



Introduction to Plant Science (AG-23)

Course Information

- Semester & Year: Fall 2021
- Course ID & Section #: AG-23-E1612
- Instructor's name: Meerae Park
- Lecture and Lab Location: Applied Technology, Room 108 (AT108)
- Course units: 3.00 Credits

Instructor Contact Information

- Office Location: AT108
- Online Location: [Zoom Link](#)
- Office Hours: 3:00 PM - 4:00 PM in AT108 or By Appointment Via Zoom
- Phone Number: (949) 677-3877
- Email Address: meerae-park@redwoods.edu

Catalog Description

- Introduction to plant science including structure, growth processes, propagation, physiology, growth media, biological competitors, and post-harvest factors of food, fiber and ornamental plants. Laboratory required.

Course Student Learning Outcomes

1. (Lecture) Describe sexual and asexual reproduction in higher plants.
2. (Lecture) Explain photosynthesis, respiration and translocation in higher plants.
3. (Laboratory) Analyze the structural components of higher plants.
4. (Laboratory) Explain the standard plant propagation methods.

Textbooks

- **REQUIRED: AG 23 – Introduction to Plant Science College of the Redwoods. Pearson Custom publishing and Introduction to Plant Science Lab Manual. 2017**
- **There are 10 copies available in the library to take home for a free semester-long rental.**
- **There are 3 copies permanently located in the library and available for two-hour rental. 2 of these copies are a different edition, so check the lecture topic that week to make sure you are reading the correct chapter.**
- Lecture material will be based regularly on the required textbook and occasionally on supplementary resources.

Quizzes and Exams

- Quizzes will be based on lecture material
- Midterm exam and final exam will be based on lecture material and labs.
- Quizzes, midterm exam, and final exam will consist of multiple choice, true/false, short answer, and long answer questions.
- The final exam will be cumulative.

Evaluation & Grading Policy

- Weekly Quizzes = 140 points (14 quizzes x 10 points per quiz) = 12.5% of total grade
- Midterm = 140 points = 12.5% of total grade
- Final = 140 points = 12.5% of total grade
- Lecture Participation = 140 points (14 lectures x 10 points per lecture) = 12.5% of total grade
- Weekly Labs = 420 points (14 labs x 30 points per lab) = 37.5% of total grade
- Semester Long Lab Manual = 140 points = 12.5% of total grade

Attendance/Absence Policy

- If you are late to class, you will lose 5 points that day.
- There are no makeups for absences or late work, except for extraordinary circumstances determined at the instructor's discretion.
- If you miss 6 lectures or labs by the end of the 10th week of instruction, you will be dropped from the course.

Lab Policy

- All labs will require closed toe-shoes.
- Labs involving chemicals, for which you will be notified on Tuesday, will require long sleeve shirt, long sleeve pants, and closed toe-shoes.
- Lab documents will be posted by Tuesday, 11:59 PM each week.
- Read the lab documents before lab to familiarize yourself with the activity.
- Bring a printed copy of lab documents. If you do not have a printer, please let me know.

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
- During COVID19—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

- 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.

Admissions Deadlines & Enrollment Policies

- Fall 2021 Dates

- *Classes begin: 8/21/21*
- *Last day to add a class: 8/27/21*
- *Last day to drop without a W and receive a refund: 9/3/21*
- *Labor Day (all-college holiday): 9/6/21*
- *Census date: 9/7/21*
- *Last day to petition to file P/NP option: 12/17/21*
- *Last day to petition to graduate or apply for certificate: 10/28/21*
- *Last day for student-initiated W (no refund): 10/29/21*
- *Last day for faculty initiated W (no refund): 10/29/21*
- *Veteran's Day (all-college holiday): 11/11/21*
- *Fall break (no classes): 11/22/21-11/26/21*
- *Thanksgiving (all-college holiday): 11/24/21-11/26/21*
- *Final examinations: 12/11/20-12/17/21*
- *Semester ends: 12/17/21*
- *Grades available for transcript release: approximately 1/7/21*

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](#).

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](#).

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.

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.

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.

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.

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.

