

ANSC 151L Clinical Laboratory Techniques Lab

1 Credits

Thu: 10:00-12:45 (CRN: 64115) or 2:30-5:15 (CRN: 64159)

Fri: 11:30-2:15 (CRN: 64126)

INSTRUCTOR: Sam Geiling, RVT
TELEPHONE: 236-9107 271-7883
EFFECTIVE DATE: Spring 2017

OFFICE HOURS: Mon 1-2 & Fri 10-11, or by appt
EMAIL: scraddoc@hawaii.edu
OFFICE: Hale Kako'o 128

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

Provides students with the background knowledge needed to perform and interpret laboratory techniques commonly used in veterinary practice. Topics include: commonly used laboratory equipment, hematology, clinical chemistry, urinalysis, internal and external parasitology of companion animal species. Will include a review of the physiology of major body systems and an overview of common diseases seen in veterinary practice. This course is intended for students entering veterinary assisting, veterinary technology or other animal-related fields.

Prerequisite: Credit for ANSC 142 and 142L. Credit for or registration in ANSC 151L.

STUDENT LEARNING OUTCOMES

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

COURSE CONTENT

- Commonly used laboratory equipment
- Proper collection and handling of laboratory specimens
- Laboratory safety/OSHA regulations and MSDS information
- Hematology
- Blood chemistry analysis
- Urinalysis
- Parasitology: Identification and life cycle of internal and external parasites
- Zoonotic Diseases
- Anatomy and physiology review of the circulatory, respiratory, urinary, digestive endocrine, reproductive systems as related to laboratory diagnostics

COURSE TASKS

- 1) Attend lectures, on time
- 2) Complete assigned readings **prior to** the lectures
- 3) Participate in class discussions
- 4) Complete 10 quizzes
- 5) Complete 3 examinations and 3 Exam Reviews

ASSESSMENT TASKS AND GRADING

ATTENDANCE and PARTICIPATION: 50 points – Attendance will be taken at the beginning of each class period. Both tardiness and early departure from class are considered forms of absenteeism. Students are ***NOT entitled to any unexcused absences and will be docked 25 points for each absence.*** After the 50 points are lost, the student must meet with the instructor to discuss options for completing the course. If a student has an emergency or is too ill to come to class, the instructor should be notified via email prior to class. A doctor's note or documentation of extenuating circumstances will be required within 48 hours of the absence. For absences due to the observance of religious holidays, jury duty, and for calls to active duty, students must confer with the instructor prior to the absence. Students absent from class for any reason are still responsible for all work missed. In the event of severe weather or other emergency, students are expected to check-in via Lulima for instructor updates. Students who stop attending class, but do not formally withdraw, may receive an "F" grade and face financial aid repercussions in future semesters as a result. Because most laboratory sessions require special equipment and preparation, make-up labs will NOT be given. Students are expected to participate the ENTIRE lab period, including performing assigned clean-up duties. Any student who misses clean-up, leaves early, or does not complete all assigned lab activities will have points deducted.

QUIZZES (100 points total). Students will take a short (10 min) quiz at the beginning of most labs. The quiz will be based on the material covered in the previous week as well as the reading for the current lab. Quizzes will be in the first 10 minutes of class, you will not receive extra time if you are late. If you are absent for a legitimate excuse, and have proof that is acceptable to the instructor, you will be able to make up the quiz.

LAB ACTIVITIES (100 points). Students are expected to record the results and interpretation of all lab procedures in their laboratory notebook. The format for the notebook will be discussed on the first day of class. The notebook will be collected twice

LAB PRACTICUMS (200 points total-100 points for each practicum). The student will take two lab practicums (cumulative) to demonstrate knowledge and understanding of information presented in lab activities. Format and material will be discussed in class. There will be no make-up practicums.

Quizzes (10)	100
Notebooks	100
Practicum (2)	200
Attendance	50
Total	450

Total Points		Letter
403-450	90-100%	A
358-402	80-89%	B
313-357	70-79%	C
268-312	60-69%	D
<267	0-59%	F

LEARNING RESOURCES

Required Textbooks:

1. Margi Sirois, Laboratory Procedures for Veterinary Technicians, 6th edition, St. Louis, MO, Mosby Inc, 2014. (ISBN: 978-0-323-16930-1)
2. Geiling, Sam, ANSC 151L Lab Notebook, Windward Community College
3. Reagan, William, et al. Veterinary Hematology: Atlas of Common Domestic and Non-Domestic Species, 2nd edition, Ames, IA, Wiley-Blackwell, 2008 (ISBN-13: 978-0-8138-2809-1)
4. Bassert, Joanna and Dennis McCurnin, McCurnin's Clinical Textbook for Veterinary Technicians, 8th edition, St Louis, MO, Saunders Elsevier, 2010. (ISBN: 978-1-4160-5700-0)

Additional Information

ACADEMIC DISHONESTY Students involved in academic dishonesty will receive an "F" grade for the course. Academic dishonesty includes cheating and plagiarism. For more information on academic dishonesty, please see the Vet Tech Student Handbook.

