

JEFFERSON COLLEGE

COURSE SYLLABUS

VAT266

Large Animal Technology I

3 Credit Hours

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VAT266 LARGE ANIMAL TECHNOLOGY I

I. CATALOG DESCRIPTION

- A. Prerequisites: VAT101 Introduction to Veterinary Technology, VAT106 Applied Pharmacology, VAT113 Principles of Clinical Medicine I, VAT114 Principles of Clinical Medicine II, VAT199 Veterinary Technology Internship, BIO208 Vertebrate Physiology or BIO212 Anatomy and Physiology II, and BIO113 Microbiology for Health Sciences or BIO215 General Microbiology (all courses must be completed with a grade of “C” or better) and reading proficiency
- B. 3 semester hours credit
- C. Large Animal Technology I familiarizes the student with large animal hospital biosecurity, large animal handling and restraint, large animal behavior, obtainment of histories and physical exams, large animal nutrition, and performance of clinical procedures. Species included are equine, bovine, caprine, porcine, ovine, camelids, and poultry. A laboratory session is included to allow students practice of techniques learned in the classroom. (F)
- D. Fulfills degree requirement for the Associate of Applied Science degree in Veterinary Technology

II. EXPECTED LEARNING OUTCOMES/ASSESSMENT MEASURES

Describe the life cycle patterns of pathogens, the main routes of transmission, ways to prevent disease in patients, and proper biosecurity steps that should be taken prior to patient arrival and on arrival, outline steps of putting on and taking off personal protective equipment (PPE), and compare and contrast disinfection and sterilization in preventing nosocomial infection	In-class exercises/discussions, exam, and final exam
Apply the concept of flight zone, point of balance, and flocking instinct to animal-handling situations, demonstrate basic methods of catching/restraining large animal species, and compare behavioral/physical differences in how large animals respond to handling/restraint	In-class exercises/discussions, student reflection on guest speaker presentation/demonstration, laboratory assignments, exam, and final exam
Describe the role of the veterinary technician in taking a patient history, list common questions asked when obtaining a patient history, and differentiate between a herd and an individual history	In-class exercises/discussions, exam, and final exam
Perform the basic components of a large	In-class exercises/discussions, laboratory

animal physical examination; list the normal temperatures, pulse, and respirations rates for large animal species; and describe diagnostic procedures commonly utilized in the examination process	assignments, exam, and final exam
List the six major nutrient groups, describe how each nutrient group affects physiological processes in the body, and describe how nutrient excesses produce toxicity	In-class exercises/discussions, exam, and final exam
Describe considerations and indications that should be taken into account when choosing equipment for various clinical procedures, calculate medication and fluid dosages, properly record medical information in the medical record, and describe necessary safety measures when performing clinical procedures	In-class exercises/discussions, student reflection on guest speaker presentation/demonstration, laboratory assignments, exam, and final exam

III. COURSE OUTLINE

- A. Hospital Biosecurity
 1. Cycle of Infection
 2. Transmission
 3. Patient placement in the hospital
 4. Proper gowning techniques
 5. Hand hygiene
 6. Disinfection and sterilization
 7. Hospital management
 8. Infection control programs
 9. Surveillance
 10. Multidrug resistant organisms, methicillin Resistant *Staphylococcus* sp., and zoonotic diseases

- B. Restraint
 1. Knots
 2. Basic behavior of large animals
 3. Small ruminant restraint
 4. Camelid restraint
 5. Bovine restraint
 6. Equine restraint
 7. Swine restraint

- C. History
 1. Ruminants
 2. Camelids
 3. Equine

4. Porcine
 5. Multiple species management
- D. Physical Exam
1. Food animal physical exam
 2. Equine physical exam
 3. The equine pain score
- E. Nutrition
1. Equine nutrition
 2. Cattle nutrition
 3. Camelid nutrition
 4. Sheep and goat nutrition
 5. Swine nutrition
- F. Clinical Procedures
1. Venous catheterization
 2. Arterial catheterization
 3. Tracheostomy
 4. Blood products and administration
 5. Medication administration
 6. Fluid administration
 7. Intraosseous administration
 8. Nasogastric and orogastric intubation
 9. Transfaunation
 10. Ongoing monitoring
 11. Nursing care for the recumbent patient
 12. Dentistry

