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

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

2. New Alpha, Number and Title
   - ZOOL 141L Human Anatomy and Physiology Lab I

3. Credits
   - 1 credit

4. Old Alpha, Number and Title
   - 

5. Credits
   - *

6. New Catalog Description
   - Laboratory to accompany ZOOL 141. Reinforces the facts and concepts of human anatomy and physiology discussed in ZOOL 141 through dissections, examination of models, laboratory activities, and other hands-on experiences. This course is intended for students entering health care or medically related fields such as nursing, physical therapy and medical technology.

7. Select box and type specific information in text box.
   - ☑ Prerequisites
   - ☑ Corequisites or Recommended Preparation
   - ☑ Prior or concurrent registration in ZOOL 141 or equivalent preparation or consent of instructor

8. Student Contact Hours Per Week
   - Lecture
   - Lecture/Lab
   - Lab
   - 3
   - 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 Nat Sci: Biological
    - ☑ Other, specify Science Laboratory Course

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>HawaiiCC</td>
<td>BIOL 141L Human Anatomy and Physiology Lab</td>
<td>MauiCC</td>
<td>ZOOL 141 Human Anatomy and Physiology</td>
</tr>
<tr>
<td>Honolulu</td>
<td>ZOOL 141 Human Anatomy and Physiology I</td>
<td>UH Hilo</td>
<td>BIOL 243L Human Anatomy and Physiology Lab</td>
</tr>
<tr>
<td>Kapiolani</td>
<td>ZOOL 141L Human Anatomy and Physiology Lab</td>
<td>UH Manoa</td>
<td>PHYL 141L Human Anatomy and Physiology Lab</td>
</tr>
<tr>
<td>KauaiCC</td>
<td>ZOOL 141L Human Anatomy and Physiology Lab</td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>Leeward</td>
<td>ZOOL 240 Human Anatomy and Physiology</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:
   - ☑ Appropriate for Articulation with all courses listed in #12 above except courses at HonCC, LeeCC, & MauCC which also include lecture.
   - Provide details of existing or desired articulation (date, college(s), purposes, pre-major or major, etc.) in this space:
   - Desired by Fall 2004. Any of these classes may satisfy requirements for human anatomy & physiology in undergraduate nursing curricula.
   - ☑ Not yet appropriate for Articulation.

14. Reason for Initiating, Modifying or Deleting Courses or Other Pertinent Comment:
   - Responding to student requests for WCC to offer this class. Also responding to requests from Dean's office, course scheduling committee and CAAC. The ZOOL 141/142 sequence plus companion labs are required for undergraduate study in nursing programs at KapCC, KauCC, HawCC, UHH, & UHM.

Requested by:

Approved by:

Date:

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

Course Alpha, Number, and Title: BIL 141L Human Anatomy and Physiology Lab I

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

   [Signatures]

   [Dates]

2. Department

   [Signature]

   Department Chairperson

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

3. Division

   [Signature]

   [Dates]

4. Curriculum Committee Review

   Approved ☑ 7-0

   Disapproved □

   Reason:

   [Signature]

   Curriculum Committee Chairperson

   [Dates]

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?

The ZOOL 141/142 sequence, plus companion labs, is required for undergraduate curricula in nursing at many institutions. The nursing field is in desperate need of recruiting qualified nurses.

ZOOL 141L fulfills WCC's stated mission of providing "the trained workforce needed by the State, by offering occupational, technical, and professional courses and programs which both prepare students for immediate employment and career advancement" (WCC ADP 2002-2008). This course is also consistent with the ADP Strategic Direction 3.0, "Promote Workforce and Economic Development.

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, when offered, will require additional resources in the form of supplies and equipment. It is anticipated that funds for the equipment will be raised from WCC summer session revenues and extramural funding.

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.

No fundamental differences from comparable courses in the UH system. At some campuses (HonCC, LeeCC, and MauCC), the lab component is integrated into the course as a single four-credit course. At others (UHM, UHH, KapCC, KauCC, and HawCC), registration into lab (one credit) is separate from the lecture (three credits).

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.
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 ZOOL 141L Human Anatomy and Physiology Lab I

Submitted by Dave Krupp

Date April 6, 2003

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

PHYL 141L Human Anatomy and Physiology Lab. Required for the Bachelor of Science degree in Nursing at UHM.
BIOL 243L Human Anatomy and Physiology Laboratory. Required for the Bachelor of Science degree in Nursing at UHH.

