



UNIVERSITY of HAWAII®
WINDWARD
COMMUNITY COLLEGE

ANSC 143: Medical Dosages and Calculations for Veterinary Technicians

3 Credit Hours (CRN 64376)

Thursdays 1:30-2:45 PM

Palanakila 102

INSTRUCTOR: Dr. Jessie Krause
OFFICE: Imiloa 102
OFFICE HOURS: Thursdays 2:45-3:45 PM
TELEPHONE: 808-236-9125
EMAIL: jkrause7@hawaii.edu
EFFECTIVE DATE: Fall 2024

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 Ko‘olau region of O‘ahu and beyond with liberal arts, career and lifelong learning in a supportive and challenging environment — inspiring students to excellence.

CATALOG DESCRIPTION

Introduction to Medical Dosages and Calculation for Veterinary Technicians. This course is designed to present the information commonly referred to as posology, which is defined as the study of dose and dosage in the field of applied pharmacology. This course will include, but not be limited to, the following: general mathematics used by veterinary medical personnel involved in calculating dosages of common drugs, reading drug orders and labels, and calculating intravenous fluid rates. Students will learn systems of measure, drug orders, drug concentration, conversions and different methods of dose calculations. The goal of this course is that each student be confident and capable of calculating correct drug doses regardless of the physical form of the medication. This course requires a strong background in algebra, the metric system, and an understanding of word problems. It is intended for students entering veterinary technology, veterinary assisting or other animal-related fields.

Credits: 3

Recommended Preparation: Grade of C or better in MATH 25, 26, 28, 29, 75X or higher or equivalent, satisfactory math placement test score.

Prerequisites: Enrolled as a Veterinary Assisting Program student; Placement in Eng 100 and Math 100 level courses.

STUDENT LEARNING OBJECTIVES

As a result of taking this course, students can expect to attain the following outcomes:

- Convert between standard and imperial units.
- Calculate correct medication and drug dosages for patients based on weight.
- Calculate appropriate intravenous fluid drip rates.

COURSE CONTENT

ANSC 143 - Weekly Schedule

Subject to Change

Week	Topics
WEEK 1 8/29	Course Introduction Initial Assessment Fractions
WEEK 2 9/5	Decimals Rounding Scientific Notation
WEEK 3 9/12	Percentages Ratios and Proportions
WEEK 4 9/19	Solving for "X" Estimation/Checking Your Work
WEEK 5 9/26	Exam 1
WEEK 6 10/3	Measurement Systems and Conversions
WEEK 7 10/10	Percent Solutions
WEEK 8 10/17	Understanding Drug Orders and Labels Equipment for Dosage Measurement Basic Dose Calculations Dispensing Medications
WEEK 9 10/24	Reconstitutions and Dilutions

WEEK 10 10/31	Exam 2
WEEK 11 11/7	Introduction to IV Infusions and Equipment Fluid Calculations: Maintenance and Surgical Rates, Drip Rates
WEEK 12 11/14	Fluid Calculations: Rehydration, Resuscitation
WEEK 13 11/21	IV Infusions: Fluid Additives and CRI Calculations
WEEK 14 11/28	No Class - Happy Thanksgiving! Blood Transfusions More CRI Practice
WEEK 15 12/5	Nutrition: MER, RER Body Condition Score Weight loss, Malnutrition Medical Equipment for Nutritional Support Refeeding Syndrome
WEEK 16 12/12	Review
WEEK 17 12/16-12/20	Final Exam - Date and Time TBA

COURSE TASKS

Overview

Students will be expected to attend weekly lectures, read assigned textbook chapters, review supplemental materials, and complete assignments and quizzes by the due dates posted in Laulima. Three examinations will be given throughout the course of the semester.

ACTIVITIES REQUIRED AT SCHEDULED TIMES OTHER THAN CLASS TIMES

On occasion, students will be expected to take quizzes or exams at the campus testing center. Students will be given advance notice and are expected to schedule their own appointments.

