



Syllabus for AG 27: Nursery Practices

Course Information

Semester & Year: Fall 2023

Course ID & Section #: AG-27-E5557

Instructor's name: Breauna DeMatto

Day/Time of required meetings:

Lecture - Tuesdays 2:15-4:20 (AT108)

Lab - Thursdays 2:15-5:25 (Greenhouse)

Location: AT 108 (Lecture) Campus Greenhouse Rm 100 (Lab)

Course units: 3.0

Instructor Contact Information

Office location and hours: By appointment

Phone number: 559-639-9603

Email address: breauna-dematto@redwoods.edu or message via Canvas

Catalog Description

A course of study of the production and cultural care of commercial container grown and field grown nursery operations. Among the topics covered are: crop scheduling, growing media, watering, fertilization, lighting, pests, temperature control, post harvest handling, marketing and sales.

Course Student Learning Outcomes

1. Compare and contrast old and new nursery industry practices to assess changes and advances. (LEC)
2. Identify basic marketing strategies used in the nursery industry. (LEC)
3. Apply proper cultural practices and grow nursery crops. Practices include: planting and potting up, scheduling crops, soil mixes and pasteurization, fertilizing and calculations, pest control, pinching, pruning, shaping and watering. (LAB)

Textbook

Booley, J. W. & Newman, S. E. (2009). *The Commercial Greenhouse* (3rd edition). Delmar, Cengage Learning.

This text will be made available as an ebook through Canvas. The cost is \$41.99 to access. Let your instructor know if you encounter any issues accessing the text.

Evaluation & Grading Policy

Evaluation for this course is based on your performance of the following assignments:

Lecture

In-Class Assignments (12 at 10 points each) = 120 points

Exams (3 at 60 points each) = 180 points

Lab

Fertilizer Experiment Lab Report = 40 points

Lab Participation (15 labs at 15 points each) = 225 points

Total Points = 565 points

Grades will be posted to Canvas in a timely manner after an assignment is completed. Please be sure to check your grades throughout the semester so that you can alert me of any discrepancies that you notice.

Semester grades will be based on the percentage of the total possible points earned over the semester. Letter grades will be broken down as follows:

90-100% = A

80-89% = B

70-79% = C

60-69% = D

50-59% = F

Assignments

In-Class Assignments

There will be a total of 12 in-class assignments offered during lecture throughout the semester (excluding Week 1 and exam weeks). Each in-class assignment is worth 10 points, and will consist of various written exercises that are due during the lecture period. If you miss an in-class assignment, you will be able to make it up at the following class.

Unit Exams

The material for this course is broken up into three different units. At the conclusion of each unit, there will be a unit exam. Each exam is worth 60 points and is made up of short answer questions. The exams will be considered "take home exams" and will be made available on Canvas. There will be no lecture the week of the exam, in order to provide adequate time for you to complete the exam at home. More details will be provided on Canvas.

Lab Attendance and Participation

Consistent lab attendance and active participation is critical to your success in this course. In addition, *students are expected to attend for the entirety of the lab activity*. Points will be docked for arriving late or leaving early. Each lab is worth 15 points. In general, you cannot make up a lab, however, there are extra credit points available to assist your grade (see Canvas for more information). There are a total of 15 labs throughout the semester.

Fertilizer Experiment Lab Report

One of our activities this semester will be conducting a fertilizer experiment on radish plants. You will be provided with a lab report template to report on the process and results of this activity. Further information will be provided during the lab. This assignment is worth 40 points.

Course Outline

This is a tentative outline of the topics and activities we will cover this semester. Especially with labs, activities may be adjusted to different dates, new activities may be added, and certain planned activities may not work out due to outside factors. You will be advised of any changes in the schedule beforehand.

