ANSC 151L Lab Techniques I Lab
1 credit – CRN 61152/61153/61434
Wed – 9:00-11:45 or 2:30-5:15 or Fri – 10:00-12:45

INSTRUCTOR: Sam Geiling, RVT
OFFICE HOURS: Hale Uluwehi · Mondays: 9am-1pm and Thursdays 11:30am-2:30pm
CONTACT: Campuswire – scraddoc@hawaii.edu
808-236-9107
EFFECTIVE DATE: Spring 2022

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 Koʻolau region of Oʻahu
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.

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.

LEARNING RESOURCES
• Margi Sirois, Laboratory Procedures for Veterinary Technicians
• Geiling, Sam, ANSC 151L Lab Notebook, Windward Community College
  Species,
• Bassert, Joanna and Dennis McCurnin, McCurnin’s Clinical Textbook for Veterinary Technicians,
  10th edition, St Louis, MO, Saunders Elsevier

COURSE TASKS
• Attend labs prepared to PERFORM hands on activities
• Attend assigned labs in uniform and on time
• Complete assigned readings and lab notebook sections prior to the labs
• Complete all required AVMA skills assigned to the course
ASSESSMENT TASKS AND GRADING

ATTENDANCE: 20 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 20 points for an absence. Please refer to the Student Handbook for attendance policies.** You are expected to attend every lab without discretion. If you have a legitimate excuse or legitimate illness, you must contact the instructor within 48 hours prior to the intended lab date.

~~COVID-19~~ If you are feeling sick and/or exhibiting any of the signs or symptoms associated with COVID-19, do not attend your lab/class, please contact your physician immediately for the appropriate steps to acquire a test and initiate quarantine. You must contact your instructor immediately and provide the documentation from your physician regarding your health status.

QUIZZES – 50 points total – 10 points each – Students will take a short quiz at the beginning of some labs. 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 NOTEBOOK AND 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 four times – see course schedule.

LAB PRACTICUMS – 200 points – Student will take two lab practicums (final is 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.

370 total

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage Range</th>
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<tbody>
<tr>
<td>A</td>
<td>90-100%</td>
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<tr>
<td>B</td>
<td>80-89%</td>
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<tr>
<td>C</td>
<td>70-79%</td>
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ADDITIONAL INFORMATION

LAB ATTIRE, CONDUCT, AND HYGIENE

Because this lab involves the use of hazardous materials, students MUST wear close-toed shoes. In addition, some lab activities will require students to wear gloves and safety glasses (provided by college). A long-sleeved lab coat will be required for ALL labs. Lab coats must be purchased prior to the start of the semester. 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 and “F” grade for the course. **Students who behave in a reckless, inhumane, or unsafe manner will receive and “F” grade and be barred from attending future classes.**

*Windward Community College is an equal opportunity, affirmative action institution.*
LAB SAFETY RULES

- Be familiar with lab safety procedures and take appropriate precautions at all times to insure the safety of all lab students.
- Follow all instructions carefully, especially when hazardous materials are being used.
- Know the locations of important safety equipment: eyewash, safety shower, fire extinguisher, and first aid kit.
- Report all injuries to the instructor immediately.
- 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.
- Report any hazardous conditions (e.g. chemical spills or broken glass) to the instructor immediately.
- NO FOOD ALLOWED IN LAB.
- 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.
- Know how to safely operate all lab equipment and tools (e.g., microscopes, scalpels, and hematology supplies). Your instructor will demonstrate safe usage.
- Clean all lab supplies and return them to their proper location before leaving lab.
- Treat all organisms, living or dead, with care and respect. Use gloves when handling dissected specimens.
- Place broken glass, sharps, and lab specimens in the appropriate biohazard or sharps receptacles (NOT IN THE TRASH!)
- Unless otherwise instructed, chemical wastes should NOT be disposed of down the drain.
- Wash your hands immediately following each lab to reduce the possibility of contamination or infection.

COURSE CONTENT.

<table>
<thead>
<tr>
<th>Task Description</th>
<th>Date</th>
<th>Initials</th>
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<tbody>
<tr>
<td>Perform Urinalysis: determine physical properties</td>
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<tr>
<td>Perform Urinalysis: test chemical properties</td>
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<td></td>
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<tr>
<td>Perform Urinalysis: examine and identify sediment</td>
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<td>Perform Complete Blood Count: total protein</td>
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<td>Perform CBC: packed cell volume</td>
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<td>Perform CBC: red cell count</td>
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<tr>
<td>Perform CBC: white cell count</td>
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<tr>
<td>Perform microscopic exam of blood film: correct white blood cell counts for nucleated cells</td>
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<tr>
<td>Perform microscopic exam of blood film: prepare film and stain using a variety of techniques</td>
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</table>
Perform microscopic exam of blood film: perform leukocyte differential – normal vs abnormal
Perform microscopic exam of blood film: evaluate erythrocyte morphology – normal vs abnormal
Perform microscopic exam of blood film: estimate platelet numbers
Perform microscopic exam of blood film: calculate absolute values
**Prepare, label, package,** and store specimens for laboratory analysis
Select and maintain laboratory equipment
Implement *quality control* measures [GROUP]
Perform blood *chemistry* tests (BUN, glucose, common enzymes)
Perform *serologic* test (ELISA, slide/card agglutinations)
Collect/evaluate *skin scrapings*
Perform *cytologic* evaluation: collect, prepare, and evaluate ear cytology
Perform cytologic evaluation: collect, prepare, and evaluate canine vaginal smears [GROUP]
Perform cytologic evaluation: assist in collecting, preparing and evaluating transudate, exudate and cytologic specimens (joint, cerebrospinal, airway, body cavity) (not required)
Perform cytologic evaluation: perform fine needle tissue aspirates and impression smear preparation (differentiate benign vs. malignant) *not required*
Perform cytologic evaluation: prepare and stain bone marrow specimens *not required*
Perform cytologic evaluation: evaluate semen *not required*

