

BIOL 265L Ecology and Evolutionary Biology Lab

CRN 63397 * 01 Credit

INSTRUCTOR:	David A. Krupp, Ph.D.
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EFFECTIVE DATE:	Fall 2011
COURSE WEBSITE:	http://krupp.wcc.hawaii.edu/BIOL265L/biol256L.htm

WINDWARD COMMUNITY COLLEGE MISSION STATEMENT

Windward Community College is committed to excellence in the liberal arts and career development; we support and challenge individuals to develop skills, fulfill their potential, enrich their lives, and become contributing, culturally aware members of our community.

CATALOG DESCRIPTION

Laboratory to accompany BIOL 265. (3 hrs. lab) WCC: DY

CO-REQUISITE

Concurrent registration in BIOL 265.

RECOMMENDED PREPARATION

ICS 101 or ICS 105B-E; or familiarity with spreadsheets, word processing, & Internet browsers.

STUDENT LEARNING OUTCOMES

By the end of this class, the student should be able to

1. Use the scientific method of inquiry to investigate ecological and evolutionary phenomena.
2. Apply the concepts learned in BIOL 265 to an experimental and hands-on observational setting.
3. Apply standard analytical procedures for the study of evolution and ecology. These include the following areas of study: experimental design and set-up; descriptive statistics and hypothesis testing; age structure of a natural population; sampling and describing population attributes; sampling, describing, and quantifying the flora, fauna, and relevant abiotic characteristics of a terrestrial habitat; plant competition; optimal foraging theory; sampling and describing community characteristics and functions; primary productivity; natural selection; colonization and adaptive radiation of Hawaiian flora and fauna; taxonomy, systematics, and phylogenetics.
4. Collect, reduce, and interpret ecological and evolutionary data.
5. Prepare written objective reports describing and interpreting experimental and observational results.

COURSE TASKS, ASSESSMENT AND GRADING

LABORATORY SUMMARIES. The student will complete a total of 15 written laboratory summaries or reports (20 points each). Each summary must be completed and turned in no later than the beginning of the first laboratory meeting after the assignment was given (300 points total). The production of laboratory summaries should be considered an individual student task. The sharing of data tables and graphs between students is considered a form of plagiarism and is inappropriate. **LATE SUMMARIES RECEIVED WITHIN ONE WEEK OF THE DUE DATE WILL BE ASSESSED AN AUTOMATIC PENALTY OF 3 POINTS. SUMMARIES WILL NOT BE ACCEPTED IF SUBMITTED MORE THAN ONE WEEK FOLLOWING THE DUE DATE.**

LABORATORY ATTENDANCE. Regular attendance is expected. Because laboratories involve considerable set-up/take-down time and supervision, students will **NOT** be able to make up missed laboratory activities. A student missing a scheduled laboratory activity because of an illness or legitimate emergency may be given an alternative activity to make up lost lab summary points. In such a circumstance, the student is still responsible for the information presented during the missed laboratory session. Regardless of the reason, **A STUDENT MISSING MORE THAN TWO SCHEDULED LABORATORY SESSIONS WILL NOT RECEIVE CREDIT FOR THE COURSE.**

Letter grades will be assigned as follows:

A	90% or above in total points and not missing more than one scheduled laboratory activity.
B	80-89.9% of total points and not missing more than one scheduled laboratory activity.
C	65-79.9% of total points and not missing more than one scheduled laboratory activity.
D	55-64.9% of total points and not missing more than one scheduled laboratory activity.
F	Below 55% of total points or informal or incomplete official withdrawal from course, or if a student misses more than one scheduled laboratory activity for reasons other than documented illness or emergency.
I	Incomplete; given at the INSTRUCTOR'S OPTION when student is unable to complete a small part of the course because of circumstances beyond his or her control. It is the STUDENT'S responsibility to make up incomplete work. Failure to satisfactorily make up incomplete work within the appropriate time period will result in a grade change for "I" to the contingency grade identified by the instructor (see catalog); may be issued if documented serious illness or emergency forces a student to miss more than one scheduled laboratory activity.
CR	65% or above in total points; the student must indicate the intent to take the course as CR/NC in writing by the end of the 10th week of classes (see catalog).
NC	Below 65% of total points; this grade only available under the CR/NC option (see above and see catalog).

