Proposal to Initiate, Modify or Delete a Course

1. Type of Action
   - A. Addition
   - B. Deletion
   - C. Modification: [ ] in credits [ ] in title [ ] in number or alpha [ ] in prerequisites or co-requisites (click to specify)

2. New Alpha, Number and Title
   - BIOL 265L Ecology and Evolutionary Biology Lab

3. Credits
   - 1 credit

4. Old Alpha, Number and Title

5. Credits
   - *

6. New Catalog Description
   - Laboratory to accompany BIOL 265.

7. Select box and type specific information in text box.
   - [ ] Prerequisites
   - [ ] Corequisites or Recommended Preparation
   - Co: BIOL 265; or consent of instructor.
   - Rec: ICS 101 or ICS 105B-E; or familiarity with spreadsheets, wordprocessing, and Internet browsers.

8. Student Contact Hours Per Week
   - Lecture: [ ] Other (click to specify)
   - Lecture/Lab: [ ] 3
   - Co-requisites or Lecture/Lab: [ ] Other (click to specify)

9. Proposed Date of First Offering
   - Semester: Fall
   - Year: 2004

10. This course is proposed for the Liberal Arts Program.
    - [ ] can fulfill ASC Elective
    - If Other, specify Academic Subject Area Certificate in Bio-Resources and Technology

11. This course makes no difference in the number of credits required for the program/core.

12. Equivalent or similar courses offered in the UH System:

<table>
<thead>
<tr>
<th>Campus</th>
<th>Alpha, Number, Title</th>
<th>Campus</th>
<th>Alpha, Number, Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>UHM</td>
<td>BIOL 265L Ecology and Evolutionary Biology Lab</td>
<td>*</td>
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</table>

13. This course is (check one and click in appropriate textbox and provide details):
   - [ ] Already articulated with
   - Provide details of existing or desired articulation (date, college(s), purposes, pre-major, etc.) in this space:

14. Reason for Initiating, Modifying or Deleting Courses or Other Pertinent Comment:

Requested by:

Approved by:

Dean of Instruction

Provost

CCCMM #6100 (Amended for WCC use October 2002)
Levels of Review of Course Proposal at Windward Community College

Course Alpha, Number, and Title: BIOL 265 Ecology and Evolutionary Biology

<table>
<thead>
<tr>
<th>Signatures</th>
<th>Dates</th>
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1. Department Area (more than one departmental instructor's signature required) |

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2. Department |

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</table>

Department/Chairperson

Was this course discussed in a department meeting? ☑ Yes ☐ No

3. Division

<table>
<thead>
<tr>
<th>Signature</th>
<th>Date</th>
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<tbody>
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</tbody>
</table>

4. Curriculum Committee Review

Approved ☑  5-0

Disapproved ☐

Reason:

<table>
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<tr>
<th>Signature</th>
<th>Date</th>
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<td>12/4/02</td>
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<td></td>
<td>12/4/02</td>
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</tbody>
</table>

Curriculum Committee Chairperson

February 11, 2003
University of Hawaii Community Colleges
Proposal to Initiate, Modify or Delete a Course
New Course Proposal Form – Go to next page for Course Modification)

WCC Form for New Course Proposals
(This sheet was originally pink.)

1. How is this course related to the education needs and goals of the College/Department/Community as reflected in the EDP/ADP?

Consistent with the WCC ADP goal to "provide the necessary courses for WCC students to take their first two years of a baccalaureate degree in any of the traditional natural science disciplines." In addition, this class may be used in partial satisfaction of the Academic Subject Certificate in Bio-Resources and Technology (Bio-Resources Development and Management track).

2. Provide details of any additional staff, equipment, facilities, library/media material, faculty preparation and other financial support that would be required to implement this course. (Include an estimate of the actual cost of supplies and equipment.) What has been done to provide for these additional costs for the proposed date of offering? Who will teach the course?

No additional resources will be required for this course. This course will initially be offered in alternate years with the BIOL 171/172 series. Resources that would have been used for BIOL 171L would be allocated to BIOL 265L during the years it is taught.

3. Is a similar course taught elsewhere in the UH system? Yes If yes, provide details of how this course differs from existing similar courses.

This course was designed based upon the model provided by the identical course (BIOL 265L) offered at UHM. The main difference may lie in the specific field activities which are locality-specific. But the basic concepts and techniques covered are the same.

