In addition to the live aquaria located here, the room contains the main disinfection materials and equipment for the maintenance and biosecurity of the various aquarium systems. The room also has a salt mixing system used to supply the saltwater make-up reservoirs in the LSS room. All AQS courses use this area at some point during their term of study.

5.2.7 Student Workshop

The student workshop is equipped with materials, machinery and tools intended to help students design and construct various aquarium science related projects. Students are taught throughout the curriculum the proper handling and use of each material, machine and tool in the workshop. Safety is a key consideration when using the equipment in this area, and strict adherence to safety policies, protocols and procedures is enforced (see the safety policies in section 6.3). The main courses that use the workshop in support of associated activities and projects include Introduction to Aquarium Science (AQS 100), Life Support System Design and Operation (AQS 240) and Exhibits and Interpretation (AQS 252).

5.2.8 Teaching Lab

The teaching lab is equipped with lab seating for 24 students. This room can be used for instruction with a whiteboard and a desk for demonstrations, such as dissections or other integrated lab activities. Overhead water lines supply cold and warm fresh and saltwater, as well as power and central aeration, allowing aquaria to be set up in the lab space. Drains line the floor to prevent flooding when setting up and breaking down aquaria.

The lab is also equipped with dissecting kits, a fume hood, sinks, counters for workspace and cabinets for storage. Some of the courses in the program use this space for instruction, lab activities and projects.

5.2.9 Storeroom

The storeroom is located centrally in the facility and contains supplies needed for facility system maintenance and husbandry as well as for teaching labs. Items in the storeroom include filtration components, lighting equipment, pumps, aquarium maintenance equipment, aquarium tanks and plumbing materials. Items are organized and kept in an orderly fashion and must be returned to the location from which they were retrieved. Students may use supplies and items in the storeroom in support of aquarium science program and class-related assignments, projects and activities.

6. Facility Policies, Expectations and Standards

Students enrolled in the Aquarium Science Program are expected to read, understand and comply with the policies set out in this handbook. Policies specific to the AQS Program in regard to the AQS facility and labs are included below. AQS students are expected to act in accordance with these policies while maintaining a high standard of professional ethics and respect for OCCC-owned property and equipment.

6.1 General Facility Policies

6.1.1 Permissible Facility Use and Authorized Access

The AQS facility is primarily accessible to authorized people, including OCCC leadership (AMG group), OCCC faculty and staff, AQS facility personnel and actively enrolled AQS students. Access to the facility requires a key card and a pass code to disarm the building alarm; these must be approved by the Director of the Teaching Aquarium and issued by the Director of Facilities. If the building alarm is triggered, security will report to the building. Any unauthorized parties found on the premises will be asked to leave. No pets are allowed in the facility.

6.1.2 Hours of Use and Operation

The AQS hours of use and operation coincide with the College business hours of 8:00 AM to 8:00 PM Monday through Thursday, and 8:00 AM to 5:00 PM on Friday. Students are allowed in the AQS facility during posted hours without special permission; these hours are typically restricted during the fall term. Students should not enter the AQS building outside of posted hours unless they have the permission of the Director of the Teaching Aquarium or are accompanying AQS staff. If students are working in the facility during non-business hours, including weekends, then for safety reasons, there must be a minimum of two people in the facility at any one time — for example, another AQS student, staff member or faculty member — and restrictions may be applied to the types of activity a student may perform (a list of authorized activities may be provided).

Course or program activities required during these hours will require supervision from authorized personnel and special permission from the Director of the Teaching Aquarium.

6.1.3 Visitors and Guest Authorization

Students are allowed to bring guests or visitors through the facility. However, guest or visitor access requires permission from the Director of the Teaching Aquarium, with a minimum of 24 hours' notice. In the Director's absence, seek permission from the Dean of Aquarium Sciences. Any group of six or more visitors is considered a tour. Tours require authorization from the Director of the Teaching Aquarium and may require a College faculty or staff member to act as tour guide; tours are generally arranged through the Director of the Teaching Aquarium. Guests are not allowed to conduct work or use equipment unless authorized by the Director of the Teaching Aquarium or appropriate personnel. Students should not carry out animal care or system maintenance while giving tours.

6.1.4 Facility Dress Code

The AQS facility is first and foremost a working environment. Appropriate attire is therefore required for safety and sanitation. Appropriate dress may depend on the activities being conducted in the facility but should generally consist of work clothes that the student does not mind getting wet, damaged, dirty or fouled. The College is not responsible for supplying or replacing clothing for AQS-related activities.

No open-toed shoes or sandals are to be worn in the facility at any time. Closed-toe shoes should have adequate tread or grip for wet floors in the facility; waterproof, slip-resistant shoes are preferable. It is highly recommended that jewelry such as bracelets, rings and necklaces be removed while working in the facility. Removing jewelry limits the risk of property loss, impact on aquariums and self-injury. Again, the College is not responsible for supplying or replacing any lost jewelry for AQS-related activities.

Long hair must be tied back and lanyards must be removed before working in the facility. The AQS facility contains a great deal of moving machinery — pumps, blowers, mixers and workshop power tools — and anything that dangles can be drawn into it. The same applies to loose drawstrings, scarves, wide sleeves and neckties. If you need to carry a key card, use a belt clip or a pocket rather than wearing it around your neck.

6.1.5 Food and Beverage Policy

No food or drink is allowed in any area outside the common student lobby area. All waste and recyclables must be disposed of properly. This includes any spills or dropped items on tables and floors.

Label anything you want to keep. Food left in the lobby without a name and date may be cleared away. In practice, items are not usually thrown out after a single day, but labeling is the only reliable way to make sure your lunch is still there when you come back for it.

There is a table in the AQS lobby used for sharing. Anything placed on it is understood to be offered to anyone who wants it, so do not leave food there that you intend to keep. There is also a coffee machine in the lobby, free for students to use.

Whether food and drink are permitted in a classroom during class is at the discretion of each instructor. Ask yours rather than assuming; the answer varies by course and by activity.

