General Botany with Lab

Course Information

Semester & Year: Spring 2021
Course ID & Section #: BIOL-5-V0242
Instructor's name: Maria Morrow
Course units: 4

Instructor Contact Information

Office location or *Online: Link to weekly office hour Zoom
Office hours: Tuesdays at 2pm
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. NOTE: This course is intended for biology majors.

Grading options: Letter grade only (no P/NP option)

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.

Prerequisites/co-requisites/ recommended preparation

Prerequisite: BIOL-3

Required Materials:

- Your textbook, lab manual, and photographic atlas will all be available free online (see Canvas for links).
- A kit of lab materials is being compiled for you by our wonderful lab techs at CR. These materials are free. Anything not used up must be returned at the end of the semester to receive a grade.
- The only thing you'll need to purchase for this course is a microscope device. This could be a USB microscope, microscope attachment for your phone (e.g. one of these; make sure you are not getting something to attach a phone to a microscope, like this), or even an actual microscope.

Note: I had originally intended for us to use Foldscopes, but these are now so expensive that it makes more sense to just go for something far more technically advanced for $5 more. Then, they were discontinued! Yeesh. Please do not get a Foldscope.

Tentative Spring Schedule (subject to change; any changes will be posted to Canvas)

Week	Lecture Topics	Labs	Optional Field Trip	Assessment
1	Introduction to Botany Ecology Overview	Flipgrid introductions; pick up lab kits at CR		
2	Microfungi Macrofungi	Microfungi Macrofungi	Arcata Community Forest	LQ1
3	Oomycota Brown Algae & Diatoms	Cyanobacteria Exploring Algae	King Salmon	LQ2
4	The Descendants of Primary Endosymbiosis Movement onto Land	Red & Green Algae Evolution of the Embryophytes	Humboldt Botanical Garden	LQ3 **Exam 1**
5	Bryophytes SVPs	Bryophytes SVPs	Humboldt Botanical Garden	LQ4
6	Gymnosperms Angiosperms	Gymnosperms Flowers, Part 1	Humboldt Botanical Garden	LQ5
7	Pollination Dispersal	Flowers, Part 2 Fruits **Lab Practical 1**	Humboldt Botanical Garden	LQ6
8	Plant Anatomy Water and Nutrients	Cell Types and Tissues **Start MNE**	Virtual	LQ7
9	Photosynthesis	Photosynthesis & Plant Pigments	Virtual	LQ8 **Exam 2**
10	Roots Shoots	Roots Shoots	Humboldt Botanical Garden	LQ9
11	Secondary Growth Leaves	Wood Leaves	TBD, potentially Table Bluff	LQ10
12	Plant Adaptations	Adaptations Topic Selection	Humboldt Botanical Garden	LQ11
13	Mutualisms & Coevolution	Analysis of Experiment	Virtual	
14	Biodiversity & Conservation	Natural History Collections	Virtual	**iNat coll.'s due**
15	Presentations of Research	**Lab Practical 2**	Virtual	**Final Project**

Labs

This course has 6 hours of lab per week. This means that each week you will have around 6 hours of lab content to work through! These will involve working with your microscope, collecting specimens, and viewing images and/or videos of specimens online.

Field Trips (completely optional!)

Field trips will be distanced and **masks are required** during the entire outing. You must provide your own transportation, as riding with people outside of your pod unit is not safe and puts everyone at risk. Field trips will be focused on collecting materials for that week's lab activities.

Accessibility

Students will have access to online course materials that comply with the Americans with Disabilities Act of 1990 (ADA), Section 508 of the Rehabilitation Act of 1973, and College of the Redwoods policies. Students who discover access issues with this class should contact the instructor.

College of the Redwoods is also 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

During COVID19, approved accommodations for distance education classes will be emailed to the instructor by DSPS. In the case of face to face instruction, please present your written accommodation request to your instructor at least one week before the first test so that necessary arrangements can be made. Last-minute arrangements or post-test adjustments cannot usually be accommodated.

Support for online learners during COVID-19

In response to COVID-19, College of the Redwoods moved the majority of its courses online to protect health and safety. As the faculty and students adjust to this change, clear communication about student needs will help everyone be successful. Please let me know about any specific challenges or technology limitations that might affect your participation in class. I want every student to thrive.

Evaluation & Grading Policy

Late Work Policy: Pay attention to deadlines listed in your Canvas Calendar! NO LATE WORK WILL BE ACCEPTED unless you have made previous arrangements with the instructor.

Assignment Weights:

- iNaturalist Collection   20%
- Labs   20%
- Lab quizzes   10%
- Lab practicals   20%
- Lecture exams   20%
- Research Project   10%

Grading Scale:

< 60%	60-69%	70-76%	77-79%	80-82%	83-86%	87-89%	90-92%	93-100%
F	D	C	C+	B-	B	B+	A-	A

Admissions deadlines & enrollment policies

Spring 2021 Dates

- *Classes begin: 1/16/21*
- *MLK Jr. Birthday (all campuses closed): 1/18/21*
- *Last day to add a class: 1/22/21*
- *Last day to drop without a W and receive a refund: 1/29/21*
- *Census date: 2/01/21 or 20% into class duration*
- *Last day to petition to file P/NP option: 2/12/21*

- *Lincoln's Birthday (all campuses closed): 2/12/21*
- *President's Day (all campuses closed): 2/15/21*
- *Last day to petition to graduate or apply for certificate: 3/04/21*
- *Spring Break (no classes): 3/15/21 – 3/20/21*
- *Last day for student-initiated W (no refund): 4/02/21*
- *Last day for faculty-initiated W (no refund): 4/02/21*
- *Final examinations: 5/08/21 – 5/14/21*
- *Semester ends: 5/14/21*
- *Grades available for transcript release: approximately 5/31/21*

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.

Note: Plagiarism is a form of cheating. Therefore, **all written work you turn in must be in YOUR OWN WORDS**. If you choose to use someone else's exact words, you must credit the source and put the words in quotations. If you choose to plagiarize any work for this class, you will receive a zero on the assignment, even if you have permission to work on an assignment with other students from the class. This is particularly important for labs and exams.

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. It does not change your legal name in our records. See the Student Information Update form.

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://www.redwoods.edu/online/Help-Student
Canvas online orientation workshop: https://www.redwoods.edu/online/Home/Student-Resources/Canvas-Resources

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.

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 financial assistance, support and encouragement for eligible income disadvantaged students at all CR locations.
- 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