Botany 160 lecture
Tropical Plant Identification CRN 64504

3 units Hale ʻImiloa 101
T & F 12:55 – 2:10 pm

INSTRUCTOR: Teena Michael PhD
OFFICE: Hale ʻImiloa 118
OFFICE HOURS: F 2:10—3:10 and *by appointment
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EFFECTIVE DATE: Fall 2018

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 O'ahu's Ko'olau region and beyond with liberal arts, career and lifelong learning in a supportive and challenging environment — inspiring students to excellence.

CATALOG DESCRIPTION

Non-technical course in identification of common plants of the tropics, including native and introduced flora.

Activities Required at Scheduled Times Other than Class Times

1. Read assigned chapters prior to class sessions
2. Conduct a plant identification research project and provide a class presentation
3. Field trips (submit field trip reports and prepare herbarium)
4. Extra curricular activities (i.e. plant identification for WCC web, planting/maintaining medicinal garden at the Bioprocessing Medicinal Garden Complex, etc.)

REQUIREMENT COURSE SATISFIES:

AT WCC: (http://windward.hawaii.edu/Courses/BOT130/)

- Associate in Arts - Biological Sciences (DB)
- Associate in Arts - Natural Sciences Lab (DY)
- CA Agripharmatech: Ethnopharmacognosy (Elective)
  (http://windward.hawaii.edu/Academics/Agripharmatech_CA/)

STUDENT LEARNING OUTCOMES

1. Operate dissecting microscopes
2. Recognize unique vegetative and generative characteristics of plant families
3. Prepare herbaria
4. Proficiently use manuals, flora and monographs to identify plants
5. Experience in identifying plants

COURSE TASKS

1. Describe and integrate basic information related to plants of Hawaii and Introduced plants presented in lectures, handouts, lab practicum and field trips.
2. Demonstrate the ability to identify basic vegetative and reproductive structures of the plants and provide common and scientific names.
3. Use appropriate techniques to operate a dissecting microscope, collect and prepare plant specimens for herbarium.
4. Observe plants in their natural settings during field trips.

ASSESSMENT TASKS AND GRADING

Class lectures, assigned readings, lab exercises and field trips constitute fundamental knowledge you need in order to identify plants correctly.

Add your work to Drop Box of Laulima.

Make-up for exams is permitted for emergencies or illness accompanied with a doctor's note; and must be completed within one week of the scheduled exam date. *There are no make-ups for the Final Exam!*

Grades

Exams (3 @ 100 points each)	300 points
In class journals	25
Field trip report	25
Research project & presentation	50
Extra curricular activities	50
	450 points

Service Learning
I encourage you to *volunteer* at a Hawaiian/Restoration site as part of Service Learning. Full participation (20 hours/semester) will result in an A grade for one exam (but you must take the exam and earn a C or better) as well as an opportunity to apply theory to practice and contribute to the perpetuation of the sites and all associated with it.
http://servicelearning.socialsciences.hawaii.edu/pages/mina.html

Grading
Grading is based on the percentage of total points earned. Final Grades will be assigned as follows:
A 90 - 100%
B 80 - 89%
C 70 - 79%
D 60 - 69%
F 0 - 59%

I (incomplete), given at the INSTRUCTOR'S DISCRETION when you are unable to complete a small part of the course because of circumstances beyond your control. It is YOUR responsibility to make up 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 from "I" to the contingency grade identified by the instructor (see catalog).
CR (credit), 60% or above in total points. See catalog for specifics and calendar for dates. NC (no credit) will be assigned for a grade below 60% of total points. The NC grade will not be used as an alternative grade for an "F". Last day to withdraw with "W" grade is October 29, 2018.

LEARNING RESOURCES

1. Murrell, Z.E. Vascular Plant Taxonomy. Sixth edition. Kendall/Hunt Pub. Company.
2. Harrington, H.D. How to Identify Plants. Ohio University Press.
3. http://www.botany.hawaii.edu/faculty/carr/pfamilies.htm
4. http://www.wcc.hawaii.edu/facstaff/white-i/plantID.html
   http://www.wcc.hawaii.edu/facstaff/white-i/medgarden.html

Additional Information

Disabilities Accommodation Statement

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 'Akoakoa 213 for more information.

Nondiscrimination and Affirmative Action

The University of Hawaii is committed to a policy of non-discrimination on the basis of race, sex, age, religion, color, national origin, ancestry, disability, marital status, arrest and court record, sexual orientation, or veteran status in all of its programs, policies, procedures, or practices.

This policy covers admission and access to, participation, treatment and employment in University program and activities.

Fall 2018 Botany 160 Lecture SCHEDULE

Date	Lecture Topic	Textbook
Aug 21	Introduction to Class & Classification & Flowers!	Harrington
24	How are plants classified?	
	What is evolution?	
28	Classification, common names & scientific names. What is a key?	
31	FLOWERS terms and diversity, start growing seeds	
Sept 4	FLOWERS terms and diversity—What families?	
7	Calyx, corolla, stamens, pistils & *practicum*	
11	Inflorescence terms and diversity	
14	Inflorescence terms and diversity	
18	Plant practicum & identification using floras	
21	***EXAM 1 Generative terms and identification***	
25	Terms relative to the stem	Harrington
28	Terms relative to the leaves. Practicum and plant ID exercise	
Oct 2	Leaf shapes. Practicum, plant ID (using floras)	
5	Practicum including Flowers to Seeds (Fruit)	
9	Continued practicum and plant ID	
12	Leaf margins. Practicum and plant ID	
16	Leaf margins and venation & practicum	
19	***EXAM 2 Vegetative terms and identification***	
23	Ferns and fern allies	Murrell
26	Gymnosperms. Plant ID practice (using manuals & floras)	
29	*Last day to withdraw with a W*	
30	Gymnosperms and Primitive Angiosperms Magnoliidae. Rosidae	
Nov 2	Field trip OR TBD	
6	*HOLIDAY*	
9	Asteridae I & II, Dilleniidae & class presentation	Murrell
13		
16	Planting, maintaining medicinal garden at BMGC OR Caryophyllidae , Hamamelidae & class presentation	
20	Class presentation & plant identification Plant identification and herbarium	
23	*HOLIDAY*	
27	Monocot 1 & class presentation	
30	Monocot 2 & class presentation	
Dec 4	Class presentation & plant identification	
7	Saving species through Systematics	
11	Keying Plants, Review & Pa'ina	
14 & 18	**FINAL EXAM A & B 12:55-2:10**	

Note: The order of the topics will remain although the schedule may be modified as we proceed. I will announce any changes ahead of time. Have a great semester!