

Course: BI 130 - Ethnobotany - LECTURE - 3.0 cr Time: 5:30 - 7:35 p.m. - Tu & Thur
 Instructor: Shirley Black Gerum, B.A., Botany; MPH, Environmental Health
 Snail Mail: P.O. Box 18: Haleiwa, HI 96712
 Ofc Hours: Immediately after each lab class; or by appointment
 Text: No Required Text; Recommended Companion Text: *Ancient Hawai'i* by H. Kane (\$12+)

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 Hawai'i. The word ethnobotany has two components: ethno + botany - a combination of the Greek term *ethnos* (people) and the Greek term *botanikos* < *botanē* (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. Since man's existence, development, medicine, migration, history, economy, and (in some cases) 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. Respect for all opinions will make our discussions richer. As events and speakers, fieldtrip options become available, we will accommodate these opportunities. Our focus will be local—Hawaiian ethnobotany, but our reach will be global.

II. CLASS OBJECTIVES: To be able to identify ethnobotanically important plants and plant families; to analyze the conditions and trends that give rise, thru natural selection, to the unique flora of Hawai'i; to learn endemic, indigenous, Polynesian-introduced, European-introduced plants in the Hawaiian environment; to learn the uses of ethnobotanically important plants; 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 fully appreciate and preserve biodiversity to protect the habitats of ethnobotanical plants, to learn consumer awareness/safety issues for herbals; to understand rights of indigenous peoples and their plant uses; to preserve biodiversity; to distinguish between etic and emic observations of other cultures; to learn tools for analyzing published research.

III. CLASS FORMAT: Class lectures & assignments will be structured to provide students with the basis for further explorations and applications of ethnobotany. Life experiences will be incorporated whenever applicable. Since we live in such exciting times of discovery, news you bring in to share from newspapers, journals, trade publications about ethnobotanical issues, applications and solutions will be a part of required assignments. Let's seek out novel uses of plants and algae. In the seminar portion of our class, we will all learn from the student inquiry-based research projects, crafts, or research papers.

IV REQUIREMENTS AND GRADING:

* No makeup exams/quizzes
 Exception: Documented
 work or medical absence

3 Assignments or Exams (50 pts. ea.)	150
3 News/Journal Articles to Share re Ethnobotany	15
Attendance/Sportsmanship/Participation (APS)	15
Total Points Possible	180

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.

"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

V. STUDENT RESPONSIBILITIES:

1. Academic Honesty: Chaminade University policies regarding academic honesty are clear. (See CUH Undergraduate Catalog) **Plagiarism** is the offering of work of another as one's own and may include, but is not limited to: (a) Complete or partial copying direct from a written published or unpublished source without proper acknowledgment to author. (Minor changes in wording or syntax—without acknowledgment to the author—is NOT sufficient to avoid plagiarism charges.). (b) Paraphrasing the work of another without proper author acknowledgment. (c) Submitting as one's own original work (however freely given or purchased) the original exam, research paper, manuscript, report, computer file, internet information or other assignment that has been prepared by another individual. **Cheating:** No student may give or receive help from another or use notes during exams. No student may hand in or cause to be handed in another student's work as his/her work. The copying of another's assignment(s) is also forbidden and will result in an "F" for that assignment—for the one copying and the one allowing his/her work to be copied. Failure to adhere to these standards may result in the receipt of the grade "F" for the assignment and/or an "F" for the course. This remains subject to the student's right of appeal and/or referral. The usual penalty for academic dishonesty is failure in the course for the 1st offense, and disciplinary action, not to exclude suspension or expulsion from the university for the 2nd offense.

2. Attendance/Participation/Sportsmanship (APS) : Attendance, participation and sportsmanship are vital to maintaining interactive excellence. **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. To emphasize the importance of participation, support for those presenting ideas to the class and to underscore zero tolerance for unwelcome remarks regarding ethnicity, lifestyle, gender, 15 points of the total grade will be based on APS. 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 for students with documented duty or medical emergencies (note from clinic or supervisor with telephone number) who are prepared to take the makeup test/exam upon return to class. There is a 10 point deduction for each day the makeup is delayed after return. 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 or exam will not excuse any student from taking any announced quiz/exam on announced date.**

Course: BI 130 - Ethnobotany (LAB) - Credit: 1.0 Time: 7:35 - 9:55 p.m. Tu/Thurs (and w/in 5:30-8:00 p.m. daylight hours)

The lab/lecture components of this class are inseparable. The lab component of this class will provide more hands-on ethnobotanical experiences. All students will dissect a variety of plants to learn plant anatomy and to gain experience in identification of common features shared by relevant plant families. To take advantage of the available daylight hours for observing plants in our outdoor surroundings, labs may be at the beginning of class and will include walks/fieldtrips for observation of plant families, with audio-visual, microscopy and other indoor lab experiences in the middle or end of the evening. Lab materials will be provided for observation. We will use cultivated & wild plants to explore plant families, plant anatomy, ecological/environmental issues. We will sharpen our observance, classification skills in the field and jump-start our awareness by exposing ourselves to opportunities that will prompt questions, discussion. Field trips and hands-on activities have been planned to support the lecture material. Since science is to be shared, some lab fieldwork assignments will be given for you to share with your families on walks, outings. Science is basically observance, recording observations, questioning, research. Note: **You will learn to recognize poisonous plants in your surroundings.**

Remember: Do not touch, smell, pick or attempt to bring any to class for identification. ☆

LAB REQUIREMENTS AND GRADING: 10 assignments and/or quizzes (15 pts. each): **150** points possible.

