ANSC 142L: Anatomy and Physiology of Domestic Animals Laboratory

**R: 2.30PM - 5.15PM**
**CRN: 63095**

**INSTRUCTOR:** Matthew Tsuda, CVT

**OFFICE:** Hale Kako’o 125

**OFFICE HOURS:** R: 1:00-2:00

**TELEPHONE:** 808-343-7507

**EMAIL:** mttsuda@hawaii.edu

**EFFECTIVE DATE:** Fall, 2016 (August 22 to December 16)

WINDWARD COMMUNITY COLLEGE MISSION STATEMENT

Windward Community College offers innovative programs in the arts and sciences and opportunities to gain knowledge and understanding of Hawai’i and its unique heritage. With a special commitment to support the access and educational needs of Native Hawaiians, we provide O’ahu’s Ko‘olau region and beyond with liberal arts, career and lifelong learning in a supportive and challenging environment — inspiring students to excellence.

CATALOG DESCRIPTION

Laboratory to accompany ANSC 142. This course is designed to acquaint the student with the body systems of common domestic species (e.g., cats, dogs, horses and birds) through dissections, examinations of models, laboratory exercises, and other hands-on activities. This course is intended for students entering veterinary technology, veterinary assisting or other animal-related fields (3 hrs. lab).

Prerequisite: Credit for or registration in ANSC 142 or equivalent preparation or consent of instructor.

Activities Required at Scheduled Times Other Than Class Times: None

STUDENT LEARNING OUTCOMES

Upon successful completion of ANSC 142L, the student should be able to:

1) Identify and describe the anatomy of the major body systems for cats, dogs and horses using prepared slides, skeletons, models and dissections.
2) Use standard anatomical terms to describe body directions, regions and sectioning planes.
3) Identify major anatomical landmarks used to assess patient health during physical exams.
4) Demonstrate proficiency at the use of the microscope as a clinical instrument.

COURSE CONTENT

*Concepts or Topics*

The student will describe and integrate basic biological principles and define basic biological terms presented in lecture, required texts, and other instructional materials.
These principles include the following areas:
• Standard anatomical position.
• Use of the microscope.
• Anatomy of cells.
• Anatomy and function of mammalian tissues.
• Gross and histological anatomy of the following body systems:
  ➢ Skeletal & Muscular Systems
  ➢ Nervous System & Special Senses
  ➢ Circulatory & Lymphatic Systems
  ➢ Endocrine & Digestive Systems
  ➢ Urinary & Reproductive Systems

COURSE TASKS

1) Attend class at scheduled times.
2) Participate in lab activities with notebook prepared.
3) Complete weekly quizzes.
4) Complete two in-class practicums.

ASSESSMENT TASKS AND GRADING

QUIZZES (100 points total - 10 points for each quiz). Students will take a short quiz at the beginning of most labs. The quiz will be based on the material covered in the previous lab. Students who miss a lab (unexcused) or show up late, for any reason, will receive a zero score for the quiz. If a student has a legitimate reason for missing lab (excused: doctor’s note, etc.) s/he must contact the instructor to make up the quiz. Please note, the quiz may be comprised of different questions that the quiz given during regular class, but will cover the same content.

LAB PRACTICUMS (200 points total - #1 is 50 points, #2 is 50 points, and #3 is cumulative and worth 100 points). The student will take three lab practicums to demonstrate knowledge and understanding of information presented in lab activities. These practicums will cover anatomy (e.g., organ identification and histology) and physiology of major systems covered during lab.

LAB NOTEBOOK (100 points) Each lab exercise has terms that are outlined in the lab manual. Students should complete indicated activities for each lab. Activities will be collected and graded on the day of the practicum: 50 points at Practicum 2 and 50 points at Practicum 3.

ATTENDANCE (20 points) If the student misses a lab (or a lab practicum) because of an illness or legitimate emergency, the student must contact the instructor within 48 hours and present evidence of the illness or emergency that caused the student to miss the lab. The student is only allowed one excused absence. If the student misses a lab unexcused, the student will receive an “F” grade for the course.

While make-up practicums will cover the same content area as a missed practicum, the format and specific questions may be different. No retests will be given for any reason.

PARTICIPATION (30 points) Students will need to participate in lab activities, including group work, dissection, and review sessions.
### Quizzes
100

### Practicums
200

<table>
<thead>
<tr>
<th>Lab activities</th>
<th>100</th>
<th>Total Points</th>
<th>Percentage Points</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attendance</td>
<td>20</td>
<td>403-450</td>
<td>90-100</td>
<td>A</td>
</tr>
<tr>
<td>Participation</td>
<td>30</td>
<td>358-402</td>
<td>80-89</td>
<td>B</td>
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<tr>
<td>Total</td>
<td>450</td>
<td>268-313</td>
<td>60-69</td>
<td>D</td>
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<td></td>
<td></td>
<td>&lt;267</td>
<td>0-59</td>
<td>F</td>
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Grades may be curved at the instructor’s discretion; however, as a student you should use the above grading scale to evaluate your 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 you present evidence of the illness or emergency that caused the student to miss the exam. If you miss an exam for any other reason, you 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


Laulima: Your instructor has created a Laulima website to accompany this course. This website contains power point presentations, copies of course forms and syllabi, and links to on-line learning resources. To access, go to https://laulima.hawaii.edu/portal. Login using your UH username and password and click on ANSC 142L.

