

Anatomy and Physiology of Domestic Animals ANSC 142

MW 1:00-2:15 (CRN 62449) Imiloa 133
MW 2:30-3:45 (CRN 62101) Palanakila 102

INSTRUCTOR: Sam Craddock, RVT
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EFFECTIVE DATE: Fall, 2014

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: None

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 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:

The scientific method
 Chemistry of living organisms
 Biological macromolecules
 Cellular basis of life
 Membrane transport
 Cell 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

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|---|-----------------------------|
| 1) Attend class at scheduled times. | 4) Complete 4 assignments. |
| 2) Complete assigned readings prior to lecture. | 5) Complete 8 exam reviews. |
| 3) Participate in class discussions. | 6) Complete 8 examinations. |

ASSESSMENT TASKS AND GRADING

EXAMINATIONS (400 points total-50 points for each exam). The student will take eight exams (non-cumulative) to demonstrate knowledge and understanding of information presented in the lectures, lecture outlines, text readings, and study guide activities.

EXAM REVIEWS: (40 points) Students are expected to complete reviews prior to each exam. The format for these reviews will be discussed in class.

ASSIGNMENTS: (40 points) Students are expected to complete four assignments, worth 10 points each, throughout the semester. The format for these assignments will be discussed in class.

ATTENDANCE (20 points): Attendance is mandatory. Each student is allowed two absences without penalty. Each unexcused absence above two will result in a deduction of points from the student's attendance score. Students who miss guest lectures will receive a double deduction.

METHOD OF GRADING**GRADING SCALE**

		Total Points	Percentage Points	Grade
Exams	400 points	448-500	90-100	A
Reviews	40 points	398-447	80-89	B
Assignments	40 points	348-397	70-79	C
Attendance	20 points	298-347	60-69	D
TOTAL	500 points	<297	0- 59	F

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.**

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 student handbook for a description of the University's policies concerning academic dishonesty.

LEARNING RESOURCES

Textbook: Colville, T. and J.M. Bassert. 2008. Clinical anatomy and physiology for veterinary technicians. Mosby Inc. St. Louis, MO. ISBN: 978-0-323-04685-5

Laulima: Your instructor has created a Laulima website to accompany this course. This website contains lecture outlines, copies of course forms and syllabi, and links to on-line learning resources. Students enrolled in ANSC 142 or ANSC 142L are automatically enrolled in the Laulima website. To access, go to <https://laulima.hawaii.edu/portal>. Login using your UH username and password and click on ANSC 142/142L.

Additional Information**STUDENT RESPONSIBILITIES**

The student is expected to attend lectures, participate in all course activities, and complete all examinations and course assignments on time. Please be considerate to other students by turning off any cell phones during class. It is the student's responsibility to be informed about deadlines critical to making registration changes (e.g., last day for making an official withdrawal).

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.

HOW TO SUCCEED IN THIS CLASS

Although you can download all lecture outlines and course materials, you will not succeed in this class without attending lecture 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. Most important vocabulary words appear in **boldface** throughout your textbook. One way to learn these vocabulary words is to make flash cards so you can quiz yourself. Answering the “Test Yourself” questions located throughout the chapter can also be a helpful way to learn new vocabulary and evaluate your comprehension of important concepts.

In addition to vocabulary, you will be expected to have a detailed understanding of the *mechanisms* regulating the homeostasis of major body systems. In many cases, these systems are regulated by negative feedback loops. Your instructor will outline the most important feedback loops for each body system. You should be familiar with the components of these loops and be able to predict what will happen if one or more of the components are modified or removed.

After you have studied on your own, the next step is to study in GROUPS. Study groups are proven to increase student success.

Helpful tips for a successful study group:

- No more than 5 – or it ends up social time
- Everyone must contribute – no dead weight, don’t be afraid to tell someone to step it up
- Meet on a schedule – 2-5 times a week for the same amount of time – no cramming!
- Meet somewhere everyone is comfortable – have you SEEN our new library?
- Lay out what format you study best in, and switch up what you guys do to accommodate.

WK	Date	TOPIC	READING
1	M 8/25	Course Intro/ Intro to A&P	Syll/Ch 1
	W 8/27	Chemical Basis for Life	Ch 2
2	M 9/1	~~Labor Day~~	
	W 9/2	Cellular Anatomy and Physiology	Ch 3
3	M 9/8	Tissues	Ch 4
	W 9/10	Exam #1 (50 points)	
4	M 9/15	Integument & Related Structures	Ch 5
	W 9/17	Bone	Ch 6 (154-161)
5	M 9/22	Axial Skeleton	Ch 6 (161-174)
	W 9/25	Appendicular skeleton & Joints	Ch 6 (174-190)
6	M 9/29	Muscular system	Ch 7
	W 10/1	Muscular system	Ch 7
7	M 10/6	Exam #2 (50 points)	
	W 10/8	Cardiac structure and circulation	Ch 8
8	M 10/13	Blood	Ch 9 (220-239)
	W 10/15	Lymph, immunity	Ch 9 (239-246)
9	M 10/20	Respiratory anatomy	Ch 10 (248-258)
	W 10/22	Respiratory physiology	Ch 10 (258-262)
10	M 10/27	Review	
	W 10/29	Exam #3 (100 points) **Covers Ch 1-10**	
11	M 11/3	Digestive System	Ch 11
	W 11/5	Nutrition and metabolism	Ch 12
12	M 11/10	Exam #4 (50 points)	
	W 11/12	Nervous system	Ch 13
13	M 11/17	General and special senses	Ch 14
	W 11/19	Endocrine system	Ch 15
14	M 11/24	Exam #5 (50 points)	
	W 11/26	Urinary system	Ch 16
15	M 12/1	Urinary system	Ch 16
	W 12/3	Reproductive system	Ch 17
16	M 12/8	Pregnancy, development, parturition	Ch 18
	W 12/10	Review	
	FINAL	1:00 class – Mon – 12/15 – 1:00-3:00 2:30 class – Wed – 12/17 – 2:30-4:30 Exam #6 (100 points) **Covers Ch 11-18**	