ANSC 263L  
**Exotic and Laboratory Animal Procedures**  
Thursdays at Hale Imiloa 1 (9:00-11:45am | 1:00-3:45pm) CRN: 64256 | 64257

**INSTRUCTOR:** Dani Carico  
**OFFICE:** Hale Kako'o 126  
**OFFICE HOURS:** Mondays 11:30-12:30pm  
**TELEPHONE:** 236-9165  
**EMAIL:** caricod@hawaii.edu  
**EFFECTIVE DATE:** August 20, 2018

**WINDWARD COMMUNITY COLLEGE MISSION STATEMENT**

*Windward Community College is committed to excellence in the liberal arts and career development; we support and challenge individuals to develop skills, fulfill their potential, enrich their lives, and become contributing, culturally aware members of our community.*

**CATALOG DESCRIPTION**

Introduction to the care and use of laboratory animals and exotics. Includes training in restraint, nursing, and husbandry of common laboratory animal species and exotics (rats, mice and rabbits). This course is intended for students entering lab animal medicine, veterinary technology, veterinary assisting or other animal-related fields (1 credit lab).

*Prerequisite:* Credit for ANSC 151 and ANSC 151L.

**Activities Required at Scheduled Times Other Than Class Times:**

Students enrolled in ANSC 263 are required to be enrolled in ANSC263L and attend scheduled labs on and off campus.

**STUDENT LEARNING OUTCOMES**

Upon successful completion of ANSC 263, the student should be able to:

1) Comply with national and institutional regulations regarding the care and use of laboratory animals.

2) Recognize common lab animal and exotic species and safely restrain them for laboratory procedures.

3) Administer drugs and medications using appropriate sites and routes (IV, IM, SQ and Oral Dosing).

4) Humanely collect blood samples from mice, rats and rabbits.

5) Describe the signs and treatments for common diseases of lab animals and exotics.

6) Explain anesthetic and recovery procedures.
### COURSE CONTENT

#### Concepts or Topics

The student will describe and integrate basic biological principles and define basic biological terms presented in lecture, laboratory, required texts, and other instructional materials.

Topics include:
- Regulations regarding the care and use of laboratory animals
- Occupational health and safety
- Potential for zoonotic diseases
- Sanitation procedures
- Ethics of animal use
- Types of laboratory animal facilities
- Types of primary enclosures
- Feeding and watering devices
- Biosafety levels
- Lab Animal Protocols and IACUC approvals
- Animal identification procedures (tags, tattoos, etc)
- Anatomy and physiology of common laboratory animals
- Animal behavior
- Assessing vital signs, reflexes and general health of laboratory animals
- Restraint techniques
- Blood collection techniques
- Administration of medications
- Common diseases of laboratory animals: signs, pathology, and treatment
- Husbandry and nutrition
- The research process
- Care of non-human primates and exotics
- Methods of administering anesthesia and analgesia
- Methods of euthanasia and disposal
- Basic husbandry, anatomy, and care for exotics

### COURSE TASKS

1. Attend lab at scheduled times.
2. Complete assigned readings and other assignments on Canvas prior to lecture.
3. Participate in class discussions.
4. Complete assignments, and any unannounced quizzes
5. Complete the skills checklist
ASSSESSMENT TASKS AND GRADING

ATTENDANCE (30 points): Attendance is mandatory and defined as being present in class for at least 75% of the class period and is worth 30 points toward the final grade. Students are allowed 1 excused absence. In order for the absence to be considered excused students will be required to turn in a doctor’s note or get approval from the program director. The instructor is not expected to provide an additional lab to make up any missed skills but may do so at their discretion if time allows for it. Any tardy is an automatic deduction of 15 points. Due to labs being off campus at times, if a student is tardy during those labs they risk getting left behind by the instructor and this will be counted as an unexcused absence. Students who do not participate in class discussions or come unprepared to participate in these activities will have points deducted from their attendance score.

ASSIGNMENTS (140pts): During the semester, you will need to complete assignments through Canvas and in lab. These assignments are on a pass/fail system. For every failed assignment, 10 points will be deducted. These assignments are crucial to participating in Labs and 5 or more failed assignments will equal an ‘F’ grade in the class.

QUIZZES (50 points): There will be unannounced cumulative quizzes given through Canvas. Quizzes will be based on labs and assignments. These quizzes will be timed and details will be discussed in lab.

LAB PROJECT (40pts): There will be 1 project on Non Human Primates to be done at the Honolulu Zoo. Details will be discussed in Lab.

FINAL EXAM (40pts): There will be a final exam at the testing center and it will be cumulative.

