

Course Information

Semester & Year: Spring 2022

Course ID & Section #: BIOL-5-E2857 & E2858

Instructor's name: Maria Morrow

Day/Time of required meetings: Lectures are asynchronous online. In-person labs will be at the following times, depending on your section number. Masks are required and must cover the nose and mouth. Please see the CR guidelines for acceptable masks (no ports, neck gaiters, bandanas, or other ineffective facial coverings).

	E2857	E2858
Monday	8:20-11:30 am	1:15-4:25 pm
Wednesday	8:20-11:30 am	1:15-4:25 pm

Location: SC108 (Science building, entrance on outside at SW corner)

Course units: 4.0

Instructor Contact Information

Office location or *Online: SC214-D

Office hours: By request, email me with some times that work for you

Phone number: (707) 476-4472

Email address: maria-morrow@redwoods.edu

Catalog Description

A comparative study of plant, fungal, and algal structure and function, with additional studies of developmental biology, phylogeny/systematics, plant ecology, and conservation biology.

Recommended Prep: (CHEM-100 or CHEM-1A) and BIOL-3. Transfers to: UC and CSU.

Note: This course is intended for biology majors and is part of the STEM majors biology sequence.

Course Student Learning Outcomes

1. Recognize structural characteristics of plant, fungal, and algal groups, and use these characteristics to define their phylogenetic relationships.
2. Correlate plant form with function at cellular and whole organism levels.
3. Describe specific examples of how plants, fungi and algae interact at the population, community and ecosystem levels, and how the flow of energy and matter maintain ecosystem function.
4. Use the scientific method and inquiry-based laboratory tools to critically evaluate and explain observable phenomena.

Required Materials

All required materials are available for free on our Canvas site and via LibreTexts. A printed copy of the lab manual is available through the CR Bookstore. Physical copies of the textbook and photographic atlas must be printed or ordered through [Libretexts.org](https://libretexts.org).

- Textbook: [Botany by Ha, Morrow, and Algiers](#) (2021)

- Lab Manual: [Botany Lab Manual by Morrow](#) (2020)

Recommended: [A Photographic Atlas for Botany by Morrow](#) (2021) and colored pencils or pens.

Evaluation & Grading Policy

This class will be experimenting with an 'ungrading' model. Details for how this works are including on our Canvas site in a discussion forum called "[Ungrading](#)". You may ask any clarifying questions or express any concerns there.

Student Support

Accessibility

College of the Redwoods is committed to making reasonable accommodations for qualified students with disabilities. If you have a disability or believe you might benefit from disability-related services and accommodations, please contact your instructor or [Disability Services and Programs for Students](#) (DSPS). Students may make requests for alternative media by contacting DSPS based on their campus location:

- Eureka: 707-476-4280, student services building, 1st floor
- Del Norte: 707-465-2324, main building near library
- Klamath-Trinity: 530-625-4821 Ext 103

If you are taking online classes DSPS will email approved accommodations for distance education classes to your instructor. In the case of face-to-face instruction, please present your written accommodation request to your instructor at least one week before the needed accommodation so that necessary arrangements can be made. Last minute arrangements or post-test adjustments usually cannot be accommodated.

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](#)

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

Learning Resource Center includes the following resources for students

- [Academic Support Center](#) for instructional support, tutoring, learning resources, and proctored exams. Includes the Math Lab & Drop-in Writing Center
- [Library Services](#) to promote information literacy and provide organized information resources.
- [Multicultural & Diversity Center](#)

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

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 <https://redwoods.instructure.com>

Password is your 8 digit birth date

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

Canvas Help for students: <https://webapps.redwoods.edu/tutorial/>

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](#).

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](#). [Wellness Central](#) is a free online health and wellness resource that is available 24/7 in your space at your pace. Students seeking to request a counseling appointment for academic advising or general counseling can email counseling@redwoods.edu.

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 [Redwoods Public Safety Page](#) 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.

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

Scheduling Information

Admissions deadlines & enrollment policies

Spring 2022 Dates

- Classes begin: 01/15/22*
- Last day to add a class: 01/21/22*
- Martin Luther King, Jr's Birthday (all campuses closed): 01/17/22*
- Last day to drop without a W and receive a refund: 01/28/22*
- Census date (or 20% into class duration): 01/31/22*
- Last Day to file P/NP (only courses where this is an option) 02/11/22*
- Lincoln's Birthday (all campuses closed): 02/18/22*
- Presidents Day (all campuses closed): 02/21/22*
- Last day to petition to graduate or apply for certificate: 03/03/22*
- Spring Break (no classes): 03/14/22-03/19/22*
- Last day for student-initiated W (no refund): 04/01/22*
- Last day for faculty-initiated W (no refund): 04/01/22*
- Final examinations: 05/07/22-05/13/22*
- Semester ends: 05/13/22*
- Grades available for transcript release: approximately 05/30/22*

Course Schedule of Topics

This schedule is subject to change, depending on events that occur during the semester. We are hoping for this version, but we must be flexible in response to current events.

Week	Lecture Topics	Labs	Lab Quiz	Other
1	Introduction to Botany	No lab Monday (holiday) Observations and Microscopy	--	
2	Fungi & Lichens	Microfungi Macrofungi	1	
3	Heterokonts	Heterokonts Photosynthesis & Plant Pigments (Part 1 only)	2	
4	Descendants of Primary Endosymbiosis	Red and Green Algae Evolution of the Embryophyta*	3	
5	Lecture Assessment 1 Plant Cells & Tissues	Lab Practical 1 Discuss and Write Narratives	--	Unit 1 Narratives due

6	Water & Nutrients Experimental Design and Scientific Papers	No lab (holiday) Water in Plants	--	Start Plant Experiment
7	Roots Shoots	Roots Shoot Anatomy & Morphology	4	
8	Leaves Plant Adaptations	Leaf Anatomy Organ Modifications	5	
9	Photosynthesis Lecture Assessment 2	Photosynthesis & Plant Pigments (Part 2) Lab Practical 2	6	
10	Bryophytes Seedless Vascular Plants	Bryophytes Seedless Vascular Plants	--	Unit 2 Narratives due
11	Gymnosperms Secondary Growth	Gymnosperms* Secondary Growth	7	
12	Angiosperms Fruits & Flowers	Finish Plant Experiment Angiosperms: Flowers	8	
13	Pollination & Dispersal Evolution & Speciation	Angiosperms: Fruits Introduction to Ecology	9	Lab Report Due
14	Symbiosis Lecture Assessment 3	Field Trip to HSU Greenhouse* Lab Practical 3	--	
15	Design a Plant project	Assemble final portfolios		Unit 3 Narratives due
Finals				Final Portfolio Due