

AQUA-3: Intro to Fisheries

Course Information

Semester & Year: Fall 2024

Course ID & Section #: AQUA-3-E7417

Instructors Name: Jasmine Iniguez

Day/Time of required meetings: M/W: 11:40 AM – 1:05 PM

Location: AT132

Course units: 3

Instructor Contact Information

Office location: SCI 216I

Office hours: In person by appointment or via ZOOM

Phone number: (707) 476-4528

Email address: jasmine-iniguez@redwoods.edu

Catalog Description

This course is designed to provide students with a general understanding of the history, present status, and future of fisheries. Students will learn about inland and offshore fisheries, fishing gear, methods, management strategies, economics, and the sociology of fisheries. This course provides an overview of fisheries laws and regulations and their relationship between fish, people, and the environment. Special attention will be devoted to commercial finfish and shellfish fisheries on the West Coast.

Course Student Learning Outcomes

1. Access, analyze, and apply basic fisheries principles, laws, regulations, and annual catch limits to manage fish populations and understand aspects of policy management and planning
2. Discuss an awareness of concerns associated with fish resources, exploitation, and environmental degradation

Prerequisites/corequisites/ recommended preparation

None

Required Course Textbook

Fisheries Biology: Assessment and Management, 2nd Edition

Author: Michael King

Publisher: Wiley-Blackwell
ISBN: 978-14051148312

Recommended Course Textbook

Brief Introduction to Fisheries

Author: Xinjun Chen and Yingpi Zhou
Publisher: Wiley-Blackwell
ISBN: 978-981-15-3136-1

Evaluation & Grading Policy

Grading:

Course Requirements	Percent of Total Grade	Due Date
Exam 1	20	Monday, Sept 30
Exam 2	20	Monday, Nov 4
Final Exam	20	Monday, Dec 16
Research Paper	15	Sunday, Dec 8
Fishercises -Assignments	10	TBA
Quizzes	10	Wednesdays
Participation (Attendance accounted for)	5	

CR has a set policy for how course percentages convert to grades:

A > 92%; A- 90-92%; B+ 87-89%; B 83-86%; B- 80-82%; C+ 77-79%; C 70-76%; D 60-69%; F

Late Assignments:

Each student is responsible for completing all assignments and activities as specified by the instructor by the date indicated. Please stay on task, as late assignments will be penalized and loose 5% for each day they are late. If you have an emergency (e.g. hospitalization, death in the family, car accident) please notify me as soon as you can if this affects your coursework or attendance. Please contact me immediately if something in the foreseeable future is approaching as well.

Exam Make-up Policy:

This class will have a total of three exams (100 points each), which make up 60% of your grade!

The course is broken up into three units. These three units make up each exam, which means the exams are not cumulative, but some topics may be repeated, and you may see them on other exams. The final is not cumulative. YAY! **You must have a serious and verifiable excuse to miss a lecture exam. If you have an emergency (hospitalization, family/friend death, car accident, quarantine) please notify me as soon as you can if this affects your ability to take the exam on the scheduled date.** Please contact me 12 hours in advance if something in the foreseeable future is approaching as well. If you do not notify me and or do not provide a legitimate excuse an automatic 10% will be taken from your makeup exam.

Fisheries Research Paper:

Students are required to write a literature review on a specific fishery, species involved in fisheries, or a topic of your choice related to fisheries. No repeat topics or species! For help determining what species/fishery you would like to write about please use <https://www.fisheries.noaa.gov/find-species> as a reference.

FORMAT:

- MLA Format
- Submit in Word document NOT pdf so I can make suggestions via track changes
- Typed with 12- point Font in Times New Roman
- Double spaced
- 4-6 pages in Length
- At least 5 peer-reviewed references should be cited from a research journal.
- Pictures, diagrams, and tables are highly encouraged but *not* required. They will not count towards page requirements.

OUTLINE FOR PAPER:

Introduction: Provide a brief overview of the selected fishery, including its importance in terms of ecological, economic, and social aspects. Highlight any existing challenges or issues related to sustainability.

Ecological Assessment: Include information on the target species, their life cycle, reproduction, population dynamics, and the overall ecosystem in which the fishery operates.

Harvest Methods and Gears Used: Provide information on harvest methods and gears used

Social Considerations: Explore the social dimensions of the fishery, considering the livelihoods of fishers and the communities dependent on the fishery. Consider the cultural significance of the fishery and potential impacts on local communities.

