COMMON COURSE OUTLINE: Course discipline/number/title: VT 1410: Veterinary Surgical Nursing and Anesthesia

A. CATALOG DESCRIPTION
   1. Credits: 2
   2. Hours/Week: 3
   3. Prerequisites (Course discipline/number): Appropriate score on RCTC placement test or completion of appropriate developmental course with grade of C or better.
   4. MnTC Goals (if any): NA

This course is designed to give students a foundation in the principles of routine veterinary surgical assisting. Emphasis will include instrumentation, aseptic technique, surgical support equipment, proficiency in the proper preparation of the operating room and general nursing care. The course will also cover basic anesthetic principles and monitoring.

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

B. DATE LAST REVISED (Month, year): November, 2006

C. OUTLINE OF MAJOR CONTENT AREAS:
   1. Sterilization and disinfecting
   2. Surgical instruments
   3. Instrument care and pack preparation
   4. Patient preparation
   5. Surgical scrub
   6. Operating room procedures
   7. Anesthesia
   8. Surgical fluid therapy
   9. Monitoring devices

D. LEARNING OUTCOMES (GENERAL): The student will be able to:
   1. List classes of pathogenic organisms in order of the resistance to destruction.
   2. List the different ways that microbial control methods destroyed or inhibit pathogenic microorganisms.
   3. Identify categories of physical methods of microbial control.
   4. Identify common surgical instruments and defined their intended use.
   5. Identify types of surgical needles.
   6. Identify suture material.
   7. Demonstrate proper instrument care.
   10. Describe how to maintain asepsis in a surgical suite.
   11. Describe correct surgical scrubbing and conduct in the operating room.
   12. Describe possible duties of the sterile surgical assistant.
   13. Perform post surgical clean up.
   14. Properly pass instruments and supplies.
   15. Operate and maintain suction and cautery.
   16. Calculate dosages of anesthetic related drugs.
   17. Identify the indications, advantages, disadvantages, effects on the body, and the associated adverse side effects of the commonly used preanesthetic.
   18. Explain the rationale, effects on the body, advantages and disadvantages of the commonly used injectable in inhalation anesthetic agents.
   19. Identify the components of general anesthesia.
   20. Demonstrate proper monitoring during anesthesia
   21. Identify and demonstrate use of rebreathing and nonrebreathing systems.
   22. Identify the various parts of the anesthetic machines and explain maintenance and use of each.
D. **LEARNING OUTCOMES (GENERAL): Continued.** The student will be able to:

23. Differentiate between a precision and non precision vaporizer and recognize the advantages and disadvantages in each.

24. Perform cystocentesis.

25. Maintain and operate anesthetic delivery and monitoring equipment:
   a. pulse oximeter, esophageal stethoscope, electrocardiograph
   b. anesthetic machines, including re-breathing systems, non-re-breathing systems induction chambers and masks
   c. endotracheal tubes, laryngoscopes, and ambu bags
   d. scavenging systems and oxygen sources
   e. respiratory and blood pressure monitors

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.