

WE:01
Bms

Course: 131 130 \ Ethnobotany LECT (3.0 cr) w/in 5:30-9:55 p.m.scheduled time
Instructor: Shirley Black Gerurn, B.A., Botany; MPH, Environmental Health
e-mail: Snail Mail: P.O. Box 18: Haleiwa, HI 96712
Ofc Hours: Immediately after each class; or by appointment (CUH-SB tel: 624-2515)
Text: None - See Annotated References List

I. COURSE DESCRIPTION: This course provides an overview of ethno-/economic botany for the non-science major with an introduction to the native and introduced plants of Hawaii. The word **ethnobotany** has two components-ethno + botany-a combination of the Greek terms *ethnos*, (people) and *botanikos* < *botany* (plant). Since botany is the study of plants, ethnobotany is devoted to the study of "people's plants" and borrows equally from anthropology and botany to understand the reciprocal influence of plants and culture. Exploration of the geographic and cultural origins of the 20+ plants brought to Hawaii by ancestors of today's Hawaiian population will provide us a window to Pacific history, culture, language and technology. Since man's existence, development, medicine, migration, history, economy, and (often) belief systems have been shaped by plants over time, you will find the study of ethnobotany has direct links to many different fields and majors. We will track uses of plants from the Stone Age to the Space Age, examining migration theories by glottochronistic, material culture and DNA evidence. Student input/experiences will make our discussions richer and are vital to interactive excellence. Our focus will be local-Hawaiian/Pacific ethnobotany-but our reach will be global.

II. CLASS OBJECTIVES: To learn ethnobotanically important plants of Hawaii (native and introduced), to understand the difference in native endemic, indigenous plants and Polynesian and post-contact introduced plants in the Hawaiian environment; to understand the conditions and trends that give rise, thru natural selection, to the unique flora of Hawaii; to work with and make useable articles/implements from plant materials; to appreciate the role of plants in our global cultural history; to understand the importance of plants in economics, aesthetics, medicine and their place in the future; to instill an appreciation for the natural world; to foster environmental awareness; to preserve biodiversity; to protect the habitats of Hawaiian plants in the wild; to learn consumer awareness/safety issues for herbal products; to understand rights of indigenous peoples and their plant uses; to distinguish between etic and emic observations of other cultures; to sharpen critical thinking tools for analyzing published research; to apply critical thinking skills & lessons learned from this class to survival in the wild.

III. METHODOLOGY/CLASS FORMAT: Class lectures & assignments will be structured to provide students with fundamental knowledge to form the basis for further exploration and application of ethnobotany. The format is designed to provide comprehension, application, analysis, synthesis and evaluation tools for ongoing study. Life experiences will be incorporated where applicable. Since we live in such exciting times of discovery, current news you bring to share from newspapers, journals, other publications about ethnobotanical issues, applications and solutions will be a part of required assignments. Let's seek out novel uses of plants and algae. We will all learn from independent student inquiry-based research projects, crafts shared in student seminars.

IV. REQUIREMENTS AND GRADING:

* No makeup exams or quizzes. Exception: documented work/medical emergency, field, TDY	S Assignments or Exams (50 points each) 250 pts
	3 News/Journal Articles to Share re Ethnobotany 15 pts
	Attendance/Sportsmanship/Participation 15 pts
	280 pts

A=90-100% (252-280); B = 80-89% (224-251.99); C = 70-79% (196-223.99); D = 60-69% (168-195.99); F= Below 60% (167)

2000 B.C - Here, eat this root (Adapted from unsourced, forwarded e-mail)

1000 A.D. - That root is heathen. Here, say this prayer.

1850 A.D. - That prayer is supersition. Here, drink this potion.

1940 A.D. - That potion is snake oil. Here, swallow this pill.

1985 A.D. - That pill is ineffective. Here, take this antibiotic

2000 A.D. - That antibiotic is no longer effective. Here, eat this root.

V. STUDENT RESPONSIBILITIES:

1. Academic Honesty: Chaminade University policies regarding academic honesty are clear. (See CUH Undergraduate Catalog.) Students will be required to read and verify understanding of the CUH policies and penalties regarding academic honesty.

2. Attendance/Participation/Sportsmanship (APS) : Attendance, participation and sportsmanship are vital to maintaining interactive excellence. To emphasize the importance of participation, support for those presenting ideas to the class and to underscore zero tolerance for unwelcome remarks, 15 points of the total grade will be based on APS. **Attendance:** Students with the highest grades are often those who have participated in hands-on activities/materials, discussions, are present for demonstrations, special speakers, and A/Vs. The pace of an accelerated class does not allow time to repeat material missed due to absence or late arrival. **Participation:** The input of class members is one of the most valuable components of a university-level class. Your questions, comments open doors. **Good Sportsmanship** goes a long way in any field-yielding to those who are speaking, withholding negative comments and judgments. A science class is a good place to polish up skills in polite scholarly debate to support or challenge existing theories, technology, society standards.

