

ANSC 151L Clinical Laboratory Techniques Lab

1 Credit

Thursday 8:30-11:15 or 1:00-3:45

Or Friday 11:30-2:15

INSTRUCTOR: Sam Geiling, RVT

OFFICE: Hale Na'auao 121

TELEPHONE: 236-9107 271-7883

EFFECTIVE DATE: Spring 2016

OFFICE HOURS: Tue

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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

Laboratory to accompany ANSC 151. Provides students with the knowledge and skills necessary to perform common veterinary lab tests including urinalysis, hematology, blood chemistry, cytology and parasitology. This course is intended for students entering veterinary technology, veterinary assisting or other animal-related fields.(3 hours laboratory) *Pre-Requisite: Credit for ANSC 142&142L, credit for or registration in ANSC 151.*

STUDENT LEARNING OUTCOMES

- Properly package, handle and store specimens for laboratory analysis.
- Demonstrate proficiency in the use of veterinary lab equipment (e.g. microscopes, blood chemistry analyzers, centrifuges, and refractometers).
- Determine proper maintenance and quality control procedures necessary to ensure accurate results.
- Properly carry out analysis of laboratory specimens, including urinalysis, CBC, blood chemistry and common cytological and parasitological procedures.
- 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 CONTENT

Concepts or Topics

- Laboratory safety
- Sample handling, storage, and preparation
- Use of lab equipment (microscopes, blood analyzers, centrifuges, refractometers)
- Perform hematology, urinalysis, clinical chemistries, and basic parasitological procedures
- Understanding how performing these laboratory procedures will assist a veterinarian in the diagnosis in a setting.

COURSE TASKS

- 1) Attend lab at scheduled times, on time, and in proper uniform.
- 2) Participate in lab activities.
- 3) Complete two in-class practicums.
- 4) Record results of lab activities in lab notebook.
- 5) Complete weekly quizzes.

ASSESSMENT TASKS AND GRADING

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 during the semester and evaluated for accuracy, organization and completeness, it will be worth 50 points at each evaluation.

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.

ATTENDANCE and PARTICIPATION (50 points): Attendance is mandatory and is worth 50 points towards the final grade. Each student is allowed **one** absence without penalty. Each unexcused absence above one will result in a deduction of 25 points per absence from the student's attendance score. Students with more than three un-excused absences will receive an "F" grade in the class. 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 (10)	100
Notebooks	100
Practicum (2)	200
Attendance	50
Total	450

Total Points	% points	Grade
403-450	90-100	A
358-402	80-89	B
313-357	70-79	C
268-312	60-69	D
<267	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.

LEARNING RESOURCES

Textbooks:

Laboratory Procedures for Veterinary Technicians. Hendrix, Charles M. and Sirois, Margi. 5th Edition, Mosby Inc., St. Louis MO

Lab manual, Craddock (available in the bookstore)

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.

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 Schedule

Week	Date	LAB TOPIC:	LECTURE
1	R 1/14	Lab safety & cleanup, lab equip, intro to smears	Intro
	F 1/15		Hematology
2	R 1/21	Hematology – CBC	Hematology (T)
	F 1/22		Hematology
3	R 1/28	Hematology – CBC	Hematology
	F 1/29		Hematology
4	R 2/4	Hematology – CBC	Hematology
	F 2/5		Hematology
5	R 2/11	Hematology - CBC	Review
	F 2/12		EXAM 1
6	R 2/18	Urinalysis + CBC	Urinalysis (T)
	F 2/19		Urinalysis
7	R 2/25	Urinalysis + Clin chem + CBC	Urinalysis
	F 2/26		Urinalysis
8	R 3/3	Urinalysis + Clin chem + CBC ~~Excellence in Education~~	Urinalysis
	F 3/4		Clin Chem
9	R 3/10	REVIEW	Clin Chem
	F 3/11		Clin Chem
10	R 3/17	PRACTICUM #1	Review
	F 3/18		EXAM 2
11	R 3/24	~~Spring Break~~ ~~Have fun, be safe!~~	
	F 3/25		
12	R 3/31	Parasitology ~~Good Friday~~	Parasitology
	F 4/1		Parasitology
13	R 4/7	Parasitology	Parasitology
	F 4/8		Parasitology
14	R 4/14	Parasitology	Review
	F 4/15		EXAM 3
15	R 4/21	Cytology & External labs	Toxicology
	F 4/22		Cytology
16	R 4/28	CBC + Chem + UA + Parasites + Cytology (Review)	Cytology
	F 4/29		Cytology
			Review
		Wednesday May 4 is the last day of instruction	Review
FINAL			Practicum #2 Cumulative EXAM 4 (Final)