4. Is this course experimental and/or unique to Windward Community College? No If yes, provide rationale and details of its impact on the College Curriculum

5. Is a similar course taught in the upper division level by a 4-year UH college? Yes If yes, explain why this course is appropriate at the lower division or how it differs from its upper division counterpart.

This course, nearly identical to UHM’s BIOL 265L course, functions as a sophomore level bridging course that helps in the transition from freshman biology to upper division courses in the life sciences.

6. Please attach a complete course outline. Your course outline should address all the items listed in the Guidelines for Course Outlines.

7. If this course is numbered 100 or above or appropriate for transfer to a 4-year college, complete and attach WCC Form for Transfer Courses (blue). See criteria for transfer courses.

CCCMM #6100 (Amended for WCC use September 2002)
Original dated WCC 9/91
University of Hawaii Community Colleges
Proposal to Initiate, Modify or Delete a Course
Articulation with 4-year UH Campus Form

**WCC Form for Transfer Courses**
(To be completed for articulation with any 4-year UH campus)
(This sheet was originally blue.)

Course Alpha and Number BIOL 265L

Submitted by David Krupp

Date December 4, 2002

1. List the counterpart to this course on any 4-year UH campus. Describe the relationship between the course and any related baccalaureate program area.

   BIOL 265L at UHM. This course is required for a baccalaureate degree in Biology at UHM.

2. Is this course taught or accepted by major accredited colleges or universities? Give one or two examples.

   BIOL 301L, Ecology and Evolution Lab, at the University of South Carolina.

3. Please attach a complete course outline if you have not done so already. Your course outline should address all the items listed in the Guidelines for Course Outlines.

---

CCCM #6100 (Amended for WCC use September 2002)
Original dated WCC 9/91
COURSE ARTICULATION FORM (GENERAL EDUCATION CORE)

ORIGINATING CAMPUS: Windward CC  DATE SUBMITTED: 12/4/02

COURSE ALPHA & NUMBER: BIOL 265L  SEMESTER CREDITS: 1

COURSE TITLE: Ecology and Evolutionary Biology

DATE OF OUTLINE: (Fall or Spring) Fall Year 2002

(** Representative outline, no multiple syllabi, please.)

1. Articulation committee to review this course:

   Standing Committees
   Written Communication [ ]
   Mathematical & Logical Thinking [ ]
   World Civilizations [ ]
   Languages [ ]
   Arts & Humanities [ ]
   Natural Science [X]
   Social Science [ ]

2. The information in this item is required by the reviewing committee so that it has a starting point for reviewing the course. It is the responsibility of the submitting campus to do the necessary research to provide this information.

   In the opinion of the originating campus, this course is equivalent to the following and/or meets the criteria for the indicated core categories. Every core category space, except your own campus, must be filled in (can include 'none'). An equivalent course, if known, may be helpful to committee members but is not required.

<table>
<thead>
<tr>
<th>Receiving Campus</th>
<th>Equivalent Course (Alpha and Number)</th>
<th>Core Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>UH Hilo</td>
<td>BIOL 265L</td>
<td>DY</td>
</tr>
<tr>
<td>UH Mānoa</td>
<td></td>
<td>NS</td>
</tr>
<tr>
<td>UH West O'ahu</td>
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<td>NS-1</td>
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<tr>
<td>Hawai'i CC</td>
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<td>Honolulu CC</td>
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<td>Kapi'olani CC</td>
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<td>Kaua'i CC</td>
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<tr>
<td>Leeward CC</td>
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<td>NS-1</td>
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<tr>
<td>Maui CC</td>
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<td>NS</td>
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<tr>
<td>Windward CC</td>
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</tbody>
</table>

3. I am submitting electronically. I understand that this outline will be posted to a publicly accessible web site to enable open access for reviewing committees and campuses. The outline will be taken off the site upon completion of the review.

   ________________________________________________________________
   Typed Name or Signature

   Revised 7/15/02
WINDWARD COMMUNITY COLLEGE
OUTLINE OF COURSE OBJECTIVES

COURSE NAME: Ecology and Evolutionary Biology Lab
COURSE ALPHA: BIOL 265L
CREDIT HOURS: 01

CATALOG DESCRIPTION:
Laboratory to accompany BIOL 265. (3 hrs. lab)

REQUIREMENTS COURSE SATISFIES:
Partially fulfills requirements for the Academic Subject Area Certificate in Bio-Resources and Technology (Bio-Resources Development and Management track) at WCC.