N	NOT GIVEN BY THIS INSTRUCTOR EXCEPT UNDER EXTREMELY RARE CIRCUMSTANCES (e.g., documented serious illness or emergency that prevents the student from officially withdrawing from the course); may be issued if documented serious illness or emergency forces a student to miss more than one scheduled laboratory activity; never used as an alternative for an "F" grade.
W	Official withdrawal from the course after the third week and prior to the end of the 10th week of classes (see catalog).

Waiver of minimum requirements for specific grades may be given only in unique situations at the instructor's discretion.

Students involved in academic dishonesty will receive an "F" grade for the course. Academic dishonesty is defined in WCC's college catalog.

LEARNING RESOURCES

Descriptions of laboratory assignments and activities will be made available at the course Laulima site and/or distributed in class.

STUDENT RESPONSIBILITIES

Students should carefully review the attached sheet detailing inherently dangerous activities of this course and sign the appropriate U.H. Assumption of Risk and Release and Medical Consent forms.

Students are expected to participate in all laboratory activities and complete all course assignments on time.

Students are expected to be prepared in advance when they arrive to class. Being prepared includes the following: having already read text materials (e.g., textbook readings and handouts) assigned for that day's activities, bringing required work materials (e.g., lab notebook, textbook, handouts, writing supplies, etc.), and having completed any assigned pre-lab tasks.

Any changes in the course schedule, such as examination dates, deadlines, etc., will be announced ahead of time in class. It is the student's responsibility to be informed of these changes.

It is the student's responsibility to be informed about deadlines critical to making registration changes (e.g., last day of erase period and last day for making an official withdrawal).

The student should understand that BIOL 265L is a difficult course for students intending to major in one of the biological sciences. Thus BIOL 265L requires much time and serious dedication. If the student does not have a strong background or interest in science, the student does not belong in this lab course.

BIOL 265L FIELD ACTIVITIES

Students enrolled in BIOL 265L are advised that certain required course activities are inherently dangerous and may require normal physical abilities. Students are therefore required to read about the inherently dangerous activities described below. In addition, students must read and demonstrate knowledge of their responsibilities while engaged in these activities.

Some students may have physical conditions that restrict their participation in certain laboratory activities. Respiratory ailments, certain allergies, and pregnancy may be among these conditions. Students exhibiting any of these conditions, or any other condition that may be impacted adversely by participation in the activity, should consult a physician.

Inherently Dangerous Activities

During field activities students face risks such as accidents while en route to and from field destinations, falling out of boats, slipping on wet surfaces, stepping on sharp objects, large waves, strong currents, and dangerous marine life.

Responsibilities of Students in the Field

1. Field excursions may involve carpooling to field destinations. Drivers are expected to have valid Hawaii driver's licenses, drive safely, and follow all traffic laws. Passengers should not disturb drivers.
2. When in the field, students should use the buddy system. Partners should have comparable physical skills and should keep track of each other at all time.
3. Students should wear clothing appropriate for the activity and should anticipate all possible weather conditions. Land/shoreline activities require loose-fitting clothing that protects the extremities from sunlight and abrasions (note that this clothing may get wet). Footwear should allow stable walking on rough and/or slippery surfaces (slippers are not acceptable footwear). A hat and sunglasses are also highly recommended. For water activities, a wet suit, or long pants and sleeves, worn over swimsuits, are recommended. Gloves and protective footwear are essential. Students should apply sunscreen to all exposed skin areas.
4. When looking under rocks or ledges, students should be prepared for encounters with dangerous marine animals, such as eels, lionfish, and sea urchins. Unless specifically instructed to do so, students should not touch any marine organism.
5. Students should familiarize themselves with potential hazards in an area before beginning an activity. Watch for large waves and dangerous currents. If conditions should become dangerous after the activity starts (e.g., waves pick up or dangerous marine life enters the area), the student should leave the area immediately. Students should inform the instructor immediately when dangerous conditions arise. A student should never feel compelled to do an activity that seems hazardous. A student should refuse to carry out an activity that exceeds his or her physical capabilities.

6. Anyone injured in the field, should inform the instructor immediately and take immediate action to reduce the risk of further injury. Before an activity begins, students will be informed of the location of the first aid kit (which will be taken on every excursion).
7. No one should operate a powerboat without specific training. While in powerboats, students should remain seated at all times. No powerboat should be used without proper safety gear (i.e., first aid kit, life vests, oars, anchor, flares and other essential gear).

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.