6.1.6 Use of Equipment and General Property

All equipment, materials and items found in the facility, whether purchased by the College or donated to it, are the sole property of the AQS Program. Equipment, materials and items in the facility may not be removed, borrowed or taken from the facility unless expressly authorized by the Director of the Teaching Aquarium or authorized faculty and staff. Likewise, equipment, materials and items in the facility may not be used for personal use, hobby use or in aid of a third party unless authorized by the Director of the Teaching Aquarium. Discovery of equipment used for personal or third-party use or gain without authorization may result in disciplinary action under the Student Conduct policy, including revocation of facility privileges and up to and including dismissal from the program..

Use of equipment, materials or items that are not the property of the College or the AQS Program is not permitted unless authorized by the AQS leadership or designated personnel. Proper use and care of equipment is always required. AQS students, faculty and staff must follow all protocols and procedures associated with an

item, whether from factory or supplier manuals or from program-generated material. Safety protocols and procedures associated with the facility (see section 6.3) must be implemented at all times when handling facility equipment. Discovered abuse or misconduct while using equipment may result in disciplinary action under the Student Conduct policy, including revocation of facility privileges and up to and including dismissal from the program.

Students are authorized to use only those items — for example, life support equipment, hand tools, power tools, lab equipment, chemicals and materials — in which they have been properly trained by AQS faculty and staff. Note that some equipment can only be operated with supervision (see section 6.3). All items must be put back in their proper designated location, or where originally found, in a neat and orderly fashion after each use. Items must be returned in the condition in which they were found: clean, dry and free of saltwater. Where possible, use equipment that is already available in storage rather than new equipment.

Working surfaces — floors, counters, cabinets, shelves and similar — must be kept neat, clean and tidy at all times. These areas must be cleaned, often disinfected, and organized after each use. Proper cleaning techniques apply according to any training or written protocols and procedures.

Personal items should be stowed in the proper designated locations and not left for long-term storage. Personal items should be removed and taken with the student each time the student leaves the facility. No food, drink, associated containers or waste should be left in the facility; these must be disposed of properly.

Activities permitted without supervision

The following activities are permitted in the facility during normal operating hours, or within non-business hours as authorized by the Director of the Teaching Aquarium:

- all husbandry activities associated with established, operating aquarium systems for which proper training has been given (for example, routine cleaning, water changes, water sampling and testing, filter changes and feeding);
- minor modifications to husbandry equipment and established operating aquarium systems for which proper training and authorization have been given (for example, minor equipment repair, and addition or replacement of auxiliary equipment such as heaters, submersible pumps, aeration and hang-on filtration);
- routine water quality testing and use of laboratory equipment for which proper training and authorization have been given;
- routine use of food preparation equipment for which proper training and authorization have been given;
- routine use of chemicals for cleaning, water quality testing, water treatment, salt mixing, biosecurity and similar purposes, for which proper training and authorization have been given; and
- use of hand tools, power drills, step stools three feet in height or less, cleaning equipment such as a shop vacuum, and any shop items for which proper training and authorization have been given.

Activities permitted only with supervision

The following activities are permitted with supervision in the facility during normal operating hours, or during non-business hours as authorized by the Director of the Teaching Aquarium:

- major modifications to husbandry equipment and established aquarium systems, as well as the construction of new aquarium systems or installation of new equipment (special projects). Activities during special projects may become more routine and be allowed without supervision during normal operating hours if authorized by appropriate AQS facility personnel;
- any work in the Life Support Systems room;
- use of all power saws and grinding equipment (compound miter saw, radial arm saw, reciprocating saw, table saw, circular saw, jigsaw, router, power grinder or power sander); and
- use of a ladder or similar device for access to work requiring a height of over three feet.

Activities always prohibited

The following activities are always prohibited in the facility:

- improper use or unauthorized alteration of equipment, chemicals and materials within the facility;
- use of unauthorized equipment, chemicals and materials;
- social gatherings or personal engagements not associated with AQS Program activities;
- pervasive use of foul and offensive language;
- horseplay, running and similar behavior; and
- loud music and videos on personal electronic devices. If headphones are used, the wearer must be able to hear beyond the volume of the sound from the device. Where music or video is audible or visible to anyone else in the facility, the content must not be such that others could reasonably find it offensive. The College is not responsible for the replacement or repair of lost or damaged personal electronic devices used during AQS activities.

6.2 Animal Policy

6.2.1 Animal Care Ethics and Etiquette

Handling of animals should be done in accordance with established protocols, procedures and training. Any unauthorized handling of animals — particularly dangerous or venomous animals — is prohibited. Use of proper handling equipment, such as nets, containers and bags, is required and may be specified for certain species.

Humane treatment of animals is always required. Animals must never be handled, manipulated or contained in a manner that is unethical or inhumane. Animals euthanized for humane or medical reasons shall be euthanized in accordance with the AVMA Guidelines for the Euthanasia of Animals. All students, faculty and staff will:

1. provide animals with humane care and living conditions at all times;
2. not allow others to cause undue stress or physical harm to the animals, or to treat them in an inhumane or cruel manner;
3. report any observed violation of this policy to the Director of the Teaching Aquarium or the Dean of Aquarium Sciences;

4. not provide any animals held for display, education, research, or conservation to any facility (a) for the purpose of providing game or recreation, (b) for eventual disposition in any animal auction, or (c) to be farmed for parts or products collected by invasive means;
5. ensure that animals raised in the program's aquaculture systems for food production receive the same humane care required by this section, and that such animals are handled and slaughtered in accordance with the AVMA Guidelines for the Humane Slaughter of Animals;
6. release animals cultured for conservation, restoration, or restocking only under a plan approved by the Dean of Aquarium Sciences and by the applicable state or federal management agency, addressing broodstock sourcing and genetic provenance, health and pathogen screening prior to release, release siting, and post-release monitoring;
7. not provide any animals to any facility for the purpose of invasive research that is inconsistent with this section. Research that contributes directly to the needs of the animal, or that provides information or direct benefit to the health and conservation of the species, may be acceptable if conducted so that there is little or no discomfort or psychological stress to the animals. Any student wishing to conduct research involving animals must obtain approval from the Dean of Aquarium Sciences before beginning the project. Depending on the nature of the work, review by the College's Institutional Animal Care and Use Committee (IACUC) may also be required; the Dean will determine what approvals apply and direct the student accordingly;
8. comply with applicable federal, state and local law, and obtain and maintain all required licenses, permits and approvals for the acquisition, care, harvest and disposition of the animals;
9. not accept or acquire animals the program cannot support with the requisite care and living conditions; and
10. never knowingly sell or transfer animals held for display, education, research, or conservation to any third party for a purpose inconsistent with this section.

