University of Hawaii Community Colleges
Proposal to Initiate, Modify or Delete a Course

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

2. New Alpha, Number and Title  OCN 201L Science of the Sea Laboratory

3. Credits 1 credit

4. Old Alpha, Number and Title

5. Credits *

6. New Catalog Description
   Experiments, computer exercises and field trips demonstrating the geological, physical, chemical and biological principles, and equipment, of earth and ocean sciences.

7. Select box and type specific information in text box.
   [ ] Prerequisites  [ ] Corequisites or
   [ ] Recommended Preparation
   Pre: Completion or concurrent registration in OCN 201 or equivalent preparation or consent of instructor.
   Rec: High school algebra and chemistry; ability to use a computer.

8. Student Contact Hours Per Week
   Lecture
   Lecture/Lab  Lab  3.0
   Other (click to specify)

9. Proposed Date of First Offering
   Semester Spring
   Year 2006

10. This course [x] is proposed for the Liberal Arts Program Program.  [ ] can fulfill Nat Sci: Physical  If Other, specify Science laboratory course. ASC in Bio-Resources and Technology, Bio-Resource Development and Management track. Marine Option Program certificate requirements.

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>UH Mano</td>
<td>OCN 201L Science of the Sea Laboratory *</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Honolulu</td>
<td>OCN 201L Science of the Sea Laboratory *</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UH Hilo</td>
<td>Mare 201L Oceanography Laboratory *</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leeward</td>
<td>OCN 201L Science of the Sea Laboratory *</td>
<td></td>
<td></td>
</tr>
</tbody>
</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:

   - [x] Appropriate for Articulation with courses listed in #12 above
   - Provide details of existing or desired articulation (date, college(s), purposes, pre-major or major, etc.) in this space:
   - Since the courses listed above (see #12) satisfy Marine Option Program requirements, articulation with these courses is requested. Mare 201L is required for a Bachelor's degree in Marine Science at UHH
   - [ ] Not yet appropriate for Articulation.

14. Reason for Initiating, Modifying or Deleting Courses or Other Pertinent Comment:
   A companion field course is needed to accompany the lecture portion of Ocean 201, Science of the Sea, for demonstrating field and laboratory techniques and equipment to students interested in any aspect of oceanography; while not identical in format, this course would supplant Ocean 202 and Ocean 209 at WCC (neither of which is offered at, thus transfers to, other campuses within the UH System).

Requested by: Joseph E. Ciotti  10-5-05
Approved by: John Obuuya  10/25/05
Approved by: Phillip K. Hagstrom  11/12/2005
Approved by:  11/1/2005
CCC #6100 (Amended for WCC use October 2002)
University of Hawaii Community Colleges
Proposal to Initiate, Modify or Delete a Course

Dean of Instruction

Provost

Date 11/02/05

Date

CCC M #6100 (Amended for WCC use October 2002)
University of Hawaii Community Colleges
Proposal to Initiate, Modify or Delete a Course

Levels of Review of Course Proposal at Windward Community College

Course Alpha, Number, and Title: OCN 201L Physical Environment of the Ocean Laboratory

Signatures

1. Department Area (more than one departmental instructor's signature required)

[Signature]

Dates

Oct 3, 2005

2. Department

Joseph E. Crotti
Department Chairperson

Was this course discussed in a department meeting? □ Yes ☒ No

3. Division

Elizabeth Aslund

10 12/05

4. Curriculum Committee Review

Approved ☒

Disapproved □

Reason:

Jean Shibuya
Curriculum Committee Chairperson

October 25, 2005

CCCM #6100 (Amended for WCC use October 2002)
1. How is this course related to the education needs and goals of the College/Department/Community as reflected in the EDP/ADP?

OCN 201L will function as the optional companion lab course for OCN 201, fulfilling core requirements for a natural science laboratory class.

This course is consistent with the WCC ADP Strategic Direction to “Strengthen the Liberal Arts” as follows:

7.A. Continue Support for Existing and New Initiatives
The OCN 201/201L sequence will support new curriculum initiatives in Bio-Resources Development and Management and Ocean Recreation, Safety and Stewardship.

7.G. Support Goals of the Natural Sciences Department
The OCN 201/201L will support “curriculum development and enhancement for undergraduate education and workforce training in the following areas:” ocean sciences, environmental science/studies, and ocean recreation safety and management, without requiring significant additions to the existing budget.

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?

This class should not require additional resources or costs beyond our existing budget. Potential instructors for the course include Dr. Floyd McCoy and Dr. David Krupp.

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.

OCN 201L (UHM, HonCC, LeeCC) & MARE 201L (UHH).

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? No If yes, explain why this course is appropriate at the lower division or how it differs from its upper division counterpart.