CO-REQUISITE: BIOL 265; or consent of instructor

RECOMMENDED SPECIAL PREPARATION:
ICS 101 or ICS 105B-E; or familiarity with spreadsheets, wordprocessing, and Internet browsers.

INSTRUCTOR:
OFFICE:
TELEPHONE:
E-MAIL:
COURSE HOMEPAGE:
INSTRUCTOR'S HOMEPAGE:
EFFECTIVE DATE:
COURSE GOALS

➢ To illustrate and explore key ecological and evolutionary principles using experiments and observations.

➢ To gain an appreciation of ecological diversity by working in a variety of local habitats and ecological communities.

➢ To practice the critical thinking and data analysis skills needed to develop and test hypotheses in science.

➢ To integrate textbook and lecture information from BIOL 265 with systematic observations of in the laboratory and field.

COURSE OBJECTIVES

➢ The student will demonstrate the acquisition of basic laboratory and field skills for the study of evolution and ecology. These skills include the following areas:

➔ describe the scientific method of inquiry, provide examples of its use, and demonstrate this method through written summaries of class laboratory activities and one formal research report;

➔ gain hands-on experience in experimental design, field research, data analysis, and critical scientific thinking.

➔ collect, reduce, interpret, and present scientific data;

➢ demonstrate the proper use of some of the standard tools of the biological scientist, such as microscopes, scales, spectrophotometers, computers, and other analytical tools;

➢ carry out specific laboratory and field activities (as individuals or in cooperative groups, depending upon the activity) to demonstrate the following principles of ecology and evolution:
  ➢ experimental design and set-up;
  ➢ descriptive statistics and hypothesis testing;
  ➢ age structure (age pyramids, life tables, & survivorship curves) of a natural population;
  ➢ sampling and describing population attributes (population size, density, percent cover, dispersion, frequency);
  ➢ 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 (e.g., species diversity, community similarity, succession);
  ➢ primary productivity;
  ➢ natural selection;
  ➢ colonization and adaptive radiation of Hawaiian flora and fauna;
  ➢ taxonomy, systematics, and phylogenetics.
The previously described objectives will be achieved through the aid of the following learning activities:

- Active participation in laboratory and field activities;
- Laboratory lecture and demonstrations;
- Multimedia presentations, including computer-assisted and internet-assisted activities;
- Recording laboratory and field activities and results in a laboratory notebook;
- Written laboratory/field reports;
- Pre-laboratory quizzes.

The material presented in all modes of instruction will be of an introductory nature but sufficient in content to allow continuation in higher level biological science courses required for biological science majors. Considerable out-of-classroom time will be spent completing assignments and preparing for upcoming lab activities.

EVALUATION OF OBJECTIVE ACHIEVEMENT

PRE-LAB QUIZZES. The student will take a total of 15 quizzes (10 points each) administered ONLY during the first five minutes of the laboratory/field meetings or via WebCT before the laboratory meeting. These non-cumulative quizzes will test the student’s knowledge of and preparation for the laboratory/field exercise planned for that day, as well as the student's understanding of the previous laboratory/field activity. Because the student is required to enter specific information into his notebook before the activity, some quizzes may include inspections of notebooks to make sure the student has completed all of the items required. Of these 15 quizzes, only the 12 best scores will be included in the student’s point total (120 points total). NO MAKE-UP QUIZZES FOR ANY ABSENCES (EVEN RESULTING FROM LEGITIMATE ILLNESS) WILL BE ADMINISTERED.

LABORATORY/FIELD NOTEBOOK. The student will maintain a laboratory/field notebook to record all notes, observations, and information gathered before and during laboratory activities. This notebook must be brought to every laboratory period. FAILURE TO HAVE THE LAB NOTEBOOK AND/OR LAB MANUAL DURING THE LAB PERIOD WILL RESULT IN A 10 POINT REDUCTION IN THE STUDENT’S TOTAL POINTS FOR EACH OCCURRENCE. This notebook will be collected and graded twice during the semester (40 points each collection). The type of notebook and the kind of information required will be explained during the introductory lab session.