IV. METHOD(S) OF INSTRUCTION

- A. Lectures including guest speaker presentation
- B. Laboratory assignments including live animal models
- C. In-class exercises/discussions
- D. Homework Assignments
- E. Textbooks
- F. Audio-visual aids

V. REQUIRED TEXTS

Holtgrew-Bohling, Kristin, Large Animal Clinical Procedures for Veterinary Technicians,

Elsevier Publishing (Current Edition)

VI. REQUIRED MATERIALS

Boots

VII. SUPPLEMENTAL REFERENCES

McCurnin, D., *Clinical Textbook for Veterinary Technicians* (Current Edition),
St. Louis: Saunders Publishing

VIII. METHOD(S) OF EVALUATION

A. Distribution of Final Grade

There are written exams/quizzes, in-class exercises/discussions, homework assignments and a comprehensive final, all of which comprise the final lecture grade.

Laboratory participation, laboratory assignments, and animal care duties comprise the final laboratory grade.

A student must independently pass both the lecture portion and the laboratory portion of each class to advance in the program.

Class participation, diligence in animal care assignments, and attendance are expected of the students; however, the instructor reserves the right to award or detract percentage points based on these attributes.

B. Assignment of Final Letter Grades

A = 93-100

B = 84-92

C = 75-83

D = 60-74

F = below 60

C. Attendance Policy

Student attendance is mandatory. There are no excused absences. If a student misses more than 15% of the total time that the class meets in a semester, the student may be prohibited from attending the class by the instructor. In such cases, the student must officially withdraw from the course, by the designated withdrawal date, in order to reduce the possibility of receiving an "F" for the course. **Tardiness beyond 10 minutes is considered an absence.**

Students are permitted to miss one exam date with no penalty. Make up exams are

taken in the Testing Center within 3 days of the original exam.
The instructor may make exceptions to this policy in certain cases, i.e., illness requiring hospitalization, death in the family, etc.

IX. ADA AA STATEMENT

Any student requiring special accommodations should inform the instructor and the Coordinator of Disability Support Services (Technology Center 101; phone 636-481-3169).

X. ACADEMIC HONESTY STATEMENT

All students are responsible for complying with campus policies as stated in the Student Handbook (see College website <http://www.jeffco.edu>).

XI. ATTENDANCE STATEMENT

Regular and punctual attendance is expected of all students. Any one of these four options may result in the student being removed from the class and an administrative withdrawal being processed: (1) Student fails to begin class; (2) Student ceases participation for at least two consecutive weeks; (3) Student misses 15 percent or more of the coursework; and/or (4) Student misses 15 percent or more of the course as defined by the instructor. Students earn their financial aid by regularly attending and actively participating in their coursework. If a student does not actively participate, he/she may have to return financial aid funds. Consult the College Catalog or a Student Financial Services representative for more details.

XII. OUTSIDE OF CLASS ACADEMICALLY RELATED ACTIVITIES

The U.S. Department of Education mandates that students be made aware of expectations regarding coursework to be completed outside the classroom. Students are expected to spend substantial time outside of class meetings engaging in academically-related activities such as reading, studying, and completing assignments. Specifically, time spent on academically-related activities outside of class combined with time spent in class meetings is expected to be a minimum of 37.5 hours over the duration of the term for each credit hour.

Since this class is a face-to-face, 16-week, 3 credit hour class, the expectation is that 112.5 hours be spent on academically-related activities over the 16-week period. The class meets face-to-face for 52.5 hours over the 16 weeks, so it is expected that 60 hours be spent on outside-of-class activities. This means you should spend about 4 hours each week reading the textbook, completing assignments, studying for exams, etc.