JEFFERSON COLLEGE

COURSE SYLLABUS

VAT114

PRINCIPLES OF CLINICAL MEDICINE II

4 Credit Hours

Prepared by:
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**VAT114 Principles of Clinical Medicine II**

I. CATALOGUE DESCRIPTION

A. Pre-requisite: VAT101 Introduction to Veterinary Technology and VAT113 Principles of Clinical Medicine I (both courses must be completed with a grade of “C” or better) and reading proficiency.

B. 4 Semester Credit Hours

C. Principles of Clinical Medicine II further prepares the student for employment as a veterinary technician intern by providing the basics in medical nursing, theriogenology, and neonatal care. Also introduced are areas of clinical pathology, including hematology and urinalysis, introductory radiology, and toxicology. A laboratory session is included to provide practice for techniques learned in the classroom. (S)

II. EXPECTED LEARNING OUTCOMES/CORRESPONDING ASSESSMENT MEASURES

<table>
<thead>
<tr>
<th>Summarize hospital care of impaired animals including gathering patient data and creating a nursing care plan; explain the etiology and pathogenesis of common non-infectious diseases in dogs and cats; identify common clinical signs, diagnostic procedures, and common treatments of non-infectious diseases; and describe wound healing and small animal wound management.</th>
<th>In-class exercises, homework assignments, quizzes, and final exam</th>
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<tbody>
<tr>
<td>Summarize the reproductive system in dogs and cats; describe hormonal changes that occur during the estrous cycle and pregnancy; explain the process of fertilization and embryo development; compare and contrast the canine and feline estrous cycles, gestation, and parturition; and describe the collection process and interpretation of canine vaginal cells.</td>
<td>In-class exercises, homework assignments, quizzes, and final exam</td>
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<td>Define the neonatal period for puppies and kittens; obtain an accurate and thorough clinical history; describe the procedure for physical examination of the neonate; explain the timeline of normal development; discuss how to perform diagnostic procedures on a neonate; explain common concerns and disorders in neonates; and discuss proper care of an orphaned neonatal.</td>
<td>In-class exercises, homework assignments, quizzes, and final exam</td>
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<tr>
<td>Task</td>
<td>Method</td>
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<td>----------------------------------------------------------------------</td>
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<tr>
<td>Define common hematological terms; describe proper blood collection</td>
<td>In-class lectures, homework</td>
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<td>techniques and proper handling of blood samples; describe the</td>
<td>assignments, quizzes, instructor</td>
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<td>components of a complete blood count; recognize normal sites for</td>
<td>observation of students</td>
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<tr>
<td>canine and feline venipuncture; perform complete blood counts;</td>
<td>during hematology laboratory</td>
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<td>perform a stained blood smear; and recognize normal and abnormal</td>
<td>session and final exam</td>
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<td>results for common hematologic tests</td>
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<td>Describe proper urine collection techniques and handling of urine</td>
<td>In-class lectures, homework</td>
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<td>samples; list and describe methods for the physical and biochemical</td>
<td>assignments, quizzes, instructor</td>
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<td>evaluation of urine; describe the preparation of urine for</td>
<td>observation of students</td>
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<td>microscopic evaluation; list the cellular elements that can be found</td>
<td>during urinalysis laboratory</td>
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<tr>
<td>in urine sediment; identify common urine crystals; and perform a</td>
<td>session, and final exam</td>
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<tr>
<td>complete urinalysis</td>
<td></td>
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<tr>
<td>List common small animal toxicities and emergencies and discuss</td>
<td>In-class exercises, homework</td>
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<td>appropriate patient stabilization and treatment</td>
<td>assignments, quizzes, and final</td>
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<tr>
<td>Describe the hazards of x-radiation; summarize radiation safety</td>
<td>In-class lecture, quiz, instructor</td>
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<td>including proper personal protective equipment; demonstrate proper</td>
<td>observation of students during</td>
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<tr>
<td>usage of imaging equipment; demonstrate proper patient positioning;</td>
<td>radiology laboratory session,</td>
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<td>correctly expose the X-ray film; and demonstrate correct technique</td>
<td>and final exam</td>
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<tr>
<td>when developing/processing the X-ray film</td>
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III. OUTLINE OF TOPICS

A. Medical Nursing
   1. Gathering patient data
   2. Identify and prioritize technician evaluations
   3. Develop nursing care plan
   4. Small animal noninfectious diseases
   5. Wound healing
   6. Small animal wound management

B. Theriogenology
   1. Overview of female and male reproduction
   2. Canine reproduction
   3. Feline reproduction
   4. Breeding soundness exam of the male and female
C. Neonatal Care
   1. History
   2. Physical examination
   3. Normal development
   4. Diagnostics
   5. Routine maintenance
   6. Common concerns and disorders in the puppy and kitten

D. Hematology
   1. Complete blood count (CBC)
   2. Packed cell volume (PCV)
   3. White blood cell (WBC) count
   4. Preparation of blood smears
   5. Blood smear evaluation

E. Urinalysis
   1. Equipment and collection
   2. Color and turbidity
   3. Specific gravity
   4. Chemical evaluation
   5. Microscopic evaluation

F. Toxicology
   1. Common toxins of the dog and cat
   2. Clinical signs
   3. History
   4. Physical exam
   5. Toxin decontamination

G. Radiology
   1. Radiation Safety
   2. Legal records and film identification
   3. Filing of radiographs
   4. X-Ray equipment
   5. Patient Positioning
   6. Production of X-Rays
   7. The darkroom
IV. METHOD(S) OF INSTRUCTION

A. Lecture

B. Laboratory Sessions

C. Textbooks, Audio-Visual Aids, In-Class Exercises, Live Animal Models for Laboratory Instruction

V. REQUIRED TEXTBOOK(S)


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, 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 (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 (Library; 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.
XIII. ATTENDANCE STATEMENT

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. Student’s grade will also be based on participation in class and attendance.