Any person found to be acting in violation of this policy may be subject to disciplinary action up to and including dismissal from the program.

6.2.2 Animal Acquisition

It is the goal of OCCC always to acquire animals from the most appropriate and sustainable sources, keeping the health and welfare of the animals in mind. Although the majority of aquarium specimens are sourced from the wild, wherever possible the acquisition of specimens from surplus or captive-bred sources should be considered first. Acquisition of animals from any source must be carried out in adherence to this policy, following the established animal acquisition protocols and with the approval of the Director of the Teaching Aquarium.

Selection of New Animals

Proper species selection is a vital step in the animal acquisition process. The selection of animals for care at OCCC must support the facility's educational function, institutional goals and established collection plan.

It is important to select species that are appropriate and compatible with the facility, the existing animal collection and its aquarium systems, and within the expertise and abilities of the personnel charged with their care. Improper selection of incompatible species results in consequences such as aggression and unnatural

behaviors that place the general health of a system population at risk. An aquarium system must provide a habitat that allows the animals selected to behave naturally. This contributes positively to an animal's overall health and welfare, allows for natural longevity and encourages reproduction.

Animals will be selected according to compatibility with captive life. Where species do not thrive in captivity, further investigation will be undertaken involving the program's senior staff, veterinarians and members of other reputable establishments throughout the world, such as other public aquariums, museums and marine science institutions. Until such investigations are completed, or if it proves impossible to keep a species satisfactorily, the species will no longer be kept by OCCC.

Any species not yet kept by OCCC or infrequently cared for in the professional aquarium industry, yet deemed appropriate as a potential captive specimen, must be thoroughly investigated prior to acquisition. Before trialing a new species, extensive research and development will be undertaken to gain knowledge of husbandry requirements from other establishments and to ensure best practice is in place on arrival. In general, large migratory fish species will not be kept in captivity unless there is significant benefit to be gained through education or by highlighting the conservation status of these animals.

Any animals listed as endangered under the Endangered Species Act, or on the IUCN endangered list, will not be collected from the wild without proper permits and licenses. However, endangered species can be kept where captive-bred populations are available and it is felt that participation in holding and potentially breeding these animals will further benefit them. Information gathering for this process is the responsibility of the AQS Program senior staff.

Selection of Acquisition Source

Aquatic specimens may be acquired from a variety of sources. Selection of a proper animal acquisition source may often depend on the availability of the animals desired. However, sources considered inappropriate for any reason in regard to use, care, handling or collection should under no circumstances be used.

Surplus Sources

When considering the acquisition of an animal, sources of surplus specimens should be considered as a priority option wherever possible. However, surplus sources considered inappropriate for any reason in regard to the use, care or handling of their animals should under no circumstances be used. Priority among surplus animal sources should be given first to reputable public aquarium facilities that are AZA-accredited organizations, credible museums, academic institutions and marine science research facilities. Animals considered for acquisition from the pet trade and home hobby aquarists require special consideration; acquisition of surplus animals from such sources should be considered only on a case-by-case basis and approved by AQS Program senior personnel. Newly acquired surplus animals should be quarantined for a suitable period prior to introduction to established systems.

Captive-Bred Sources

Sources of captive-bred specimens should be considered as a priority option wherever possible. However, captive-bred sources considered inappropriate for any reason in regard to the use, care or handling of their animals should under no circumstances be used. Priority among captive-bred animal sources should be given first to reputable aquaculture facilities and farms, such as those subscribed to the National Fish Breeders

Registry. Newly acquired captive-bred animals should be quarantined for a suitable period prior to introduction to established systems.

Wild-Caught Sources

Suppliers of animals collected from the wild will be selected for their efforts to reduce the impact on the environment and the stress on the animals involved during the collection process, as well as for their efforts to develop alternatives to wild collecting. Priority among wild-collected animal sources should be given first to the most reputable collectors and suppliers, such as those that practice the standards of the Marine Aquarium Council (MAC) and other certifying authorities. All suppliers and collectors of aquarium specimens must hold all necessary permits and follow all rules and guidelines of local, regional, national and international governing authorities and agencies.

Where OCCC-sponsored collection of animals from the wild is required or carried out, the collection methods used must be selected to have the least possible impact on the environment and on the populations of wildlife involved. AQS staff, faculty and students involved with collecting wild specimens must be properly permitted to do so by the appropriate government agency associated with the area of collection — for example, an Oregon Department of Fish and Wildlife collection permit.

The quality of wild-collected specimens may vary greatly depending on how carefully they were collected, cared for and transported. Some sources may consistently provide specimens with high levels of pre-existing infectious disease or trauma; these suppliers should be avoided where possible. All newly acquired animals are likely to have at least a degree of these factors predisposing them to disease. For this reason, newly acquired wild-collected animals should be quarantined for a suitable period prior to introduction into established systems.

Donations

The donation of animals from students, hobbyists or any third party must adhere to the animal policies written here. Animal donations will not be accepted without the express authorization of the Director of the Teaching Aquarium. Once an animal is donated and accepted into the AQS facility it becomes the sole property of the College, and the College then has full authorization and responsibility to care for and, if needed, relocate the animal. The disposition of such animals must only be carried out in accordance with the disposition policy below and any associated protocols established by the College. Newly acquired donated animals should be quarantined for a suitable period prior to introduction to established systems.

6.2.3 Animal Dispositions

It is the goal of the animal disposition policy to ensure that the disposition of animals from OCCC to other facilities or locations is carried out in support of the organization's educational function, institutional goals and established collection plan, while at the same time ensuring the long-term health and welfare of the animals dispositioned and minimizing the loss of animals to the facility.

