

**ANSC 142**  
**Anatomy and Physiology of Domestic Animals**

CRN 63059: TR - 10:00-11:15 am  
CRN 63191: TR -11:30 am-12:45pm  
Imiloa 123

**INSTRUCTOR:** Ross Langston, PhD  
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**EFFECTIVE DATE:** Fall, 2016

**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**

Introduction to the anatomy and physiology of domestic animals. Compares the anatomy and function of major body systems for the cat, dog and horse, with lesser emphasis on birds, reptiles and amphibians. This course is intended for students entering veterinary technology, veterinary assisting or other animal-related fields (3 hrs. lect). Prerequisite: Credit for or registration in ANSC 142L.

**Activities Required at Scheduled Times Other Than Class Times:** Exams must be taken at testing center outside of normal class time.

**STUDENT LEARNING OUTCOMES**

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

- 1) Discuss the chemical building blocks of major biological molecules.
- 2) Describe the link between cells, tissues, organs, and organ systems.
- 3) Contrast the structure and function of major body systems (e.g., skeletal, circulatory, respiratory, and reproductive) among companion animals and selected livestock species.
- 4) Explain how disease and disorders disrupt the homeostasis of each of the above body systems and discuss how common veterinary medical treatments are used to restore homeostasis.

## COURSE CONTENT

**Concepts and 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:

- Chemistry of living organisms
- Biological macromolecules
- Cellular basis of life
- Membrane transport
- Cellular division
- Tissues
- Homeostasis
- Integumentary System: Skin, hair, nails and hooves
- Skeletal system: Bones, joints, and joint movements
- Muscular system: Origins, insertions, and actions
- Nervous System: Major divisions
- Endocrine System: Major hormones and their effects
- Circulatory System: The Heart, Blood, and Blood Vessels
- Respiratory System: Anatomy and Physiology of Respiration
- Digestive System and Metabolism
- Urinary System
- Reproductive system
- Pregnancy and parturition

## COURSE TASKS

- 1) Complete assigned readings prior to lecture.
- 2) Attend weekly lectures
- 3) Participate in-class discussions and exam reviews
- 4) Complete weekly quizzes
- 5) Complete 4 proctored examinations at an approved UH testing center

## ASSESSMENT TASKS AND GRADING

**EXAMINATIONS** (800 points total-200 points for each exam). The student will take FOUR exams (non-cumulative) to demonstrate knowledge and understanding of information presented in the lectures, lecture outlines, text readings, and study guide activities.

**Exams must be taken at the WCC Testing Center, or another pre-approved UH location. The exam MUST be completed by 4:00 PM on the day of the deadline.** You will need to bring a driver's license or other approved state ID to the testing center in order to take the exam. They will be timed (typically one minute/question) and may consist of multiple-choice, short answer, or essay questions. You will be allowed to take the exam one time only.

**QUIZZES** (120 points- 10 points for each quiz). The student will take 15 online quizzes which will cover material from the lecture and reading. **Quizzes may be taken from home, but they MUST be taken by the indicated deadline (typically 11:00 PM each Friday).** Quizzes cannot be made up for any reason, including network problem. You will be allowed FIVE attempts for each quiz. Only the highest grade will be saved. The lowest three quiz grades will be dropped at the end of the semester. As with exams, quizzes will be timed (typically 1 min per question,

depending on difficulty). Quizzes may be taken open-book, but be warned that if you do not study beforehand you will not be able to complete the quiz before the deadline lapses.

**ATTENDANCE & CLASS PARTICIPATION** (80 points). Students are expected to all lectures and complete all course assessments and activities on a timely basis. Each student is allowed two absences without penalty. Any further absences will result in the deduction of class participation points. In addition, students are also required to participate in exam reviews. Your performance on these reviews will count for ca. 50% of your class participation points.

### **METHOD OF GRADING**

The assignment of points will be according to the following:

Exams	800 points
Quizzes	120 points
<u>Assignments &amp; Participation</u>	<u>80 points</u>
<b>TOTAL</b>	<b>1,000 points</b>

### **GRADING SCALE**

<b>Total Points</b>	<b>Percentage Points</b>	<b>Grade</b>
900-1000	90-100	A
800-899	80-89	B
700-799	70-79	C
600-699	60-69	D
<600	0- 59	F

Grades may be curved at my discretion; however, 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 me **within 48 hours** to arrange a time to take a make-up exam. I will request that you present evidence of the illness or emergency that caused you to miss the exam. If you miss an exam for any other reason, you will not be permitted to take a make-up exam, thus failing to receive any points for the missed exam. While make-up exams will cover the same content as a missed exam, the exam format and questions may be different. No retests will be given for any reason. **Please also note that “N” grades are not given for this course.**

### **ACADEMIC DISHONESTY**

**Students involved in academic dishonesty will receive an "F" grade for the course.**

Academic dishonesty includes cheating on exams and plagiarism. See pages 14-15 of the 2015-2017 course catalog for a description of the College’s policies concerning academic dishonesty.

