



UNIVERSITY of HAWAII
WINDWARD COMMUNITY COLLEGE

Ke Kulanui Kaiāulu o ke Ko'olau

ANSC 151L: Clinical Laboratory Techniques

Spring 2026

3 Credits | Imiloa 123

CRN 63195 – T 1:00–3:45pm

CRN 63196 – W 1:00–3:45pm

CRN 63504 – R 1:00–3:45pm

About Windward Community College

Mission Statement

‘O keia ka wā kūpono e ho‘onui ai ka ‘ike me ka ho‘omaopopo i kō Hawai‘i mau ho‘oilina waiwai. Aia nō ho‘i ma ke Kulanui Kaiāulu o ke Ko‘olau nā papahana hou o nā ‘ike ‘ake akamai a me nā hana no‘eau. Me ke kuleana ko‘iko‘i e ho‘ohiki ke Kulanui e kāko‘o a e ho‘okumu i ala e hiki kē kōkua i ka ho‘onui ‘ike a nā kānaka maoli. Na mākou nō e ho‘olako, kāko‘o a paipai i nā Ko‘olau a kō O‘ahu a‘e me nā hana no‘eau ākea, ka ho‘ona‘auao ‘oihana a me ka ho‘onui ‘ike ma ke kaiāulu–hō‘a‘ano a e ho‘oulu i nā haumāna i ka po‘okela.

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.

‘Āina

Windward Community College is located in the ahupua‘a of Kāne‘ohe and He‘e‘ia in the moku of Ko‘olaupoko on the island of O‘ahu. Both ahupua‘a are directly connected to the mo‘o ‘ōlelo of Pāpa and Wākea, who are seen as the ancestors of the Hawaiian nation. The campus sits beneath the pu‘u of Keahiakahoe, which is also connected to many mo‘o ‘ōlelo of this ‘āina. Because wind names and rain names are associated with specific ‘āina, the rain name of Kāne‘ohe is known as the ‘Āpuakea and the rain name of He‘e‘ia is the Ulumano.

Instructor Information

How to Contact Your Instructor

Matthew Tsuda, RVT

Veterinary Technology

- Office Hours (by appointment): T, W, R – 10:30-12:30pm

Windward Community College is an Equal Opportunity Institution.

Rev DATE: 11/13/2025

- Office: Imiloa 104/Imiloa 123
- Email: mttsuda@hawaii.edu
- Phone: 808-343-7507

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

Contingency Plan

If there is an outage, weather situation, or family emergency on my end, I will do my best to find a way to communicate an update as soon as possible about my return to the course. Mahalo in advance for your understanding and I hope you will do the same.

Course Format & Structure

This course is offered in a 16-week time frame. Please note that this is not a self-paced course; our course schedule is provided in this syllabus.

All course activity due dates are listed in Lamakū on the Calendar. Please check your UH email often and set your [Lamakū Notifications](#) (both email and D2L Brightspace [Pulse App](#)) to receive course notices, such as grading updates, announcements, and activity reminders.

Participation Verification

Campuses are required by federal regulations to verify the participation of students in their classes. In accordance with [Executive Policy 7.209](#), all students in the University of Hawai'i system are required to establish "participation" to ensure that they are not dropped from their class(es). Effective Fall 2021, students who fail to participate by the late registration period for a class will be administratively dropped from that class. Students may also be dropped from dependent prerequisite and/or corequisite classes if both courses do not establish participation.

Course Information

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

Students can expect to attain the following outcomes as a result of taking this course:

1. Properly package, handle and store specimens for laboratory analysis.
2. Demonstrate proficiency in the use of veterinary lab equipment (e.g. microscopes, blood chemistry analyzers, centrifuges, and refractometers).
3. Determine proper maintenance and quality control procedures necessary to ensure accurate results.
4. Properly carry out analysis of laboratory specimens, including urinalysis, CBC, blood chemistry and common cytological and parasitological procedures.
5. Use critical thinking to analyze and interpret clinical data to determine if a need exists for additional laboratory tests that will provide useful diagnostic information.