Disposition is the process by which animals are formally removed from the facility's permanent animal collection records. Once an animal has been dispositioned from the animal collection, it is physically removed from the facility and is therefore no longer part of the collection plan. Dispositions may be categorized as "live animal dispositions" or "mortalities".

Live animal dispositions are those in which animals are purposefully removed from the collection in support of another facility's collection plan. The planned disposition of live animals from the animal collection at OCCC must support the facility's education and conservation function, institutional goals and collection plan, and must follow the established Animal Disposition Protocol.

Mortalities are dispositions in which animals are terminated by means of planned euthanasia or spontaneously lost to natural or unnatural causes. Handling of mortalities should be carried out in accordance with any associated animal health protocols and following any established animal disposition protocols. Animals dispositioned as a result of prescribed euthanasia must be handled in accordance with the euthanasia policy in section 6.2.4.

Selection of Live Animals for Disposition

The proper determination of an animal's candidacy for disposition to a new facility is a vital step in a planned animal disposition process. Live animal dispositions must be authorized and approved by the proper authorities involved, such as the Director of the Teaching Aquarium, veterinarians and senior AQS staff. Animals selected for disposition must generally fit the following criteria to be good candidates:

1. surplus animals from breeding and reproduction, or from temporary or unplanned acquisitions;
2. animals presenting unforeseen behavioral issues that prevent them from being displayed in the environment provided by the facility; and
3. animals that no longer support the education and conservation function and collection plan of the facility.

Animals should not be dispositioned to other facilities because of chronic or underlying health issues, such as communicable diseases or pathogens, so as not to compromise the receiving facility's collection.

Selection of Recipient for Live Animal Disposition

It is the goal of OCCC always to disposition animals to the most appropriate recipients while keeping the health and welfare of the animals being dispositioned in mind. Selection of a proper animal recipient may often depend on the location, perceived need and reputation of the facility seeking or solicited for receiving dispositioned animals. Recipients considered inappropriate for any reason in regard to use, care, handling or collection should under no circumstances be used. Priority among recipients should be given first to reputable public aquarium facilities, such as zoological organizations within AZA-accredited organizations, credible museums, academic institutions and marine science research facilities.

Animals should not be dispositioned to the pet trade, home hobby aquarists or other organizations where they can be bought, resold or traded, for any reason other than that which can be shown to serve the conservation, research or betterment of the species as a whole. Animals will not be dispositioned to recipients that will sell or trade the animals to any facility for the purpose of providing game for recreation, for use in stressful or terminal research programs, or for eventual disposal at any animal auction. Animals must be dispositioned to facilities that will house, feed and maintain them in a manner that ensures their health and well-being. The disposition of animals as surplus to any recipient should be considered only on a case-by-case basis and approved by OCCC senior AQS personnel.

Under no circumstances shall any animal be dispositioned into the wild without the authorization of OCCC senior AQS staff, and unless properly permitted to do so, following all rules and guidelines of local, regional, national and international governing authorities and agencies associated with the area of release.

Animals raised by students for the purpose of projects supporting course and program activities are the sole property of the College and cannot be removed for personal use. Personal donations become the property of the College and cannot be removed without the consent of the Director of the Teaching Aquarium (see "Donations" in section 6.2.2).

6.2.4 Euthanasia

Sometimes the best possible care requires euthanizing an animal in the collection. The mode of euthanasia will depend on the species and the size of the individual animal, and the practice of euthanizing an animal will depend on the circumstances surrounding the individual case.

The following guidelines are used to determine when euthanasia is necessary:

1. an animal is so severely injured as to make recovery unlikely;
2. successive medical treatments for a disease or condition have proven unsuccessful and the health of the animal continues to decline;
3. medical interventions fail to reverse deterioration in an animal's condition and quality of life because it is near the end of its normal life cycle;
4. an animal does not thrive in captivity and releasing it back into its original habitat is not possible; or
5. natural reproduction of a particular species in captivity surpasses the carrying capacity of an exhibit or the ability of the aquarium to disposition surplus individuals of that species.

> No euthanasia shall be carried out without the express permission of the Director of the Teaching Aquarium or a veterinarian, except where a delay in administering euthanasia would mean significant additional suffering for an animal. **Notify the Director of the Teaching Aquarium of any euthanasia, or of any need to euthanize, as soon as possible.**

6.2.5 Animal Record Keeping

Students are expected to maintain all written records associated with animal husbandry in the AQS facility of which they have been notified or in which they have been trained. Such records may include, but are not limited to, system husbandry and maintenance logs, animal mortality and transfer logs, water quality logs and associated records, inventory logs and daily checklists.

6.2.6 Biosecurity

Biosecurity is defined as the containment principles, technologies and practices that are implemented to prevent unintentional exposure to pathogens and toxins, or their accidental release. AQS students are required to follow established biosecurity protocols and procedures, as set by AQS personnel, to prevent cross-contamination of live aquarium systems and infection from zoonotic diseases. Students will learn these protocols and procedures from AQS personnel during their time in the program. Examples include the use of

personal protective equipment (PPE; see section 6.3.4), the use of disinfection procedures, the use of footbaths, and the use of designated equipment or equipment that has been properly disinfected.

Aquarium maintenance and associated husbandry equipment — essentially anything that comes into contact with established aquarium system water — should never come into contact with items, organisms or water from other systems. All husbandry maintenance equipment should be stored in its proper designated location, in containers or on hangers, and should never come into contact with the floor or other potentially contaminated surfaces, not even temporarily. All equipment in contact with system water or organisms should always be cleaned, disinfected and rinsed before storage and future use.

6.2.7 Institutional Animal Care and Use Committee (IACUC)

The Institutional Animal Care and Use Committee (IACUC) is a self-regulated committee that, in accordance with U.S. federal law, must be established by any institution handling or caring for laboratory animals in a research or instructional capacity. The IACUC monitors and evaluates all aspects of the institution's animal care and use program. Any student research project or class assignment involving or requiring the use of animals within the Aquarium Science Program must be submitted to the Dean of Aquarium Sciences as a formal proposal, which in turn will be evaluated and approved by the IACUC.