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

BIOL 151L Human Anatomy and Physiology Laboratory, Chaminade University, Honolulu, HI
BIOL 2031 Anatomy and Physiology I Lab, Hawaii Pacific University, Honolulu, HI

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: April 6, 2003

COURSE ALPHA & NUMBER: ZOOL 141L SEMESTER CREDITS: 1

COURSE TITLE: Human Anatomy and Physiology Lab I

DATE OF OUTLINE: April 6, 2003 Year 2004

(** 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>BIOL 243L</td>
<td>NS (lab course)</td>
</tr>
<tr>
<td>UH Manoa</td>
<td>PHYL 141L</td>
<td>DY</td>
</tr>
<tr>
<td>UH West Oahu</td>
<td>none</td>
<td>NS</td>
</tr>
<tr>
<td>Hawaii CC</td>
<td>BIOL 141L</td>
<td>NS1 (lab course)</td>
</tr>
<tr>
<td>Honolulu CC</td>
<td>ZOOL 141 (includes lecture)</td>
<td>NS1 (lab course)</td>
</tr>
<tr>
<td>Kapiolani CC</td>
<td>ZOOL 141L</td>
<td>NS1 (lab course)</td>
</tr>
<tr>
<td>Kauai CC</td>
<td>ZOOL 141L</td>
<td>NS1 (lab course)</td>
</tr>
<tr>
<td>Leeward CC</td>
<td>ZOOL 240 (includes lecture)</td>
<td>NS1 (lab course)</td>
</tr>
<tr>
<td>Maui CC</td>
<td>ZOOL 141 (includes lecture)</td>
<td>NS (lab course)</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 responsible for tracking all courses submitted for articulation.
WINDWARD COMMUNITY COLLEGE
OUTLINE OF COURSE OBJECTIVES

COURSE NAME: Human Anatomy and Physiology Lab I
COURSE ALPHA: ZOOL 141L
CREDIT HOURS: 01

CATALOG DESCRIPTION:
Laboratory to accompany ZOOL 141. Reinforces the facts and concepts of human anatomy and physiology discussed in ZOOL 141 through dissections, examination of models, laboratory activities, and other hands-on experiences. This course is intended for students entering health care or medically related fields such as nursing, physical therapy and medical technology. (3 hrs. lab)

REQUIREMENTS COURSE SATISFIES:
Partially fulfills Windward Community College’s Liberal Arts degree Natural Science requirements as a biological science laboratory course.

PREREQUISITES:
Successful completion or concurrent registration in ZOOL 141 or consent of the instructor

RECOMMENDED SPECIAL PREPARATION: None.

RECOMMENDED BASIC SKILL LEVELS: College level reading/writing skills.

ACTIVITIES REQUIRED AT SCHEDULED TIMES OTHER THAN CLASS TIME:
None.

INSTRUCTOR:
OFFICE:
TELEPHONE:
EFFECTIVE DATE: Fall 2004
COURSE GOALS

The primary goal of this laboratory course is to provide the student with the hands-on experiences and skills that enhance the student’s understanding of human anatomy and physiology 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 functioning of the human body.

COURSE OBJECTIVES

The student will demonstrate the acquisition of basic biological science laboratory skills and knowledge relevant to human anatomy and physiology. These skills and knowledge include the following areas:

- describe the scientific method of inquiry, provide examples of its use, and demonstrate this method through written reports and summaries of class laboratory activities;
- collect, reduce, interpret, and present biological data;
- use of some of the standard tools of the biological scientist, such as microscopes, scales, pH meters, spectrophotometers, computers, and other analytical tools;
- demonstrate knowledge of the instrumentation, procedures, and theoretical foundations needed to study human anatomy and physiology, such as dissection, basic chemical techniques, separation and analysis of biological compounds, microscopic examination of cells and tissues, membrane transport mechanisms, nervous and sensory function;
- demonstrate comprehensive knowledge of anatomy (structure) and physiology (function) of the fetal pig (using preserved specimens) and human body (using models, photographs, and diagrams), including basic tissues types, organs, and organ systems (i.e., skeletal, integumentary, muscular, and nervous); and
- communicate using the appropriate technical vocabulary in a written report and oral presentation the results of a library research project on an human health topic.

MODE OF INSTRUCTION

The previously described objectives will be achieved through the aid of the following learning activities:

- Active participation in laboratory activities;
- Laboratory lecture and demonstrations;
- Multimedia presentations, including computer-assisted and Internet-assisted activities;
- Dissection of preserved specimens and examination of models;
- Computer-assisted data collection activities;
- Recording and interpreting results from laboratory activities;
- Written reports and/or summaries of laboratory activities;
- A term research paper; and
- Laboratory examinations and 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. Considerable out-of-classroom time will be spent completing lab reports and summaries.

EVALUATION OF OBJECTIVE ACHIEVEMENT

IN-LAB EXAMINATIONS. The student will take one midterm practical examination (100 points) and a non-cumulative final practical examination (100 points) to demonstrate acquisition of laboratory skills and an understanding of information presented during laboratories.

