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

1. Type of Action
   - 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
   ANSC 151 Clinical Laboratory Techniques

3. Credits
   - 3 credits

4. Old Alpha, Number and Title

5. Credits
   *

6. New Catalog Description
   Provides students with the background knowledge needed to perform and interpret laboratory techniques commonly used in veterinary practice. Topics include: Homeostatic relationships, cytology, histology, parasitology and clinical physiology of major body systems. Includes a discussion of common disorders affecting major body systems and the techniques used for diagnosis. This course is intended for students entering veterinary technology, veterinary assisting or other animal-related fields (3 hrs. lecture).

7. Select box and type specific information in text box.
   - Prerequisites
   - Corequisites
   - Recommended Preparation
   - Credit for ANSC 142/142L Registration in ANSC 151L

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

9. Proposed Date of First Offering
   - Semester Spring
   - Year 2010

10. This course is proposed for the * Program. can fulfill Nat Sci: Biological If Other, specify Veterinary Assisting Certificate of Achievement (DB)

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>KapiolaniCC</td>
<td>MLT 100 Introduction to the Clinical Laboratory</td>
<td>*</td>
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<tr>
<td>KapiolaniCC</td>
<td>MLT 108 Hematology</td>
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<tr>
<td>KapiolaniCC</td>
<td>MLT 112 Clinical Biochemistry</td>
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<td>KapiolaniCC</td>
<td>MLT 212 Clinical Biochemistry II</td>
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<tr>
<td>KapiolaniCC</td>
<td>MLT 211 Clinical Microscopy</td>
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</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 Manoa
   - Provide details of existing or desired articulation (date, colleges(s), purposes, pre-major or major, etc.) in this space:
   - Not yet appropriate for Articulation.

14. Reason for Initiating, Modifying or Deleting Courses or Other Pertinent Comment:
   This course is most-similar to MLT 100. It covers topics taught in MLT 108, MLT 112, MLT 211, and MLT 212, though in less detail. Unlike the MLT courses, this course focuses on animal health (no humans).

Requested by: [Signature] 9/26/08
Approved by: [Signature] 10/28/08
# Levels of Review of Course Proposal at Windward Community College

Course Alpha, Number, and Title: ANSC 151 Clinical Lab Techniques

<table>
<thead>
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<th>Signatures</th>
<th>Dates</th>
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</tbody>
</table>

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

2. Department

   [Signature]

   Department Chairperson

   Was this course discussed in a department meeting? [ ] Yes [ ] No

3. Division

   [Signature]

4. Curriculum Committee Review

   [ ] Approved

   [ ] Disapproved

   Reason:

   [Signature]

   Curriculum Committee Chairperson

CCCMM #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?

   This course will meet the requirements for a WCC biological science (DB) and will support career development for those individuals wishing to obtain employment as veterinary assistants or lab animal technicians.

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 course could be taught by existing Natural Science faculty or by a qualified Veterinary Technician. Necessary equipment and supplies have already been purchased using extramural funds.

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

   The topics covered in this course overlap with MLT 100, MLT 108, MLT 112, MLT 211, and MLT 212. However, the focus of this course is animal health rather than human health.

4. Is this course experimental and/or unique to Windward Community College? Yes If yes, provide rationale and details of its impact on the College Curriculum

   Hawaii is one of only six states that lacks any type of formal training for veterinary technicians and veterinary assistants. As a result, most veterinarians are forced to train staff “off the street.” The proposed course and associated certificate would be unique to WCC and should result in an increase in full-time enrollment by 25-35 students per semester. No other UH institution teaches a similar course in the clinical physiology of domestic or companion animals.

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.
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 ANSC 151

Submitted by  Ross Langston, WCC Natural Sciences

Date September 25, 2008

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.