METHOD OF GRADING
The assignment of points will be according to the following:

<table>
<thead>
<tr>
<th>Task</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attendance</td>
<td>30</td>
</tr>
<tr>
<td>Assignments</td>
<td>140</td>
</tr>
<tr>
<td>Quizzes</td>
<td>50</td>
</tr>
<tr>
<td>Lab Project</td>
<td>40</td>
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<tr>
<td>Final Exam</td>
<td>40</td>
</tr>
<tr>
<td><strong>TOTAL POINTS</strong></td>
<td><strong>300</strong></td>
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</tbody>
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GRADING SCALE ESTIMATE

<table>
<thead>
<tr>
<th>Total Points</th>
<th>Percentage Points</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>270-300</td>
<td>90-100</td>
<td>A</td>
</tr>
<tr>
<td>240-269</td>
<td>80-89</td>
<td>B</td>
</tr>
<tr>
<td>210-239</td>
<td>70-79</td>
<td>C</td>
</tr>
<tr>
<td>180-209</td>
<td>60-69</td>
<td>D</td>
</tr>
<tr>
<td>&lt; 179</td>
<td>0-59</td>
<td>F</td>
</tr>
</tbody>
</table>

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. If you miss an exam or quiz because of an illness or legitimate emergency, you must contact the instructor within 48 hours to arrange a time to take a make-up exam or quiz. The instructor may request that the student present evidence of the illness or emergency that caused the student to miss the exam/quiz. If the student misses an exam/quiz for any other reason, the student may be prohibited from taking a make-up exam/quiz, thus failing to receive any points for the missed exam/quiz. While make-up exams/quizzes will cover the same content area, the exam/quiz format and specific questions may be different.

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

Academic dishonesty includes cheating on any testing material and plagiarism. Students are prohibited from discussing any testing material with each other once they have taken any exam. See the 2017-2018 course catalog for a description of the University’s policies concerning academic dishonesty.

LEARNING RESOURCES


ANSC 263 Notebook: Exotic and Laboratory Animal Procedures Notebook. This notebook is designed to help students focus their attention on important information for testing purposes.


Lecture Outlines: Power point lectures and work sheets will be given at the beginning of each lecture.

Canvas: Your instructor has created a Canvas website to accompany this course. To access, go to https://windwardcc.instructure.com/login/canvas. Login using your UH username and password.

Worksheets/Handouts: Your instructor will have worksheets and handouts given in class to complete.
Additional Information

STUDENT RESPONSIBILITIES
The student is expected to attend lectures, participate in all course activities, and complete all Exams, quizzes and course assignments on time. Please be considerate to other students by turning off any cell phones or beepers during class. Any changes in the course schedule, such as examination dates, deadlines, etc., will be announced ahead of time on the course website. It is the student's responsibility to be informed of these changes. It is the student's responsibility to be informed about deadlines critical to making registration changes (e.g., last day for making an official withdrawal).

REVIEW OF REGULATIONS:
All Students are required to complete the Citi Program review of regulations. The exam will be administered via https://www.hawaii.edu/researchcompliance/citi-training-information
And you will need to register for the regulations. This exam is open book/notes, and students may take the exam unlimited times in order to obtain a passing score. In order to complete the review of regulations, students will need to complete the following modules and print the completion reports on:
1. Investigators, Staff and Students: Initial Basic Course
2. Refresher Course for Investigators Conducting Research with Laboratory Animals.
3. Aseptic Surgery
4. "Mice and Rats Course Bundle;"
5. Working with Amphibians in a Research or Field Setting
6. Working with rabbits in Research Settings
7. Working with fish in Research

Students who do not pass the exam will not be allowed to participate in the clinical labs and will receive an “F” for the course.

COURSE SKILLS CHECKLIST:
Each student is required to attend labs at the AVS Lab Animal Facility. These labs will enable the student to gain hands-on experience in the husbandry and nursing of laboratory animals under the supervision of the Instructor or lab animal technician. Students who do not complete the skills checklist will receive an “F” for the entire course. The student’s performance will be documented on the course skills checklist and must be signed off by the instructor. This checklist must be turned in with the notebook to be graded.

ATTIRE, CONDUCT, AND HYGEINE
Students MUST wear close-toed shoes at all time for labs. In addition, some activities will require students to wear medical scrubs, gloves and other protective equipment. Students failing to dress appropriately for the lab will not be permitted to participate. Students who engage in conduct that threatens the animals, themselves or others will be refused access to the facility for the remainder of the semester and receive and “F” grade for the course.
LAB SAFETY RULES (LSR)
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.

HOW TO SUCCEED IN THIS CLASS
Although you can download all lecture and course materials, you will not succeed in this class without attending lecture and taking detailed notes on the corresponding material in the textbook and notebook. Merely reading the chapter will not suffice. Science courses generally require a minimum of two to three hours of independent study time for each hour in class. It is your responsibility to allocate the appropriate amount of time needed for study and be realistic about all personal and professional commitments that may cut into your study time.
ACCOMODATION FOR STUDENTS WITH DISABILITIES

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.