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.
1. What change is proposed in the course? Provide specific information comparing both the "new" and "old" course.

2. What is the rationale for the change?

3. Is the change substantive enough to require a change in course identification? If so, explain thoroughly.

4. Is the course articulated with any 4-year program? *
   If yes, give details of the agreement(s) and explain any impact the proposed modifications may have on articulation.

5. Provide details of any additional staff, equipment, facilities, library/media material, faculty preparation and other financial considerations that would be required to implement this course modification. What has been done to provide for these additional costs? Who will teach the course? Is additional preparation needed?

6. Will this course modification result in any alterations in the number of hours required to attain a certificate or degree? * If yes, provide details and justification for these alterations.

7. If the course is renumbered to 100 or above, does it meet the criteria for transfer level courses? (Go to next page for transfer course criteria.) *
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 OCN 201L Physical Environment of the Ocean Laboratory

Submitted by Floyd McCoy

Date October 4, 2005

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

   OCN 201L is similar to OCN 201L at UHM and Mare 201L at UHH. Mare 201L is required for a Bachelor's Degree in Marine Science at UHH. Both OCN 201L and Mare 201L may partially satisfy the Marine Option Program requirements at UHM and UHH respectively.

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

   HPU offers MARS 2061 (Geological, Chemical, and Physical Oceanography Laboratory), which is designed for majors in Marine Biology and Oceanography.

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.
University of Hawaii Community Colleges
Proposal to Initiate, Modify or Delete a Course Articulation with 4-year UH Campus Form

COURSE ARTICULATION FORM (GENERAL EDUCATION CORE)

ORIGINATING CAMPUS: Windward Community College DATE SUBMITTED: October 4, 2005

COURSE ALPHA & NUMBER: OCN 201L SEMESTER CREDITS: 1

COURSE TITLE: Science of the Sea

DATE OF OUTLINE: October 4, 2005 Year 2005

(** 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 □
   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>MARE 201L</td>
<td>NS</td>
</tr>
<tr>
<td>UH Manoa</td>
<td>OCN 201L</td>
<td>DY</td>
</tr>
<tr>
<td>UH West Oahu</td>
<td>none</td>
<td>NS</td>
</tr>
<tr>
<td>Hawaii CC</td>
<td>none</td>
<td>NS2</td>
</tr>
<tr>
<td>Honolulu CC</td>
<td>OCN 201L</td>
<td>NS2</td>
</tr>
<tr>
<td>Kapiolani CC</td>
<td>none</td>
<td>NS2</td>
</tr>
<tr>
<td>Kauai CC</td>
<td>none</td>
<td>NS2</td>
</tr>
<tr>
<td>Leeward CC</td>
<td>OCN 201L</td>
<td>NS2</td>
</tr>
<tr>
<td>Maui CC</td>
<td>none</td>
<td>NS</td>
</tr>
<tr>
<td>Windward CC</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3. If submitted 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

Note: If possible submit coversheet and course outline electronically as e-mail attachments (preferably in ‘pdf’ format). If submitting in printed form, 20 copies of coversheet and course outline are required for distribution for appropriate review.

Note: UCA Clearinghouse
John Muth, Office of the Chancellor for Community Colleges, is acting as staff to the University Council on Articulation and is
1. When the committee has completed its review of a course, the "ARTICULATION RECOMMENDATION FORM" (revised 1/18/2001) should be filled in and attached to the outline. The committee chair should also sign the form.

2. If the committee choice is "accept," indicate receiving campus core area. If the committee choice is "not recommended," a reason must be provided. Outlines with missing or incomplete recommendation forms will be returned to the committee.

If a committee requires updated or more complete outlines, such requests should be made through the UCA Clearinghouse so that the new outline material can be tracked and placed in the file. If a committee requires more general supporting information, this should be requested through the course's supporting campus representative on the committee.

3. All committee recommendations should be sent to the UCA Clearinghouse for recordation and dissemination to the campuses. DO NOT SEND THE RECOMMENDATIONS DIRECTLY TO ANY CAMPUS.

RECEIVING CAMPUS:

1. Courses will be sent to each campus for consideration after they come out of committee. Each campus has its own internal process for the approval of courses for its general education core.

2. In all cases where a campus accepts a course into its general education core, it must also indicate which area or part of its core the course fits.

3. In all cases where a campus does not accept a course for articulation, it must supply a reason (even if it is "we agree with the committee").

4. When campus actions are completed, these actions should be conveyed back to the UCA Clearinghouse for recordation and publication.

5. The Community College Policy on Acceptance of UCA Reviewed Courses is as follows:

(a) All Community Colleges agree to accept positive UCA committee recommendations for core, including core categories assigned by the committee.