6.3 Facility Safety Policies

6.3.1 General Safety

Safety is a must and should be the top priority for all students using the AQS facility. Students are expected to follow all safety procedures and protocols associated with any AQS equipment or materials. Students should be aware of the locations of all safety-related material, documentation and personal protective equipment (PPE). Specific protocols and procedures can be found in the AQS Facility Operations Manual or in the equipment manufacturer's supplied user manual. No student should use items for which they have not had prior training from AQS personnel, or other proven professional training approved by the AQS leadership. Any student who knowingly violates safety policies or procedures may be subject to disciplinary action up to and including dismissal.

6.3.2 Hazardous Chemical Use and Disposal

Numerous chemical materials in various forms are present in the AQS facility in support of laboratory procedures, animal health protocols, aquarium maintenance, disinfection and biosecurity, fabrication and construction, and general building maintenance and cleaning. OCCC will provide all AQS students with information and training on the usage, handling and storage of chemical hazards and hazardous substances, as well as on how to control hazards, to ensure compliance with the requirements for a written Hazard Communication Plan under Occupational Safety and Health Administration (OSHA) standard 29 CFR 1910.1200. College management is expected to take immediate action to stop any activity or process that would be potentially hazardous or cause imminent danger to an employee or student at OCCC.

AQS personnel are responsible for maintaining a safe workplace and for properly instructing each student in the safe use of chemical products used in their work, in both the classroom and the facility. AQS personnel are responsible for ensuring that lists of chemical products used in the work area, known and established

information on the potential hazards of chemical products, and chemical control measures are made available to students. When new chemicals are introduced into the facility, AQS personnel will ensure proper guidelines are in place. AQS personnel are responsible for identifying and controlling hazardous materials within their specific locations, and the College facilities department is responsible for cleaning up all hazardous spills and leaks in the facility. Each container in the facility is required to be labeled properly; the label will include the identity of the chemical product in the container and the appropriate hazard warning.

Students are required to be familiar with the Safety Data Sheets (SDS; see section 6.3.3) for hazardous materials used in the workplace. Providing labels on containers, SDS and training are part of a comprehensive Hazard Communication Plan for all students who are potentially exposed to chemical products. Each student is responsible for notifying College personnel when a chemical spill or leak occurs; the College facilities department will notify the proper agencies if necessary. Each student should try to stay upwind of any chemical spill or leak until it can be contained and removed.

6.3.3 Safety Data Sheets (SDS)

Safety Data Sheets are provided for chemical products and their approved applications. An SDS is the means of conveying information to the reader about the hazards of the chemicals used on the premises. It provides data on how to use, handle and store chemicals safely, including precautions to be taken and first aid treatment if exposure occurs. Master copies of the SDS for all hazardous substances to which students may be exposed are kept in a binder in the main hallway of the facility and are available to all students for review.

If an SDS is not available, or a new hazardous substance in use does not have one, students should contact AQS personnel or the Director of the Teaching Aquarium immediately. Whenever a new or revised SDS is received that indicates significantly increased health risks or additional protective methods, the information will be provided to students upon receipt.

AQS personnel will review incoming safety data sheets for new and significant health and safety information and will ensure that all affected students are trained on any new information. The Director of the Teaching Aquarium and the Facilities Director will review the SDS periodically for completeness. If an SDS is missing or obviously incomplete, a new one will be requested from the manufacturer. If an SDS does not accompany a product, the product shall not be used.

6.3.4 Personal Protective Equipment (PPE)

There are many ways a chemical can enter the body, and personal protective equipment (PPE) acts as a barrier to these routes of entry, blocking access of chemicals to human tissues. These routes of entry are:

- the mouth, nose and lungs, by inhalation;
- the skin, by absorption;
- the membranes of the eyes; and
- the stomach and intestines, by ingestion.

The specific equipment required to protect an individual varies depending on the exact nature and type of chemical in question, the process in which the chemical is used, the exposure of the individual during a specific operation, and the specific biological makeup of the person exposed, as not everybody reacts alike to chemicals.

Consult the SDS to know which PPE should be used when handling specific chemicals. Personal protective equipment can be found in the AQS facility in the student workshop, teaching lab and water quality lab. If personal protective equipment is not available in the designated areas of the facility, consult AQS personnel or a representative of the College Safety Committee.

Chemical Fume Hood

Chemical fume hoods are located in the teaching lab and the water quality lab. A chemical fume hood is appropriate for storing labeled chemicals and for working with chemicals to prevent the inhalation of chemical fumes. Consult the SDS to determine whether a chemical should be handled under a fume hood and be sure to turn the fume hood on when working with a chemical substance.

Gloves and Aprons

Gloves and aprons (or gowns) provide a barrier to skin absorption. Depending on the specific hazards involved, a variety of these items may be necessary to provide the proper level of protection. Students should consult AQS personnel or a College Safety Committee representative for specific recommendations or if they have any questions.

Safety Glasses

Eye protection is mandatory in all work areas while using chemicals or operating machinery or power tools.

Labeling

Always label containers to prevent accidental drinking. Some foods and drinks can absorb chemicals from the air and be ingested later; keep all food and drink away from work areas and always wash your hands thoroughly with soap and water before eating or drinking after the use of chemicals.

Hearing Protection

Hearing protection must be worn in and around areas with excessive noise. Anything you can do to separate your work environment from your own person improves your protection. Hearing protection is available in the facility in the PPE cabinet in the workshop, or directly from AQS personnel.

Respirators

Respirators are a barrier to chemicals that can be inhaled. Respirators either filter particles out of the air, react with chemicals in the air to neutralize them, or provide fresh air from a source separate from the work area. There are two important things to remember about using respirators:

1. A respirator only works when you use it and use it properly. It will not work if you do not use it.
2. The proper respirator and filters for a specific hazard must be used. Respirators designed for one type of chemical will not work for another; a respirator designed for dust will not protect against paint vapors. If there is a question about the proper type of respirator to use, contact AQS personnel. No one is allowed to use any respirator without respirator training.

