

Course Information

Semester & Year: Spring 2024

Course ID & Section #: AQUA-3-E6165

Instructors Name: Jasmine Iniguez

Day/Time of required meetings: MW 2:50 – 4:15 PM

Location: AT108

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/co-requisites/ recommended preparation

None

Recommended Course Textbook

Fisheries Biology: Assessment and Management, 2nd Edition

Author: Michael King

Publisher: Wiley-Blackwell

ISBN: 978-14051148312

Brief Introduction to Fisheries

Author: Xinjun Chen and Yingpi Zhou

Publisher: Wiley-Blackwell

Evaluation & Grading Policy

Grading:

Course Requirements	Percent of Total Grade	Due Date
Exam 1	20	Wednesday, Feb. 22
Exam 2	20	Wednesday, April 3
Final Exam	20	Monday, May 6
Research Paper	15	Friday, April 26
Fishercises -Assignments	15	TBA
Participation (attendance taken into account)	10	

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 resonate, and you may see them on other exams. The final is not cumulative. **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.

DUE DATES:

Monday, February 5: Topic Identified submit on discussion board via Canvas

Friday, March 8: Rough Draft DUE via Canvas

Monday, April 22 Final Draft DUE via Canvas

Format: Submit in word document NOT pdf so I can make suggestions. This paper should be 4-6 pages in length, typed with 12- point font in Times New Roman and double spaced. 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.

The paper must be formatted in MLA format. Links to the guidelines will be shared on Canvas.

Outline of the research 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

Economic Analysis: Evaluate the economic sustainability of current fishing practices and assess the economic impacts of overfishing or other unsustainable practices.

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.

Field Trips and Hands on Exercises:

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

Wednesday, January 31- Fish, Shellfish, and Seaweed Dissection + Anatomy lesson

Wednesday, March 27- Calculating Stream Flow and Macroinvert Sampling, Location: TBA

March/February: Tour of the Hagfish Facility, Samoa CA

Tour of Pacific Seafood Processing Plant or Catio Fisheries or Ashley Seafood

Monday, April 15 – Scotia Fisheries Exhibition

Wednesday, April 17 – Snorkel Exercise at Mad River, Blue Lake

Snorkel Survey:

Tentative Scheduled Date: April 17

Tentative Schedule Location: Mad River, Blue Lake

Students will be required to participate in a **snorkel survey**! This will be conducted during class time.

Equipment: You will need a snorkel mask, wet suite, 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 3+ mm wet suit. If you do not plan on participating in the snorkeling exercise, please bring the other proper attire: rain jackets, boots and or waders to participate in other activities on the bank.

Calculating Stream Flow and Macroinvertebrate Sampling:

Tentative Scheduled Date: March 27

Tentative Schedule Location: Mad River, Blue Lake (Location may change)

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 2:50 – 4:15 PM)
15-Jan	M	NO CLASS – Martin Luther King Jr. Day
17-Jan	W	Course Overview and Introduction to Fisheries
	Week 2	
22-Jan	M	Introduction and History Fisheries
24-Jan	W	Fish Systematics and Classification
	Week 3	
29-Jan	M	Fisheries Biology (Internal Anatomy and Physiology)
31-Jan	W	Fish and Shellfish Dissection Exercise
	Week 4	
5-Feb	M	Fish Identification (Dichotomous Key) – *Rockfish and Surfperch Fisheries Research Paper: Topic Due
7- Feb	W	Aquatic Ecosystem and Fish Food Chains
	Week 5	
12-Feb	M	Types of Fisheries (Marine and Freshwater)
14-Feb	W	Exam 1 Review
	Week 6	
19-Feb	M	NO CLASS – Presidents Day
22-Feb	W	Exam 1
	Week 7	
26- Feb	M	Harvesting and Gear Selectivity/Methods
28- Feb	W	Bycatch, Exploited, Over-Exploited, Depleted, and Recovering
	Week 8	
4-Mar	M	Fisheries Management
6-Mar	W	Guest Speaker: Seth Naman – NOAA, Fisheries Biologist
	Week 9	
11-Mar	M	SPRING BREAK

13-Mar	W	SPRING BREAK
	Week 10	
18- Mar	M	West Coast Commercial Fisheries (Hagfish Facility)
20- Mar	W	Fish Handling and Preservation (Pacific Seafood Field Trip?)
	Week 11	
25-Mar	M	Fisheries Sampling Techniques
27-Mar	W	Calculating Stream Flow and Macroinvertebrate Sampling
	Week 12	
1-Apr	M	No Class: Cesar Chavez Day (Review for Exam 2, Recorded Lecture)
3-Apr	W	Exam 2
	Week13	
8-Apr	M	Fisheries Habitat Restoration
10-Apr	W	Aquaculture Based Fisheries
	Week 14	
15-Apr	M	Scotia Fisheries Exhibit Field Trip
17-Apr	W	Snorkel Exercise @ Mad River
	Week15	
22-Apr	M	TEK – Guest Lecture TBA Fisheries Research Paper: Final Draft Due
24-Apr	W	Guest Speaker, Environmental Scientist, Paul Amato
	Week 16	
29-Apr	M	Fisheries Impact and Climate Change
1-May	W	Review Final Exam
	Week 17	
6-May	M	FINAL EXAM @ 3:15 – 5:15PM
8-May	W	No Class – Best of luck during finals week!! CHEERS

