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

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

3. Credits
   - 3 credits

4. Old Alpha, Number and Title

5. Credits

6. New Catalog Description
   - The first semester of a two-semester course in human anatomy and physiology which includes a study of human embryology, gross anatomy, microanatomy, physiology, pathology, and homeostatic relationships. 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
   - Pre: High school chemistry or equivalent preparation or consent of instructor.
   - Rec: High school biology, BIOL 100 BIOL 101 or ZOOL 101; Concurrent registration in ZOOL 141L.

8. Student Contact Hours Per Week
   - Lecture 3
   - Lab
   - Other (click to specify)

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

10. This course $\checkmark$ is proposed for the Liberal Arts Program
    - Program.
    - $\checkmark$ can fulfill Nat Sci: Biological
    - Other, specify

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 141 Human Anatomy and Physiology I</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 243 Human Anatomy and Physiology</td>
</tr>
<tr>
<td>Kapiolani</td>
<td>ZOOL 141 Human Anatomy and Physiology I</td>
<td>UH Manoa</td>
<td>PHYL 141 Human Anatomy and Physiology</td>
</tr>
<tr>
<td>KauaiCC</td>
<td>ZOOL 141 Human Anatomy and Physiology *</td>
<td>Leeward</td>
<td>ZOOL 240 Human Anatomy and Physiology *</td>
</tr>
</tbody>
</table>

13. This course is
   - $\checkmark$ already articulated with
   - Provide details of existing or desired articulation (date, college(s), purposes, pre-major, etc.) in this space:
     - $\checkmark$ appropriate for Articulation with all courses listed in #12 above except courses at HonCC, LeewCC, & MauCC also include lab.
     - 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: [Signature] Date: 4/17/03
Approved by: [Signature] Date: 4/22/03
CCCM #6100 (Amended for WCC use October 2005)
University of Hawaii Community Colleges
Proposal to Initiate, Modify or Delete a Course

Dean of Instruction

Provost

Date

5/5/03

Date

CCCM #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: Biol 141 Human Anatomy and Physiology I

Signatures

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

   [Signature]
   Date: Apr 8, 03

2. Department

   [Signature]
   Date: Apr 8, 03

   Department Chairperson

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

3. Division

   [Signature]
   Date: Apr 8, 03

4. Curriculum Committee Review

   Approved ☑ 7-0
   Disapproved ☐

   Reason:

   [Signature]
   Date: April 22, 2003

   Curriculum Committee Chairperson

CCCM #6100 (Amended for WCC use October 2002)
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?

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 141 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 lect./lab. 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 141 Human Anatomy and Physiology 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 141 Human Anatomy and Physiology. Required for the Bachelor of Science degree in Nursing at UHM.
   BIOL 243 Human Anatomy and Physiology. 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 151 Human Anatomy and Physiology, Chaminade University, Honolulu, HI
   BIOL 2030 Anatomy and Physiology I, 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 141  
SEMESTER CREDITS: 3  

COURSE TITLE: Human Anatomy and Physiology I  

DATE OF OUTLINE: April 6, 2003  

(** 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 243</td>
<td>NS - I, C</td>
</tr>
<tr>
<td>UH Manoa</td>
<td>PHYL 141</td>
<td>DB</td>
</tr>
<tr>
<td>UH West Oahu</td>
<td>none</td>
<td>NS</td>
</tr>
<tr>
<td>Hawaii CC</td>
<td>BIOL 141</td>
<td>NS1</td>
</tr>
<tr>
<td>Honolulu CC</td>
<td>ZOOL 141</td>
<td>NS1</td>
</tr>
<tr>
<td>Kapiolani CC</td>
<td>ZOOL 141</td>
<td>NS1</td>
</tr>
<tr>
<td>Kauai CC</td>
<td>ZOOL 141</td>
<td>NS1</td>
</tr>
<tr>
<td>Leeward CC</td>
<td>ZOOL 240</td>
<td>NS1</td>
</tr>
<tr>
<td>Maui CC</td>
<td>ZOOL 141</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 responsible for tracking all courses submitted for articulation.
WINDWARD COMMUNITY COLLEGE
OUTLINE OF COURSE OBJECTIVES

COURSE NAME: Human Anatomy and Physiology I
COURSE ALPHA: ZOOL 141
CREDIT HOURS: 03

CATALOG DESCRIPTION:

The first semester of a two-semester course in human anatomy and
physiology which includes a study of human embryology, gross anatomy,
macroanatomy, physiology, pathology, and homeostatic relationships.
This course is intended for students entering health care or medically
related fields such as nursing, physical therapy and medical technology.
(3 hrs. lect.)

REQUIREMENTS COURSE SATISFIES:

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

PREREQUISITES:

High school chemistry or equivalent preparation or consent of instructor.

RECOMMENDED SPECIAL PREPARATION:

High school biology, BIOL 100 BIOL 101 or ZOOL 101; Concurrent
registration in ZOOL 141L.