Course Materials

Required

1. Margi Sirois, Laboratory Procedures for Veterinary Technicians, 7th edition, St. Louis, MO, Mosby Inc, 2019 (ISBN: 9780323595056)
2. Margi Sirois, Lab Manual for Laboratory Procedures for Veterinary Technicians, 7th edition, St. Louis, MO, Mosby Inc, 2019 (ISBN: 9780323595407)
 - Regular access to a computer with internet (desktop or laptop).
 - Windward offers free laptop and WiFi hotspot check-out to students (first-come, first-served), as well as software and other tech discounts; see Ka Piko [Student Tech Support](#) for information.
 - UH Online provides an [online learning Readiness Activity](#) and an [Orientation to Online Learning](#) that Windward CC students may take to see if online learning is a good fit.
 - **Long-sleeved white lab coat**
 - **3-ring binder or folder**

Lamakū Learning Management System (<https://lamaku.hawaii.edu/d2l/home>)

Learn about the Hawaiian meaning of the word “lamakū”: [Lamakū Pronunciation, Meaning, and Importance](#).

- [UHCC Lamakū Student Resources](#) (how-to videos)
 - Contact [UH ITS](#) for 24/7 Lamakū assistance.
- [Keeping Accessibility and UDL in Mind](#)
 - If you find any course content that needs remediation and/or updating, please kindly share and I will immediately work to make the content accessible.
- Lamakū courses will appear 5 days before the first day for the academic term and will become inactive (no longer be available to access) 3 weeks after the end of the term. Be sure to save any coursework you may need from Lamakū *during* the term.

- Lamakū automatically logs you out *if it does not detect activity for three hours*. A warning message will appear, notifying you of the lack of activity. Activity is defined as clicking a button in Lamakū, such as "Save Draft" or "Next" (in a test), clicking on a course tab, or taking an action that sends information to the server.

Other Technology

D2L Brightspace, the parent company of Lamakū, recommends users choose the latest versions of [Google Chrome](#), [Mozilla Firefox](#), [Microsoft Edge](#), or [Apple Safari](#) as their internet browser.

We recommend that students update their internet browser at the start of each term, search how to allow pop-up windows, adjust their cookies, and clear device history. Also, fully restart your computer and/or device from time-to-time to optimize performance.

Review the privacy/security policies before using the technologies we will be using in this class. Contact me if you would like to discuss the use of alternate options or technologies.

- [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.
- [Google Docs](#) is used for some files required for assignments like templates, rubrics, etc. Although you do not necessarily need to edit any Google Doc files, you may be using this extensively on your own to create your case study projects or edit an existing template. Accessibility rules are the same as Google Drive in general.
- [Kahoot!](#) is an online quiz program which will contain several practice quizzes and exams for the semester. You do not need an account to play any Kahoot games. ([accessibility statement](#), [privacy policy](#))

Grading Policy

1. **Late Assignments** - 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. **Google Drive** - 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.
4. **Lab Dress Code:** Students are required to observe all dress code policies (see VETA handbook for full details.) Repeated instances will be issued demerits. Dress code includes:
 - a. Close-toed shoes with no holes
 - b. School scrubs
 - c. White long-sleeved lab coat
 - d. Visible jewelry like piercings and nail polish are not allowed
5. **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.
6. **Cleaning Duties:** Labs days with biological sample usage (almost every week) will have cleaning duties assigned to two students per week.