QUizzes. The student will take a total of 13 quizzes (10 points each) administered ONLY during the first five minutes of the laboratory meetings. These non-cumulative 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 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 (20 points for the first collection; 40 points for the final collection; 60 points total). The type of notebook and the kind of information required will be explained during the introductory lab session.

LABORATORY REPORTS AND SUMMARIES. The student will complete a total of 13 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 (130 points total).

TERM RESEARCH PAPER. The student will complete a major written (typed) assignment involving a library research report on an approved human health topic (60 points). The specific details and instructions for how to complete this assignment will be made available at the course website or through a written class handout. The student will also make a short oral presentation of the topic during the last laboratory session (20 points).

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 report/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.
LAB ATTIRE, CONDUCT AND HYGIENE. Because biology labs often involve working with hazardous materials and living organisms, students must dress appropriately. Students must wear lab coats and closed-toe shoes to lab. Students may purchase a lab coat at the college bookstore. In addition, some lab activities will require students to wear gloves and safety glasses (provided by the college). Students failing to dress appropriately for lab will not be permitted into the laboratory and will be considered to be absent for the missed lab activity. Students engaged in conduct that threatens the safety of themselves and others in the lab will be refused access to the lab for the remainder of the semester and will receive an "F" for the course. Students are also expected to clean up their workstations following the lab activities. Failing to do so will lead to a 5-10 point penalty depending upon the seriousness of the infraction.

METHOD OF GRADING

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

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Midterm Examination</td>
<td>100</td>
</tr>
<tr>
<td>Final Examination</td>
<td>100</td>
</tr>
<tr>
<td>Quizzes</td>
<td>130</td>
</tr>
<tr>
<td>Laboratory Notebook</td>
<td>60</td>
</tr>
<tr>
<td>Laboratory Reports/Summaries</td>
<td>130</td>
</tr>
<tr>
<td>Term Research Paper &amp; Presentation</td>
<td>80</td>
</tr>
<tr>
<td>TOTAL</td>
<td>600</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).

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.

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 ZOOL 141L is a difficult course. Thus ZOOL 141L requires much time and serious dedication. If the student does not have a strong background or interest in human anatomy and physiology, the student does not belong in this lab course.

TEXTBOOK AND OTHER ASSIGNED INSTRUCTIONAL MATERIALS

The required textbooks are:

- Specific handouts for physiology experiments will be distributed.


Selected lab activities will also be utilized from:


OTHER INFORMATION

Important Dates:

- Last day to add or drop a class
- Last day of erase period
- Last day for official withdrawal

Instructor's Office Hours (or by appointment):

<table>
<thead>
<tr>
<th>WEEK</th>
<th>LABORATORY TOPIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Laboratory Introduction and Orientation; Introduction to the Scientific Method</td>
</tr>
<tr>
<td>2</td>
<td>Physiology: Collecting, Summarizing, Interpreting and Presenting Data</td>
</tr>
<tr>
<td>3</td>
<td>Experiment: The Chemistry of Life and Biological Molecules</td>
</tr>
<tr>
<td>4</td>
<td>Experiment: Using the Microscope and Cell Structure</td>
</tr>
<tr>
<td>5</td>
<td>Physiology: Diffusion, Osmosis and Membrane Transport</td>
</tr>
<tr>
<td>6</td>
<td>Experiment: Mitosis and Meiosis</td>
</tr>
<tr>
<td>7</td>
<td>Anatomy: Tissues and the Skin</td>
</tr>
<tr>
<td>8</td>
<td>Anatomy: Body Organization; Anatomy: Skeleton, and Bones</td>
</tr>
<tr>
<td>9</td>
<td>LABORATORY PRACTICAL EXAMINATION</td>
</tr>
<tr>
<td>10</td>
<td>Anatomy: Joints and Muscles</td>
</tr>
<tr>
<td>11</td>
<td>Physiology: Muscle Contraction</td>
</tr>
<tr>
<td>Week</td>
<td>Topic</td>
</tr>
<tr>
<td>------</td>
<td>-------------------------------------------</td>
</tr>
<tr>
<td>12</td>
<td>Physiology: Neurophysiology Experiment</td>
</tr>
<tr>
<td>13</td>
<td>Anatomy: The Nervous System</td>
</tr>
<tr>
<td>14</td>
<td>Anatomy: The Special Senses</td>
</tr>
<tr>
<td>15</td>
<td>Physiology: Human Sensory Function</td>
</tr>
<tr>
<td>16</td>
<td>Research Paper Reports</td>
</tr>
<tr>
<td>Finals Week</td>
<td>FINAL PRACTICAL EXAMINATION (1:30-3:20)</td>
</tr>
</tbody>
</table>
ZOO 141L Laboratory Activities

Students enrolled in ZOO 141L 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 IN THE BIOLOGY LABORATORY

Students 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.

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 and 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.