Educational Accessibility & Support

College of the Redwoods is committed to providing reasonable accommodation 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 (e.g., 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 (e.g., audio books, 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 [Disability Services and Programs for Students \(DSPS\)](#). If you are unsure whether you qualify, please contact DSPS for a consultation: dsps@redwoods.edu.

- Eureka: 707-476-4280, Student Services Building, 1st floor
- Del Norte: 707-465-2324, Main Building, near the library
- Klamath-Trinity: 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](#) (Comprehensive information for online students)
- [Library Articles & Databases](#)
- [Canvas help and tutorials](#)
- [Online Student Handbook](#)
- [Online Tutoring Resources](#)

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 KT Office for specific information about student support services at 530-625-4821

Community College Student Health and Wellness

If you are in distress or are with someone at risk right now, call the National Suicide Prevention Lifeline at 1-800-273-TALK (8255) or TEXT 741-741

Timely Care

When you're feeling under the weather physically or distressed mentally, you can find the help you're looking for in just a few quick taps. Students can schedule an appointment anytime via phone, video, and chat. [Visit TimelyCARE here](#)

Mental Health Counseling

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

Contact info

Text: 707-496-2856

Email: shawnabmft@gmail.com

Fax: 707-237-2318 (voicemail can be left via fax)

Wellness Central

Resources, tools, and training 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 & Advising](#) can assist students in need of academic advising and professional counseling services. Visit the Welcome Center in the lower level of the student services building Monday –Friday 9am – 4pm (during the semester, 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. Students can submit a request for services and information [here](#).

Contact info

Phone: 707-476-4153

Email: the-grove@redwoods.edu

Learning Resource Center

Learning Resource Center includes the following resources for students

- [Library Services](#) to promote information literacy and provide organized information resources.
- [Multicultural & Diversity Center](#)
- [Academic Support Center](#) – offers tutoring and test proctoring for CR students.
- [Student Tech Help](#) – provides students with assistance around a variety of tech problems.

EOPS

[Extended Opportunity Programs & Services \(EOPS\)](#)[Links to an external site.](#) 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 in [Eureka](#) or in [Del Norte](#).

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

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!

Spring 2024 Dates

January 12	Last day to register for classes (day before the first class meeting)
January 13	Classes begin
January 15	Martin Luther King, Jr.'s Birthday Holiday (District-wide closure)
January 19	Last day to add a class
January 26	Last day to drop without a "W" and receive a refund
January 29	Census Date (20% of class)
February 16	Lincoln's Birthday Holiday (District-wide closure)
February 19	President's Day Holiday (District-wide closure)
March 7	Last day to petition to graduate
March 29	Last day for student initiated withdrawal (62.5% of class)
March 29	Last day for faculty initiated withdrawal (62.5% of class)
March 11-16	Spring break (no classes)
May 4-10	Final Examinations
May 10	Last day to file for P/NP Option
May 10	Semester Ends
May 17	Grades due
May 24	Grades available

Drop Policy:

You may be dropped from the class if you miss 3 or more weeks of class participation, discussion, or assignments prior to the end of week 10.

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 [College Catalog](#) and on the [College of the Redwoods website](#).

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. However, overuse of these tools in this class can undermine your learning and curtail the development of your critical and creative thinking skills. In addition, AI outputs are often unreliable and frequently subject to bias. For these reasons, the policy of this class is that AI cannot be used at any point in the completion of class assignments, including discussion posts. Any or all of your assignment submissions and discussion posts may be screened by AI detection software, but the real penalty for AI misuse is that you will miss out on an opportunity to learn.

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. 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 [College Catalog](#) and on the [College of the Redwoods website](#).

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, visit [My CR Portal](#).

For help with Canvas once you're logged in, click on the Help icon on the left menu.

For tech help, email its@redwoods.edu or call 707-476-4160

Canvas online orientation workshop: [Canvas Student Orientation Course \(instructure.com\)](#)

Setting Your Preferred Name in Canvas

Students have the ability to have an alternate first name and pronouns to appear in Canvas. Contact [Admissions & Records](#) to request a change to your preferred first name and pronoun. 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](#).

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 see the [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, see the [Redwoods Public Safety](#).

Klamath-Trinity Campus Emergency Procedures

Please review the responsibilities of, and procedures used by, the College of the Redwoods, KlamathTrinity 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 even 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. Student Support Services (required for online classes