Testing Center Information:

- Appointments are required for Testing Center use and will need to be made at least 3 days in advance.
- Appointments can be made on the Testing Center webpage (<https://windward.hawaii.edu/services-for-students/testing-center/>).
- The Testing Center can be reached at 808-235-7498 with any questions or for assistance in making appointments.
- ID cards are required.
- Testing Center hours are M-F 8-4pm (closed on holidays).

ASSESSMENT TASKS AND GRADING

Students will be graded as follows:

POINT VALUES

Total of 900 points

- Exams - 500 points
 - 150 points each for Exams 1 and 2
 - 200 points for Exam 3 (a portion will cover the last several chapters of the course, and the rest will be a cumulative final exam)
- Assignments - 200 points
- Quizzes - 200 points

GRADING SCALE**Total Points and Grade Equivalent**

810-900 points	A (90%-100%)
720-809 points	B (80%-89%)
630-719 points	C (70%-79%)
540-629 points	D (60%-69%)
539 points or less	F (<60%)

Please note that "N" grades are not given for this course.

A total score of 70% or above is required in order to pass this course.

A minimum score of 70% is required on the final exam in order to pass this course, regardless of the student's overall course grade.

In the event that a student scores less than a 70% on the final exam, the final exam grade will become the overall course grade.

Attendance:

Attendance is mandatory and defined as being present for the scheduled class time for the entire period. Any absences must be communicated with the lecturer prior to or on the day of the absence. Each student is allowed one unexcused absence without penalty. **Each unexcused absence beyond the one allowed, will result in a deduction of 15 points from the student's final course score.** If a student is absent due to an emergency or is too ill to come to class, **a doctor's note or documentation must be given to the instructor within 48 hours of the missed class in order to be considered an excused absence.**

Quizzes will be given at the start of each lecture period. Students are responsible for being on time to take their quiz. No additional time will be given for quizzes nor will quizzes be administered at a later time without a documented excuse.

Lecture attendance via Zoom during an absence may be possible with instructor approval. It is the student's responsibility to contact the instructor to have this arranged. Attendance via Zoom is **NOT** considered equivalent to attendance in person and will not be treated as such with regards to a student's attendance grade. An absence will be counted as unexcused without proper documentation whether a student attends via Zoom or not.

Tardiness: Arriving more than 10 minutes late may be considered an absence.

For more information on the Veterinary Technology Program attendance policy, please refer to the Student Handbook.

Late Assignment Policy:

Late submissions will not be accepted. If an assignment was missed due to an unforeseen emergency, communication must be established with your instructor as soon as possible and documentation must be provided.

Make-Up Exam Policy:

If an examination must be missed because of an illness or legitimate emergency, the instructor must be contacted as soon as possible to arrange a time to make up the missed test. The student must present evidence of the illness or emergency that caused the student to miss the test. If the student misses an exam for any other reason, the student may be prohibited from taking a make-up exam. Make-up exams may differ from the original test with regards to questions but content will remain the same.

No retests will be given for any reason.

LEARNING RESOURCES

Required textbook:

Medical Mathematics and Dosage Calculations for Veterinary Technicians, 3rd Edition. Bill, Robert. Wiley Blackwell, Hoboken, NJ. ISBN: 9781118924143.

Lectures: PowerPoint presentations will be available each week on a shared Google drive. Links to these presentations will be posted on Lulima before the start of each lecture period.

Other resources: Due to the nature of this course, it is necessary to have access to high-speed internet, campus email, Lulima, Google Drive, and computer software (e.g. Microsoft, Adobe).

ADDITIONAL INFORMATION

Communication

- The instructor will communicate with students during class time, by email, or through the Lulima website. Any changes in the course schedule, such as examination dates, deadlines, etc., will be announced ahead of time in Lulima or via email.
- It is recommended that students check their email accounts regularly (at least every 48 hours) to be informed of any changes in a timely manner.
- When responding to email communication from the instructor or another faculty member, students are to “reply all” so that all parties are included in the response.
- Any questions pertaining to an individual student’s grade, or which for other reasons are preferred to be asked privately, can be sent to the instructor via email to jkrause7@hawaii.edu. Likewise, any questions not covered in class or questions which are time-sensitive may be emailed to the instructor at any time.