None

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

This Course is similar in content to:
VT 240 Clinical Laboratory Procedures I, Colby Community College, KS
Animal Science 420 Clinical Procedures in Animal Care I, Pierce College, CA

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: September 25, 2008

COURSE ALPHA & NUMBER: ANSC 151    SEMESTER CREDITS: 3

COURSE TITLE: Clinical Lab Techniques

DATE OF OUTLINE: September 25, 2008    Year 2008

(** 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>
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<tr>
<td>UH West Oahu</td>
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<td>Hawaii CC</td>
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<td>Honolulu CC</td>
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<td>Kapiolani CC</td>
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<td>Kauai CC</td>
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<td>Leeward CC</td>
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<td>Maui CC</td>
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<td>Windward CC</td>
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</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.

Revised 1/29/2001
University of Hawaii Community Colleges  
Proposal to Initiate, Modify or Delete a Course  
Articulation with 4-year UH Campus Form  

COMMITEE LEVEL:  

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 responsible for tracking all courses submitted for articulation.  

Revised 1/29/2001
University of Hawaii Community Colleges
Proposal to Initiate, Modify or Delete a Course
Articulation with 4-year UH Campus Form

ARTICULATED COURSE
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
ANSC 151
Clinical Laboratory Techniques

TR 9:30 – 10:45
ʻImiloa 103

INSTRUCTOR: __________________________
OFFICE: ____________________________
OFFICE HOURS: TBA
TELEPHONE: __________________________
EFFECTIVE DATE: Spring, 2009

WINDWARD COMMUNITY COLLEGE MISSION STATEMENT

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

CATALOG DESCRIPTION

Provides students with the background knowledge needed to perform and interpret laboratory techniques commonly used in veterinary practice. Topics include: Homeostatic relationships, cytology, histology, parasitology and clinical physiology of major body systems. Includes a discussion of common disorders affecting major body systems and the techniques used for diagnosis. This course is intended for students entering veterinary technology, veterinary assisting or other animal-related fields (3 hrs. lecture).

Prerequisite: Credit for or registration in ANSC 151L. Credit for ANSC 142 and 142L, or consent of instructor.

Activities Required at Scheduled Times Other Than Class Times: None

STUDENT LEARNING OUTCOMES

Upon successful completion of ANSC 151 the student should be able to:

1) Describe the procedures for safely collecting specimens from domestic animals.

2) Identify internal and external parasites common to domestic mammals and birds.

3) Discuss the procedures used to culture and identify common strains of bacteria.

4) Describe the functions and physiology of the digestive, endocrine, circulatory, respiratory, reproductive and urinary systems.

5) Discuss the clinical tests used to access function of the above body systems and be able to distinguish normal vs. abnormal results.

6) Compare the technologies used by automated hematology and blood chemistry machines and discuss their impacts on the accuracy and reliability of test results.

COURSE CONTENT
Concepts or Topics
The student will describe and integrate basic laboratory principals and define basic laboratory protocols presented in lecture, required texts and other instructional materials. The principles include the following areas:

- Application of the scientific method to clinical practice
- Proper collection and handling of laboratory specimens
- Quality control
- Cytology
- Histology and Histopathology
- Microbiology: Theory and procedures
- Zoonotic Diseases
- Parasitology: Identification and life cycle of parasites.
- Physiology and homeostasis of the circulatory, respiratory, urinary, endocrine, reproductive and digestive systems.
- Urinalysis
- Hematology
- Blood chemistry analysis
- Antibody-based tests
- Artificial Insemination
- Differing technologies used by common models of automated lab analyzers

COURSE TASKS

1) Attend class at scheduled times.
2) Complete assigned reading prior to lecture.
3) Participate in class discussions.
4) Complete 3 Case Studies.
5) Complete 3 in-class exams.

ASSESSMENT TASKS AND GRADING

CASE STUDIES (150 points total- 50 points for each case study). Students are expected to complete case studies prior to taking coordinating exam. The case study will be based on the lecture material covered in the previous weeks as well as the assigned reading. Students who neglect to complete the case study prior to the scheduled exam will receive a zero score (NO EXCEPTIONS!).

EXAMINATIONS (300 points total- 100 points for each exam). The student will take three examinations (non-cumulative) to demonstrate knowledge and understanding of information presented in lecture.

