

Course: Bi 130: Ethnobotany - LECT - 3.0 cr Hours: w/in 5:30 -9:55 p.m. timeframe Tu/Thurs  
 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 (Tel: 624-2515)  
 Text: None (Suggested Companion Text: *Ancient Hawaii* by Herb Kane, any edition)

**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 term *ethnos* (people) and the Greek term *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. 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 Hawaii; 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 the need for biodiversity, to protect the habitats of native plants, to learn consumer awareness/safety issues for herbals; to understand rights of indigenous peoples and their plant uses; to learn proper data-collection tools and documentation when carrying out field research and literary searches; to distinguish between etic and emic observations of other cultures; to learn tools for evaluating and 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 (seminar-style) 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. The comfortable seminar style of our classes nurture inquiry/discussion, incorporating student inquiry-based research projects, crafts, research papers.

**IV. REQUIREMENTS AND GRADING:**

* No makeup exams or quizzes. Exception: <u>documented</u> work/medical absence	5 Assignments or Exams* (50 points each) ..... 250
	3 News/Journal Articles to Share re Ethnobotany ..... 15
	Attendance/Sportsmanship/Participation ..... 15
	<b>280</b>

A = 90-100 % (252-280); B = 80-89 % (224-251); C = 70-79 % (196-223); D = 60-69 % (168-195); Below 60 % (167) = F  
 To visualize the percentage points of individual exams/assignments, simply divide your score by the number of points possible for that exam or assignment. Example: 45150 = 90% (A)

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:

Ethnobotany (BI 130) Syllabus p. 2

**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 absences (note from clinic or supervisor), prepared to take test upon return. You must leave a message for me at SB CUH office (624-3515) re absence on day of exam.** 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) - Credit: 1.0 Time: Tu/Thurs (Win 5:30-9:55 p.m. time frame)  
**COURSE DESCRIPTION and CLASS FORMAT:** The lab/lecture components of this class are inseparable. The lab will provide more applied ethnobotanical experiences. All students will dissect a variety of plants to learn plant anatomy and to gain experience in identification of common features of plant families. To take advantage of daylight to observe all we can find in our Schofield environment, labs may be at the beginning, middle, or end of class time and will include walk/fieldtrips for observation of plant families, A-Vs, volunteer assignments during Earth Day Week, group and independent field assignments. Lab materials will be provided for observation; several field experiences are planned to provide you with the opportunity to observe, collect plant species. 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. Field trips and hands-on activities have been planned to support the lecture material. Some lab assignments will be given for you to share with your families on outings since science is to be shared. Science is basically observance, recording information & questioning.

**LAB REQUIREMENTS AND GRADING:** 10 assignments & 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*

CHAMINADE UNIVERSITY * FALL 2001 (E) SCHOFIELD * u/Th * IOL 130+L: ETHNOBOTANY				
Note: Dates/Details of Field Trips to <b>Keaiwa Heiau, Waimea</b> Arboretum, East Range to be Announced				
MO	DA	WKDA	#	TOPIC
OCT	2	TU	1	Intro: <del>What is Ethnobotany?</del> <b>What is Botany?</b> Ground Rules for Studying Other Cultures; What is Ethnocentrism? Awareness of Etic vs Emic Viewpoint Ethnobotany of Upcoming Religious Holidays: <u>Christian, Jewish, Islamic, Buddhist, Polynesian, etc</u>
	4	THUR	2	<b>Ethnobotany</b> of Salsa & Chips: New World Plant Foods Columbus Discovered as intro to <b>Taxonomy/Classification: Genus, Species, Family</b> ; Plant Anatomy
	9	TU	3	What's a Hawaiian Plant? How Did Plants Arrive B/4 People? Native vs Introduced Plants in Hawaii; Polynesian-Introduced Plants and Polynesian Migration Theories; Glottochronolinguistic, Archaeological, DNA evidence re origin of Hawaiians
	11	THUR	4	Hawaii 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 & <b>Indigenous</b> ; Plants After People: Polynesian-Intro & post-1778 Alien Plants & <b>Animals: Threats</b> to Unique Hawaii <b>Ecosystem; Endangered</b> Spp
	16	TU	5	Summary & Review: Native Endemic, Native Indigenous, Polynesian-Introduced, post-Contact Introduced Plants, Polynesian Migration Theories, <b>3W's</b> , Plant Anatomy, Taxonomy, etc.
	18	THUR	6	Lab: Ethnic/Regional Foods From Around the World; Potluck your Favorite <b>Summary &amp; Review:</b> All Lecture Material Covered Above + Plant Anatomy Lab Quiz 1
	23	TU	7	Exam I+Lb Quiz ( <b>pistil, stamen, anther, pollen, pollen</b> tube, ovary, ovule, pistillcarpel, style)
	25	THUR	8	Polynesian-Introduced Plants: Food Plants & Planting- Part I Life in Pre-Contact <b>Hawai'i: The</b> Polynesian Family System & the <b>Ahupua'a</b>
	30	TU	9	Ethnobotany of <b>Halloween</b> (Student Seminar <b>Presentations</b> )
NOV	1	THUR	10	Polynesian-Introduced Food Plants Continued
	6	TU	11	Hawaiian House & Canoe Building & the Hawaiian/Polynesian Living System
	8	THUR	12	<del>The</del> <b>Hawaiian</b> House Continued (Materials & Methods)
	13	TU	13	Ethnobotany & Hawaiian Health, Food & <b>Medicinal</b> Plants, Games & Sports & Religion How They're All Related to Promote Wellness (Ola)-->Mind-Body-Spirit ( <b>Lokahi</b> )
	15	THUR	14	Plants & Big Business: Pharmaceuticals/Nutraceuticals, Herbal <u>Medicines: Risk/Benefits</u>
	20	TU	15	Ethnobotany of <b>Thanksgiving</b> , Student Presentations ( <b>Seminar-Style</b> )
****	22	THUR	***	* * * * <b>HOLIDAY*</b> HAPPY THANKSGIVING *NO CLASS* HOLIDAY
	27	TU	16	Ethnobotany & Environment: Saving the Falealupo Rainforest
	29	THUR	17	Student Presentations (Seminar Style): Continued
	4	TU	18	Student Presentations (Seminar Style) + Review for Final Exam <b>NOTE: LAST DAY TO TURN IN ASSIGNMENTS FOR FULL CREDIT</b>
DEC	6	THUR	19	<b>Botany of War &amp; Peace</b> (Pearl Harbor & <b>Bodhi Day</b> ), Christmas, Hanukkah, Kwanzaa +Review <b>NOTE : ABSOLUTE LAST DAY TO TURN IN ASSIGNMENTS FOR 1/2 CREDIT</b>
	11	TU	20	<b>FINAL EXAM (LECTURE &amp; LAB &amp; ALOHA</b>