**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. Roy Inouye can be reached at (808) 235-7448, royinouy@hawaii.edu, or you may stop by Hale Kākoʻo 106 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:

<table>
<thead>
<tr>
<th>Jojo Miller, Confidential Advocate</th>
<th>Desrae Kahale, Mental Health Counselor &amp; Confidential Resource</th>
<th>Karla K. Silva-Park, Title IX Coordinator</th>
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<tr>
<td>Phone: (808) 348-0663 Email: <a href="mailto:advocate@hawaii.edu">advocate@hawaii.edu</a> Office: Hale Kākoʻo 110</td>
<td>Phone: (808) 235-7393 Email: <a href="mailto:dkahale3@hawaii.edu">dkahale3@hawaii.edu</a> Office: Hale Kākoʻo 101</td>
<td>Phone: (808) 235-7468 Email: <a href="mailto:karlas@hawaii.edu">karlas@hawaii.edu</a> Office: Hale ‘Ākoakoa 220</td>
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_Windward Community College is an equal opportunity, affirmative action institution._
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/

**ACADEMIC INTEGRITY**

_Students involved in academic dishonesty will receive demerit points, lost points, and be referred to the Vice Chancellor for Student Affairs._

Academic dishonesty includes cheating on exams and plagiarism.

Work submitted by a student must be the student’s own work. The work of others should be explicitly marked, such as through 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, lab sheets or lab notebooks, and for cheating on a quiz/exam. Students will receive demerit points, to go into their VETT Student record, per the VETA/VETT Student Handbook

All cases of academic dishonesty are referred to the Vice Chancellor for Student Affairs. See the 2021-2022 course catalog for a description of the University’s policies concerning academic dishonesty.

**Policy on Late Assignments:** Late submissions are not accepted. If an assignment was missed due to an unforeseen emergency, communication must be established with your instructor within 48 hours and documentation must be provided. Unless previously consulted with by your instructor, uploaded files with edits made after the due date will not be accepted.

**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.

**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.

**ALTERNATE CONTACT INFORMATION**

If you are unable to contact the instructor, you can contact:

- Dr. Kelly: jennyrk@hawaii.edu
- Stacie Kissel: kupahu@hawaii.edu
- Sydney Dickerson: ssfd@hawaii.edu

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
<table>
<thead>
<tr>
<th>WEEK</th>
<th>DATES</th>
<th>LAB TOPIC:</th>
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<tbody>
<tr>
<td>1</td>
<td>Jan 10-14</td>
<td>LNB: Into</td>
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<td>2</td>
<td>Jan 17-21</td>
<td>LNB: UA</td>
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<td>3</td>
<td>Jan 24-28</td>
<td>Practice UA</td>
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<td>4</td>
<td>Jan 31-Feb 4</td>
<td>Practice UA and blood smears</td>
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<tr>
<td>5</td>
<td>Feb 7-11</td>
<td>UA, CBC</td>
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<tr>
<td>6</td>
<td>Feb 14-18</td>
<td>UA, CBC</td>
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<tr>
<td>7</td>
<td>Feb 21-25</td>
<td>UA, CBC</td>
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<tr>
<td>8</td>
<td>Feb 28-Mar 4</td>
<td>Wed:</td>
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<td></td>
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<td>Fri: no class</td>
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<tr>
<td>9</td>
<td>Mar 7-11</td>
<td>PRACTICUM 1</td>
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<td></td>
<td>Mar 14-18</td>
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<td>10</td>
<td>Mar 21-25</td>
<td>UA, CBC, FECAL</td>
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<td>11</td>
<td>Mar 28-Apr 1</td>
<td>UA, CBC, FECAL</td>
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<tr>
<td>12</td>
<td>Apr 4-8</td>
<td>UA, CBC, FECAL</td>
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<td>13</td>
<td>Apr 11-15</td>
<td>Wed:</td>
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<td>Fri: no class</td>
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<td>14</td>
<td>Apr 18-22</td>
<td>UA, CBC, FECAL, CYTOLOGY</td>
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<td>15</td>
<td>Apr 25-29</td>
<td>Review</td>
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<tr>
<td>16</td>
<td>May 2-6</td>
<td>WED/FRI: OPEN LABS</td>
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<tr>
<td>FINALS</td>
<td>May 9-13</td>
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