



UNIVERSITY of HAWAII®  
**WINDWARD**  
COMMUNITY COLLEGE

## **ANSC 151: Clinical Laboratory Techniques**

3 Credits (CRN: 62352)

Online (See Schedule)

**INSTRUCTOR:** Matthew Tsuda

**OFFICE:** Hale Imiloa 104

**OFFICE HOURS:** F 10:00-11:00am

**TELEPHONE:** 808-343-7507      **EMAIL:** mtttsuda@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) Watch recorded lectures
- 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

**PARTICIPATION:** 20 points total – Participation includes collaboration of certain assignments such as with viewing exam reviews from other students.

**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 – 7 quizzes will be available on Lulima's Tests & Quizzes. Each quiz must be taken by the due date. The quizzes will be graded 1-2 days after the due date. After grading you may recorrect wrong answers on the designated Assignment's tab. Previously incorrect answers that were corrected will receive 1/3 point rounded. Corrections will be due the Sunday after the initial due date.

**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 Lulima 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

1. **Late Submissions** - If you miss an assignment due to a **serious illness or legitimate emergency**, you **must** contact the instructor within **24 hours** 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. **PowerPoints** – 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. **Wrong file submission policy** – It is the student's responsibility to ensure that the correct file was uploaded. Submissions of wrong files will be categorized as a late assignment.
5. **Corrupted file submission policy** – It is the student's responsibility to ensure that a working file was uploaded. Submissions of corrupted files will be categorized as a late assignment.
6. **LOOM or ZOOM:** All quizzes and exams must have an accompanying Loom link or Zoom recording to verify academic honesty. Submitted quizzes with no Loom link will not be eligible for points. You must sign up for a Loom Education Account prior to taking any quizzes. Alternatively, you may use a recording program like Zoom instead. However, this will typically create large files that may be difficult to share digitally.

## LEARNING RESOURCES

1. Margi Sirois, Laboratory Procedures for Veterinary Technicians, 7<sup>th</sup> edition, St. Louis, MO, Mosby Inc, 2019 (ISBN: 9780323595056)
2. Margi Sirois, Lab Manual for Laboratory Procedures for Veterinary Technicians, 7<sup>th</sup> edition, St. Louis, MO, Mosby Inc, 2019 (ISBN: 9780323595407)
3. Reagan, William, et al. Veterinary Hematology: Atlas of Common Domestic and Non-Domestic Species, 3<sup>rd</sup> 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](mailto:jodiaka@hawaii.edu), or you may stop by Hale Kāko‘o 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](mailto:advocate@hawaii.edu)  
 Office: Hale Kāko‘o 107

Desrae Kahale, Mental Health Counselor & Confidential Resource  
 Phone: (808) 235-7393  
 Email: [dkahale3@hawaii.edu](mailto:dkahale3@hawaii.edu)  
 Office: Hale Kāko‘o 101

Mykie Ozoa-Aglubub, Title IX Coordinator  
 Phone: (808) 235-7468  
 Email: [kcho@hawaii.edu](mailto: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/](https://manoa.hawaii.edu/titleix/)

## ACADEMIC INTEGRITY

Refer to Vet Tech Student Handbook for all policies regarding academic dishonesty. 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 all 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 121
- Phone: (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

<b>Week</b>	<b>Date</b>	<b>Module Contents</b>	<b>Assignments</b> (all due on Sunday by 11:55pm)
<b>1</b>	1/08	Anatomy Review, Urine Collection Physical & Chemical UA	
<b>2</b>	1/15	Microscopic UA	
<b>3</b>	1/22	Microscopic UA Hematopoiesis	<b>Quiz 1</b> – Urine Collection, Physical & Chemical UA <b>Exam 1 Review</b> <a href="#">Select case study topic</a>
<b>4</b>	1/29	<b>Exam 1</b>	<b>Exam 1</b>
<b>5</b>	2/5	CBC and Collection RBC Morphology	
<b>6</b>	2/12	RBC Morphology WBC Morphology	<b>Quiz 2</b> – CBC and Collection
<b>7</b>	2/19	Anemia Coagulation	<b>Quiz 3</b> – RBC Morphology <b>Exam 2 Review</b>
<b>8</b>	2/26	Review	<b>Quiz 4</b> – Anemia and Coagulation
<b>9</b>	3/4	<b>Exam 2</b> Introduction to Parasitology	<b>Exam 2</b>
<b>10</b>	3/11	Roundworms & Hookworms Whipworms & Tapeworms	
<b>11</b>	3/18	<b>Spring Break</b>	
<b>12</b>	3/25	Heartworms Protozoa & Rickettsia	<b>Quiz 5</b> – Roundworms, Hookworms, Whipworms, and Tapeworms <a href="#">Case Study Draft 1</a>
<b>13</b>	4/1	Ectoparasites	
<b>14</b>	4/8	Liver & Protein Chemistry	<b>Quiz 6</b> – Protozoa, Rickettsia, and Ectoparasites <a href="#">Case Study Peer Review</a>
<b>15</b>	4/15	Kidney & Pancreas Chemistry Electrolytes and Other Tests	
<b>16</b>	4/22	Cytology Evaluation	<b>Quiz 7</b> – Liver, Protein, Kidney, and Pancreas Chemistry <a href="#">Case Study Final Draft</a>
<b>17</b>	4/29	Review	<b>Exam 3 Review</b>
<b>18</b>	5/6	Exam 3 (Finals Week)	<b>EXAM 3</b> (Due date <b>5/10/2023</b> )

**Quiz Corrections Due Date:****Quiz 1 – 2/4****Quiz 2 – 2/25****Quiz 3 – 3/3****Quiz 4 – 3/10****Quiz 5 – 4/7****Quiz 6 – 4/21****Quiz 7 – 5/5**