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 course is to provide the student with the basic knowledge of human anatomy and physiology needed for entering an academic program in human health-related fields such as nursing, physical therapy, and medical technology. A further goal is for the student to achieve an understanding of the role of science and the scientific method in understanding the functioning of the human body.

COURSE OBJECTIVES

The student will describe and integrate basic biological principles and define basic biological terms relevant to human anatomy and physiology presented in lecture and required texts, citing specific examples when asked for. These principles includes the following areas:

- The philosophy and characteristics of science and the scientific method;
- The difference between hypotheses, theories and laws in science;
- The definition of life and how living things differ from inanimate objects;
- The chemical architecture of living things and the functions of the major groups of biological molecules;
- The structure, function and reproduction of cells and their organelles;
- The organization of cells into tissues, the basic types of tissues, their subdivisions and their functions;
- The basic architecture of the human body – anatomical position, regional names, directional terms, planes and sections, body cavities, and abdominopelvic regions and quadrants;
- The anatomy and physiology of the systems that make up the human body, including the skeletal, integumentary, muscular, and nervous system (including special senses) systems; and
- Pathological conditions of these systems and functions.

MODE OF INSTRUCTION

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

- Active participation in lecture activities;
- Lecture and demonstrations;
- Multimedia presentations (e.g., PowerPoints, videos, etc.)
- Computer-assisted (e.g., CD-ROM) and Internet-assisted (e.g., WebCT) activities;
- Assigned text readings;
- Lecture outlines and other handouts; and
- Quizzes and examinations.

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

EXAMINATIONS. The student will take two midterm examinations (100 points each) and a non-cumulative final 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 10 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.

Examinations and quizzes may be administered via WebCT.

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>Midterm Examinations</td>
<td>200 points</td>
</tr>
<tr>
<td>Final Examination</td>
<td>100 points</td>
</tr>
<tr>
<td>Quizzes</td>
<td>100 points</td>
</tr>
<tr>
<td>TOTAL</td>
<td>400 points</td>
</tr>
</tbody>
</table>

Letter grades will be assigned as follows:

A......90% or above in total points.
B......80-89.9% of total points.
C......65-79.9% of total points.
D......55-64.9% of total points.
F......Below 55% of total points or informal or incomplete official withdrawal from course.
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).
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).
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 are expected to participate in all lecture activities and complete all course activities 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, study guides and handouts) assigned for that day's activities and bringing required work materials (e.g., textbook, handouts, writing supplies, etc.).

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.

Students should expect a level of difficulty comparable to other 100-level science classes intended for majors in the discipline. When difficult concepts and detailed information are presented, it is the student's responsibility to take the appropriate steps to learn and understand these concepts and information.

Science courses at W.C.C. generally require two to three hours of independent private study time for each hour in class. However, because of the nature of the material presented in BIOL 141, more study time may be required (depends upon the student's science/biology background). It is the student's responsibility to allocate the appropriate time needed for study in an environment conducive to quality study. The student must budget time efficiently and be realistic about all personal and professional commitments that consume time.

TEXTBOOK AND OTHER ASSIGNED INSTRUCTIONAL MATERIALS

The required textbook is:


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):
## Tentative Schedule of Lecture Topics

<table>
<thead>
<tr>
<th>WEEK</th>
<th>LECTURE TOPIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Course Introduction; Science as a Way of Knowing</td>
</tr>
<tr>
<td>2</td>
<td>Characteristics of Living Things</td>
</tr>
<tr>
<td>3</td>
<td>The Chemistry of Life and Biological Molecules</td>
</tr>
<tr>
<td>4</td>
<td>Cell Structure and Function</td>
</tr>
<tr>
<td>5</td>
<td>Cell Reproduction: Mitosis and Meiosis</td>
</tr>
<tr>
<td>6</td>
<td>Catch Up and Review; FIRST MIDTERM EXAMINATION</td>
</tr>
<tr>
<td>7</td>
<td>Tissues; The Integumentary System</td>
</tr>
<tr>
<td>8</td>
<td>The Architecture of the Human Body</td>
</tr>
<tr>
<td>9</td>
<td>The Skeletal System</td>
</tr>
<tr>
<td>10</td>
<td>The Muscular System</td>
</tr>
<tr>
<td>11</td>
<td>Catch Up and Review; SECOND MIDTERM EXAMINATION</td>
</tr>
<tr>
<td>12</td>
<td>The Nervous System: Neurons and Nerve Transmission</td>
</tr>
<tr>
<td>13</td>
<td>The Nervous System: The Central Nervous System</td>
</tr>
<tr>
<td>14</td>
<td>The Nervous System: The Peripheral Nervous System</td>
</tr>
<tr>
<td>15</td>
<td>The Nervous System: The Special Senses</td>
</tr>
<tr>
<td>16</td>
<td>The Nervous System: The Special Senses</td>
</tr>
<tr>
<td>----</td>
<td>---------------------------------------</td>
</tr>
<tr>
<td>Finals Week</td>
<td>FINAL EXAMINATION</td>
</tr>
</tbody>
</table>