

Course Information

Semester & Year:	Spring 2024
Course ID & Section #:	BIOL-15-E5826
Instructors' name:	Julie Kelly
Course units:	4
Lecture (Face-to-Face):	
Day and Time	Tuesday and Thursday from 1:15 pm - 2:40 pm
Place	Science Building, Room SC 102
Field Trips / Lab:	
Day and Time	Friday from 1:15 am - 4:25 pm
Place	Lab - Science Building, Room SC 102 Field Trips - Prearranged locations

Instructor Contact Information

Julie Kelly is the instructor for lecture and lab.

Office hours:	One-on-one meeting by arrangement
Email address:	julie-kelly@redwoods.edu

Study Sessions (optional)
Where: SC 102
When: Tuesday from 3:00 pm to 4:00 pm (after lecture).

Catalog Description

An introduction to ocean habitats and marine life. Topics covered include physical properties that define marine habitats, the diversity and ecology marine organisms, and marine resource use and conservation. Labs and field trips focus on local habitats and the identification of local species.

Note: This course includes required field trips to local marine habitats. The College does not provide transportation. Car-pooling with other students is encouraged.

Course Student Learning Outcomes

1. Recognize major marine habitats and analyze the physical, oceanographic and ecological characteristics that define them.
2. Describe the defining cellular characteristics and life history patterns of prokaryotic and eukaryotic organisms commonly encountered in marine habitats
3. Hypothesize ecological and evolutionary mechanisms that are responsible for specific examples of marine organism adaptation.
4. Identify marine organisms to major taxon on sight, and be able to utilize resources such as dichotomous keys and field guides to identify organisms more specifically.
5. Keep an organized field/ lab notebook that includes meaningful and accurate notes and data.

Prerequisites/co-requisites/ recommended preparation

None

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 (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

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.

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 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 & 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!

Evaluation & Grading Policy

This is a grade only course. Your final grade in this course will be based on tests and assignments in lecture, field trips, and lab.

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)
April 1	District-wide closure (Cesar Chavez Day)
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

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.

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.

BIOLOGY 15 – MARINE BIOLOGY COURSE INFORMATION

INSTRUCTOR

Julie Kelly

email julie-kelly@redwoods.edu

COMMUNICATION BETWEEN STUDENT AND PROFESSOR

- 1) Professor will check email and Canvas Comments and respond to students within 24 hours (weekends not included).
- 2) Student will check Canvas Announcements.
- 3) Student will check Canvas Assignment Feedback on every Marine Biology assignment.

RESOURCES

Lecture textbook: Castro and Huber, Marine Biology, 10th, 11th, or 12th Edition.

Handouts and other resources from CANVAS site

OTHER MATERIALS

Field/ lab notebook

You will use the field/lab notebook only for field observations and lab work...your lecture notes need to go somewhere else.

Black and colored pencils and the appropriate erasers.

Do NOT use ink unless you invest in waterproof ink pens!

Appropriate clothing

Field trips are typically at the beach, rain or shine, warm or cold. You should be prepared to get wet, muddy, sandy, etc. Warm windproof layers, waterproof boots, and a warm hat are ideal.

TECHNOLOGY

1. Learning Management System: CANVAS by Instructure

This course makes heavy use of the online resource **Canvas**. You will need to have reliable access to the internet at least twice a week for the duration of this class. If you are having technological difficulties, get help EARLY!

How to log in to CANVAS:

- Access at CR web page Student Logins or <https://redwoods.instructure.com>
- Login: Your WebAdvisor ID (example: mine would be jkelly245)
- Password: 6 digit birthday (example: January 19, 2015 would be 011915)
- Once you have logged in you should change your password.