Management Plan: Include management strategies for selected fishery and any harvest quotas and fishing gear restrictions.

Concerns and Issues: Identify any environmental impacts and potential threats to the fishery's sustainability.

Future Directions: Direction in which the fishery is heading in.

Citations: Utilize google scholar (<https://scholar.google.com/>) to search for academic journals. If there is a research manuscript you are unable to access, please let me know. I may be able to get it for you.

DUE DATES: (Submit via Canvas!)

Monday, Sept 16: Topic Identified submit on discussion board

Sunday, Oct 20: Outline

Sunday, Nov 24: Rough Draft

Sunday, Dec 8: Final Draft

Field Trips and Hands on Exercises:

CR does not provide all transportation so therefore students are expected to provide their own for traveling for majority of the field trips. Please consider carpooling with each other!

Monday Sept 16, - Fish and Shellfish Dissection

Friday, Sept 27 – Snorkel Exercise at Mad River, Blue Lake

Wednesday, Oct 2 – Scotia Fisheries Exhibit, Scotia

Wednesday, Nov 13 - Macroinvertebrate Collection, Location: On campus creeks

Monday, Nov 18 – Calculate Stream Flow, Location: TBA

Wednesday, Nov 20 – Aging Fish Scales

TBA – Ashley Seafood Visit

Snorkel Survey:

Tentative Scheduled Date: Friday, Sept 27th

Tentative Schedule Location: Mad River, Blue Lake or camping out on the Smith River

Students will be required to participate in a **snorkel survey**!

Equipment: You will need a snorkel mask, wet suit, and booties (or any other water shoes/sandals) for this exercise.

Students can rent equipment at Pacific Outfitters and Eureka Shop for relatively affordable prices. <https://pacificoutfitters.com/eureka>

I have one extra snorkel mask, and two wet suits that can be loaned. I would recommend a 3mm-5mm wet suit.

Calculating Stream Flow and Macroinvertebrate Sampling:

Tentative Scheduled Date: Wednesday, Oct 30th

Tentative Schedule Location: TBA

Equipment: Dip nets, ice cube trays, magnifying glass, rulers, long measuring tape, YSI Water quality, and timer (this will all be provided).

You will need to bring appropriate outdoor gear including raincoat, boots, waders, ect

Tentative Course Schedule

AQUA 3: Intro to Fisheries <°)))>{		
Date	Week 1	Lecture Topic (M/W 11:40 – 1:05 PM)
26-Aug	M	Course Overview and Canvas Navigation Introduction to Fisheries
28-Aug	W	Fisheries Current and Historical State
	Week 2	
2- Sept	M	No Class – Labor Day
4- Sept	W	Humboldt County's Fisheries
	Week 3	
9-Sept	M	Classification and External Anatomy
11-Sept	W	Biology (Internal Anatomy and Physiology)
	Week 4	
16-Sept	M	Fishercise: Fish and Shellfish Dissection Activity
18-Sept	W	Exam 1 Review
	Week 5	
23-Sept	M	Fish Identification (Dichotomous Key): *Rockfish and Other Specimens
25-Sept	W	Salmon Species and ID
28-Sept	Sat	Snorkel Exercise @ Smith River Overnight Camping Trip
	Week 6	
30-Sept	M	Exam 1
2- Oct	W	Scotia Fisheries Exhibit Field Trip
	Week 7	
7-Oct	M	Types of Fisheries
9- Oct	W	Types if Gears Harvesting and Gear Selectivity/Methods
	Week 8	
14- Oct	M	Fisheries Marketing
16- Oct	W	Our Local Industry! Ashley Seafood
	Week 9	
21-Oct	M	Bycatch and Overfishing
23- Oct	W	Fisheries Management
	Week 10	
28-Oct	M	Documentary: SEASPIRACY & Discussion
30-Oct	W	Exam 2 Review
	Week 11	
4-Nov	M	Exam 2
6-Nov	W	Inland Fisheries and Sampling Techniques – Fish Tagging
	Week 12	
11-Nov	M	No Class, Veterans Day
13-Nov	W	Fishercise: Macroinvertebrate Collection and ID Activity
	Week13	
18-Nov	M	Fishercise: Calculating Stream Flow Exercise
20-Nov	W	Fishercise: Aging Using Fish Scales Activity

