COURSE INFORMATION FORM

DISCIPLINE: Veterinary Technology
COURSE TITLE: Clinical Pathology Techniques II

CR.HR  5   LECT HR.  2   LAB HR.  6   CLIN/INTERN HR.   CLOCK HR.   

CATALOG DESCRIPTION
Theory and performance in hematology, urinalysis, clinical chemistry, and parasitology. Introduction to simple immunologic tests, blood coagulation tests, bone marrow evaluation, and cytology. Emphasis on hematology and hemoparasites. Emphasis on large animal parasitology.

PREREQUISITES
VETT 201

EXPECTED STUDENT OUTCOMES IN THE COURSE (ESO)
Upon completion of this course, the student will be able to:

1. Explain basic principles of normal and abnormal clinical pathology of feces, urine, parasitology, hematology, chemistries, immunology, and cytology.
2. Differentiate and identify normals and abnormals when performing urinalysis, fecal analysis, differentials, complete blood count with chemistries.
3. Perform complete urinalysis, complete blood count with differentials, fungal slide stains, glucose tests, cross match blood, and blood chemistries.

GENERAL EDUCATION OUTCOMES (ESO)
Specify which general education outcomes, if any, are substantially addressed by the course. Numbers in parentheses identify the Expected Student Outcomes linked to the specific General Education Outcome.

Communication: Reading Skills
3. Make accurate inferences and predictions based on evidence (1-3)
6. Make valid generalizations and apply information (1-3)

Critical Thinking: Sort and classify information
4. Distinguish the relevant from irrelevant and integrate key relationships (1-3)

Critical Thinking: Define, analyze, and evaluate information, materials and data
2. Construct valid inferences from facts, credible sources, experiences, anecdotes, and values and belief systems (1-3)

Life-Long Learning: Attributes of an Awareness of the Convergence of Knowledge
2. Apply learned skills to real world interactions (1-3)
3. Synthesize information to facilitate application (1-3)
PROGRAM-LEVEL OUTCOMES

CAREER AND TECHNICAL EDUCATION PROGRAM OUTCOMES
Specify which Career and Technical program outcomes, if any, are substantially addressed by the course by completing the “Career and Technical Education template” to show the relationship between course and program outcomes to assessment measures.

The student will demonstrate:
1. the ability to communicate effectively and clearly with instructors regarding the treatment and care of animals
2. the ability to carry out the role and function of a Veterinary Technician
3. an understanding of the business role that technicians play in a veterinary hospital

CLASS-LEVEL ASSESSMENT MEASURES
Student accomplishment of expected student outcomes will be assessed using the following measures. (Identify which measures are used to assess which outcomes.)

1. Lecture test (1)
2. Laboratory (written & practical) examinations (2,3)
3. Final examination (1)
Individual instructors may order this outline as fits the needs of their individual courses. In addition, they may place more emphasis on some areas than on others. What is assured is that this particular list is covered in the course. Other topics may be added to a course as the instructor sees fit, and as time and interest allow. An *asterisk can be used to mark an item as optional.

I. Parasitology – large animal
   A. Fecal examination
   B. Staining techniques
   C. Cytology
   D. Blood examination for parasites
   E. Endoparasites
   F. Ectoparasites

II. Urinalysis
   A. Specimen collection and handling
   B. Routine urinalysis
   C. Renal function tests
   D. Laboratory findings in disease states

III. Hematology
   A. Collection and preservation of blood samples
   B. Routine blood counts (review)
   C. Bone marrow collection and cytology
   D. Cell indices
   E. Coagulation of blood
   F. Coagulation tests
   G. Special hematologic procedures
   H. Identification of blood parasites

IV. Chemistry
   A. Instruments
   B. Tests
      1. Liver
      2. Kidney
      3. Endocrine
      4. Pancreatic
      5. Water and electrolyte balance

V. Immunology
   A. Immune responses and hypersensitivity
B. Principles of immunization
C. Types of vaccines
D. Laboratory tests based on immune responses
E. Autoimmune disorders
F. Tissue crossmatching

VI. Miscellaneous fluids
A. Semen examination
B. Examination of spinal fluid, joint fluid and ascetic fluid
C. Vaginal cytology

VII. Microbiology Cultures
A. Blood cultures
B. Fecal
C. Special (fungi, anaerobes)

VIII. Cytology
A. Ear Cytology
B. Tumor aspirate and biopsy cytology
C. Organ aspirate and biopsy cytology