2. Access to free student response system

- Cloud-based student response system
 - Socrative <http://www.socrative.com>
 - Log in as student

3. Method of copying Field/Lab notebook to submit notebook electronically.

- Scan notebook pages and submit as PDF electronically
- Photograph and convert JPG file to PDF to submit electronically

COURSE ORGANIZATION

Lectures

- **Lectures** are aimed at introducing you to important principles of physical oceanography and marine organism ecology and evolution. We follow the text closely, though not in the same chapter order. Be sure to note the specific assigned reading details on the course schedule *and* on the Week at a Glance Module on Canvas.
- **Lectures** will deliver the content that you are responsible for in this class and will be crucial in maintaining a high grade in this class because this class moves rather quickly and covers a lot of material.
- **Lecture outlines and slides** are posted in the weekly MODULES in Canvas.
- You can also use online sources to review the material covered in lecture and lab. However, you are responsible for the detail covered in the lecture videos. Online sources could provide less detail or way too much detail than is required for this class.

Labs and Field Trips

On Fridays, we will alternate between in-class Labs and out-in-the-world Field Trips.

- **Labs** are held in the SC 102 classroom at 1:15PM, and usually involve close-up study of marine organisms.
- **Field trips** require that we meet off-campus at the designated location and time, usually 1:45PM. See your schedule for details.
 - You need to arrange your own transportation for these field trips.
 - Car-pooling with other students is encouraged.
 - Come dressed for the outdoors...*plan* on rain, wind, cold, and wet feet!!!
 - On Fridays, you'll *always* need your field/ lab notebook and usually a handout from CANVAS that *must* be printed out ahead of time.

Personal weekly beach visits

Personal weekly beach visits are required. You should visit a location with a view of the marine environment 10 times during the 16-week Spring 2024 semester.

You should:

- Research the conditions before going to the beach.
 - Determine the tidal level and the predicted weather at your location and log this information in your field notebook.
- Spend at least 30 minutes exploring the marine environment.

- Write entries in your field notebook about conditions that you find at your beach. Document the types of marine life that you find there either by drawing pictures or describing with words.

Exceptions

In field biology, we are at the mercy of the natural world. Some events, like tides, are relatively predictable; others, like storms and beached whales, are not. Because of this, there will be exceptions and alterations to the neat and tidy schedule you've been given. For example:

- Some of the best low tides of the semester are during the weekends. Weekend field trips will be offered as extra credit or to make up a missed field trip.
- In nature, the unexpected happens. I might suddenly inform you that a whale has washed up and we're going to go check out the stinky decomposing beauty, or we might have to cancel a field trip due to weather (this happens way less frequently than you might think!).

Please check CANVAS Announcements and your CR email regularly. Make sure I have good contact info for you. **Pronto** on Canvas will be a good method for communication of last-minute details and directions in case somebody will be late to the field trip or gets lost on the way to the field trip.

Exams

- There are two mid-term Lecture Exams and a Final that covers both lecture and lab material.
- You will have Study Guides to help you review lecture material and prepare for these exams.
- You will be allowed to use your Field/ Lab Notebook on the lab portion of the Final Exam.

Field/ Lab Notebook

You will be graded on the thoroughness of your Field/ Lab notebook. "Thorough" means conscientious entries for all *scheduled labs and field trips*, including relevant illustrations, maps, climate data, species lists, and miscellaneous notes, conscientious entries.

Entries will be made for:

(1) all field trips,

(2) all labs,

(3) your *required weekly personal beach visits*. Entries from your *required weekly personal beach visits* should contain all the same sorts of information as for class field trips

Details on how to record these activities will be found in a separate handout and discussed further in class.

Copepod Experiment Report

We will be carrying out a week-long experiment on copepods (shrimp relatives).

You will write up your experiment, its results, and your interpretation of those results, in a standardized scientific format. Details on this format will be found in a separate handout and discussed further in class.

Research papers

Each student will research 3 marine organisms: marine invertebrate, marine fish, and marine mammal. Then write a research paper for each of these marine organisms.

Other Assignments

These will include at least 2 homework assignments: Understanding the Scientific Method and Understanding Tides.

ASSESSMENT AND GRADING

I will use the following scale to determine the letter grade you earn in this class.