(b) All Community Colleges agree to accept the UCA committee judgment of not-Recommended (nR) without further review.

(c) This policy is retroactive to the time the current articulation effort started.

(d) The Community Colleges reserve the right to review and modify core category assignments as necessary to insure appropriate categorization and to realign such assignments if changes are made to the campus core structure. Such modifications shall not interfere with the timely publication of the student transfer handbook.

Note: UCA Clearinghouse
John Muth, Office of the Chancellor for Community Colleges, is acting as staff to the University Council on Articulation and is
University of Hawaii Community Colleges
Proposal to Initiate, Modify or Delete a Course
Articulation with 4-year UH Campus Form

ARTICULATEDCOURSE
CHANGE IN ALPHA/NUMBER/TITLE

Old Course

______________________________________________
Course Alpha & Number:
Title:

______________________________________________

Revised Course

______________________________________________
Course Alpha & Number:
Title:
Semester and Year when the revised course was/will be first offered:

Reason for the change in Alpha/Number/and/or Title:

Note: A current outline of the course must be submitted with this form. Undated outlines are not acceptable.

I certify that this course has had its alpha, number, and/or title changed, but that it is substantially the same course as the course that was reviewed and approved for articulation.

Campus: Windward Community College
Certifying Authority (Typed Name or Signature and Title)
Date:

SUBMIT TO: UCA Clearinghouse, Attn: John Muth
Chancellor’s Office for CC, 2327 Dole Street
Revised 1/19/01
WINDWARD COMMUNITY COLLEGE
OUTLINE OF COURSE OBJECTIVES

COURSE NAME: Science of the Sea Laboratory
COURSE ALPHA: OCN 201L
CREDITS: 01

CATALOG DESCRIPTION:

Companion laboratory course to OCN 201. Concepts, techniques, and instrumentation used for experimental studies in chemical, physical, and geological oceanography. Emphasizes laboratory and field measurements and their applications. Laboratory/field trip course. (3 hrs. lab)

REQUIREMENTS COURSE SATISFIES:

Partially fulfills Windward Community College’s Liberal Arts degree Natural Science requirements as a physical science laboratory course.

PREREQUISITES:

Completion or concurrent registration in OCN 201 or equivalent preparation or consent of instructor.

RECOMMENDED PREPARATION:

High school algebra and chemistry; ability to use a computer.

RECOMMENDED BASIC SKILL LEVELS:

Reading level of text(s): college level.

INSTRUCTOR:
OFFICE:
TELEPHONE:
EFFECTIVE DATE: Spring 2006
COURSE GOALS

The primary goal of this laboratory/fieldtrip course is to provide the student with the hands-on experiences and skills that enhance the student's understanding of chemical, physical, and geological oceanography as presented in the lecture companion course. A further goal is for the student to achieve an understanding of application of the scientific method in understanding the study of the oceans.

COURSE OBJECTIVES

The student will demonstrate the acquisition of basic laboratory and field research skills and knowledge relevant to chemical, physical, and geological oceanography. These skills and knowledge include the following areas:

- the scientific method of inquiry, providing examples of its use, and demonstrating this method through written reports and summaries of class laboratory activities;
- the collection, reduction, interpretation, and presentation of scientific data in the form of laboratory/field reports and summaries;
- the use of some of the standard tools of the oceanographer, such as water and sediment sampling devices, global positioning systems, hand-bearing compasses, transits, pulse-laser rangefinders, current drogues, microscopes, scales, spectrophotometers, reversing thermometers, XBT's, pH meters, oxygen meters, salinometers, refractometers, conductivity meters, turbidimeters, light meters, Secchi disks, computers, and other analytical tools;
- basic techniques in oceanographic measurement, such as beach profiles and bathymetry, sediment analyses, sampling techniques, light measurements, physical and chemical determinations of seawater characteristics, use of marine charts for navigation and station location, geographic information systems, remote sensing, plotting currents, etc.; and
- integration of basic oceanographic principles with the techniques learned by completing specific assignments.

MODE OF INSTRUCTION

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;
- Internet-assisted activities and assignments;
- Data collection using instruments and measurement tools;
- Computer-assisted data collection activities;
- Recording and interpreting results from laboratory and field activities;
- Written reports and/or summaries of laboratory activities;
- Homework assignments; and
- Pre-lab quizzes.
EVALUATION OF OBJECTIVE ACHIEVEMENT

PRE-LAB QUIZZES. The student will take a total of 15 quizzes (10 points each; 150 points total) administered ONLY during the first five minutes of the laboratory meetings. These noncumulative quizzes will test the student's knowledge of and preparation for the laboratory exercise planned for that day, as well as the student's understanding of the previous laboratory activity.