CHAMINADE UNIVERSITY * FALL 2002 (E) * SCHOFIELD * Tu/Th * BIOL 130+L: ETHNOBOTANY				
Note: Dates/Details of Field Trips to Keaiwa Heiau, Waimea Arboretum, East Range to be Announced				
MO	DAY	WKDAY	#	TOPIC
				Aloha ahiahi (Aloha in the evening)
OCT	8	TU	1	Intro: What is Ethnobotany? What is Botany? Ground Rules for Studying Other Cultures; What is Ethnocentrism? Awareness of difference in Etic vs Emic Viewpoint; Ethnobotany of Upcoming Religious Holidays: Christian, Jewish, Islamic, Buddhist, Polynesian, etc
	10	THUR	2	Ethnobotany of Salsa & Chips: New World Plant Foods Columbus "Discovered" as intro to Taxonomy/Classification: Genus, Species, Family; Plant Anatomy
	15	TU	3	What's a Hawaiian Plant? How Did Plants Arrive B/4 People? Native vs Introduced Plants in Hawai'i; Polynesian-Introduced Plants and Polynesian Migration Theories; Glottochronolinguistic, Archaeological, DNA evidence re origin of Hawaiians
	17	THUR	4	Hawai'i Before People: Island-Forming; Plant spores, seeds arrive on a cooling volcano middle of the Pacific by Wind, Wing, Wave; Plants B/4 People: Native Endemic & Indigenous; Plants After People: Polynesian-Intro & post-1778 Alien Plants & Animals: Threats to Unique Hawai'i Ecosystem; Endangered Spp
	22	TU	5	Tentative Fieldtrip: Waimea Arboretum/Botanical Garden 59-864 Kam. Hy Haleiwa (Note: Wait for Confirmation on 17th B/4 Meeting at Waimea)
	24	THUR	6	Summary & Review: Native Endemic, Native Indigenous, Polynesian-Introduced, post-Contact Introduced Plants, Polynesian Migration Theories, 3W's, Plant Anatomy, Taxonomy, etc.
	29	TU	7	Lab: Ethnic/Regional Foods From Around the World; Potluck your Favorite Summary & Review: All Lecture Material Covered Above + Plant Anatomy Lab Quiz 1
	31	THUR	8	Lab: Ethnobotany of Halloween; Polynesian-Introduced Plants: Food Plants & Planting- Part I Life in Pre-Contact Hawai'i: The Polynesian Family System & the Ahupua'a
NOV	5	TU	9	Exam I+Lb Quiz (pistil, stamen, anther, pollen, pollen tube, ovary, ovule, pistil/carpel, style)
	7	THUR	10	Polynesian-Introduced Food Plants Continued (Note: Mahalo to all Veterans; Happy Veterans' Day on 11/11. Thank you for serving our country.)
	12	TU	11	Hawaiian House & Canoe Building & the Hawaiian/Polynesian Living System
	14	THUR	12	The Hawaiian House Continued (Materials & Methods)
	19	TU	13	Ethnobotany of Ramadan-Chaplain (Capt.) Abdullah Hulwe & family will visit/lead discussion
	21	THUR	14	Ethnobotany & Hawaiian Health, Food & Medicinal Plants, Games & Sports & Religion & How They're All Related to Promote Wellness (Ola)--> Mind-Body-Spirit (Lokahi) Plants & Big Business: Pharmaceuticals/Nutriceuticals, Herbal Medicines: Risk/Benefits
	26	TU	15	Ethnobotany of Thanksgiving, Student Presentations (Seminar-Style) Nutriceuticals Continued; OTC Herbal "Remedies" (Risk/Benefits) Continued
****	28	THUR	HOL	**** HOLIDAY * HAPPY THANKSGIVING * NO CLASS * HOLIDAY ****
DEC	3	TU	16	Ethnobotany & Environment: Saving the Falealupo Rainforest in Samoa
	5	THUR	17	Ethnobotany of Bodhi Day; Student Presentations (Seminar Style): Continued
	10	TU	18	Student Presentations, Ethnobotany of Christmas, Hannukah, Kwanzaa+ Review NOTE: LAST DAY TO TURN IN ASSIGNMENTS FOR FULL CREDIT
DEC	12	THUR	19	FINAL EXAM (LECTURE & LAB) & ALOHA
	17	TU	20	No Class (One of the Fieldtrips We Took on Weekend Day Substitutes for this Class)