

ANSC 151: Clinical Laboratory Techniques

3 Credits (CRN: 62080) M and T: 9:00-10:15am

INSTRUCTOR: Matthew Tsuda

OFFICE: Hale Imiloa 104

OFFICE HOURS: F 9:00-10:00

TELEPHONE: 808-343-7507 EMAIL: mttsuda@hawaii.edu

EFFECTIVE DATE: Spring 2024

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 the Ko'olau region of O'ahu and beyond with liberal arts, career and lifelong learning in a supportive and challenging environment — inspiring students to excellence.

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.

STUDENT LEARNING OUTCOMES

As a result of taking this course, students can expect to attain the following outcomes:

- 1. Describe the procedures for safely collecting specimens from domestic animals
- 2. Discuss the clinical tests performed in hematology, urinalysis, clinical chemistries, and cytology
- 3. Compare the technologies used by automated hematology and blood chemistry machines and
- 4. discuss their impacts on the accuracy and reliability of test results
- 5. Recognize accurate vs. erroneous results in order to provide maximum diagnostic benefit

COURSE TASKS

- 1) Attend lectures, on time
- 2) Complete assigned readings
- 3) Participate in class discussions and group work
- 4) Complete 7 quizzes
- 5) Complete 3 examinations and 3 Exam Reviews
- 6) Complete a Case Study project

ASSESSMENT TASKS AND GRADING

ATTENDANCE: 20 points total – Please refer to the attendance policy outlined within the Veterinary Technology Student Handbook for full details.

Attendance is expected for every class and will be documented prior to the start of lecture. Any unexcused absences may be subjected to a loss of 10 points. Any absences must be communicated with your lecturer prior or on the day of the absence. Any and all absences will not be considered excused without documentation. Arriving more than 10 minutes late may be considered an absence. **Overall, prompt communication is essential for working out plans for making up assignments, activities, and lectures.**

~~COVID-19~~ If you are feeling sick and/or exhibiting any of the signs or symptoms associated with COVID-19, do not attend your class, please contact your physician immediately for the appropriate steps to acquire a test and initiate quarantine. You must contact your instructor immediately and provide the documentation from your physician regarding your health status.

CASE STUDY: 50 points – Students will be required to create a case study of a disease to present to the class. The format for the case study will be discussed in class. Note that there will be a first and final draft due as well as peer reviews.

QUIZZES: 70 points total – Students should expect a quiz many class periods. Each quiz is worth 10 points. Quizzes will be graded and returned, after which students are able to re-answer incorrect questions. Previously incorrect answers that were corrected will receive 1/3 point rounded. Second submission of quiz will be due the week after it is returned. No late submissions will be accepted.

EXAM REVIEWS: 30 points total – Students are expected to complete reviews prior to each exam. Each review is worth 10 points. Each student will write 10 questions with the correct answers from the chapters for the upcoming exam and post it to Laulima and the designated Google Drive folder. No late submissions will be accepted.

EXAMINATIONS: 250 points total – Exam 1 is worth 50 points, Exam 2 is worth 100 points and the Final Exam is cumulative and will be worth 100 points.

ASSIGNMENT POLICIES

- <u>Late Submissions</u> If you miss an assignment due to a <u>serious illness or legitimate</u> emergency, you <u>must</u> contact the instructor within <u>24 hours</u> to discuss making up assignments. You may need to provide documentation for evidence of emergency or illness.
- 2. **Spelling** Due to the importance of spelling in a medical setting, any spelling error may be marked as incorrect. This is especially true for critical terminologies.
- 3. <u>PowerPoints</u> The PowerPoints created for this course was intended to be opened with Microsoft PowerPoint. This is because there may be transitions and animations that were meant to be played in presentation mode. PowerPoints can be opened by other third-party programs, although the images may not load correctly. PDFs will be available as well, although transitions and animations will not work.
- 4. <u>Google Drive</u> Google Drive is used in this course to organize files and make them accessible. Your UH email must be used to access all files; all requests from non-UH emails will be ignored.

LEARNING RESOURCES

- 1. Margi Sirois, <u>Laboratory Procedures for Veterinary Technicians</u>, 7th edition, St. Louis, MO, Mosby Inc, 2019 (ISBN: 9780323595056)
- 2. Margi Sirois, <u>Lab Manual for Laboratory Procedures for Veterinary Technicians</u>, 7th edition, St. Louis, MO, Mosby Inc, 2019 (ISBN: 9780323595407)
- 3. Reagan, William, et al. <u>Veterinary Hematology: Atlas of Common Domestic and Non-Domestic Species</u>, 3rd edition, Ames, IA, Wiley-Blackwell, 2019 (ISBN-13: 978-1-119-06497-8)

DISABILITIES ACCOMMODATIONS

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 Accessibility Counselor to discuss reasonable accommodations that will help you succeed in this class. Jodi Asato can be reached at (808) 235-7472, jodiaka@hawaii.edu, or you may stop by Hale Kākoʻo 105 for more information.

