

AG 120 Plant Science

CRN 64434 3 Credits

Dates: August 26, 2024 – December 20, 2024

Lectures: Online

In-person Lab: Fridays 1:00 – 3:00 pm

INSTRUCTOR: Thomas Bleazard
OFFICE: Hale Uluwehi B104
OFFICE HOURS: Fridays From 11-noon
bleazard@hawaii.edu

EFFECTIVE DATE: Fall 2024

WINDWARD COMMUNITY COLLEGE MISSION STATEMENT

Windward Community College offers innovative programs in the arts and sciences and opportunities to gain knowledge and understanding of Hawai'i and its unique heritage. With a special commitment to support the access and educational needs of Native Hawaiians, we provide the Ko'olau region of O'ahu and beyond with liberal arts, career and lifelong learning in a supportive and challenging environment — inspiring students to excellence.

CATALOG DESCRIPTION

The study of plant science, morphology, anatomy, physiology, classification, growth regulators, and propagation. Students are required to write a 10 to 15 page research report.

STUDENT LEARNING OUTCOMES

As a result of taking this course, students can expect to attain the following outcomes:

- 1. Describe and explain general plant structure and function in relation to plant growth and development.
- 2. Demonstrate knowledge of horticultural principles in the cultivation of plants.
- 3. Examine different agricultural systems and enterprises to become familiar with employment opportunities and the impact of horticulture on our lives.
- 4. Research and report on a horticultural plant.

COURSE TASKS

- 1. Use objective tests, essay questions, or research/term papers to evaluate student's ability to explain or identify plant structures or functions.
- 2. Use objective tests, essay questions, or research/term papers to evaluate student's knowledge of horticultural principles.

- 3. Use objective tests, essay questions, research/term papers, case studies, class presentations, or applied projects to evaluate student's comprehension of commercial agricultural enterprises and their impact on the state's economy.
- 4. A requirement of this course is to write a 10 15 page research report. This will be split out into Three, 3-5 page papers due throughout the semester we will combine into one report. The minimum length of the report will be 10 pages and the maximum length will be 15 pages. The number of pages counted for this report will be only prose (i.e. title page, reference page, etc., will not count in the total). All reports will be typed with a maximum font size of 14, double-spaced, with 1-inch margins. The report will include parenthetical documentation and a bibliography and cited using APA format. You are required to use a minimum of six references, one reference must come from each of the following sources: a journal/periodical, Internet, textbook, and personal interview. The topic of this report must be addressed in this course and approved by the instructor. You will also give a 5-10 minute presentation of your report to the class. Some of this paper will be completed each week.

ASSESSMENT TASKS AND GRADING

Participation in discussions: 10% (10 points x 16 weeks = 160 points)

Quizzes: 10% (10 points x 16 weeks = 160 points)

Weekly Assignments: 65% (60 points x 16 weeks = 960 points)

Research Paper: 20% (320 points) Total points for course = 1,600

Your grade will be based on your attendance, participation and performance in completing the above tasks. Corresponding letter grades are as follows:

A = 100 - 90 pts

B = 89 - 80 pts

C = 79 - 70 pts

D = 69 - 60 pts

F = 59 and below.

Please refer to the WCC College Catalog for audit, withdrawal, and incomplete options.

IMPORTANT DATES

09/03/2024 Last day to register

09/03/2024 Last day to receive 100% tuition refund

09/17/2024 Last day to receive 50% tuition refund

09/17/2024 Last day to drop (No "W" on transcript)

11/04/2024 Last day to withdraw from class ("W" on transcript)

COURSE CONTENT

Lectures:

- Week 1: Read syllabus, introductions, and figuring out Laulima virtual classroom.
- Week 2: What are plants and why should we learn about them?
- Week 3: Where can we find plants?
- Week 4: How are plants important to people?
- Week 5: How are plants important to ecosystems?
- Week 6: How did plants evolve?
- Week 7: Focus on plant structures: Cells
- Week 8: Focus on plant structures: Tissues.
- Week 9: Focus on plant structures: Roots.
- Week 10: Focus on plant structures: Stems.
- Week 11: Focus on plant structures: Leaves.
- Week 12: Focus on plant structures: Flowers, fruits, and seeds.
- Week 13: Photosynthesis.
- Week 14: Respiration.
- Week 15: Plant nutrition.
- Week 16: Human impacts on plants and the environment.

