

ANSC 258 Clinical Laboratory Techniques II

3 Credits

M – 1:00-2:15 T – 8:30-9:45

INSTRUCTOR: Sam Geiling, RVT

OFFICE: Hale Na'auao 121

OFFICE HOURS: T: 10:00-1:00 & F: 10:00-11:00 (Fridays, I will be in Imiloa 103)

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EFFECTIVE DATE: Fall 2015

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

A continuation of ANSC 151& 151L, this course provides students with additional instruction and hands-on experience with laboratory tests commonly used in veterinary practice. Topics include: 1) identification of internal parasites 2) performance and evaluation of microbiologic and serologic tests, 3) collection & evaluation of cytological samples 4) veterinary necropsy procedures. Included in this course is a review of the anatomy and 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. (3 hours lecture) Co-Requisite(s): ANSC 258L

STUDENT LEARNING OUTCOMES

- Properly package, handle and store specimens for laboratory analysis.
- Identify and describe the life cycle of select internal parasites of companion animals, livestock, & exotic species.
- Perform serologic tests.
- Collect, culture, and identify bacteria from animal tissues and perform sensitivity testing.
- Collect and evaluate various cytological specimens including canine vaginal smears.
- Perform a postmortem examination of a non-preserved animal

COURSE CONTENT

- Commonly used laboratory equipment
- Proper collection and handling of laboratory specimens
- Laboratory safety/OSHA regulations and MSDS information
- 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 activities, discussions, and projects
- 4) Complete 8 quizzes
- 5) Complete 5 examinations and 5 Exam Reviews

ASSESSMENT TASKS AND GRADING

ATTENDANCE: 20 points – Attendance is mandatory. Each student is allowed two absences without penalty. Each unexcused absence beyond two will result in a deduction of points from the student’s attendance score.

PARTICIPATION: 20 points – Most Tuesday mornings, the class will do some sort of review activity based on the reading from the book on the current topic. Participation in these activities will be graded.

QUIZZES: 110 points total – Quizzes will be held on Tuesday mornings. The content may cover any topic that has been previously discussed during the semester. There are 11 scheduled quizzes at 10 points each.

EXAM REVIEWS: 50 points total – Students are expected to complete reviews prior to each exam. Each review is worth 10 points. Instructions: each student will write 10 questions from the chapters for the upcoming exam, post it to Lulima under resources, and bring in one copy on the class period BEFORE the REVIEW. (Example: Exam #1 is Feb 10, the review day is Feb 9, the questions are due Feb 3)

EXAMINATIONS: 300 points total – Exam 1-4 will each be worth 50 points and the Final Exam will be worth 100 points.

Attendance	20	GRADING SCALE		
Participation	20	Total Points	Percentage Points	
Quizzes	110	Grade		
Exam Review	50	448-500	90-100	A
Exams	300	398-447	80-89	B
Total	500	348-397	70-79	C
		298-347	60-69	D
		<297	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. 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)
3. Hendrix, Charles and Robinson, Ed, Diagnostic Parasitology for Veterinary Technicians, 4th edition, St. Louis, MO, Saunders Elsevier, 2012. (ISBN: 978-0-3230-7761-3)

Recommended Textbooks:

1. Zajac, Anne and Conboy, Gary, Veterinary Clinical Parasitology, 8th edition, New York, NY, John Wiley & Sons, 2012. (ISBN: 978-0-8138-2053-8)

Additional Information

Quizzes will be given during the first 10-15 minutes of class. If you are late, you will not be allowed additional time.

If you miss an exam or quiz due to a **serious illness or legitimate emergency**, you **must** contact the instructor **within 48 hours** to arrange a time to take a make-up exam/quiz. You may need to provide a doctor's note. The make-up exam may not be the same exam that was given to other students and will need to be taken at the WCC Testing Center within a timeframe agreed upon by the instructor and student. If the student misses an exam for an unexcused reason, the student may be prohibited from taking a make-up exam, thus failing to receive any points for the missed exam. While make-up exams will cover the same content area as a missed exam, the exam format and specific questions may be different.

HOW TO SUCCEED IN THIS COURSE

- 1) Science courses at WCC generally require a minimum of 3 hours of independent study for **each** hour of class; therefore you should expect to spend **9 hours per week studying OUTSIDE of class** to fully understand the complexities of the wide range of information presented in this class.
- 2) Although you can download the lecture PowerPoint outlines and read the textbook, you will not succeed in this class without attending the lecture and taking notes on the corresponding material in the textbook. You need to **study** this material.
- 3) This class covers a variety of clinical laboratory techniques that requires a good understanding of animal anatomy and physiology. You may need to review your physiology textbook and class notes to fully understand how to use and apply diagnostic laboratory tests.
- 4) Form effective study groups with your classmates. Come prepared, meet on a schedule, change up the format. If you'd like more guidance on study groups, please ask.