7. **Use of Phones, Laptops, and other Devices:** Use of the mentioned devices is allowed only for studying and access on course resources. You will be instructed to put these away if they are a distraction to yourself or others as you must always be attentive due to the samples and tools we may be working with.
8. **Demerit System:** Please see the Student Handbook for more information on our demerit system. The following instances may result in use of the program's demerit system:
- Improper and careless handling of biological specimens
 - Not restocking your supply containers or cleaning your table before leaving
 - Repeated instances of showing up to lab in improper dress code, including bringing your lab coats. You should not be reminded to remove your jewelry and doing so will add demerit points.
 - Any other condition stated within the Student Handbook
9. **AVMA-Required Skills:** There is a list of 151L-specific skills that must be completed *before* the end of the semester. This list can be found at the end of the syllabus. **Failure to complete all skills, even if missing just one, will result in an 'Incomplete-F' grade.** This grade requires you to complete all missing skills before the indicated deadline (depends on semester and year) or your finalized grade will be recorded as an F.

Assessment, Tasks, and Grading

ATTENDANCE: Excused absences are accompanied by prior communication and documentation of illness or emergency. Unexcused absences do not have documentation, regardless of prior communication.

Only **one excused** absence is permitted due to illness or family emergency. No **unexcused absences** are permitted and will result in **failure** of the course. If a student has an emergency or is too ill to come to lab, they must contact the instructor as soon as possible. A doctor's note or other documentation of extenuating circumstances will be required for any excused absence within 48 hours of the missed class. Any additional excused absences will result in **failure** of the course.

Attendance in a lab other than your assigned section is not permitted unless the absence is excused and properly documented or have received prior approval.

PARTICIPATION: Students are expected to be working on 151L-related activities during lab time. Any other actions, such as working on other course assignments, using electronic devices for non-educational purposes, taking prolonged and frequent breaks, etc., may lead to a loss of 10 points from your total grade and use of the demerit system.

LAB MANUAL ASSIGNMENTS: 45 points - Complete the Lab Manual that accompanies the textbook. The page numbers and exercises that need to be completed can be found on Lamaku.

QUIZZES: 70 points total – Students should expect a quiz many class periods and are expected to keep up with the material and be prepared every class. Each quiz is worth 10 points.

SAMPLE EVALUATIONS: 20 points twice, 40 points total – Sample evaluations that are completed in lab must be recorded on the appropriate sheets. These must be

kept together in a binder or folder, not loose. Loose papers will result in loss of points. There must be an acceptable amount of each type of sample evaluation that must be completed per submission; the total number can be found on the Lamaku assignment page. Every entry must be completed in the manner described within the lessons. Deviations from the correct format will result in loss of points.

MICROSCOPIC GUIDE: 80 points – The Microscopic Guide is modeled after the NERD book which is a self-created reference guide that will consist of all microscopic findings discussed in lab. This is a semester-long project that must be worked on weekly and will be collected twice. Full details can be found on the Lamaku assignment page.

PRACTICUM: 150 points total – There will be two practicums held within this semester.

Academic Integrity

Work submitted by a student must be the student's own work. The work of others should be explicitly marked, such as through the use of quotes or summarizing with reference to the original author.

In this class, students who commit academic dishonesty, cheating, or plagiarism will have the following consequence(s):

- Students will receive a failing grade for plagiarized assignments.
- All cases of academic dishonesty are referred to the Vice Chancellor for Student Affairs.
- 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.

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.
- Using AI as the source of assignment completion.
- 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.)

[Windward CC Student Conduct Information](#)

[UH System Student Conduct Policy EO 7.208](#)

AI Policy

AI is considered a newer tool that can effectively assist with studying and research. AI may also be used to supplement any projects in this course as a means to edit documents for grammar and

semantics. However, **you must be transparent on your productive usage of AI** by indicating how it was used and where (e.g. used to edit for grammar, used to reorganize document sections, used for research purposes, etc.) Using AI to write your case study will be considered plagiarism and may lead to dismissal from the program.