| Dates | Lecture (Tues 2:15-4:20) | Lab (Thurs 2:15-5:25) |
|-------------------------|---|---|
| Unit 1 | | |
| Week 1 8/22 & 8/24 | Syllabus and Introductions Overview of the Nursery and Greenhouse Industry | Intro to the Greenhouse Soil media and mixtures Start basil seeds |
| Week 2 8/29 & 8/31 | The Plant and Plant Propagation <i>Chapters 7, 17 & 18</i> | Basic plant anatomy exercise Crop scheduling exercise Seed stratification |
| Week 3 9/5 & 9/7 | Container-Grown Crop Production and Regulating Plant Growth <i>Chapters 21 & 22</i> | <i>Field Trip and Volunteer Work</i> - CNPS Native Plant Nursery (3pm-5pm) |
| Week 4 9/12 & 9/14 | Greenhouse Structures, Site Selection and Control of the Greenhouse Environment <i>Chapters 4, 5 & 6</i> | TBA |
| Week 5 9/19 & 9/21 | Unit 1 Exam <i>Take Home Exam (No Class)</i> <i>Due: Friday, 9/22 by 11:59pm on Canvas</i> | <i>Begin Fertilizer Experiment</i> Plant microgreens Shift up basil |
| Unit 2 | | |
| Week 6 9/26 & 9/28 | Light and Gases <i>Chapters 8 & 10</i> | Measuring light, pH and EC Germination testing |
| Week 7 10/3 & 10/5 | Temperature <i>Chapter 9</i> | Harvest microgreens and measure yield Check germination tests Pinch basil |
| Week 8 10/10 & 10/12 | Growing Media <i>Chapters 11-13</i> | Calculating pore space and water-holding capacity |
| Week 9 10/17 & 10/19 | Nutrition and Fertility <i>Chapters 14 & 15</i> | Fertilizer arithmetic Nutrient deficiency ID Substrate testing |

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|-----------------------------|--|--|
| Week 10 10/24 & 10/26 | Water and Irrigation <i>Chapter 16</i> | Water quality analysis Observe results of basil pinching |
| Week 11 10/31 & 11/2 | Unit 2 Exam <i>Take Home Exam (No Class)</i> <i>Due: Friday, 11/3 by 11:59pm on Canvas</i> | <i>Collect Fertilizer Experiment data</i> Work on completing lab report |
| Unit 3 | | |
| Week 12 11/7 & 11/9 | Greenhouse Pests <i>Chapter 19</i> | Pest scouting/ID Pesticide label activity Beneficial insects ID Fertilizer Experiment Lab Report Due <i>(upload to Canvas by 11:59pm)</i> |
| Week 13 11/14 & 11/16 | Greenhouse Diseases <i>Chapter 20</i> | Disease ID Pest and disease management case studies |
| Fall Break 11/21 & 11/23 | Fall Break: No Classes | |
| Week 14 11/28 & 11/30 | Post Harvest Handling Marketing and Sales | Cost of production exercise Plant 90-day stratified seeds |
| Week 15 12/5 & 12/7 | Nursery Laws and Regulation Moving Nurseries Towards Sustainability | <i>Online Lab:</i> Virtual Nursery Tour and Activity |
| Week 16 12/11-12/15 | Unit 3 Exam <i>Take Home Exam (No Class)</i> <i>Due: Friday, 12/15 by 11:59pm on Canvas</i> | |

Class Policies

Class Overview

For a three-unit course, you can expect to spend about two hours per week in-class for the lecture portion and about three hours per week in class for the lab portion of the course. Out of class, you can expect to spend about four hours per week completing activities such as reading assigned materials, working on assignments, and studying for exams.

Open Door Policy

I have an “open door policy,” meaning that you can approach me with any questions or concerns at any time. I am here to help you learn and to support you on your educational journey. I am available by email, phone, and before and after class.

Late Policy

Please keep yourself apprised of the due dates for your assignments. Be sure to allot enough time to complete each assignment, while keeping in mind the fact that computers tend to malfunction, people tend to get sick, and life tends to get messy (i.e. plan ahead for the unexpected/don't wait until the last minute). Points will be deducted for late submissions (please refer to the corresponding rubric for an assignment).

Excessive Absences

Excessive absences will lead to being dropped from the course. Up until the end of the tenth week of the semester, unexcused absence from class for four total class days will lead to your being dropped from the course. This is to address the prevalence of Financial Aid fraud. Note that 10/27/23 is the last day to drop and receive a W. If you realize throughout the course that you no longer wish to take this class, please drop yourself before this date so that you can receive a W. If you stop attending class after this date, I will need to assign you a grade at the end of the semester.

If you need to miss class (especially multiple weeks in a row), it is good practice to reach out and let me know. You do not need to let me know why you are missing class, but simply that you will not be in class and include when you plan to return. Please be aware as well that if you are not consistently attending class prior to the census date (09/05/23), this will lead to you being dropped from the course.

Furthermore, please be in the habit of being on time to class.

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
- 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.

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 will be utilized for this class. Our Canvas class page will be where you can find the syllabus, lecture content, assignments, articles, grades, announcements, and is also a great way to message myself or your classmates. Grades will be logged into Canvas throughout the semester so that you are able to keep track of your progress. *Be sure that you set your Canvas settings to allow you to receive notifications when announcements and messages are sent.*

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 \(instructure.com\)](#)

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