3. Missed Quizzes/Exams: Out of respect to students who come prepared to take quizzes/exams in spite of obstacles/illnesses, students who miss a quiz or exam will not be given the opportunity for a makeup exam. Exceptions will be made on a case-by-case basis for students with documented duty or medical emergencies (note from clinic or supervisor), who come prepared to take test on day of return. A message must be left at SB CUH office (624-3515) re absence on day of exam/quiz. It is the student's responsibility to keep informed of assignments, quizzes. Please check with other students if you miss class. "Not knowing" of a quiz will not excuse any student from taking any announced quiz/exam on announced date.

Course: Bi 130: Ethnobotany Lab (1.0 Cr)

Days/Times: 3 -4hrs/wk Tu/Thur within scheduled 5:30-9:50 p.m. scheduled class time & independently
Note: Regrettably, it will be impossible to make up some labs, demos, lab quizzes even with documented illness or work absence.

COURSE DESCRIPTION and CLASS FORMAT: To take advantage of daylight for observing plants in the living laboratory of our Schofield environment, labs may be at the beginning, middle, or end of scheduled class time and will include walks around Schofield plantings (& weeds), fieldtrips to botanical gardens, archaeological sites, A/Vs, group and independent field assignments. The lab/lecture components of this course are interwoven. However, the lab experience will provide more applied ethnobotanical experiences to support lecture assignments and reinforce cognitive learning. Comprehension, application, analysis, synthesis will increase with opportunities to observe, describe, identify, locate, recognize plant structures. Students will dissect a variety of plants to learn plant anatomy and to gain experience in recognition/identification of common features of plant families. Schofield has an abundance of plants to learn from. CUH SB students will be seeing plants outside our classroom that students on the mainland see only in photographs (or as dried specimens.) Lab materials will be provided for observation. Lab quizzes will include identification of plants, plant structures, plant uses, plant families-many from campus walks/fieldtrips. Several field experiences are planned to support the lecture material and to provide students with the opportunity to observe plant species in the wild as well as in labeled, documented collections. Students will use cultivated & wild plants to explore plant structure, anatomy. Since voucher specimens are crucial to academic publishing, students will learn to make herbarium pressings. We will sharpen our observation, classification, skills in the field and jump-start our awareness by exposing ourselves to opportunities that will prompt questions. Science is basically observing, recording information & questioning.

LAB REQUIREMENTS /GRADING: 10 assignments and/or quizzes @ 15 pts. each for a total of 150 points.
 A = 90=100% (135-150); B = 80-89% (120-134); C = 70-79% (105-119); D = 60-69% (90-104); F = Below 90 pts

"In the end, we will conserve only what we love, we will love only what we understand and we will understand only what we are taught. " Baba Dioum, Senegal

DAY WKDAY # TOPIC

JAN-1

Cultures; Note: Ethnobotanist Paul Cox at BYU 7 PM (We'll vote on attending,)

as "Taxonomy/Classification/Plant Family"; Plant Anatomy
How are Today's Plants Related to First Cultivated Foods/Medicines
Studying Other Cultures Continued: Etic-vs. Emic and Ethnocentrism

roduced Plants; Polynesian Plants and Polynesian Migration Theories;
Glottochronolinguistic, Archaeological, DNA evidence re origin of Hawaiians

ing volcano middle of the Pacific U Wind, Wing Wa Plants B/4 p le
Native Endemic & Indigenous; Plants After People: ian-Intro 778

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	30 TU	7	Life in Pr & C on tact
FEB	1 THUR	8	Polynesian-Introduced Plants: Food Plants & Planting- Part I
	6 TU		ynesian
	8 THUR	--	
	1		I Related to Promot Welln ss: RAW
	13 TU	11	Hawaiian House & Canoe Building & the Hawaiian/Polynesian Living System
	15 THUR	12	Fieldtrip to a Hawaiian Shrine: Keaiwa Heiau: Ancient Medical School?

for Documentation

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27 TU 15 Ethnobotany & Environment: Native Pharmaceuticals & Environment

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NOTE. 3/13: LAST DAY TO TURN IN ASSIGNMENTS FOR

15 THUR 20 FINAL EXAM