SEX DISCRIMINATION AND GENDER-BASED VIOLENCE RESOURCES (TITLE IX)

Windward Community College is committed to providing a learning, working, and living environment that promotes personal integrity, civility, and mutual respect and is free of all forms of sex discrimination and gender-based violence, including sexual assault, sexual harassment, gender-based harassment, domestic violence, dating violence, and stalking.

If you or someone you know is experiencing any of these, WCC has staff and resources to support and assist you. To report an incident of sex discrimination or gender-based violence, as well as receive information and support, please contact one of the following:

Leslie Cabingabang, Confidential Advocate Phone/Text: ((808) 348-0432 or (808) 341-4952

Email: advocate@hawaii.edu
Office: Hale Kākoʻo 107

Desrae Kahale, Mental Health Counselor & Confidential Resource

Phone: (808) 235-7393 Email: dkahale3@hawaii.edu Office: Hale Kākoʻo 101

Mykie Ozoa-Aglubub, Title IX Coordinator

Phone: (808) 235-7468 Email: kcho@hawaii.edu Office: Hale Kako'o 109

As a member of the University faculty, I am required to immediately report any incident of sex discrimination or gender-based violence to the campus Title IX Coordinator. Although the Title IX Coordinator and I cannot guarantee confidentiality, you will still have options about how your case will be handled. My goal is to make sure you are aware of the range of options available to you and have access to the resources and support you need.

For more information regarding sex discrimination and gender-based violence, the University's Title IX resources and the University's Policy, Interim EP 1.204, go to manoa.hawaii.edu/titleix/

ACADEMIC INTEGRITY

<u>Refer to Vet Tech Student Handbook for all policies regarding academic dishonesty</u>. Actions that are involved within this policy include but are not limited to:

- Sharing answers on assignments that are not considered group assignments.
- Informing classmates of quiz and exam content.
- Viewing other classmates' papers or talking during quizzes and exams.
- Using any form of unapproved notes during a quiz or exam (paper notes, phone, smartwatch, laptop, etc.)

Please note that <u>all</u> suspected actions will be immediately investigated for legitimacy. This may mean receiving a zero on suspected assignments, discussion with the program director and academic affairs, and scrutinization of assignment content until all parties are proven uninvolved.

ALTERNATE CONTACT INFORMATION

If you are unable to contact the instructor, have questions that your instructor cannot answer, or for any other issues, please contact the Academic Affairs Office:

Location: Alaka'i 121Phone: (808) 235-7422

Last day for 100% refund: 1/16

Last day for 50% refund: 1/31

Last day to withdraw without a W: 1/31

Last day to withdraw with a W: 3/22

Week	Date	Topic 1 (Monday)	Date	Topic 2 (Tuesday)	Assignments5
1	1/08	Anatomy Review Urine Collection	1/09	Physical & Chemical UA	
2	1/15	Holiday	1/16	Physical & Chemical UA Microscopic UA	
3	1/22	Microscopic UA	1/23	Review	M: Quiz 1 – Urine Collection, Physical & Chemical UA M: Exam 1 Review T: Select case study topic
4	1/29	Exam 1	1/30	Hematopoiesis	EXAM 1
5	2/5	CBC and Collection	2/6	RBC Morphology	
6	2/12	RBC & WBC Morphology	2/13	WBC Morphology	M: Quiz 2 – CBC and Collection
7	2/19	Anemia	2/20	Coagulation	M: Quiz 3 – RBC Morphology T: Exam 2 Review
8	2/26	Holiday	2/27	Review	T: Quiz 4 – Anemia and Coagulation
9	3/4	Exam 2	3/5	Introduction to Parasitology	EXAM 2
10	3/11	Roundworms & Hookworms	3/12	Whipworms & Tapeworms	
11	3/18	SPRING BREAK	•		
12	3/25	Heartworms, Protozoa & Rickettsia	3/26	Holiday	M: Quiz 5 – Roundworms, Hookworms, Whipworms, and Tapeworms M: Case Study Draft 1
13	4/1	Protozoa & Rickettsia, Ectoparasites	4/2	Ectoparasites	
14	4/8	Liver & Protein Chemistry	4/9	Liver & Protein Chemistry	M: Quiz 6 – Protozoa, Rickettsia, and Ectoparasites T: Case Study Peer Review
15	4/15	Kidney & Pancreas Chemistry	4/16	Electrolytes and Other Tests	
16	4/22	Cytology Collection	4/23	Cytology Evaluation	M: Quiz 7 – Liver, Protein, Kidney, and Pancreas Chemistry M: Case Study Final Draft
17	4/29	Review	4/30	Review	M: Exam 3 Review
18	5/6	Finals Week			EXAM 3

Quiz Corrections Due Date:

- **Quiz 1** 1/30
- **Quiz 2** 2/20
- **Quiz 3** 2/27
- **Quiz 4** 3/11
- **Quiz 5** 4/2
- **Quiz 6** 4/16
- **Quiz 7** 4/30