Tentative Schedule

(SUBJECT TO CHANGE WITH UPDATED VERSIONS POSTED TO CANVAS)

WEEK	OVERVIEW	LECTURE	READING	LAB TOPIC
1	Lecture: 8/24 Lab: 8/26 Quiz Due: 8/28 11:59 PM	- Student introductions - Class introduction	- Article on the scientific method	- Microscope introduction - Prepare for semester long experiments

		<ul style="list-style-type: none"> - Syllabus - The scientific method 		
2	Lecture: 8/31 Lab: 9/2 Quiz Due: 9/4 11:59 PM	<ul style="list-style-type: none"> - Structure of higher plants 	<ul style="list-style-type: none"> - Chapter 6 	<ul style="list-style-type: none"> - Plant anatomy
3	Lecture: 9/7 Lab: 9/9 Quiz Due: 9/11 11:59 PM	<ul style="list-style-type: none"> - Plant growth and development 	<ul style="list-style-type: none"> - Chapter 7 	<ul style="list-style-type: none"> - Plant anatomy
4	Lecture: 9/14 Lab: 9/16 Quiz Due: 9/18 11:59 PM	<ul style="list-style-type: none"> - Photosynthesis 	<ul style="list-style-type: none"> - Chapter 10 - Photosyn. cartoon 	<ul style="list-style-type: none"> - Begin treatments for semester long experiments - Propagation: cuttings and liners
5	Lecture: 9/21 Lab: 9/23 Quiz Due: 9/25 11:59 PM	<ul style="list-style-type: none"> - Respiration 	<ul style="list-style-type: none"> - Chapter 10 - Respiration cartoon 	<ul style="list-style-type: none"> - Photosynthesis - Respiration
6	Lecture: 9/28 Lab: 9/30 Quiz Due: 10/2 11:59 PM	<ul style="list-style-type: none"> - Transpiration and translocation 	<ul style="list-style-type: none"> - Assigned articles 	<ul style="list-style-type: none"> - Transpiration and translocation
7	Lecture: 10/5 Lab: 10/7 Quiz Due: 10/9 11:59 PM	<ul style="list-style-type: none"> - Mineral nutrition 	<ul style="list-style-type: none"> - Chapter 11 	<ul style="list-style-type: none"> - Fertilizer - Propagation: layering and grafting
8	Lecture:	<ul style="list-style-type: none"> - Midterm 	<ul style="list-style-type: none"> - None 	<ul style="list-style-type: none"> - Field trip: TBA

	10/12 Lab: 10/14 Midterm Due: 10/16 11:59 PM	review		
9	Lecture: 10/19 Lab: 10/21 Quiz Due: 10/23 11:59 PM	- Genetics and propagation	- Chapter 8	- Genetics
10	Lecture: 10/26 Lab: 10/28 Quiz Due: 10/30 11:59 PM	- Cultivated plants: naming, classifying, origin, improvement, and germplasm diversity and preservation	- Chapter 9 - GRIN article	- Botanic garden scavenger hunt
11	Lecture: 11/2 Lab: 11/4 Quiz Due: 11/6 11:59 PM	- Soils - Soil, water, and fertility management	- Chapters 5 and 12	- Soils and water
12	Lecture: 11/9 Lab: None Quiz Due: 11/13 11:59 PM	- Climate and its effects on plants - Terrestrial ecosystems and their relationship to cultivating plants	- Chapters 4 and 2	- None
13	Lecture: 11/16 Lab: 11/18 Quiz Due: 11/20 11:59 PM	- Integrated management of weeds, insects, disease, and other pests - Plant microbiomes	- Chapter 13 - Assigned articles	- Field trip: TBA

14	Lecture: None Lab: None	- None	- None	- None
15	Lecture: 11/30 Lab: 12/2 Quiz Due: 12/4 11:59 PM	- Growing plants for human use - General considerations for production, harvest, postharvest handling, and marketing	- Chapters 3 and 14	- Field trip: TBA
16	Lecture: 12/7 Lab: 12/9 Quiz Due: 12/11 11:59 PM	- Final review	- None	- BBQ
17	FINAL EXAM DUE: 12/16 11:59 PM			