ATTENDANCE (50 points): Attendance is mandatory and is worth 50 points towards the final grade. Each student is allowed one absence without penalty. Each unexcused absence above one will result in a deduction of points from the student’s attendance score. Students with more than two un-excused absences will receive an “F” grade in the class.

METHOD OF GRADING
The assignment of points will be according to the following:

| Case Studies | 150 points |
| Exams        | 300 points |
| Attendance   | 50 points  |
| **TOTAL**    | **500 points** |

**GRADING SCALE**

<table>
<thead>
<tr>
<th>Total Points</th>
<th>Percentage Points</th>
<th>Grade</th>
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<tbody>
<tr>
<td>448-500</td>
<td>90-100</td>
<td>A</td>
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<tr>
<td>398-447</td>
<td>80-89</td>
<td>B</td>
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<td>348-397</td>
<td>70-79</td>
<td>C</td>
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<tr>
<td>298-347</td>
<td>60-69</td>
<td>D</td>
</tr>
<tr>
<td>&lt; 298</td>
<td>0-59</td>
<td>F</td>
</tr>
</tbody>
</table>

Grades may be curved at the instructor’s discretion; however, the student should use the above grading scale to evaluate their performance throughout the class. If you miss an examination because of an illness or legitimate emergency, you must contact the instructor **within 48 hours** to arrange a time to take a make-up exam. The instructor may request that the student present evidence of the illness or emergency that caused the student to miss the exam. If the student misses an exam for any other reason, the student may be prohibited from taking a make-up exam, thus failing to receive any points for the missed exam. While make-up exams will cover the same content area as a missed exam, the exam format and specific questions may be different. **No retests will be given for any reason.**

**LEARNING RESOURCES**

Textbooks:

1. **Laboratory Procedures for Veterinary Technicians.** Hendrix, Charles M. and Sirois, Margi. 5th Edition, Mosby Inc., St. Louis MO
3. **Urine Crystals in Domestic Animals, A Laboratory Identification Guide.** Osborne, Carl A., Clinton, Chris W., and Davenport, Marina P. Veterinary Medicine Publishing Co., 1990
ACADEMIC DISHONESTY
Students involved in academic dishonesty will receive an "F" grade for the course. Academic dishonesty includes cheating on exams and plagiarism. See the 2007-2008 course catalog for a description of the University’s policies concerning academic dishonesty.

ACCOMODATION FOR STUDENTS WITH DISABILITIES
If you have a physical, sensory, health, cognitive, or mental health disability that could limit your ability to fully participate in this class, you are encouraged to contact the Disability Specialist Counselor to discuss reasonable accommodations that will help you succeed in this class. Ann Lemke can be reached at 235-7448, lemke@hawaii.edu, or you may stop by Hale ‘Akoakoa 213 for more information.
<table>
<thead>
<tr>
<th>Week</th>
<th>Lect</th>
<th>Date</th>
<th>Topics</th>
<th>Reading</th>
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<td>1</td>
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<td>1/12</td>
<td>Course Introduction</td>
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<td>R</td>
<td>1/14</td>
<td>Overview of Clinical Analysis</td>
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<td>2</td>
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<td>1/19</td>
<td>Histology/Tissues</td>
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<td></td>
<td>R</td>
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<td>Cytology I: Sample collection and preparation</td>
<td>Cowell et al., CH 1</td>
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<td>Cytology II: Types of cells</td>
<td>Cowell et al., CH 2</td>
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<td>Cytology III: Criteria for malignancy</td>
<td>Cowell et al., CH 2</td>
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<td>4</td>
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<td>Microbiology I: Introduction to infectious agents</td>
<td>Cowell et al., CH 3</td>
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<td>Microbiology II: Lab Procedures</td>
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<td>Parasitology I: Identification and life cycle of common parasites</td>
<td>Cowell et al., CH 3</td>
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<td>Respiratory System Physiology</td>
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<td>Physiology of endocrine and digestive systems</td>
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<td>Blood gases and electrolytes</td>
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<td>5/6</td>
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- Last day to drop:
- Last day to withdraw (“W” entered on transcript):
- Final Exam: See final exam schedule.