JEFFERSON COLLEGE

COURSE SYLLABUS

VAT113

PRINCIPLES OF CLINICAL MEDICINE I

4 Credit Hours

Prepared by: Dana Nevois, MBA, BS, RVT

Minor Revision or Update by: Dana Nevois, MBA, BS, RVT
Date: August 16, 2018

Chris DeGeare, M.Ed., Interim Associate Dean, Business and Technical Education
Dena McCaffrey, Ed.D., Dean, Career & Technical Education

VAT113 Principles of Clinical Medicine I

I. CATALOGUE DESCRIPTION

A. Pre-requisite: Reading Proficiency and Admission to the Veterinary Technology Program.

B. 4 Semester Credit Hours

C. Principles of Clinical Medicine I provides the student with a focus on practical veterinary nursing. Topics include medical terminology, elementary animal care and handling, small animal nutrition, medical math, animal behavior, and introductory surgical nursing. A laboratory session for this course provides hands-on animal experience. (F)

D. Fulfills degree requirement for the Associate of Applied Science degree in Veterinary Technology

II. EXPECTED LEARNING OUTCOMES/CORRESPONDING ASSESSMENT MEASURES

Recognize word derivation; recognize prefixes and suffixes; become familiar with anatomical, surgical, and pathological terms related to veterinary medicine; and recognize key medical terms and apply these to specific methods of disease diagnosis and research principles	In-class exercises, homework assignments, quizzes, laboratory assignments, exam, and final exam
Apply algebraic principles to determine solution ratios, demonstrate proficiency with the metric system of measurement to determine correct dosages of therapeutic agents commonly used in veterinary practice, and predict the daily fluid needs of the normal and abnormal animal, and predict drip rates to provide animals with their daily fluid needs	In-class exercises, homework assignments, laboratory assignments, exam, and final exam
Summarize the veterinary technician's role in supporting behavioral health, explain why behavior problems can be life threatening to pets, list steps taken when gathering a behavioral history, explain how animals learn, differentiate common behavior modification techniques, and describe how to prevent behavior problems in dogs and cats	In-class exercises, laboratory assignments, exam, and final exam
List indications for animal restraint, describe methods for approaching dogs and cats before attempting restraint, describe actions to diminish stress during physical examination and hospitalization, list equipment and methods used	In-class exercises, homework assignments, laboratory assignments, exam, and final exam

in capturing and restraining cooperative and uncooperative dogs and cats, and list advantages/disadvantages of chemical restraint	
Obtain an accurate and complete medical history, list common questions used in obtaining a medical history, describe the type of information contained in each section of the patient's medical history, list aspects of an animal's origin, background, and past medical history that may be relevant to a presenting complaint, and describe the general procedures used to perform a physical examination in dogs and cats	In-class exercises, homework assignments, quizzes, laboratory assignments, exam, and final exam
Discuss issues and information discussed during wellness visits at various life stages of a dog and cat including basic grooming needs; differentiate between active and passive immunity; differentiate between different types of vaccines and how they should be stored, handled, and reconstituted; list recommended administration locations for various vaccinations; describe potential adverse vaccine events and treatment options; and explain the importance of discussing canine/feline parasitic infections with owners and describe general preventive measures	In-class exercises, homework assignments, quizzes, laboratory assignments, exam, and final exam
Discuss the requirements for protein, fat, carbohydrates, fiber, vitamins, and minerals in the diet of dogs and cats; explain various aspects regarding commercial pet food manufacturing; describe feeding protocols for dogs and cats at each stage of life; explain the principles of clinical nutrition; describe methods of providing enteral and parenteral nutrition; and discuss the reasons clients might feed home-cooked diets to their pets	In-class exercises, laboratory assignments, guest speaker presentations, exam, and final exam
Name, describe, and identify commonly used surgical instruments used in general and emergency surgical packs; describe procedures for cleaning, packing, and sterilizing instruments and cloth surgical drapes and gowns; differentiate between sterilization and disinfection and describe methods of sterilization; list and describe common antiseptic and disinfection agents; describe requirements for operating room, patient, and surgical team preparation; describe the role of the veterinary technician in surgical assistance; discuss the considerations involved in choosing a type of suture material; and describe commonly used suture materials and needles	In-class exercises, laboratory assignments, laboratory practical exam, and final exam

III. OUTLINE OF TOPICS

A. Medical Terminology
1. Word Derivations
2. Prefixes and Suffixes
3. Terms Used to Denote Animal Anatomy
4. Common Terms of Pathology
5. Surgical Terms

B. Medical Math
1. Basic Math Review
2. Metric System of Measurement
3. Figure Dosages
4. Solutions
5. Fluid Administration

C. Animal Behavior
1. The technician's role in behavior counseling
2. Taking a behavior-specific history
3. Learning and animal behavior modifications
4. Preventing behavior problems in canines and felines

D. Restraint and Handling of Animals
1. Indications for restraint
2. Canine restraint
3. Feline restraint
4. Restraining dogs and cats for specific procedures

E. History and Physical Examination
1. The role of the veterinary technician in taking a history
2. Required history information
3. Physical examination
4. Documenting physical examination
5. Temperature, pulse, and respiration
6. Systems review

F. Preventive Health Programs
1. Preventive health programs for dogs and cats
2. Lifelong wellness
3. Grooming
4. Immunity
5. Parasite prevention

G. Small Animal Nutrition
1. Nutrient requirements for dogs and cats
2. Nutrition for life stages
3. Clinical nutrition

4. Commercial pet food
5. Home-prepared pet food

H. Surgical Nursing
1. Surgical instruments
2. Aseptic technique
3. Small animal patient preparation
4. General concepts in veterinary surgical assisting
5. Post-operative management
6. Suture material

IV. METHOD(S) OF INSTRUCTION

A. Lectures including guest speaker presentation

B. Laboratory assignments including live animal models

C. In-class exercises

D. Homework Assignments

E. Textbooks

F. Audio-visual aids

V. REQUIRED TEXTBOOK(S)

A. McCurnin, D., *Clinical Textbook for Veterinary Technicians, current edition*. St. Louis: Saunders Publishing

B. *Dorland's Pocket Medical Dictionary, current edition.* Philadelphia: Elsevier Saunders

C. Kahn, C., *Merck Veterinary Manual, current edition.* Whitehouse Station: Merck & Co., Inc.

D. Romich, J., *An Illustrated Guide to Veterinary Medical Terminology, current edition.* Stamford: Cengage Learning

VI. REQUIRED MATERIALS

A. Stethoscope, Nursing Watch, Calculator, Leash, Thermometer

B. Appropriate Laboratory Attire (Scrubs)

VII. SUPPLEMENTAL REFERENCES

None

VIII. METHOD OF EVALUATION

A. Distribution of Final Grade

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

Laboratory participation, laboratory assignments, laboratory practical exam, 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 (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.

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, 4 credit hour class, the expectation is that 150 hours be spent on academically-related activities over the 16-week period. The class meets face-to-face for 65 hours over the 16 weeks, so it is expected that 85 hours be spent on outside-of-class activities. This means you should spend about 5 hours each week reading the textbook, completing assignments, studying for exams, etc.