Academic and Technical Support

Academic Support

- [Windward Community College Library](#)
- [Library eResources](#)
- [Library Research Units \(LRUs\)](#)
- [Ka Piko Tutoring Services: Math Lab, Speech Lab, Writing Lab, 'Ōlelo Hawai'i Lab](#)
- [Online Learning at Windward Community College](#)
- [STAR Balance](#)

Technical Support

- [UH ITS Help Desk](#): email help@hawaii.edu or call (808) 956-8883 (or 1-800-558-2669) for Lamakū and most technology support. Available 24 hours a day, 7 days a week, including holidays.
- Student Tech Support: email winhelp@hawaii.edu, call (808) 235-7437, or stop by in person at Hale La'akea 228. Available Monday–Friday from 8:00 am–4:00 pm.
- Lamakū: Click on the [Lamakū Help](#) link in the menu bar at the top of the Lamakū homepage to fill out and submit a question and get your answer via email.
- [Information Security for Students](#)

College Policies & Support Services

Your instructor may also provide additional resources in your Lamakū course.

Basic Needs

Basic needs include food and housing, childcare, mental health, financial resources, and transportation. Student basic needs security is critical for ensuring strong academic performance, persistence and graduation, and overall student well-being. If you or someone you know is experiencing basic needs insecurity, please see the [UH System Basic Needs](#).

Disabilities Accommodations Statement

Windward Community College's Disability Student Services Office (WCC-DSSO) is committed to providing equal access to qualified students with disabilities.

If you have a physical, sensory, health, cognitive, or mental health disability that could limit your ability to participate fully in this class, you are encouraged to contact the Disability Specialist Counselor, Roy Inouye, to discuss reasonable accommodations that will help you succeed in this

class. The Disabilities Counselor can be reached at (808) 235-7448, wccdsso@hawaii.edu, or stop by the office (Hale Kako'o 106) for more information.

Financial Aid

If you are receiving financial aid and are contemplating not completing the course it is highly recommended that you contact the Financial Aid Office at (808) 934-2712 or email them at wccfao@hawaii.edu **BEFORE** you withdraw to discuss the impact this decision may have on your financial aid eligibility.

LGBTQ+

The University of Hawai'i system and Windward Community College are committed to building an inclusive community that supports and advocates for all students, staff, and faculty. We welcome all members of our campus community to our campuses: transgender, māhū, and people of all gender identities. All members of our campus community deserve a work and educational environment free from harassment or bullying based on their sexual orientation, gender identity, or expression. For more information, see the [University of Hawai'i Commission on LGBTQ+ Equality](#). Windward Community College Commissioner: Scott Sutherland, scottjks@hawaii.edu

Mental Health Counseling

Mental Health and Wellness at Windward Community College provides counseling services and activities on campus to support students' life goals as well as their academic goals. Information about services can be found at [WCC Mental Health & Wellness](#).

Student Conduct Code

Windward Community College follows the University of Hawai'i Code of Student Conduct which defines expected conduct for students and specifies those acts subject to University sanctions. Students should familiarize themselves with the Code of Student Conduct since, upon enrollment at Windward Community College, they have placed themselves under the policies and regulations of the University and its duly constituted bodies. The disciplinary authority is exercised through the Office of the Vice Chancellor for Student Affairs. Copies of the [Student Conduct Code](#) are available at the Office of the Vice Chancellor for Student Affairs.

TRiO Program

The Federal TRiO Programs are educational opportunity outreach programs designed to motivate and support students from disadvantaged backgrounds. TRiO includes six outreach and support programs targeted to serve and assist low-income, first-generation college students and students with disabilities in progressing through the academic pipeline from middle school to post-baccalaureate programs. Information about services can be found at [Windward CC TRiO](#).

Title IX - Sex Discrimination And Gender-Based Violence Resources

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:

Desrae Kahale, UH System Confidential Advocate
Phone: (808) 235-7393
Email: advocate@hawaii.edu
Office: Hale Kāko'o 101

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

Mykie E. Menor Ozoa-Aglugub, J.D., Title IX Coordinator
Phone: (808) 235-7468
Email: mozoa@hawaii.edu
Office: Hale Kāko'o 109

Karen Cho, Deputy Title IX Coordinator
Phone: (808) 235-7404
Email: kcho@hawaii.edu
Office: Hale 'Alaka'i 120

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, refer to the University's [Title IX](#) resources, and the University's Policy, [EP 1.204](#).