	Week 14	
25- Nov	M	Fall Break
27-Nov	W	Fall Break
	Week15	
2-Dec	M	TEK Presentation – Klamath Dam Removal
4-Dec	W	Fisheries Habitat Restoration
	Week 16	
9-Dec	M	Aquaculture Based Fisheries
11-Dec	W	Review Final Exam
	Week 17	
16-Dec	M	FINAL EXAM @ 10:45 AM – 12:45 PM
18-Dec	W	No Class – Best of luck during finals week!! CHEERS

Fall 2024 Dates

Date	To Remember
August 23	Last day to register for classes (day before the first-class meeting)
August 24	Classes begin
August 30	Last day to add a class
September 2	Labor Day Holiday (district wide closure)
September 6	Last Day to Drop & Receive a Refund
September 8	Last Day to Drop w/out a “W”
September 9	Census Date (20% of class)
October 31	Last Day to Petition to Graduate & Petition for Certificate
November 1	Last Day for Student/Faculty Withdrawal
November 11	Veteran's Day Holiday (District Wide Closure)
November 25-26	Fall Break (No Classes)
November 27-29	Thanksgiving Holiday (District Wide Closure)
December 14-20	Final Examinations
December 20	Last Day to File P/NP Option
December 20	Semester Ends
December 27	Grades Due
January 3	Grades Available for Transcript Release

Educational Accessibility & Support

College of the Redwoods is committed to providing reasonable accommodations for qualified students who could benefit from additional educational support and services. You may qualify if you have a physical, mental, sensory, or intellectual condition which causes you to struggle academically, including but not limited to:

- Mental health conditions such as depression, anxiety, PTSD, bipolar disorder, and ADHD
- Common ailments such as arthritis, asthma, diabetes, autoimmune disorders, and diseases

- Temporary impairments such as a broken bone, recovery from significant surgery, or a pregnancy-related disability
- A learning disability (such as dyslexia, reading comprehension), intellectual disability, autism, or acquired brain injury
- Vision, hearing, or mobility challenges

Available services include extended test time, quiet testing environments, tutoring, counseling and advising, alternate formats of materials (such as audio books or E-texts), assistive technology, on-campus transportation, and more. If you believe you might benefit from disability- or health-related services and accommodations, please contact [Student Accessibility Support Services \(SASS\)](#). If you are unsure whether you qualify, please contact SASS for a consultation: sass@redwoods.edu.

SASS office locations and phone numbers

Eureka campus

- Phone: 707-476-4280
- Location: Student Services Building, first floor

Del Norte campus

- Phone: 707-465-2324
- Location: Main Building, next to the library

Klamath-Trinity campus

- Phone: 707-476-4280

Student Support Services

Good information and clear communication about your needs will help you be successful. Please let your instructor know about any specific challenges or technology limitations that might affect your participation in class. College of the Redwoods wants every student to be successful.

The following online resources are available to support your success as a student:

[CR Online Learning Support](#)

Tech support, laptop loans, guides to using Canvas, installing Office 365 for free, and more.

[Library Articles & Databases](#)

Find the best library databases for your research.

[Online Tutoring Resources](#)

Participate in tutoring over Zoom.

To learn more about the resources available to you, click on a title bar below, or click the down arrow to expand them all.

Klamath-Trinity students can contact the CR Klamath-Trinity Office for specific information about student support services at 530-625-4821.

Community College Student Health and Wellness

National Suicide Prevention Lifeline

If you are in distress or are with someone at risk right now, call or text the National Suicide Prevention Lifeline.

Call the National Suicide Prevention Lifeline

1-800-273-TALK (8255)

Text the National Suicide Prevention Lifeline

741-741

Timely Care

When you're not feeling well physically or distressed mentally, Timely Care can offer the help you're looking for in just a few quick taps. Students can schedule an appointment anytime via phone, video, and chat. [Log in or set up an account with Timely Care.](#)

Mental Health Counseling

Students should text, email, or fax Shawna Bell directly for scheduling and/or services.

- Text: 707-496-2856
- Email: shawnabmft@gmail.com
- Fax and voicemail: 707-237-2318

Wellness Central

Resources, tools, and trainings regarding health, mental health, wellness, basic needs and more designed for California community college students, faculty and staff are available on the California Community Colleges [Wellness Central](#).

