

Course Information

Semester & Year: Fall 2023

Course ID & Section #: AQUA-3-E5530

Instructors Name: Jasmine Iniguez

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

Location: HU 129

Course units: 3

Instructor Contact Information

Office location: SCI 216I

Office hours: T/TH 10-11:30 or by appointment

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

Brief Introduction to Fisheries

Author: Xinjun Chen and Yingpi Zhou

Publisher: Wiley-Blackwell

ISBN: 978-981-15-3136-1

****Fisheries Biology: Assessment and Management, 2nd Edition**

Author: Michael King

Publisher: Wiley-Blackwell

ISBN: 978-14051148312

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

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.

Evaluation & Grading Policy

Grading:

| Course Requirements | Percent of Total Grade | Due Date |
|---|------------------------|--------------------|
| Exam 1 | 20 | Wednesday, Sep. 27 |
| Exam 2 | 20 | Wednesday, Nov. 8 |
| Final Exam | 20 | Monday, Dec.11 |
| FishBase Assignment | 10 | Wednesday, Oct 4 |
| Fisheries Assessment Research Paper | 20 | Wednesday, Nov 27 |
| Quizzes | 5 | Mondays |
| Participation (attendance taken into account) | 5 | |

Late Assignments:

Each student is responsible for completing all assignments and activities as specified by the instructor. If you have an emergency, please notify me as soon as you can if this affects your coursework or attendance. For each day an assignment is late, its grade will be lowered to a full letter grade.

Research Paper – Fisheries Assessment

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. Each student should have a specific topic identified and approved. The type of fishery must be approved by the instructor by September 6th via email. For assistance in determining what species/fishery you would like to write about see <https://www.fisheries.noaa.gov/find-species>.

The final draft will be due Monday, November 27, 2023 at midnight.

Format: 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 following the guidelines from the Journal of the World Aquaculture Society. I will add an example paper- this example is from an aquaculture class, but the layout is essentially the same. Links to the guidelines will be shared on Canvas.

*The outline of the paper must include Abstract, Introduction, Life History and Background Information of the Fishery, Species Produced, Harvest Methods and Gears Used, Economics, Concerns and Issues, and Future Directions for the fishery.

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 as I may be able to access it for you!!

FishBase Assignment: <http://www.fishbase.org>

You will pull two fish names from a hat that will be passed around during class. For this assignment you will navigate the search interface, FishBase which houses species summaries for aquaculture and fisheries. You will write up a single pager of the following information:

- 1) Fish name and scientific name
- 2) How big does this fish get?
- 3) What is its distribution, does it occur in Northern California waters?
- 4) Any unique characteristics to its morphology?
- 5) Is there a significant fishery for your fish? Please describe this fishery

Submissions will be done via Canvas under assignments.

Important Due and Scheduled Dates:

Wednesday, October 4th - FishBase Assignment

Wednesday, November 27th- Final Draft Fisheries Assessment Research Paper

Monday of the week – Quizzes

Field Trips:

Tentative Scheduled Date: October 18th, 2023

Tentative Schedule Location: Mad River, Blue Lake

There will be one field trip out in the field. This field trip is conducted during class time and consists of participating in a **snorkel survey**. This will be conducted during class time. Students are expected to provide their own transportation for traveling or carpool with each other. If you are unable to get wet suit to do the snorkel survey– there is opportunity for conducting water quality and assessing habitat in the field along the bank.

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 an extra snorkel mask I can loan someone. I would recommend a 3 mm wet suit for October temperature. Please bring proper attire: (Rain jackets, boots and or waders)

Tentative Course Schedule:

| AQUA 3: Intro to Fisheries <°>{ | | |
|--|---------------|--|
| Date | Week 1 | Lecture Topic (M/W 2:50 – 4:15 PM) |
| 21-Aug | M | Course Overview and Introduction to Fisheries |
| 23-Aug | W | Fisheries Biology (What is a Fish & Classification) |
| | Week 2 | |
| 28-Aug | M | Fisheries Biology (External Anatomy and Physiology) |
| 30-Aug | W | Fisheries Biology (Internal Anatomy and Physiology) (Quiz 1) |
| | Week 3 | |
| 4-Sep | M | Labor Day – NO CLASS |
| 6-Sep | W | Fish Dissection Exercise |
| | Week 4 | |
| 11-Sep | M | Fish Identification (Dichotomous Key) (QUIZ 2) |
| 13-Sep | W | Fish Identification Exercise |
| | Week 5 | |
| 18-Sep | M | Types of Fisheries – Freshwater versus Marine Fisheries (QUIZ 3) |
| 20-Sep | W | Types of Fisheries – Commercial, Recreational, Artisanal and Traditional |
| | Week 6 | |
| 25-Sep | M | Harvest Collection Methods + Review for Exam 1 |
| 27-Sep | W | Exam 1 |
| | Week 7 | |
| 2-Oct | M | Harvesting and Gear Selectivity (QUIZ 4) |
| 4-Oct | W | Bycatch, Exploited, Over-Exploited, Depleted, and Recovering |

