CSE rod

**CHAMINADE UNIVERSITY OF HONOLULU - Summer 2000 EVENING PROGRAM**
**July 6 - September 12, 2000 - SCHOFIELD BARRACKS EDUCATION CENTER**
**BIOLOGY 103 - Intro Plant Biology**

**Course:** **Bi 103 - Intro Botany - Introduction to Plant Biology (3.0 cr)**
**Days/Times:** TUESDAYS AND THURSDAYS **5:30-7:35 p.m.**
**Instructor:** **Shirley B. Gerum, B.A., Botany; MPH, Environmental Health**
**Mail:** **P.O. Box 18; Haleiwa, HI 96712**
**Office Hours:** **Immediately after class (or by appointment: contact CUH SB Office:** 624-2515)
**Text:** *Introductory Plant Biology* **(any edition) by Kingsley Stern**

I. COURSE DESCRIPTION: **During the course of this semester, we will concentrate on the distribution, identification, classification/taxonomy, structure and physiology of plants with special attention to plants of Hawai`i. Students in this class will be studying live specimens of plants that mainland students see only in photographs (or as dried specimens). To ensure that the lessons learned in semi-tropical Hawaii can be applied to anywhere else on earth you may be sent, there will be an emphasis on plant family recognition.**

**According to the author of your text, the word botany (the study of plants) comes from the French** word *botanique* (botanical). Of course, we go to the Greek and Latin roots for the ultimate basis **of scientific terms and find three Greek words:** *botanikos* **(botanical),** *botany* **(plant or herb), and** *boskein* **(to feed), which appear to have origins with Stone Age peoples who sought to modify their surroundings and feed themselves.**

**The traditional science of botany comes to us in the Western world from information handed down from those early Greeks who developed a practical interest in food and drug plants and became curious about the structure and function of plants. Those who recorded their observations (Plato [d. 347 B.C.], Aristotle [384-322 B.C.], Theophrastus [ca. 370-285 B.C.], Dioscorides [ca. 200-70 A.D]) stand out. However, we must not forget that cultures all over the globe were also making outstanding observations and contributions to our collective plant knowledge. Some observations were passed down only orally; some recorded on material that is barely readable, some in languages yet to be translated.** A **backlog of Chinese, Etruscan, Mayan, Tibetan, Indian, Incan records await translation. You may find you are the only link to preserving the oral and written history of your own family's plant knowledge.**

II. CLASS OBJECTIVES: **To provide students with a basic understanding of botany: to understand the importance of plants in economics, aesthetics, medicine, to become familiar with the biology and physiology of plants (their cellular, chemical composition and the functions of their organs and structures-macro and micro), to understand how plants fit into the known kingdoms of life on earth recognized today and the ways plants are classified within the plant kingdom (learning to recognize plant families by close examination of plants we observe in the field), to understand and appreciate how plants (which contain the original solar collectors) have made life possible on our** planet by providing oxygen and food, to doyclop an understanding of how plants have literally **changed the history of the world (i.e., crop failures leading to mass migrations, spice wars and exploration, medical milestones) and their place in our future, to gain an appreciation for the natural world, to foster environmental awareness, to truly appreciate and preserve biodiversity, to protect the habitats of Hawaiian plants in the wild, to develop an understanding of the fragile nature of life and the world's endangered species.**

III. METHODOLOGY:

- **Reading assignments from text, handouts, news media; independent research, documentation.**
- **Class lectures/discussions, structured to provide students with the basis for further application in the biological sciences.**

A variety of assignments will be used to reinforce botanical/biological concepts discussed in **this course. Life experiences will be incorporated, where applicable, to reinforce vocabulary and skills needed for competency in the biological sciences.**

**Since we live in such exciting times of discovery, current news you bring to share from newspapers, journals, the Internet will be a part of required** assignments. We will all learn **from the independent inquiry-based research projects shared in student seminar format.**