Counseling

[Counseling and Advising](#) can assist students in need of academic advising and professional counseling services. Call, email or stop by one of our offices to make an appointment!

Counseling and Advising office locations and contact info

Eureka campus

- Phone: 707-476-4150
- Location: Student Services Building, first floor
- Email: counseling@redwood.edu
- Hours: Monday through Friday, 9am to 4pm. Summer hours may vary

Del Norte campus

- Phone: 707-476-2300
- Location: Main Building, next to the library
- Hours: Summer hours may vary

Klamath-Trinity campus

- Phone: 530-625-4821
- Email: KT-staff@redwoods.edu
- Hours: Summer hours may vary

Basic Needs Center

[The Basic Needs Center](#) provides for the health and safety of students by providing access to healthy food, financial resources, and referrals to safe and secure housing. [Submit a request for services and information.](#)

Basic Needs Center contact info

- Phone: 707-476-4153
- Email: the-grove@redwoods.edu

Learning Resource Center

The Learning Resource Center includes the following resources for students:

Library Services

[Library Services](#) promotes information literacy and provides organized information resources.

Multicultural and Equity Center (MCE)

The [Multicultural and Equity Center](#) is a dynamic and inclusive place that supports all students in their academic and personal journeys at the college. We do this by creating community, home away from home, and a safe place for cultural expression, cross-cultural learning, access to college and dignity resources, and social justice work opportunities. The MEC is committed to retention and student success by offering activities related to leadership development, student connectedness and student equity. We are a student-centered program that fosters respect for all people.

Academic Support Center

The [Academic Support Center](#) offers tutoring and test proctoring for CR students.

Student Tech Help

[Student Tech Help](#) provides students with assistance around a variety of tech problems.

Extended Opportunity Programs and Services (EOPS)

[Extended Opportunity Programs and Services](#) (EOPS) provides services to eligible income disadvantaged students including: textbook awards, grants, career academic and personal counseling, transportation assistance, tutoring, laptop, calculator and textbook loans, priority registration, graduation cap and gown, workshops, and more!

TRiO Student Success Program

The TRiO Student Support Services Program provides eligible students with a variety of services including academic advising, career assessments, assistance with transfer, and peer mentoring. Students can apply for the program with the [Eureka TRiO office](#) or the [Del Norte TRiO office](#).

Veterans Resource Center

The [Veteran's Resource Center](#) supports and facilitates academic success for Active Duty Military, Veterans and Dependents attending CR through relational advising, mentorship, transitional assistance, and coordination of military and Veteran-specific resources.

CalWORKS

California Work Opportunity & Responsibility to Kids ([CalWORKs](#)) provides supportive services to student parents with children under the age of 18, who are receiving cash assistance (TANF benefits), to become self-sufficient. Services include: transportation assistance, basic student supplies, tutoring, priority registration, laptop and calculator loans, career, academic, and personal counseling, and more!

Academic dishonesty

In the academic community, the high value placed on truth implies a corresponding intolerance of scholastic dishonesty. In cases involving academic dishonesty, determination of the grade and of the student's status in the course is left primarily to the discretion of the faculty member. In such cases, where the instructor determines that a student has demonstrated academic dishonesty, the student may receive a failing grade for the assignment and/or exam and may be reported to the Chief Student Services Officer or designee. The Student Code of Conduct ([AP 5500](#)) is available on the College of the Redwoods website. Additional information about the rights and responsibilities of students, Board policies, and administrative procedures is located in the [2023-2024 College Catalog](#) and [CR Board and Administrative Policies](#).

AI Use Class Policy

Recent advancements in generative artificial intelligence (AI) have made large language models such as ChatGPT and Google's Bard widely available. Sometimes, using these tools appropriately can help us overcome barriers and allow us to focus on deeper learning. However, overuse of these tools can undermine the development of our critical and creative thinking skills. In addition, AI outputs are often unreliable and frequently subject to bias. For these reasons, it is sometimes appropriate and sometimes inappropriate to use generative AI in the completion of assignments or in discussion posts. For this class,

please see the specific assignment instructions for guidance on how and when generative AI tools may be used appropriately as we're working on and learning from a particular assignment. Also, please keep in mind that you are responsible for anything you submit; please carefully review all AI-generated outputs, screening them for accuracy, bias, appropriateness, and fidelity to your perspective.