	100 – 93% = A	92.9 – 90% = A-
89.9 – 87% = B+	86.9 – 83% = B	82.9 – 80% = B-
79.9 – 77% = C+	76.9 – 70% = C	
	69.9 – 60% = D	
	< 59.9% = F	

Point Break-down for class

lecture exams	2 X 100 points	200
final exam	100 lecture + 100 lab points	200
Research papers	3 X 30 points	90
field/lab notebooks		
field/labs	13 X 15 points	195
Personal weekly beach visits	10 X 10 points	100
Copepod Final Report		100
Lecture discussion	23 assignments x 4 points	92
Lecture Participation	23 assignments x 4 points	92
Homework	2 assignments x 10 points	20
		1089 total points

Marine Biology Spring 2024 Tentative Lecture Schedule		
Week	Lecture	Reading in <i>Marine Biology</i> ; Castro & Huber
1	Syllabus and Canvas	
	Marine Habitats; Chemistry	C&H Ch. 3.1
2	<u>Habitat</u> Between the Tides - Rocky Shore	C&H Ch.11.1
	Ocean Waves and Tides	C&H Ch. 3.3
3	<u>Habitat</u> Between the Tides - Sandy Shore	C&H Ch. 11.2
	Biology: Perpetuating life; Diversity of Life in the Sea	C&H Ch. 4.3 and 4.4
4	<u>Habitat</u> Estuaries	C&H Ch. 12
	Ocean Currents	C&H Ch. 3.2
5	<u>Habitat</u> Life on the Continental Shelf	C&H Ch. 13
	Review for Lecture Exam #1	
6	Lecture Exam #1 Through Continental Shelf	
	<u>Habitat</u> Coral Reef Communities	C&H Ch. 14
7	<u>Habitat</u> Coral Reef Communities	C&H Ch. 14
	<u>Habitat</u> The Epipelagic Communities	C&H Ch. 15
8	The Sea Floor	C&H Ch. 2
	<u>Habitats</u> Mid- and Deep-Water Communities	C&H Ch. 16
	Spring Break	
9	Single-celled Marine Life and Multicellular Algae and Plants	C&H Ch. 5 and 6
	Marine Invertebrates - Porifera, Cnidaria, Worms	C&H Ch. 7.1 -7.4
10	Marine Invertebrates - Molluscs	C&H Ch. 7.5
	Review for Lecture	
11	Lecture Exam #2 Material through Molluscs	
	Marine Invertebrates - Crustaceans and Echinoderms	C&H Ch. 7.6
12	Marine Fish	C&H Ch. 8
	Marine Reptiles and Birds	C&H Ch. 9
13	Marine Mammals - Pinnipeds	C&H Ch. 9
	Marine Mammals - Cetaceans	C&H Ch. 9
14	Marine Ecology and the Scientific Method	C&H Ch. 10 and Ch.1
	Resources from the Sea	C&H Ch. 17
15	Impact of Humans and Conservation	C&H Ch. 18
	Review for Lecture Exam #3	
16	Final Exam	

**MARINE BIOLOGY Spring 2024 Tentative Lab and Field
Schedule Friday 1:15 - 4:25pm**

Week		Date	Lab
1	F	19-Jan	Lab: Dock and Piling Critters
2	F	26-Jan	Lab: Dichotomous Keys
3	F	2-Feb	Field Trip - Telonicher Marine Lab
4	F	9-Feb	Field Trip: Rocky Intertidal I
5	F	16-Feb	Lincoln's Birthday (All Campuses Closed)
6	F	23-Feb	Field Trip Manila Mudflats
7	F	1-Mar	Lab: Plankton
8	F	8-Mar	Field Trip: Rocky Intertidal II
			Spring Break
9	F	22-Mar	Lab: Start Copepod Experiment
10	F	29-Mar	Lab: Copepod Experiment
11	F	5-Apr	Field Trip Friends of the Dunes Humboldt Coastal Nature Center, Beach, and Dune
12	F	12-Apr	Field Trip: Arcata Marsh
13	F	19-Apr	Madaket Tour
14	F	26-Apr	Field Trip - Sue-meg State Park, Wedding Rock
15	F	3-May	Field Trip: Rocky Intertidal III