TITLE IX

Title IX prohibits discrimination on the basis of sex in education programs and activities that receive federal financial assistance. Specifically, Title IX prohibits sex discrimination; sexual harassment and gender-based harassment, including harassment based on actual or perceived sex, gender, sexual orientation, gender identity, or gender expression; sexual assault; sexual exploitation; domestic violence; dating violence; and stalking. For more information regarding your rights under Title IX, please visit: https://windward.hawaii.edu/Title_IX/.

Windward Community College is committed to the pursuit of equal education. If you or someone you know has experienced sex discrimination or gender-based violence, Windward CC has resources to support you. To speak with someone confidentially, contact Karla Silva-Park, Mental Health Counselor, at 808-235-7468 or karlas@hawaii.edu or Kaahu Alo, Designated Confidential Advocate for Students, at 808-235-7354 or kaahualo@hawaii.edu. To make a formal report, contact the Title IX Coordinator at 808-235-7393 or wcctix@hawaii.edu.

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 use of quotes or summarizing with reference to the original author.

Students can upload papers to http://www.TurnItIn.com to have papers checked for authenticity, highlighting where the paper potentially fails to appropriately reference sources.

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.

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: Alakai 121
Phone: 808-235-7422
Email: wccaa@hawaii.edu
<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Monday Class 8:45a-11:15a</th>
<th>Thursday Lab 9a-11:45a</th>
<th>Thursday Lab 1p-3:45p</th>
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<tbody>
<tr>
<td>1</td>
<td>8/23</td>
<td>Course Introduction/Introduction to Lab Animal Care</td>
<td>Course Introduction/CITI PROGRAM/Protocols</td>
<td>Course Introduction/CITI PROGRAM/Protocols</td>
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<tr>
<td>2</td>
<td>8/30</td>
<td>Intro to Lab animal Care/Research Environment</td>
<td>OSHA- PPE, SOP’s- Injection Training, JABSOM Rules</td>
<td>OSHA- PPE, SOP’s-Injection Training, JABSOM Rules</td>
</tr>
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<td>3</td>
<td>9/6</td>
<td>Labor Day- No Class</td>
<td>CITI Program DUE/JABSOM- Orientation</td>
<td>CITI Program DUE/JABSOM- Orientation</td>
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<td>4</td>
<td>9/13</td>
<td>The Rat &amp; Mouse</td>
<td>JABSOM- Orientation/ Research Environment</td>
<td>JABSOM- Orientation/ Research Environment</td>
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<td>5</td>
<td>9/20</td>
<td>The Rat &amp; Mouse</td>
<td>JABSOM-Research Environment/ Mouse</td>
<td>JABSOM-Research Environment/ MOUSE</td>
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<tr>
<td>6</td>
<td>9/27</td>
<td>Exam 1</td>
<td>JABSOM MOUSE- Husbandry, Restraint, Sexing</td>
<td>JABSOM MOUSE-Husbandry, Restraint, Sexing</td>
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<td>7</td>
<td>10/4</td>
<td>The Guinea Pig</td>
<td>JABSOM MOUSE-Procedures</td>
<td>JABSOM MOUSE-Procedures</td>
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<td>9</td>
<td>10/18</td>
<td>The Rabbit</td>
<td>RABBIT LAB</td>
<td>RABBIT LAB</td>
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<td>10</td>
<td>10/25</td>
<td>Exam 2</td>
<td>RABBIT LAB</td>
<td>RABBIT LAB</td>
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<tr>
<td>11</td>
<td>11/1</td>
<td>Non-Human Primates</td>
<td>ZOO Field Trip- Primates</td>
<td>ZOO Field Trip- Primates</td>
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<td>12</td>
<td>11/8</td>
<td>Exotics- Avian</td>
<td>BIRD LAB – A &amp; P</td>
<td>BIRD LAB – A &amp; P</td>
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<tr>
<td>13</td>
<td>11/15</td>
<td>Veterans Day No Class</td>
<td>Avian- Skills</td>
<td>Avian Skills</td>
</tr>
<tr>
<td>14</td>
<td>11/22</td>
<td>Exam 3</td>
<td>Thanksgiving- No LAB</td>
<td>Thanksgiving- No Lab</td>
</tr>
<tr>
<td>15</td>
<td>11/29</td>
<td>Exotics- Reptiles/ Amphibians</td>
<td>FISH LAB</td>
<td>FISH LAB</td>
</tr>
<tr>
<td>16</td>
<td>12/6</td>
<td>Exotics- Non Traditional Animals</td>
<td>Reptile and Amphibian LAB</td>
<td>Reptile and Amphibian LAB</td>
</tr>
<tr>
<td>17</td>
<td>12/10-12/13</td>
<td>Your Final Exam will be taken on Laulima at the testing center any time they are open 12/11 thru 12/13</td>
<td>FINALS Cleaning</td>
<td>FINALS Cleaning</td>
</tr>
</tbody>
</table>