LABORATORY NOTEBOOK. The student will maintain a laboratory notebook to record all notes, observations, and information gathered before and during laboratory and field activities. This notebook must be brought to every laboratory period. This notebook will be collected and graded twice during the semester (15 points for the first collection; 35 points for the final collection; 50 points total). The type of notebook and the kind of information required will be explained during the introductory lab session.

LABORATORY/FIELD REPORTS AND SUMMARIES. The student will complete a total of 15 written laboratory reports or summaries (10 points each). Each report or summary must be completed and turned in no later than the beginning of the first laboratory meeting after the assignment was given (150 points total).

LABORATORY/FIELD ATTENDANCE AND PARTICIPATION. The student will attend and actively participate in all laboratory and field activities (50 points). A student missing more than two of these sessions will not receive a passing grade for the course.

HOMEWORK ASSIGNMENTS. The student will complete a total of 10 homework assignments from the course workbook. Each report will be worth 10 points for a possible total of 100 points.

METHOD OF GRADING

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

<table>
<thead>
<tr>
<th>Component</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Lab Quizzes</td>
<td>150</td>
</tr>
<tr>
<td>Laboratory Notebook</td>
<td>50</td>
</tr>
<tr>
<td>Laboratory/Field Reports and Summaries</td>
<td>150</td>
</tr>
<tr>
<td>Laboratory/Field Attendance and Participation</td>
<td>50</td>
</tr>
<tr>
<td>Homework Assignments</td>
<td>100</td>
</tr>
<tr>
<td>TOTAL POSSIBLE POINTS</td>
<td>500</td>
</tr>
</tbody>
</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 two scheduled laboratory activities.
D ......55-64.9% of total points and not missing more than two scheduled laboratory activities.
F ......Below 55% of total points or informal or incomplete official withdrawal from course, or if a student misses more than two scheduled laboratory activities 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 two scheduled laboratory activities.

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 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 two scheduled laboratory activities; 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).

All assignments (homework assignments, lab reports and lab summaries) will be due at the beginning of the first class meeting following the session in which they were assigned. A late assignment will receive a reduced score (minimum penalty = 15% of the total possible points for the assignment). Late assignments will not be accepted at all if submitted more than one week past the due date.

Waiver of minimum level of achievement or penalty criteria for late assignments will be given only in unique situations at the instructor's discretion. Students involved in cheating will receive an "F" grade for the course.

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 and field activities and complete all course assignments on time.

Students are expected to be prepared in advance when they arrive at 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; it also includes appropriate dress for field activities such as beach or shallow-water surveys.

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 also 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.)
TEXTBOOK AND OTHER ASSIGNED INSTRUCTIONAL MATERIALS

Handouts describing specific laboratory/field activities and assignments.


Other reading assignments may be found on reserve in the library or may be provided in class.

OTHER INFORMATION

Science courses at W.C.C. generally require 2-3 hours independent study time for each hour in class.

Important Dates:

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

Instructor's Office Hours:
<table>
<thead>
<tr>
<th>WEEK</th>
<th>LABORATORY TOPIC</th>
</tr>
</thead>
</table>
| 1 | Laboratory Introduction and Orientation  
Lab: Introduction to the Scientific Method |
| 2 | Lab: Data Collection, Summarization, Analysis, and Presentation |
| 3 | Lab: Map Projections and Coordinate Systems  
HW: Marine Charts |
| 4 | Lab/Field: Geographic Positioning Systems |
| 5 | Lab: Bathymetry and Seismic-Reflection Profiling  
HW: Geography of the Oceans |
| 6 | Lab: Survey of Rocks and Minerals  
HM: Sea-Floor Spreading and Plate Tectonics |
| 7 | Lab: Analysis of Sediments  
HW: Materials on the Sea Floor |
| 8 | Lab: Physical and Chemical Properties of Water and Seawater I  
HW: Temperature and Salinity |
| 9 | Lab: Physical and Chemical Properties of Water and Seawater II |
| 10 | Field: Light Absorption in the Water Column  
HW: Water Masses and How We Study Them |
| 11 | Field: Surface Currents  
HW: Surface Currents |
| 12 | Lab: Geographic Information System Analysis of Current Flow |
| 13 | Lab: Remote Sensing  
HW: Oceanography from Space and Remote Sensing |
| 14 | Lab: Quantitative Analysis of Waves and Tides  
HW: Hurricanes |
| 15 | Lab/Field: Beach Profiles  
HW: Waves in Shallow Water and Beach Erosion |
| 16 | Lab/Field: Estuary Water Quality Study |
Students enrolled in OCN 201L 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., scalpels, 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 in 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 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 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 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 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 swim suits, 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, lion fish, 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 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).

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