Student Responsibilities

- **Students are expected to complete all examinations and course assignments on time. Students are also expected to make sure that the correct and complete version of their assignments are uploaded to the correct assignment space in order to receive credit for their work.**
- It is the student’s responsibility to be informed about deadlines concerning registration (e.g., last day for withdrawal).
- It is the student’s responsibility to be informed of announcements made and to obtain copies of any assignments or other course materials provided while the student is absent.
- It is the student’s responsibility to be aware of and follow all rules, policies and procedures as stated in the syllabus, the WCC Vet Tech Student Handbook, the UH Student Conduct Code, or via other written communication by the instructor. Failure to follow rules, or any UH/WCC policies, will result in demerits for such violations as provided for in the WCC Veterinary Technology Program Student Handbook. The instructor reserves the right to change, modify or add to rules during the semester if deemed necessary. Students will be notified in writing of any changes.

Behaviors recommended for success in this course:

- Set aside time to complete tasks and study the assigned material weekly. **Good time management skills are essential for success in this program.**
- When applicable, do not forget to schedule time to take quizzes or exams at the Testing Center.
- Treat all classmates and instructors with respect and courtesy.
- Behave professionally at all times. Do not complain, gossip, or speak negatively about others (in or outside the program).
- Ask for help or clarification when needed. Tutor contact information will be listed in Laulima.

Policy for Technology Use in the Classroom:

- **Calculators will be provided** for use in completing in-class activities and all quizzes and exams. Students may not use their own calculators or electronic devices to perform calculations for quizzes and exams.
- Calculators will also be provided for use at the Testing Center.
- **Personal electronic devices are to be used for note-taking purposes only.**
- Inappropriate use of personal electronic devices during class time will result in the accumulation of 1 demerit per instance as stated in the Student Handbook. Inappropriate use of electronics in this class is defined as any purpose other than taking notes (including but not limited to: texting, checking social media accounts, “surfing” the internet).
- The instructor reserves the right to prohibit the use of personal electronic devices during class time if these rules are not followed.

STUDENT CONDUCT CODE

See the E7.208 University of Hawaii Systemwide Student Conduct Code

The UH Student Conduct Code shall apply to conduct that occurs on UH premises, at UH sponsored activities, in distance/on-line courses and events, and to off-campus conduct that affects the UH Community and/or the pursuit of its objectives. Each student shall be responsible for his/her conduct from the time of application for admission through the actual awarding of a degree.

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
 Counselor, Disability Student Services
 Office Hale Kako‘o 106
 808-235-7448
 royinouye@hawaii.edu

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:

Leslie Cabingabang, UH Confidential Advocate
Phone: (808) 348-0432 or (808) 341-0952
Email: advocate@hawaii.edu
Office: Hale Kāko‘o 107 (Wednesdays)

Desrae Kahale, Mental Health Counselor & Confidential Resource
Phone: (808) 235-7393
Email: dkahale3@hawaii.edu
Office: Hale Kāko‘o 101

Mykie Ozoa-Aglugub, Title IX Coordinator
Phone: (808) 235-7468
Email: mozoa@hawaii.edu
Office: Hale Kāko‘o 109

Karen Cho, Deputy Title IX Coordinator
Phone: (808) 235-7404
Email: kcho@hawaii.edu
Office: Hale ‘Alaka‘i 128

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

Academic dishonesty includes cheating on quizzes or exams and plagiarism. **In this course, quizzes and exams are not “open-book” and the use of notes or other course resources is prohibited unless otherwise specified.**

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 consequences:

- Students will receive a failing grade for plagiarized assignments or tests, or for any quizzes or tests for which they are found to use prohibited materials to answer questions.
- 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, please contact Dr. Jenny Kelly at jennyrk@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

****Please note that the syllabus is subject to change. Students will be given advance notice of any changes.**