LABORATORY/FIELD REPORTS. The student will complete a total of 15 written laboratory/field reports (20 points each). Specific instructions about how to complete these reports will be presented in class. Each report must be completed and turned in no later than the beginning of the first laboratory meeting after the assignment was given (300 points total). LATE SUMMARIES RECEIVED WITHIN ONE WEEK OF THE DUE DATE WILL BE ASSESSED AN AUTOMATIC PENALTY OF 2 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, perhaps different, activity which to make up lost lab report 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 ONE SCHEDULED LABORATORY SESSION WILL NOT RECEIVE CREDIT FOR THE COURSE.

METHOD OF GRADING

The assignment of points will be according to the following protocol:

<table>
<thead>
<tr>
<th>Component</th>
<th>Points</th>
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</thead>
<tbody>
<tr>
<td>Pre-lab Quizzes</td>
<td>120</td>
</tr>
<tr>
<td>Laboratory Notebook</td>
<td>80</td>
</tr>
<tr>
<td>Laboratory Reports</td>
<td>300</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>500</strong></td>
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</table>

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 ------- 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.
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 171L is a difficult course for students intending to major in one of the biological sciences. Thus BIOL 171L 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.

TEXTBOOK AND OTHER ASSIGNED INSTRUCTIONAL MATERIALS

No textbooks will be required for this class. Handouts describing the specific laboratory/field activities and requirements will be distributed in class.

OTHER INFORMATION

Important Dates:

Last day to add a class...........................................
Last day of erase period......................................
Last day for official withdrawal............................

Instructor's Office Hours (or by appointment):
Biology 265L
Ecology and Evolutionary Biology Lab
Tentative Schedule of Laboratory and Field Activities
(Based upon Fall 2002 Calendar)

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>28-Aug</td>
<td>Laboratory Introduction; Introduction to Cameras, Computers, &amp; Excel</td>
<td>Lab</td>
</tr>
<tr>
<td>4-Sep</td>
<td>The Scientific Method and Experimental Design</td>
<td>Lab</td>
</tr>
<tr>
<td>11-Sep</td>
<td>Descriptive Statistics and Graphing</td>
<td>Lab</td>
</tr>
<tr>
<td>18-Sep</td>
<td>Statistical Hypothesis Testing</td>
<td>Lab</td>
</tr>
<tr>
<td>25-Sep</td>
<td>Population Characteristics I: Population Size, Density, Percent Cover, Dispersion, Frequency</td>
<td>Lab</td>
</tr>
<tr>
<td>2-Oct</td>
<td>Population Characteristics II: Age Structure, Age Pyramids, Life Tables, &amp; Survivorship Curves</td>
<td>Lab</td>
</tr>
<tr>
<td>9-Oct</td>
<td>Ecosystem Description I: Population Sampling</td>
<td>Field</td>
</tr>
<tr>
<td>16-Oct</td>
<td>Plant Competition Experiment</td>
<td>Lab</td>
</tr>
<tr>
<td>23-Oct</td>
<td>Optimal Foraging Theory</td>
<td>Lab</td>
</tr>
<tr>
<td>30-Oct</td>
<td>Ecosystem Description II: Physical Parameters and Followup Measurements</td>
<td>Field</td>
</tr>
<tr>
<td>6-Nov</td>
<td>Community Characteristics: Species Diversity and Community Similarity</td>
<td>Lab</td>
</tr>
<tr>
<td>13-Nov</td>
<td>Primary Productivity</td>
<td>Lab</td>
</tr>
<tr>
<td>20-Nov</td>
<td>Marine Benthic Succession</td>
<td>Lab</td>
</tr>
<tr>
<td>27-Nov</td>
<td>Natural Selection and Evolution Computer Simulation Lab</td>
<td>Lab</td>
</tr>
<tr>
<td>4-Dec</td>
<td>Bishop Museum Field Trip: Evolution in the Hawaiian Islands</td>
<td>Field</td>
</tr>
<tr>
<td>11-Dec</td>
<td>Taxonomy, Systematics, and Phylogenetics</td>
<td>Lab</td>
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</tbody>
</table>
Students enrolled in BIOLOGY 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

Students in the science laboratory may be exposed to chemicals (e.g., formaldehyde, organic solvents, acids, and other caustic chemicals), chemical fumes, laboratory equipment and supplies (e.g., scissors, razor blades, glass slides, coverslips, and electrical equipment), toxic or irritating properties of living and dead animals, human organic matter (e.g., saliva and blood), and other materials necessary to laboratory activities of this or other laboratory classes. Other possible hazards include broken glass on the floor or counters, combustible materials (e.g., bunsen burner gas), and slippery spills.