### ADDITIONAL INFORMATION

**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 WCC course catalog and the WCC Vet Tech Handbook for a description of the University’s policies concerning academic dishonesty.

**ACCOMODATION FOR STUDENTS WITH DISABLITIES**

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.
LAB ATTIRE, CONDUCT, AND HYGIENE
Because this lab involves the use of hazardous materials, students MUST wear close-toed shoes. In addition, some lab activities will require students to wear gloves and safety glasses (provided by the college). Visible jewelry and nail polish/artistry are not allowed in labs. (SEE VETA STUDENT HANDBOOK) Students failing to dress appropriately for lab will not be permitted to participate in laboratory exercises and will be considered absent. Students engaged in conduct that threatens themselves or others in the lab will be refused access to the lab for the remainder of the semester and receive a “F” grade for the course.

LAB SAFETY RULES

1) Be familiar with lab safety procedures and take appropriate precautions at all times to insure the safety of all lab students.
2) Follow all instructions carefully, especially when hazardous materials are being used.
3) Know the locations of important safety equipment: eyewash, safety shower, fire extinguisher, and first aid kit.
4) Report all injuries to the instructor immediately.
5) Dress appropriately for lab. Closed-toe shoes are required for ALL labs. Safety glasses and gloves are required for labs utilizing chemicals, bodily fluids, or hot-plates.
6) Report any hazardous conditions (e.g. chemical spills or broken glass) to the instructor immediately.
7) NO FOOD ALLOWED IN LAB
8) Chemicals used in lab may be poisonous, corrosive, or flammable. No chemicals, even those known to be safe, should be ingested or touched with un-gloved hands unless you are specifically directed to do so by your instructor.
9) Know how to safely operate all lab equipment and tools (e.g., microscopes, scalpels, and hematology supplies). Safe usage will be demonstrated by your instructor.
10) Clean all lab supplies and return them to their proper location before leaving lab.
11) Treat all organisms, living or dead, with care and respect. Use gloves when handling dissected specimens.
12) Place broken glass, sharps, and dissected specimens in the appropriate receptacles (NOT IN THE TRASH!)
13) Unless otherwise instructed, chemical wastes should NOT be disposed of down the drain.
14) Human tissues and bodily fluids (e.g., saliva and blood) must be disposed of in appropriate bio-hazard containers (NOT IN THE TRASH!).
15) Wash your hands immediately following each lab to reduce the possibility of contamination or infection.
Please note this schedule is tentative & subject to change. Any changes will be announced in-class or on the course website!

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<th>Lecture Topics</th>
<th>Lab Topics</th>
<th>Quizzes and Lab Practicums</th>
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<tr>
<td>1</td>
<td>Course Orientation/Intro to A&amp;P Chemistry of Life</td>
<td>Terminology and Directional Terms</td>
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<td>2</td>
<td>Biological Molecules Cellular Anatomy</td>
<td>Microscopy and Cells</td>
<td>Quiz 1</td>
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<td>3</td>
<td>Cell Physiology Tissues</td>
<td>Tissues</td>
<td>Quiz 2</td>
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<td>4</td>
<td>Review Integumentary System (Skin)</td>
<td>Integument</td>
<td>Quiz 3</td>
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<td>5</td>
<td>Axial Skeleton Appendicular Skeleton</td>
<td>Skeletal 1</td>
<td>Practicum #1</td>
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<td>6</td>
<td>Muscular Tissue &amp; Physiology Major Muscles</td>
<td>Skeletal 2</td>
<td>Quiz 4</td>
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<td>Nervous System Sense Organs</td>
<td>Muscles 1</td>
<td>Quiz 5</td>
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<tr>
<td>8</td>
<td>Review Endocrine System</td>
<td>Muscles 2</td>
<td>Quiz 6</td>
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<td>9</td>
<td>Blood Lymph and Immunity</td>
<td>Nervous and Special Senses</td>
<td>Practicum #2</td>
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<td>Cardiovascular System</td>
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<td>Digestive System Part 1</td>
<td>Digestive System NO Friday LAB</td>
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<td>Digestive System Part II Urinary System Part 1</td>
<td>Urinary and Digestive for Friday lab</td>
<td>Quiz 9 for Friday Lab</td>
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<td>14</td>
<td>Urinary System Part II</td>
<td>Review NO Friday LAB</td>
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<td>15</td>
<td>Reproductive System Embryonic and Fetal Development</td>
<td>Reproductive System and Review for Friday Lab</td>
<td>Quiz 10</td>
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<td>16</td>
<td>Pregnancy and Lactation Review</td>
<td>Review NO Friday LAB</td>
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