6.3.5 First Aid

The AQS Program recommends that all students receive first aid and CPR training prior to or soon after starting the program. First aid and CPR training can be made available by the College; contact the Dean of Aquarium Sciences for more information.

Students should not administer first aid to anyone without the proper training. All injuries and illnesses that occur in the AQS facility should be reported immediately to College personnel or the AQS leadership. Students should notify College personnel immediately, and call emergency services (911) for any serious injury or illness requiring immediate medical assistance. First aid kits and an AED are in the student lobby and the OCCC commons (and other clearly marked and appropriate locations). If any items are used or missing from a first aid kit, students should notify AQS personnel.

6.3.6 Sharps Use and Handling

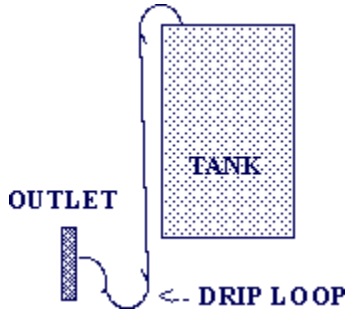
All needles, knives, blades, nails, box cutters, broken glass and similar items should be disposed of only in the red containers marked "SHARPS DISPOSAL". These containers are located in the water quality lab, teaching lab and animal holding room in the AQS facility. Any broken glass should be cleaned up with a dustpan and brush and disposed of in the appropriate designated sharps container.

6.3.7 Knife Handling

Students will occasionally use knives in the food preparation lab. When using a knife, students should always wear safety gloves where possible, use a cutting board with a damp towel beneath it for stability, and use the correct and sharpest knife for the task. Students should remain focused on their work while handling a knife, keep a firm grip, and always warn fellow students and personnel when walking near them with a knife. All knives should be washed and stored safely when not in use.

6.3.8 Electricity

Water and electricity do not mix. The combination of water and electricity can cause serious injury, including death. Frayed wires, broken light fixtures and cracked heaters can all present an electrical hazard. Make sure all cords are grounded and use drip loops to prevent dripping water from running into an electrical outlet. A drip loop is formed when the cord is allowed to hang down in a loop below the outlet, so that the plug sits above a lower section of the cord. Maintain **drip loops** on all cords used for display tanks to prevent electrocution and fire danger. If a cord is too short to form a drip loop, use an extension cord to create enough length to form one.



Extension cords should never be daisy-chained or linked with multiple extension cords from one power source. If a power cord is not long enough, it should not be used. The Director of the Teaching Aquarium must approve all

extension cord installations. Extension cords should only be used in temporary applications of one to two days and should not supply continuous power for permanent installations; if a permanent source of power is required in place of an extension cord, consult the Director of the Teaching Aquarium. Power strips should only be plugged into main power source receptacles or outlets, never at the end of an extension cord. Never unplug power cords with wet hands.

Students should avoid installing power cords, receptacles, plugs and similar items below the surface of, or in close proximity to, an open source of water, a water vessel or tank, a faucet or supply valve, or any area with a direct potential for leaks or spills. Students should always secure loose power cords to a fixed structure using zip ties, electrical tape, tie-downs or similar. Cords should not be tangled, left resting in water or on the floor, or set against hot objects.

Students should always be observant of their surroundings. Any dangerous electrical situation — frayed cords, exposed wires, broken outlets or power boxes — should be reported to AQS personnel immediately. Students are not allowed to perform any hard or direct wiring for any equipment; this may be done only by a certified electrician. All objects must be kept clear of power circuit and electrical panels; these are marked with a red line at a three-foot radius on the floor, and objects must not be placed or stored within that boundary. Students should report any electrical shock or charge near or in water, and any sparks or smoke witnessed in association with any electrical equipment or fixture, immediately to AQS personnel.

6.3.9 Tool Use

AQS students are required to use both hand and power tools during their time in the program. When using any tool, students must practice and follow proper safety guidelines for that tool.

Specific protocols and procedures for machines and power tools in the workshop can be found in the AQS Facility Operations Manual or in the equipment manufacturer's supplied user manual. Students must also use PPE appropriate for any tool used in the facility. Students must have proper training or authorization before using tools or must be accompanied by designated AQS personnel. Any student who knowingly violates safety policies or procedures may be subject to disciplinary action up to and including dismissal.

Hand tools must be selected and handled in the proper size for the operation to be performed. All cutting tools must be used such that the cutting edge is directed away from all body parts. Power tools and machines must be maintained to the full operational standards set by the manufacturer. As with cutting tools, all powered tools should be used so that the movable tool parts face away from any body parts at all times, including when they are stopped. Students must keep all tools and machines clean before and after use. When using machines, students must always wear eye protection, give the machine full attention, and never talk to a person while that person is operating a machine.

The following safety tips should be followed when using power tools:

- never carry a tool by the cord;
- never yank the cord to disconnect it from the receptacle;
- keep cords away from heat, oil, water and sharp edges;
- disconnect tools when not in use, before servicing, and when changing accessories such as blades and bits;

- do not hold fingers on the power switch while carrying a plugged-in or battery-charged tool;
- wear appropriate PPE when using power tools;
- store power tools in a dry place when not in use;
- do not use electric tools in damp or wet locations unless approved for that purpose by AQS personnel;
- ensure cords do not present a tripping hazard;
- keep the work area well-lit when operating power tools;
- remove all damaged portable electric tools from use and tag them "Do Not Use"; and
- use double-insulated tools.

6.3.10 Restricted Work Situations

Any student working on ladders or platforms at heights over three feet must be accompanied by another student or by AQS personnel. Students must not work in confined spaces — large tanks, vessels, containers and similar — without being accompanied by another student or by AQS personnel. These restrictions are in place for each student's safety. Any student who knowingly violates safety policies or procedures may be subject to disciplinary action up to and including dismissal.

6.3.11 Emergency Protocol

In case of a fire or natural disaster, all AQS students should be aware of the building evacuation routes and the evacuation plan posted in the AQS facility. Students should also note the locations of fire extinguishers and fire alarms. In the case of a fire, students should notify College personnel and call emergency services (911).