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LAB ATTIRE, CONDUCT, AND HYGEINE For the uniform required in the lab, see the Veterinary Technology Program Student Handbook. Because labs often involve working with chemicals or hazardous materials, students **MUST** wear close-toed shoes. In addition, some lab activities will require students to wear gloves and safety glasses (provided by the college). Students failing to dress appropriately for lab will not be permitted to participate in laboratory exercises and will be considered absent. Students engaged in conduct that threatens themselves or others in the lab will be refused access to the lab for the remainder of the semester and receive an "F" grade for the course.

LAB SAFETY RULES

- 1) Be familiar with lab safety procedures and take appropriate precautions at all times to insure the safety of all lab students.
- 2) Follow all instructions carefully, especially when hazardous materials are being used.
- 3) Know the locations of important safety equipment: eyewash, safety shower, fire extinguisher, and first aid kit.
- 4) Report all injuries to the instructor immediately.
- 5) Dress appropriately for lab. Closed-toe shoes are required for ALL labs. Safety glasses and gloves are required for labs utilizing chemicals, bodily fluids, or hot-plates.
- 6) Report any hazardous conditions (e.g. chemical spills or broken glass) to the instructor immediately.
- 7) **NO FOOD ALLOWED IN LAB**
- 8) Chemicals used in lab may be poisonous, corrosive, or flammable. No chemicals, even those known to be safe, should be ingested or touched with un-gloved hands unless you are specifically directed to do so by your instructor.
- 9) Know how to safely operate all lab equipment and tools (e.g., microscopes, scalpels, and hematology supplies). Safe usage will be demonstrated by your instructor.
- 10) Clean all lab supplies and return them to their proper location before leaving lab.
- 11) Treat all organisms, living or dead, with care and respect. Use gloves when handling dissected specimens.
- 12) Place broken glass, sharps, and dissected specimens in the appropriate receptacles (**NOT IN THE TRASH!**)
- 13) Unless otherwise instructed, chemical wastes should **NOT** be disposed of down the drain.
- 14) Human tissues and bodily fluids (e.g., saliva and blood) must be disposed of in appropriate bio-hazard containers (**NOT IN THE TRASH!**)
- 15) Wash your hands immediately following each lab to reduce the possibility of contamination or infection.

DISABILITIES ACCOMMODATION STATEMENT

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.

ANSC 151L Course Schedule

Week	Date	Topic	Lecture Topic
1	R 1/12	Syllabus- Lab Safety- Urinalysis	Urinalysis
	F 1/13		
2	R 1/19	Urinalysis	~~MLK Jr Day~~
	F 1/20		
3	R 1/26	Urinalysis	Urinalysis
	F 1/27		
4	R 2/2	Urinalysis	Urinalysis
	F 2/3		
5	R 2/9	Hematology – CBC+UA	Exam 1 Hematology
	F 2/10		
6	R 2/16	CBC+UA	Hematology
	F 2/17		
7	R 2/23	CBC+UA	~~President's Day~~
	F 2/24		
8	R 3/2	CBC+UA	Hematology
	F 3/3	Exc Ill in Education – No Class	
9	R 3/9	Hematology – CBC+UA	Hematology
	F 3/10		
10	R 3/16	Review	Review
	F 3/17		
11	R 3/23	Practicum 1	Exam 2 Case Study
	F 3/24		
		~~Spring Break~~ ~~Hawaii, b/sa!!~~	
12	R 4/6	CBC+UA + Clinical Chemistry	Clinical Chemistry
	F 4/7		
13	R 4/13	CBC+UA + Clinical Chemistry + Parasitology	Parasitology
	F 4/14		
14	R 4/20	CBC+UA + Clinical Chemistry + Parasitology + Cytology	Cytology
	F 4/21		
15	R 4/27	CBC+UA + Clinical Chemistry + Parasitology + Cytology	Cytology
	F 4/28		
16	R 5/4	NO CLASS	Review
	F 5/5		
17		PRACTICUM 2: _____ (100 points – cumulative)	Final