Labs:

- Week 1: Plant scavenger hunt around Hale Uluwehi.
- Week 2: Guest speaker: inspirational Botanist.
- Week 3: Looking at soils.
- Week 4: Looking at water.
- Week 5: Looking at nutrients.
- Week 6: Plant dissection.
- Week 7: Microscopy work on plants.
- Week 8: Plant pests and disease diagnosis.
- Week 9: Vegetative propagation from roots.
- Week 10: Vegetative propagation from stems.
- Week 11: Vegetative propagation: succulents.
- Week 12: Propagation from seeds.
- Week 13: Hydroponic plant production.
- Week 14: Plant care and tool maintenance.
- Week 15: Guest speaker: invasive plants & impacts on the environment.
- Week 16: Share about your favorite plant.

SKILLS AND COMPETENCIES

- Locate information.
- Distinguish relevant and reliable information.
- Identify plant structures.
- Describe a production system for a crop or agricultural enterprise.
- Determine what appropriate propagation methods would be used for a given crop.
- Recognize best management practices for a given crop.

LEARNING RESOURCES

Instructor will provide all learning resources as scanned articles, chapters, and videos.

ADDITIONAL INFORMATION

- I expect students to complete their own work and respect all students' insights and viewpoints.
- I want every student to succeed in this course. Please let me know as soon as possible if you are having difficulties or challenges with the course and/or with life in general. I am willing to work with each student depending on the circumstances.
- I will subtract 2 points for each day a discussion post, assignment, quiz, or final project is turned in late unless there is a good, documented explanation.

DISABILITIES ACCOMMODATIONS

If you have a physical, sensory, health, cognitive, or mental health disability that could limit your ability to fully participate in this class, you are encouraged to contact the Accessibility Counselor to discuss reasonable accommodations that will help you succeed in this class. Roy Inouye can be reached at (808) 235-7448, royinouy@hawaii.edu, or you may stop by Hale Kākoʻo 106 for more information.

SEX DISCRIMINATION AND GENDER-BASED VIOLENCE RESOURCES (TITLE IX)

Windward Community College is committed to providing a learning, working, and living environment that promotes personal integrity, civility, and mutual respect and is free of all forms of sex discrimination and gender-based violence, including sexual assault, sexual harassment, gender-based harassment, domestic violence, dating violence, and stalking.

If you or someone you know is experiencing any of these, WCC has staff and resources to support and assist you. To report an incident of sex discrimination or gender-based violence, as well as receive information and support, please contact one of the following:

Leslie Cabingabang, UH System Confidential Advocate

Phone/Text: (808) 348-0432 or (808) 341-4952

Email: advocate@hawaii.edu

Office: Hale Kāko'o 107 (Wednesdays)

Mykie E. Menor Ozoa-Aglugub, J.D., Title IX Coordinator

Phone: (808) 235-7468 Email: mozoa@hawaii.edu Office: Hale Kākoʻo 109

Desrae Kahale, Mental Health Counselor & Confidential Resource

Phone: (808) 235-7393

Email: dkahale3@hawaii.edu Office: Hale Kākoʻo 101

Karen Cho, Deputy Title IX Coordinator

Phone: (808) 235-7404 Email: kcho@hawaii.edu Office: Hale 'Alaka'i 120

As a member of the University faculty, I am required to immediately report any incident of sex discrimination or gender-based violence to the campus Title IX Coordinator. Although the Title IX Coordinator and I cannot guarantee confidentiality, you will still have options about how your case will be handled. My goal is to make sure you are aware of the range of options available to you and have access to the resources and support you need.

For more information regarding sex discrimination and gender-based violence, the University's Title IX resources and the University's Policy, Interim EP 1.204, go to manoa.hawaii.edu/titleix/

ACADEMIC INTEGRITY

Work submitted by a student must be the student's own work. The work of others should be explicitly marked, such as through use of quotes or summarizing with reference to the original author.

In this class, students who commit academic dishonesty, cheating or plagiarism will have the following consequence(s):

Students will receive a failing grade for plagiarized assignments.

All cases of academic dishonesty are referred to the Vice Chancellor for Student Affairs.

Windward CC Student Conduct Information
UH System Student Conduct Policy EO 7.208

ALTERNATE CONTACT INFORMATION

If you are unable to contact the instructor, have questions that your instructor cannot answer, or for any other issues, please contact the Academic Affairs Office:

• Location: Alaka'i 121; Phone: (808) 235-7422