UH Alerts

The UH Alert emergency notification system alerts the university community in the event of a natural, health or civil emergency. The information you provide will only be used in the event of an emergency that impacts the health and safety of the UH community or the closure of whole campuses. It will not be shared with others or used for routine UH communications or announcements. To sign up, visit [UH Alerts](#) for more information.

Last Day for 100% Refund – 1/20

Last Day to Withdraw without W – 2/4

Last Day to Withdraw with W – 3/27



UNIVERSITY of HAWAI'I
WINDWARD COMMUNITY COLLEGE

Ke Kulanui Kaiāulu o ke Ko'olau

W	Tuesday	Wednesday	Thursday	Assignments
1	1/13 Performing a Urinalysis Completing the UA Chart	1/14 Performing a Urinalysis Completing the UA Chart	1/15 Performing a Urinalysis Completing the UA Chart	Quiz due 1/18 – Lamaku Participation Verification
2	1/20 Identifying UA Microscopic	1/21 Identifying UA Microscopic	1/22 Identifying UA Microscopic	Quiz 1 – UA Chart – Physical & Chemical
3	1/27 Identifying UA Microscopic	1/28 Identifying UA Microscopic	1/29 Identifying UA Microscopic	
4	2/3 Blood Smears, Staining, & PCV CBC Chart I	2/4 Blood Smears, Staining, & PCV CBC Chart I	2/5 Blood Smears, Staining, & PCV CBC Chart I	Quiz 2 – UA Chart - Microscopic
5	2/10 CBC Chart II	2/11 CBC Chart II	2/12 CBC Chart II	Lab Manual Assignment I – Unit 1 & 5
6	2/17 Basic Cell Morphology	2/18 Basic Cell Morphology	2/19 Basic Cell Morphology	Quiz 3 – CBC Chart I, CBC Chart II
7	2/24 RBC Advanced Morphology	2/25 RBC Advanced Morphology	2/26 RBC Advanced Morphology	
8	3/3 Review	3/4 Review	3/5 Review	Quiz 4 – RBC Advanced Morphology
9	3/10 Practicum I	3/11 Practicum I	3/12 Practicum I	Practicum 1, Sample Evaluation I, Microscopic Guide I
10	3/17 SPRING BREAK			
11	3/24 WBC Advanced Morphology	3/25 WBC Advanced Morphology	3/26 No Class	
12	3/31 Fecal Floats & Other Tests	4/1 Fecal Floats & Other Tests	4/2 WBC Advanced Morphology Fecal Floats & Other Tests	
13	4/7 Identifying Round, Hook, Tape, Whip	4/8 Identifying Round, Hook, Tape, Whip	4/9 Identifying Round, Hook, Tape, Whip	Quiz 5 – WBC Advanced Morphology Lab Manual Assignment II – Unit 2 & 3
14	4/14 Identifying Protozoa & Ectoparasites	4/15 Identifying Protozoa & Ectoparasites	4/16 Identifying Protozoa & Ectoparasites	Quiz 6 – Fecal Floats & Other Tests, Identifying Round, Hook, Tape, Whip
15	4/21 Cytology Tests & Special Tests	4/22 Cytology Tests & Special Tests	4/23 Cytology Tests & pecial Tests	Quiz 7 – Identifying Protozoa & Ectoparasites
16	4/28 Review	4/29 Review	4/30 Review	Lab Manual Assignment III – Unit 6 & 9
17	5/5 Chart Completion	5/6 Chart Completion	5/7 No Class	
18	5/11 FINALS WEEK – Practicum 2			Practicum 2, Sample Evaluation II, Microscopic Guide II