Disruptive Behavior

Student behavior or speech that disrupts the instructional setting will not be tolerated. Disruptive conduct may include, but is not limited to: unwarranted interruptions; failure to adhere to instructor's directions; vulgar or obscene language; slurs or other forms of intimidation; and physically or verbally abusive behavior. In such cases where the instructor determines that a student has disrupted the educational process, a disruptive student may be temporarily removed from class. In addition, the student may be reported to the Chief Student Services Officer or designee. Additional information about the rights and responsibilities of students, Board policies, and administrative procedures is located in the [2023-2024 College Catalog](#) and [CR Board and Administrative Policies](#).

Inclusive Language in the Classroom

College of the Redwoods aspires to create a learning environment in which all people feel comfortable in contributing their perspectives to classroom discussions. It therefore encourages instructors and students to use language that is inclusive and respectful.

Canvas Information

- Log into Canvas at [My CR Portal](#)
- For help logging in to Canvas and general tech help, visit [Student Technical Support](#)
- Once you're logged in to Canvas, you click on the Help icon on the left menu
- Canvas online orientation workshop: [Canvas Student Orientation Course](#)

Setting Your Preferred Name and Pronouns in Canvas

Students have the ability to display personal pronouns and an alternate first name in Canvas. Students may change their pronouns on their own in Canvas (Account :: Settings :: Edit Settings). To request a change to your preferred list name, contact [Admissions & Records](#). Your Preferred Name will only be listed in Canvas; this does not change your legal name in our records. See the [Student Information Update Form \(pdf\)](#).

Emergency Procedures / Everbridge

College of the Redwoods has implemented an emergency alert system called Everbridge. In the event of an emergency on campus you will receive an alert through your personal email and/or phones. Registration is not necessary in order to receive emergency alerts. Check to make sure your contact information is up-to-date by logging into [WebAdvisor](#) and selecting 'Students' then 'Academic Profile' then 'Current Information Update.'

Please contact Public Safety at 707-476-4112 or security@redwoods.edu if you have any questions. For more information visit [Redwoods Public Safety](#).

In an emergency that requires an evacuation of the building anywhere in the District:

- Be aware of all marked exits from your area and building
- Once outside, move to the nearest evacuation point outside your building
- Keep streets and walkways clear for emergency vehicles and personnel

Do not leave campus, unless it has been deemed safe by the campus authorities.

To learn more about campus-specific Emergency Procedures, click on a title bar below, or click the down arrow to expand them all

Del Norte Campus Emergency Procedures

Please review the [Crescent City campus emergency map](#) for campus evacuation sites, including the closest site to this classroom (posted by the exit of each room). For more information, visit [Redwoods Public Safety](#).

Klamath-Trinity Campus Emergency Procedures

Please review the responsibilities of, and procedures used by, the College of the Redwoods, Klamath Trinity Instructional Site (KTIS) to communicate to faculty, staff, students and the general public during an emergency. It is the responsibility of College of the Redwoods, Klamath-Trinity Instructional Site (KTIS) to protect life and property from the effects of emergency situations within its own jurisdiction.

In the event of an emergency, communication shall be the responsibility of the district employees on scene:

1. Dial 911, to notify local agency support such as law enforcement or fire services.
2. If safe to do so, notify key administrators, departments, and personnel.
3. If safe to do so, personnel shall relay threat information, warnings, to ensure the school community is notified.
4. Contact 530-625-4821 to notify of situation.
5. Contact Hoopa Tribal Education Administration office 530-625-4413
6. Notify Public Safety 707-476-4111.

In the event of an emergency, the responsible district employee on the scene will:

1. Follow established procedures for the specific emergency as outlined in the College of the Redwoods Emergency Procedure Booklet.
2. Lock all doors and turn off lights if in lockdown due to an active shooter or similar emergency.
3. Close all window curtains.
4. Get all inside to safe location Kitchen area is best internal location.
5. If a police officer or higher official arrives, they will assume command.
6. Wait until notice of all is clear before unlocking doors.
7. If safe to do so, move to the nearest evacuation point outside building (Pooky's Park), directly behind the Hoopa Tribal Education Building.
8. Do not leave site, unless it has been deemed safe by the person in command.