COMMON COURSE OUTLINE: Course discipline/number/title: VT 2830: Clinical Laboratory Techniques II

A. CATALOG DESCRIPTION
1. Credits: 3
2. Hours/Week: 2 lecture/1 laboratory; equivalent of 4 hours per week
3. Prerequisites (Course discipline/number): Grade of C or better in all required previous VT courses and required general education classes.
4. Co-requisites (Course discipline/number): None
5. MnTC Goals (if any): NA

This course is the summation of the laboratory skills and techniques needed by the veterinary technician. Additionally, application of microbiological and cytology, serology testing and semen analysis techniques utilized in veterinary practice is covered. This course includes a hands-on situation covering all laboratory procedures. RECOMMENDED ENTRY SKILLS/KNOWLEDGE: High School diploma or GED Grade of C or better (high school or college level within the last five years) in the following courses: Biology with a lab, Chemistry with a lab, Elementary Algebra of equivalent Minimum one-year high school typing/keyboarding skills Completed VT courses with an overall GPA of 2.0.

B. DATE LAST REVISED (Month, year): March, 2010

C. OUTLINE OF MAJOR CONTENT AREAS:
1. Microbiology
2. Cytology
3. Serology testing
4. Semen analysis
5. Review of previous laboratory techniques
6. Mycology testing and identification

D. LEARNING OUTCOMES (GENERAL): The student will be able to:
1. Demonstrate the knowledge and skills of the various laboratory methods used in the identification of bacteria.
2. Identify and perform drug sensitivity testing of common disease-causing organisms.
3. Assist in collecting, preparing and appropriately evaluating cytology specimens.
4. Perform fine needle tissue aspirates and impression smears.
5. Assist in collecting, preparing, evaluating semen.
6. Explain timing types of pregnancy testing.
7. Collect, prepare and evaluate canine vaginal smears for reproductive determination.
8. Collect, prepare and perform representative microbiology.
9. Collect milk samples and conduct mastitis and bacteria culture testing.
11. Differentiate between positive and negative serological test results.
12. Identify and perform different types of serology tests.
13. Prepare material for mycologic testing.
15. Collect, prepare, and evaluate ear cytology.

E. LEARNING OUTCOMES (MNTC): NA

F. METHODS FOR EVALUATION OF STUDENT LEARNING:
Methods may include any of the following:
1. Laboratory reports and/or quizzes
2. Objective and/or subjective tests
3. Laboratory practical tests
4. Work related experience with skill competency record
5. Course assignments
6. Essay tasks
7. Group work/projects
8. Attendance (especially laboratory attendance)
G. **SPECIAL INFORMATION (if any):**
The initial lab session explains and familiarizes the student with general safety hazards and safety equipment to the lab. During the pre-lab discussion, the hazardous characteristics of any materials used during a lab are discussed. In addition, if the lab involves any potentially infectious or zoonotic material, the students will be instructed on the proper use and disposal. The instructor will direct all students to where necessary protective equipment while working with any hazardous chemicals. A copy of Material Safety Data Sheets for chemicals used is available in the lab.