### **LEARNING RESOURCES**

**Textbook:** Colville, T. and J.M. Bassert. 2016. Clinical anatomy and physiology for veterinary technicians, 3<sup>rd</sup> Ed. Elsevier. ISBN: 978-0323227933

**ANSC 142 Lecture Outlines:** Available on the laulima website.

<https://laulima.hawaii.edu/portal>

### **Additional Information**

#### **STUDENT RESPONSIBILITIES**

You are expected to view all lectures and complete all examinations and course assignments on time. In addition, you are expected to check you UH email address daily for

announcements about the course. Please be considerate of other students by turning off any cell phones or beepers during class. Any changes in the course schedule, such as examination dates, deadlines, etc., will be announced on the course website. It is your responsibility to be informed of these changes. It is also your responsibility to be informed about deadlines critical to making registration changes (e.g., last day for making an official withdrawal).

### HOW TO SUCCEED IN THIS CLASS

Although you will be given lecture outlines, you will not succeed in this class without viewing the lectures and taking detailed notes on the corresponding material in the textbook. Merely reading the chapter will not suffice. Science courses at WCC generally require a minimum of two to three hours of independent study time for each hour in class. It is your responsibility to allocate the appropriate amount of time needed for study and be realistic about all personal and professional commitments that may cut into your study time.

As part of your studies, you will need to understand a veritable *mountain* of medical and anatomical terms, most of which will probably be foreign to you. Many students find it helpful to enroll in HLTH 125 (Survey of Medical Terminology) at the same time as ANSC 142, as there is some repetition in the material covered. In this course, most important vocabulary words appear in **boldface** throughout your textbook. One way to learn these vocabulary words is to make flash cards to quiz yourself. Answering the matching and fill-in-the-blank questions located in the back of each text chapter can also be a helpful way to learn new terms. Be warned: Merely knowing the *definitions* of vocabulary words will be of little use if you do not know how the anatomy of the structures they represent.

In addition to vocabulary, you will be expected to have a detailed understanding of the mechanisms regulating mammalian body systems. In many cases, these systems are regulated by negative feedback loops. **Knowledge of negative feedback mechanisms is absolutely crucial to understanding how the body maintains homeostasis.** Your instructor will highlight the feedback loops that need to be learned in order to succeed on course exams.

**My #1 Suggestion for success in this class:** Take weekly quizzes EARLY, even if you have not had a chance to properly study for the quiz. This will prevent you from receiving a “zero” score should you forget to take the quiz by the deadline. It will also help you to better direct your studying so you can do better on future attempts for the same quiz. Remember, only your HIGHEST score is saved for each quiz. You will only be able to take each exam once. This means you should study diligently before going to the testing center to take the exam. **NO RETESTS WILL BE GIVEN!**

### 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](mailto:lemke@hawaii.edu), or you may stop by Hale ‘Akoakoa 213 for more information.

## ANSC 142 Schedule, Fall 2016

**\* Please note this schedule is tentative & subject to change. Any changes will be announced in-class or on the course website!**

Week	Date	Lecture Topics	Lect	Reading	Assignment Due <b>FRIDAY</b> (4 PM for exams; 11 PM for quizzes and other assignments)
1	8/23 8/25	Course Orientation/Intro to A&P Chemistry of Life	1 2	Syll & CH1 CH2	Quiz 1: Intro
2	8/30 9/1	Biological Molecules Cellular Anatomy	2 3A	CH 2 CH 3	Quiz 2: Chemistry
3	9/6 9/8	Cell Physiology Tissues	3B 4	CH 4 CH 5	Quiz 3: Cells
4	9/13 9/15	<b>Review</b> Integumentary System (Skin)	5	CH 6	Quiz 4: Tissues <b>Exam 1: CH 1-5</b>
5	9/20 9/22	Axial Skeleton Appendicular Skeleton	6A 6B	CH 7	Quiz 5: Integument
6	9/27 9/29	Muscular Tissue & Physiology Major Muscles	7A 7B	CH 8	Quiz 6: Skeletal System
7	10/4 10/6	Nervous System Sense Organs	8 9	CH 9 CH 10	Quiz 7: Muscular System
8	10/11 10/13	<b>Review</b> Endocrine System	10	CH 11	Quiz 8: Nervous & Senses <b>Exam 2: CH 6-10</b>
9	10/18 10/20	Blood Lymph & Immunity	11A 11B	CH 12-13	Quiz 9: Endocrine System
10	10/25 10/27	Cardiovascular System	12	CH 14	Quiz 10: Blood & Immunity
11	11/1 11/3	Respiratory System <b>Review</b>		CH 15	Quiz 11: CV System
12	<b>11/8</b> 11/10	<b>Election Day</b> Digestive System- Part I	13	CH 16	<b>Exam 3: CH 11-15</b>
13	11/15 11/17	Digestive System- Part II Urinary System	14	CH 18	Quiz 12: Respiratory Sys
14	11/22 <b>11/24</b>	Urinary System- Part II <b>Thanksgiving</b>	16	CH 18	Quiz 13: Digestive System
15	11/29 12/1	Reproductive System Embryonic and Fetal Development	17	CH 19	Quiz 14: Urinary System
16	12/6 12/8	Pregnancy and Lactation <b>Review</b>	18	CH 20	Quiz 15: Reproductive & Pregnancy

- Last day for full refund: August 26<sup>th</sup>
- Last day to drop without "W" grade: September 12<sup>th</sup>
- Last day to Withdraw ("W" entered on transcript): November 3<sup>rd</sup>
- **Final Exam:** Due by 5 PM Dec 14<sup>th</sup> (CH 16,18,19, & 20).