

AG152 ORCHID CULTURE

3 Credits (CRN60443)

MF, 1:00 – 2:15 pm, Kailua High School

INSTRUCTOR:	Hongwei Li Ph.D.
OFFICE HOURS:	Friday 2:20 – 3:20 pm at KHS, or by appointment
TELEPHONE:	(808) 236-9104
EMAIL:	hli@hawaii.edu
EFFECTIVE DATE:	Spring 2019

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

An extensive study of orchid identification, breeding, growth, and tissue culture. Students are required to write a research paper or provide a power point presentation and active participation in orchid societies.

Activities Required at Scheduled Times Other Than Class Times

Self-study, homework assignments, field trip and orchid care.

Requirement course satisfies

- DB for AA in Liberal Arts
- Certificate of Achievement in Agripharmatech
- Certificate of Competence in Plant-Food Production and Technology

STUDENT LEARNING OUTCOMES

The student learning outcomes for the course:

- Identify orchid species, hybrids and trace their pedigrees.
- Provide cultural requirements for each genus, including temperature, light intensity, humidity, watering, fertilizing, media composition, pest/disease control and repotting.
- Perform traditional and *in vitro* propagations.
- Perform orchid breeding and discuss its economic importance.
- Conduct literature or experimental research and submit research paper.

COURSE TASKS, ASSESSMENTS AND GRADING

Course Tasks:

- Activities in classroom: lectures, video, hands-on activities, and demonstration.
- Complete quizzes/homework assignments and review study guides
- Field trips to a local orchid show or orchid nursery.
- Reading assignments: assigned handouts prior to lectures, and literature research for the selected topic.

Assessments

- There are 6 quizzes/assignments will be given.
- There are three exams (2 midterms and one final) during the semester. Exams will consist of multiple choices, true/false, fill in the blank, matching and short answer questions.
 - *Make-up exam: will be permitted only by the instructor upon consideration of the evidence justifying the absence presented by the student.*
- Field trip to Windward Orchid Society Orchid Show or a local orchid nursery: write a report.
- Orchid care: take care an assigned orchid plant through the semester.
- Topic presentation: Research paper and oral presentation on a selected orchid species.

Grading

The total possible points:

<i>Exams (3)</i>	<i>300</i>	<i>points</i>
<i>Quizzes /Assignments (6)</i>	<i>120</i>	<i>points</i>
<i>Field Trip (report)</i>	<i>50</i>	<i>points</i>
<i>Orchid Care</i>	<i>30</i>	<i>points</i>
<i>Topic presentation</i>	<i>50</i>	<i>points</i>

Total	550	points
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Grading is based on the percentage of total points earned. Final Grades will be assigned as follows:

- A - - - 90% or above in total points.
- B - - - 80-89% of total points.
- C - - - 70-79% of total points.
- D - - - 60-69% of total points.
- F - - - Below 60% of total points

I (incomplete) grade is given at the instructor's option when a student has failed to complete a small part of a course because of circumstances beyond his or her control. It is **your responsibility** to contact the instructor to make up the incomplete work with a minimum level (or better) of achievement. Failure to satisfactorily make up incomplete work within the appropriate time period will result in a grade change for "I" to the contingency grade identified by the instructor.

LEARNING RESOURCES

- Course materials: <https://laulima.hawaii.edu/>
- American Orchid Society <http://www.aos.org/>
- White, I. 2016. Ethnopharmacognosy Series V: Pharmaceutical and Nutraceutical Values of Vanda Miss Joaquim. Windward Community College
- Handouts.

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 Disability Specialist Counselor to discuss reasonable accommodations that will help you succeed in this class. Ann Lemke can be reached at 235-7448, lemke@hawaii.edu, or you may stop by Hale ‘Ākoakoa 213 for more information.

TITLE IX

Title IX prohibits discrimination on the basis of sex in education programs and activities that receive federal financial assistance. Specifically, Title IX prohibits sex discrimination; sexual harassment and gender-based harassment, including harassment based on actual or perceived sex, gender, sexual orientation, gender identity, or gender expression; sexual assault; sexual exploitation; domestic violence; dating violence; and stalking. For more information regarding your rights under Title IX, please visit: https://windward.hawaii.edu/Title_IX/.

Windward Community College is committed to the pursuit of equal education. If you or someone you know has experienced sex discrimination or gender-based violence, WCC has resources to support you. To speak with someone confidentially, contact the Mental Health & Wellness Office at 808-235- 7393 or Kaahu Alo, Designated Confidential Advocate for Students, at 808-235-7354 or kaahualo@hawaii.edu. To make a formal report, contact the Title IX Coordinator, Karla K. Silva-Park, at 808-235-7468 or karlas@hawaii.edu.

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.

Students can upload papers to <http://www.TurnItIn.com> to have papers checked for authenticity, highlighting where the paper potentially fails to appropriately reference sources.

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.

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: Alakai 121
 Phone: 808-235-7422
 Email: wccaa@hawaii.edu

CLASS SCHEDULE

Time	Lecture/Lab topics
01/07	Teacher Work Day
01/11	General botany and beauty of orchids
01/14	Characteristics of orchids

01/18	Characteristics of orchids
01/25	Characteristics of orchids
01/28	Orchid mycorrhizal associations
02/01	Classification and nomenclature
02/04	Most popular orchid genera
02/08	Cross pollination
02/11	<i>Teachers' Institute Day / No school</i>
02/15	Orchid genetics and pedigrees of hybrids
02/18	<i>Holiday</i>
02/22	Midterm 1
02/25	Orchid micropropagation: principles and techniques of plant tissue culture
03/01	Orchid micropropagation: medium preparation
03/04	Orchid micropropagation: seed germination
03/08	Orchid micropropagation: seed germination
03/11	Orchid micropropagation: flower buds and leaf tips and stem nodes
03/15	Orchid micropropagation: flower buds and leaf tips and stem nodes
03/18-22	<i>Spring Break</i>
03/25	Midterm 2
03/29	Orchid care and cultivation: tools, equipment, and growth media
04/01	Orchid care and cultivation: potting
04/05	Orchid care and cultivation: watering, fertilizing, light, temperature, humidity, and resting
04/08	Vegetative propagation of orchids
04/12	Growing orchid indoors, outdoors, or in greenhouse
04/15	Common problems: orchid pests and diseases
04/19	<i>Holiday</i>
04/22	Evolution, ecology and conservation of orchids
04/26	Topic presentation
04/29	Topic presentation
05/10	Final Exam