

**JEFFERSON COLLEGE**

**COURSE SYLLABUS**

**VAT270**

**VETERINARY TECHNOLOGY CAPSTONE**

1 Credit Hour

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## VAT270 Veterinary Technology Capstone

### I. CATALOGUE DESCRIPTION

- A. Pre-requisites: VAT101 Introduction to Veterinary Tech, VAT106 Applied Pharmacology, VAT113 Principles of Clinical Medicine I, VAT114 Principles of Clinical Medicine II, VAT199 Veterinary Technology Internship, VAT250 Veterinary Hospital Technology I, VAT258 Clinical Pathological Techniques, and VAT266 Large Animal Technology I (all courses must be completed with a grade of “C” or better) and reading proficiency
- B. 1 Semester Credit Hour
- C. Veterinary Technology Capstone will systematically analyze all course material covered in previous semesters to aid in preparation for the national and state board examinations, improving the application and synthesis of all program materials. (S)
- D. Fulfills degree requirement for the Associate of Applied Science degree in Veterinary Technology

### II. EXPECTED LEARNING OUTCOMES/CORRESPONDING ASSESSMENT MEASURES

Analyze and apply knowledge of basic and clinical sciences including anatomy and physiology, urinalysis, hematology, cytology, parasitology, microbiology, mycology, clinical chemistry, virology, and immunology	In-class exercises, homework assignments, quizzes, exam, case studies, and Veterinary Technician National Examination (VTNE) online practice tests
Examine and apply knowledge of clinical applications including sanitation, sterilization, radiology, ultrasonography, restraint, and handling	In-class exercises, homework assignments, quizzes, exam, case studies, and VTNE online practice tests
Identify proper patient management and nutrition and determine appropriate nutritional needs for small and large animals	In-class exercises, homework assignments, quizzes, exam, case studies, and VTNE online practice tests
Analyze and apply knowledge of anesthesiology and pharmacology; students will determine appropriate anesthesia protocols based on species and calculate pharmaceutical calculations	In-class exercises, homework assignments, quizzes, exam, case studies, and VTNE online practice tests
Identify and apply knowledge of proper medical and surgical nursing techniques for all covered species	In-class exercises, homework assignments, quizzes, exam, case studies, and VTNE online practice tests
Differentiate zoonotic diseases and apply knowledge of proper protective procedures	In-class exercises, homework assignments, quizzes, exam, case studies, and VTNE online practice

	tests
Explain and apply knowledge of proper practice and self-management skills	In-class exercises, homework assignments, quizzes, exam, case studies, and VTNE online practice tests
Summarize and apply knowledge of ethics with regards to the field of veterinary medicine	In-class exercises, homework assignments, quizzes, exam, case studies, and VTNE online practice tests
Examine and apply knowledge of the Missouri Practice Act governing professional functions and the Animal Welfare Act to protect all animal species	In-class exercises, homework assignments, quizzes, exam, case studies, and VTNE online practice tests

### III. OUTLINE OF TOPICS

- A. Basic and Clinical Sciences
  1. Animal anatomy and physiology
  2. Urinalysis and hematology
  3. Cytology
  4. Parasitology
  5. Diagnostic microbiology and mycology
  6. Clinical chemistry
  7. Virology
  8. Immunology
  
- B. Clinical Applications
  1. Restraint and handling
  2. Sanitation, sterilization, and disinfection
  3. Radiography
  4. Alternative imaging technology
  
- C. Patient Management and Nutrition
  1. Genetics, theriogenology, and neonatal care
  2. Companion animal behavior
  3. Small animal nutrition
  4. Large animal nutrition and feeding
  5. Laboratory animal medicine
  6. Exotic Animal Medicine
  
- D. Anesthesia and Pharmacology
  1. Anesthesia
  2. Pharmacology
  3. Pharmaceutical calculations

- E. Medical and Surgical Nursing
  - 1. Surgical preparation
  - 2. Surgical instrument care
  - 3. Small animal nursing
  - 4. Equine nursing and surgery
  - 5. Ruminant
  - 6. South American camelid
  - 7. Veterinary dentistry
  - 8. Emergency medicine
  - 9. Zoonoses
  
- F. Practice Management and Self-Management
  - 1. Personal, practice, and professional management skills
  - 2. Ethics
  - 3. Missouri Practice Act
  - 4. Animal Welfare Act

#### IV. METHOD(S) OF INSTRUCTION

- A. Lectures
- B. In-class exercises including case studies
- C. Homework Assignments
- D. Textbooks
- E. Audio-visual aids

#### V. REQUIRED TEXTBOOK(S)

Tighe, M. & Brown, M. *Mosby's Comprehensive Review for Veterinary Technicians* (Current edition). St. Louis: Mosby Publishing

#### VI. REQUIRED MATERIALS

None

#### VII. SUPPLEMENTAL REFERENCES

- A. Colville, T. *Review Questions and Answers for Veterinary Technicians* (Current edition). St. Louis: Mosby Publishing.
- B. McCurnin, D. *Clinical Textbook for Veterinary Technicians* (Current edition). St. Louis: Saunders Publishing.

## VIII. METHOD OF EVALUATION

### A. Distribution of Final Grade

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

In addition, students will be required to take two Veterinary Technician National Examination (VTNE) online practice tests. The first test will be given at midterm and the second test will be given at the end of the semester.

### 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 (including lecture and laboratory) 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. For each subsequent exam missed, the student is penalized 10% of the total value of that 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, 1 credit hour class, the expectation is that 37.5 hours be spent on academically-related activities over the 16-week period. The class meets face-to-face for 12.5 hours over the 16 weeks, so it is expected that 25 hours be spent on outside-of-class activities. This means you should spend about 1.5 hours each week reading the textbook, completing assignments, studying for exams, etc.