7. Frequently Asked Questions

The questions below are the ones prospective and incoming students ask us most often. If your question is not answered here, please contact the Dean of Aquarium Sciences.

7.1 Getting Started

7.1.1 Do I need books?

To keep costs down, we do not require you to buy any books. All the books you will need are either loaned to you by the program or gifted to you by the Oregon Coast Community College Foundation. For AQS 100 and AQS 270 we use an introductory text we are fond of, *Fundamentals of Ornamental Fish Health* by Helen E. Roberts. AQS 215 dives deep into the physiology of fishes rather than heavy taxonomy; we have historically used *Bond's Biology of Fishes*, which is hard to find, so instead we provide copies of *The Diversity of Fishes: Biology, Evolution and Ecology* (Helfman, Collette, Facey and Bowen) for the class. AQS 173 and AQS 240 use the 2026 edition of the AALSO Field Guide, which we provide. In the spring term we hope to be able to order an invertebrate text for you.

Beyond that, a number of resources are freely available online, including the Elasmobranch Husbandry Manuals 1 and 2, which you can download at no cost. One topic to start early: every student is expected to know the nitrogen cycle by heart by the end of the program, and there are plenty of free YouTube and Khan Academy videos to help you get a head start.

7.1.2 What should I wear?

We do not require anything special, other than that it be professional. Plan for practical clothing you do not mind getting wet, dirty, or splashed with bleach. Closed-toe footwear is a must, and because we frequently have water on the floor, we highly recommend either rubber boots (ankle or full height) or sturdy, water-resistant shoes such as lightweight waterproof hiking or trekking shoes. We suggest avoiding shorts and skirts, particularly in the chemistry lab — though since this coursework runs in winter, few people are inclined toward them anyway. Be aware that from October through April the coast is mostly wet and cool, so dress in layers and come prepared for the weather.

7.2 SCUBA Diving and Certification

7.2.1 Do I need SCUBA certification, and how does diving fit into the program?

A dive certification is not required for our program. Not everyone is medically cleared for diving or physically able to do it, and that is completely okay. That said, if you would like to work at a public aquarium in the future, having a dive certification will be very beneficial and is often a requirement for job applications. Most jobs at AZA-accredited public aquariums require one.

Which certification?

There are many dive agencies (NAUI, PADI, SSI and others) and it does not matter which one certifies you. What matters is the level:

- **Minimum:** the equivalent of the PADI Open Water certification, which allows a maximum dive depth of 60 feet.
- **Preferred at some facilities:** a more advanced certification, such as the equivalent of PADI Advanced (second tier) or PADI Rescue (third tier). These are preferred rather than commonly required.
- **Occasionally requested:** the American Academy of Underwater Sciences (AAUS) Scientific Diver certification. This is rare, and an increasing number of facilities can train their Rescue-certified divers up to the AAUS level in-house.

Getting certified through OCCC

A SCUBA course is in the pipeline for our curriculum but still needs to clear some approval steps, so it may not be in place by spring term. In the meantime, we usually organize an extracurricular PADI Open Water course through Eugene Skin Diver Supply (ESDS) during the spring term. The AQS program also has fins, masks, snorkels, booties, and similar gear available for enrolled OCCC students to borrow.

A tip on timing

If you have the opportunity and time to get certified over the summer, we recommend it — the water during spring term is very cold. Getting your Open Water certification before starting the program means you could then, if you like, take the Advanced course with ESDS during the spring term. Be aware that for taking any scuba courses, you may need medical forms signed by a medical provider; if so, this is best done by your own provider at home during breaks or before you start the program. These forms can be downloaded on the ESDS website.

We are always happy to answer any additional SCUBA-related questions — just reach out to the Dean of Aquarium Sciences.

7.3 The Reality of Animal Care

7.3.1 Will I have to care for live animals on weekends, holidays and breaks?

Live animals need care every day, so hands-on husbandry is a scheduled, required part of the program — but it is more manageable than students sometimes expect. Throughout the term you may be assigned some weekend shifts, though these are generally short. Holidays and breaks work differently: you may volunteer to help, but you are not required to cover building duties. During inclement-weather closures and the official winter break, the College is closed to students entirely, with staff taking over student chores during those periods. The husbandry rotation mirrors the real working life of an aquarist, which is part of what makes our graduates job-ready.

7.3.2 How does the program handle animal illness, euthanasia and death?

Working with living animals means encountering illness, difficult medical decisions and sometimes death, including humane euthanasia. This is an emotionally real part of the profession, and we treat it seriously and professionally. We have a veterinarian on call for our animals' medical needs, and you will learn health assessment and animal welfare practices as part of your training. If you ever observe an animal in distress, notify one of our aquarists or the Director of the Teaching Aquarium immediately — prompt reporting is one of the most important things you can do for animal welfare. Faculty and staff support students through the harder

moments, and if this is something you have not considered before, it is worth reflecting on honestly before you enroll.

7.3.3 What if I have allergies — to shellfish, fish or latex?

This is worth raising with us early. Students routinely handle animals, prepare animal diets that include seafood, and use gloves and other materials daily. Depending on the severity, some allergies are manageable with accommodations and others may pose real challenges. We also encourage you to talk with your own medical provider before starting the program, so that you understand any risks and precautions specific to your situation. Please bring it up early, ideally during the application process, so we can talk it through honestly.

7.4 Physical Demands and Health

7.4.1 How physically demanding is the program?

More than many people expect. Expect to be on your feet for long stretches, lifting and carrying (water, equipment, feed), working in wet and cold conditions, and doing physically active husbandry. A reasonable level of physical fitness and stamina will make the program much more comfortable, and getting in shape before you start is time well spent.

7.4.2 Are there vaccinations or other health requirements?

Working around water, animals and equipment comes with routine health precautions, and we encourage you to talk with your medical provider about them before starting. If you are immunocompromised or pregnant, you may need some special accommodations, since animals can transmit zoonotic diseases. Raising this with us and with your provider early means we can help you plan ahead.

7.5 Cost, Logistics and Financial Aid

7.5.1 What does the program cost in total?

Your total cost is tuition and College fees plus program-specific fees. The total cost for the AQS certificate (53 credits/4 terms) is currently at $14,829. In addition, there may be extracurricular expenses, such as SCUBA and CPR certifications.