During field activities, students face risks such as accidents while enroute to and from field destinations, hazardous weather conditions, flash floods, falling out of boats, slipping on wet surfaces, stepping on sharp objects, large waves, strong currents, and dangerous organisms.

RESPONSIBILITIES OF STUDENTS IN THE LABORATORY

1. Students should be familiar with safety procedures and take appropriate precautions at all times to insure the safety of every student in the lab.

2. Students should follow instructions carefully, especially when hazardous conditions occur or hazardous materials are being used.

3. Students should locate the placement of safety equipment and supplies in the laboratory: safety shower, eye wash station, fire extinguisher, and first aid kit. Students should understand the use of this equipment. Also note the locations of exits.

4. Anyone injured in the lab, should inform the instructor immediately and take immediate action to reduce the risk of further injury.

5. Students should familiarize themselves with the fire procedures. Extinguish small fires, but leave the building immediately should a major fire occur. Notify the appropriate authorities -- don't assume someone else remembered to do it. Meet with other students and your instructor outside the building before leaving so that an accurate headcount may be made.

6. Students should dress appropriately in the lab. Students may elect to supply their own gloves and protective aprons or laboratory coats. Some lab activities may require protective eyewear (provided for the activity by WCC).

7. Students should report all hazardous conditions to the instructor immediately.
8. Chemicals may be poisonous, corrosive, or flammable. No chemicals, even chemicals known to be safe, should be ingested, inhaled, or touched unless specifically directed to do so by your instructor.

9. All organisms, living or dead, should be treated with care and respect. Avoid direct handling when possible.

10. The safe use of specific equipment and tools (e.g., microscopes, slides, scalpels, and pipettes) will be demonstrated by the instructor during the laboratory sessions. Students should be sure they understand this usage.

11. Students should clean up any supplies used and should return materials where they belong as instructed. Any material spilled should be cleaned appropriately. Report any hazardous spills or breakages.

12. Broken glass and sharp metal waste should be placed only in those receptacles marked for such disposal -- do not put these materials in normal trash receptacles.

13. Some chemical wastes may not be dumped into laboratory sinks. In such circumstances an appropriate container will be provided for this waste in the lab.

14. Organic waste resulting from animal dissection activities should be disposed of in the appropriate receptacle, not the ordinary trash receptacles.

15. Human organic materials (e.g., saliva and blood) must be disposed of in such a way as to eliminate any possibility for contamination and the spread of disease. Appropriate handling and disposal procedures will be explained when human materials are involved in the laboratory exercise.

16. After completing laboratory activities and clean up, students should wash their hands in the restroom to avoid spreading contamination and hazardous chemicals.

17. The laboratory is a place for learning. Therefore, eating, drinking, and playing around is prohibited during the laboratory session. Students exhibiting unsafe or inappropriate behavior in the lab may be asked to leave and may be given an "F" grade for the course.

RESPONSIBILITIES OF STUDENTS IN THE FIELD

1. Field excursions may involve carpooling to field destinations. Drivers are expected to have valid Hawai‘i 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 times.

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, abrasions and biting insects (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 swim
suits, are recommended. Gloves and protective footwear are essential. Students should apply sunscreen to all exposed skin areas. For terrestrial activities, insect repellent is highly recommended. Be prepared for inclement weather.

4. Students should carry bottled drinking water on all field activities.

5. When looking under rocks or ledges, students should be prepared for encounters with dangerous animals, such as centipedes, spiders, scorpions, eels, lion fish, and sea urchins. Unless specifically instructed to do so, students should not touch any organism.

6. Students should familiarize themselves with potential hazards in an area before beginning an activity. Be aware of slippery trails, unstable footing, and nearby cliffs. 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.

7. 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).

8. No one should operate a power boat without specific training. While in power boats, students should remain seated at all times. No power boat should be used without proper safety gear (i.e., first aid kit, life vests, oars, anchor, flares and other essential gear).

9. Consumption of alcoholic beverages is prohibited during any class activity, including field activities.