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|---------------|----------------|---|
| | Week 8 | |
| 9-Oct | M | Sock Assessments and Fisheries Management (QUIZ 5) |
| 11-Oct | W | Fisheries Management and Conservation |
| | Week 9 | |
| 16-Oct | M | Freshwater Fisheries – Aquatic Ecology |
| 18-Oct | W | Snorkel Survey Exercise |
| | Week 10 | |
| 23-Oct | M | Food Chains and Food Webs (Quiz 6) |
| 25-Oct | W | Fisheries Sampling Techniques |
| | Week 11 | |
| 30-Oct | M | Fisheries Sampling Techniques (QUIZ 7) |
| 1-Nov | W | Fish Habitat Restoration |
| | Week 12 | |
| 6-Nov | M | Review for Exam 2 |
| 8-Nov | W | Exam 2 |
| | Week13 | |
| 13-Nov | M | Tribal Fisheries (Western science versus Traditional) (QUIZ 8) |
| 15-Nov | W | Guest Lecturer – Keith Paker, Yurok Tribe Senior Fisheries Biologist |
| | Week 14 | |
| 20-Nov | M | FALL BREAK - NO CLASS |
| 22-Nov | W | FALL BREAK - NO CLASS |
| | Week15 | |
| 27-Nov | M | Fisheries Impact on the Environment – Current Issues and Solutions |
| 29-Nov | W | Aquaculture Based Fisheries - Interactive Discussion |
| | Week 16 | |
| 4-Dec | M | Careers, Employers, and Professional Societies – Interactive Activity |
| 6-Dec | W | Review Final Exam |
| | Week 17 | |
| 11-Dec | M | FINAL EXAM @ 3:15 – 5:15 PM |
| 13-Dec | W | No Class – Best of luck during finals week!! CHEERS |

Fall 2023 Dates

- **August 18th**: Last day to register for classes (day before the first-class meeting)
- **August 19th**: Classes begin
- **August 25th**: Last day to add a class
- **September 1st**: Last day to drop without a “W” and receive a refund
- **September 4th**: Labor Day Holiday (All Campuses Closed)
- **September 5th**: Census Date (20% of class)
- **October 26th**: Last day to petition to graduate
- **October 27th**: Last day for student-initiated withdrawal (62.5% of class)
- **October 27th**: Last day for faculty-initiated withdrawal (62.5% of class)
- **November 11th**: Veterans Day (All Campuses Closed)

- **November 20th-25th:** Thanksgiving break (no classes)
- **November 22nd-24th:** No Classes, all campuses closed
- **December 9th-15th:** Final Examinations
- **December 15th:** Last day to file for P/NP option
- **December 15th:** Semester Ends
- **December 22nd:** Grades due
- **January 5th:** Grades available

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](#).

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.

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](#).

Canvas Information

Canvas Information

If using Canvas, include navigation instructions, tech support information, what Canvas is used for, and your expectation for how regularly students should check Canvas for your class.

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 \(instructure.com\)](#)

Community College Student Health and Wellness

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 [Health & Wellness website](#)

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 <https://webadvisor.redwoods.edu> 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 Page](#).

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.

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 Page](#).

Eureka Campus Emergency Procedures

Please review the [campus emergency map](#) for evacuation sites, including the closest site to this classroom (posted by the exit of each room). For more information on Public Safety go to the [CR Police Department- Public Safety](#) It is the responsibility of College of the Redwoods to protect life and property from the effects of emergencies within its own jurisdiction.

In the event of an emergency:

1. Evaluate the impact the emergency has on your activity/operation and take appropriate action.
2. Dial 911, to notify local agency support such as law enforcement or fire services.
3. Notify Public Safety 707-476-4111 and inform them of the situation, with as much relevant information as possible.
4. Public Safety shall relay threat information, warnings, and alerts through the Everbridge emergency alert system, Public address system, and when possible, updates on the college website, to ensure the school community is notified.
5. Follow established procedures for the specific emergency as outlined in the College of the Redwoods Emergency Procedure Booklet, (evacuation to a safe zone, shelter in place, lockdown, assist others if possible, cooperate with First Responders, etc.).

6. If safe to do so, notify key administrators, departments, and personnel.
7. Do not leave campus, unless it is necessary to preserve life and/or has been deemed safe by the person in command.

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.

1. In the event of an emergency, communication shall be the responsibility of the district employees on scene.
 - a. Dial 911, to notify local agency support such as law enforcement or fire services.
 - b. If safe to do so, notify key administrators, departments, and personnel.
 - c. If safe to do so, personnel shall relay threat information, warnings, to ensure the school community is notified.
 - d. Contact 530-625-4821 to notify of situation.
 - e. Contact Hoopa Tribal Education Administration office 530-625-4413
 - f. Notify Public Safety 707-476-4111.
2. In the event of an emergency, the responsible district employee on scene will:
 - a. Follow established procedures for the specific emergency as outlined in the College of the Redwoods Emergency Procedure Booklet.
 - b. Lock all doors and turn off lights if in lockdown due to an active shooter or similar emergency.
 - c. Close all window curtains.
 - d. Get all inside to safe location Kitchen area is best internal location.
 - e. If a police officer or higher official arrives, they will assume command.
 - f. Wait until notice of all is clear before unlocking doors.
 - g. If safe to do so, move to the nearest evacuation point outside building (Pooky's Park), directly behind the Hoopa Tribal Education Building.
 - h. Do not leave site, unless it has been deemed safe by the person in command. Student Support Services (required for online classes)

Student Support Services

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](#)

[Counseling](#) offers assistance to students in need of professional counseling services such as crisis counseling.

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.

Special programs are also available for eligible students include

- [Extended Opportunity Programs & Services \(EOPS\)](#) provides services to eligible income

disadvantaged students including: textbook award, career academic and personal counseling, school supplies, transportation assistance, tutoring, laptop, calculator and textbook loans, priority registration, graduation cap and gown, workshops, and more!

- The TRiO Student Success Program provides eligible students with a variety of services including trips to 4-year universities, career assessments, and peer mentoring. Students can apply for the program in [Eureka](#) or in [Del Norte](#)
- 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](#) – assists student parents with children under the age of 18, who are receiving cash assistance (TANF), to become self-sufficient.
- Klamath-Trinity students can contact the CR KT Office for specific information about student support services 530-625-4821.