> If cost becomes a problem once you have started — not just at enrollment — speak to the Student Resource Navigator (section 3.1). They can check which benefit programs you qualify for and help with the applications.

7.5.2 Is financial aid or scholarship support available?

The program is eligible for financial aid, and there are also many scholarships. It is important to keep an eye out for scholarships on our webpage, as some are due early in the spring and Foundation scholarships are usually due on May 1st. Our Financial Aid and Student Success offices can help you with these applications if you reach out to them early. You can apply even if you are not yet admitted to the program.

7.5.3 What certifications will I earn along the way?

At no additional cost to you, because they are integrated into the curriculum, you will have the opportunity to gain Weld-On and AALSO Life Support Level 1 certifications in the fall term, and AALSO Water Quality Technician Level 1 in the winter term. CPR, AED and First Aid certification, and PADI Open Water certification, are offered in the spring term on an extracurricular basis and at cost. Other certifications may be available through our CTE programs.

7.5.4 Where will I live, and do I need a car?

The program is based at the Newport campus on the central Oregon coast. One option worth knowing about is Oregon State University's Harborton Street Housing, within walking distance of the OCCC campus. Since fall 2025, many of our students have lived in this new housing development at the OSU Hatfield Marine Science Center, which offers studio-style and two-bedroom units at a very affordable price. Housing options are limited, so applying early is wise.

Reliable transportation matters as well. Off-site learning at the Oregon Coast Aquarium, hatcheries and research centers is part of the experience, so reliable transportation is important. Parking is free at the College.

If you do not have your own transportation, Newport has a bus system, and there is a very inexpensive bus line that connects to the I-5 corridor via Albany and Corvallis, with transfers to Greyhound buses and Amtrak stations. Newport itself is fairly walkable, and distances are usually within two miles.

7.6 Practicums, Internships and Weekly Schedule

7.6.1 How many hours a week is the program, and can I work a job while enrolled?

This is a demanding, mostly full-time commitment. On top of classes and labs, required hands-on husbandry duties are scheduled throughout the week, including weekend rotations. Some students do hold part-time jobs, but you should plan your outside commitments conservatively, especially in the first term while you find your footing. Talk with current students or faculty about realistic workloads before committing to an outside job.

7.6.2 Are practicums required?

Hands-on practicums are a required, structured part of the curriculum, with 55 total hours in our teaching aquarium or with external partners, and 11 hours of instructor contact time. Beyond that, students have opportunities to volunteer at nearby facilities such as the Oregon Coast Aquarium, the Hatfield Marine Science Center and regional fish hatcheries. These experiences build the résumé employers look for.

7.6.3 Are internships paid, and will I need to travel for one?

The internship course, AQS 295, can be completed while you work your first job in the industry — anywhere in the world. Most students begin applying for positions in late winter and early spring term, and you sign up for the internship class in whichever term your position begins; if it starts over the summer, you enroll that summer. Your first 360 hours on the job fulfill the internship requirement. Alongside logging those hours, you will attend a weekly check-in with the internship coordinator and submit journal entries and discussion posts. A wide variety of jobs and internships qualify for AQS 295; if you are unsure whether a particular position counts, just ask us.

> **One scheduling note:** be sure to apply for graduation during spring term, regardless of where your internship stands. You are encouraged to walk in the June graduation ceremony, but your diploma is issued officially once all course requirements, including the internship hours, are complete.

7.6.4 How much of the program is hands-on versus classroom?

A great deal of it is hands-on. The program is built around a purpose-built teaching aquarium with many different live life support systems, so you spend substantial time doing the actual work of aquatic animal husbandry — running systems, testing water, and caring for animals — alongside your coursework. That practical emphasis is a defining feature of the program.

7.7 After You Graduate

7.7.1 What jobs do graduates actually get?

Graduates are qualified for entry-level roles such as aquarist, aquatic biologist, life support technician, and aquatic animal keeper. Employers include public aquariums and zoos, fish hatcheries, aquaculture businesses, research programs, marine education centers, ornamental fish wholesalers and retailers, and state and federal natural resource agencies.

7.7.2 What is the job placement rate?

The program reports a strong track record, with a current placement rate of over 94% for graduates.

7.7.3 Can I transfer these credits toward a bachelor's degree?

Yes. The College has an articulation agreement with Western Oregon University (WOU) that allows AAS graduates in Aquarium Science to continue toward a Bachelor of Science in Aquarium Science. Alternatively, you can complete your first year at OCCC for the general education courses, transfer to WOU for years two and three, and then apply for the AQS certificate and, upon acceptance, return to OCCC for the Aquarium Science certificate. If a four-year degree is part of your plan, this is a great pathway to ask us about.

7.8 Still Have Questions?

The best next step is to reach out to the Aquarium Science Program directly — the Dean of Aquarium Sciences is happy to talk with you.

Appendix A: Student Handbook Acknowledgment

This form is distributed at orientation, along with the other forms required by the Aquarium Science Program. Please read the handbook in full before signing and return the completed form to the Dean of Aquarium Sciences.

By signing below, I acknowledge and agree to each of the following statements.

1. I have received, read, and understood the Oregon Coast Community College Aquarium Science Program Student Handbook for the 2026–27 academic year.
2. I understand the policies, expectations and standards set out in the handbook, including those governing academic integrity, attendance, substance use, facility access, animal care, and facility safety.
3. I understand that Canvas is the official channel for program announcements, schedule changes, husbandry rotations and mandatory event notices, that I am responsible for checking it regularly, and that not having seen a Canvas announcement will not excuse a missed session or deadline.
4. I understand that failure to comply with these policies may result in disciplinary action, up to and including dismissal from the program.
5. I understand that this handbook is not a contract between the student and the College, and that its contents may be revised. I will consult the AQS Program website and the Dean of Aquarium Sciences for updates published after the date of this handbook.
6. I have had the opportunity to ask questions about anything in the handbook that was unclear to me.

Student name (please print):

Student signature:

Date:

Received by (AQS Program staff):