SCHEDULE & READING ASSIGNMENTS

Required readings in *Laboratory Procedures for Veterinary Technicians* by Margi Sirois are indicated on the schedule below. Information from the assigned readings will be tested on quizzes or examinations. Everything covered in the lecture -- even if not from the required textbook-- may be covered in quizzes or exams.

ACADEMIC DISHONESTY

Students involved in academic dishonesty will receive an "F" grade for the course.

Academic dishonesty includes cheating on exams and plagiarism. See pages 20-21 of the 2014-2015 course catalog for a description of the University's policies concerning academic dishonesty.

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.

Week	Day	Topic
1	M 8/24 T 8/25 W 8/26 R 8/27	Course Intro - Introduction to Microbiology, Equipment & Supplies Micro - Sample Collection & Handling, Staining Specimens (Q1) <i>Review lab rules and topics from ANSC 151L, Intro to microbiology</i>
2	M 8/31 T 9/1 W 9/2 R 9/3	Micro - Culture Techniques, Antimicrobial Sensitivity Testing Micro - Additional Testing, Mycology (Q2) <i>Microbiology</i>
3	M 9/7 T 9/8 W 9/9 R 9/10	LABOR DAY - NO CLASS Micro - Review (Q3) <i>Microbiology</i>
4	M 9/14 T 9/15 W 9/16 R 9/17	~~Microbiology Exam~~ EXAM 1 Basic Principles of Immunology, Common Lab Tests <i>Microbiology & Immunology</i>
5	M 9/21 T 9/22 W 9/23 R 9/24	Blood Groups and Immunity, Intradermal & Reference Lab Tests Disorders of the Immune System, Review (Q4) <i>Microbiology & Immunology</i>
6	M 9/28 T 9/29 W 9/30 R 10/1	~~Immunology Exam~~ EXAM 2 Parasitology - Sample Collection and Diagnostic Techniques <i>Microbiology & Immunology</i> Practicum 1
7	M 10/5 T 10/6 W 10/7 R 10/8	Parasites - Ascaroidea, Stroglyoidea, Trichostrongyloidea Parasites - Rhabditoidea, Metastrongyloidea, Trichuroidea (Q5) <i>Parasitology</i>
8	M 10/12 T 10/13 W 10/14 R 10/15	Parasites-Oxyuroidea, Spiruroidea, Dracunculoidea, Dioctophymoidea Parasites - Filarioidea - Review (Q6) <i>Parasitology</i>
9	M 10/19 T 10/20 W 10/21 R 10/22	~~Nematode Exam~~ EXAM 3 Parasites - Cestodes <i>Parasitology</i>
10	M 10/26 T 10/27 W 10/28 R 10/29	Parasites - Cestodes Parasites - Cestodes (Q7) <i>Parasitology</i>
11	M 11/2 T 11/3 W 11/4 R 11/5	Parasites - Trematodes Parasites - Trematodes and Acanthocephalans (Q8) <i>Parasitology</i>
12	M 11/9 T 11/10 W 11/11 R 11/12	Parasites - Protozoa and Rickettsia Parasites - Protozoa and Rickettsia - Review (Q9) VETERAN'S DAY - NO LAB <i>Parasitology</i>
13	M 11/16 T 11/17 W 11/18 R 11/19	~~Cestode, Trematode, Protozoa, Rickettsia Exam~~ EXAM 4 Parasites - Fleas <i>Parasitology</i>
14	M 11/23 T 11/24	Parasites - Lice, Flies, and Mites Parasites - Ticks (Q10)

	<i>W 11/25</i> <i>R 11/26</i>	<i>Parasitology</i> THANKSGIVING DAY - NO LAB
15	<i>M 11/30</i> <i>T 12/1</i> <i>W 12/2</i> <i>R 12/3</i>	Parasites - Ticks Parasites - Pentasomids, Annelida (Q11) <i>Parasitology</i>
16	<i>M 12/7</i> <i>T 12/8</i> <i>W 12/9</i> <i>R 12/10</i>	Review for final exam Review for final exam <i>Parasitology</i> Practicum 2

*This is the schedule for both lecture and lab. Lab dates and topics are *italicized*.*

Other important dates:

9/14 last day to drop w/o a W

10/30 last day to drop w a W

11/2 first day of spring registration