IV. GRADING:

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| 5 assignments and/or exams at 50 pts. each ..... ..... | 250 points possible |
| Three Botanical Articles in the News (5 pts. ea.) ..... | 15 points possible |
| Attendance, Participation, Sportsmanship (APS) ..... | 15 points possible |
| | 280 points possible |

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%

V. STUDENT RESPONSIBIUTIES:

1. Attendance/Participation/Sportsmanship (APS): Attendance, Participation and Sportsmanship are vital to maintaining interactive excellence. Attendance: Students with the highest grades are usually those who have participated in hands-on activities, materials, are present for demonstrations, special speakers, discussions and videos that cannot be repeated. The pace of an accelerated class does not allow time to respond to individual reiterations due to absence or late arrival. Students are responsible for getting announcements, notes from other students when late or absent. Participation: The input of class members is one of the most valuable components of a university-level class. To emphasize the importance of participation, support for those presenting ideas to the class and to underscore zero tolerance for unwelcome remarks regarding gender, ethnicity, lifestyle, 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 since scientific theories (old & new) collect many interpretations (and often heated controversy) over time.

2. Academic Honesty: CUH Policies regarding academic honesty are clear. Plagiarism is the deliberate use or reproduction of ideas, words, statements of another as one's own without proper acknowledgment or citation. Papers with plagiarized information will be returned without credit. Cheating: No student may give or receive help from another during examinations. No student may hand in or cause to be handed in another student's work as one's own. The copying of another's assignments(s) (complete or partial) and/or submitting as one's own original work (however freely given or purchased) the original exam, research paper, manuscript, report, computer file, or other assignment that has been prepared by another individual, website, publisher is also forbidden and will result in a ZERO for the assignment. Minor changes in wording or syntax-without acknowledgment of original work is NOT sufficient to avoid plagiarism charges. According to CUH regulations, the usual penalty for academic dishonesty is failure in the course for the 1st offense and disciplinary action, not to exclude suspension /expulsion from CUH for 2nd offense.

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. It is the student's responsibility to keep informed of assignments, quizzes. Please check with other students if you miss class. "Not knowing" of an announced quiz/exam will not excuse any student.

4. Written or Typed? Written work will be cheerfully accepted as long as it can be clearly read, If the writing is too small (or the type font used is below 13 point for typed material), you Will be asked to enlarge the paper at the Library xerox below. (Note: This sentence uses TIMES 13 point type font. This sentence: HELVETICA 13 point. This sentence too small: Times 12 point.)

Course: Bi 103 L- Botany - Introduction to Plant Biology Lab (1.0 cr)

Days/Time: Mondays & Wednesdays 7:50-9:50 p.m. (3 hours/wk within scheduled class time.

Please Note: To take advantage of daylight for observing plants, lab time may be at the beginning, middle, or end of class. Regrettably, it will be impossible to make up some labs, demos, field trips, lab quizzes ven w/documentation.

Three hours each week will be devoted to lab activities (fieldwork, campus walks, microscopy, field trips, dissecting, collecting, pressing plant specimens, etc.). We are fortunate to have an amazing abundance & variety of plant life all around us-a "living laboratory" to learn from around Schofield-around our Island. We will have access to a variety of plants from around the globe 365 days/year outside our door-some found only in Hawai`i. Lab/Lecture are interwoven. Many learning opportunities will apply to the lab and lecture portions of this course. Several field experiences are planned. Students will use cultivated & wild plants to explore plant structure, anatomy and will learn to make herbarium pressings. Lab quizzes will include ID of plants, plant structures, plant families-most from our walks/field observations. You will also be carrying out some of the lab assignments in your neighborhoods. The lab portion of our class will consist of 10 assignments/quizzes worth 15 pts each-from the mundane to the bizarre--for a total of 150 pts: (90-100% (135-150) = A; 80-89% (120-134) = B; 70-79% (105-119) = C; 60-69% (90-104) = D; Below = F )