

**STATE UNIVERSITY OF NEW YORK  
COLLEGE OF TECHNOLOGY  
CANTON, NEW YORK**



**COURSE OUTLINE**

**VSCT 204 – LARGE ANIMAL MEDICINE AND THERAPEUTIC TECHNIQUES**

**Prepared By: Mary O'Horo Loomis, DVM**

**SCHOOL OF SCIENCE, HEALTH AND CRIMINAL JUSTICE  
VETERINARY SCIENCE TECHNOLOGY  
MAY 2015**

- A. **TITLE:** Large Animal Medicine and Therapeutic Techniques
- B. **COURSE NUMBER:** VSCT 204
- C. **CREDIT HOURS:** 2
- D. **WRITING INTENSIVE COURSE:** No
- E. **COURSE LENGTH:** 15 weeks
- F. **SEMESTER(S) OFFERED:** fall
- G. **HOURS OF LECTURE, LABORATORY, RECITATION, TUTORIAL, ACTIVITY:**  
1 hr. lecture and 2 hours laboratory per week
- H. **CATALOG DESCRIPTION:**  
A course designed to prepare the Veterinary Science student for a role in a large animal veterinary practice. Emphasis will be on restraint and handling, physical exam and therapeutic methods of the food, fiber and equine patient. Students will also have an understanding of specialized diagnostics, anesthetic principles and surgeries associated with these animals. This course also includes discussion on regulatory medicine and its importance to agriculture and public health.
- I. **PRE-REQUISITES/CO-REQUISITES:**  
a. Pre-requisite(s): VSCT 112, VSCT 114, VSCT 115  
b. Co-requisite(s): none
- J. **GOALS (STUDENT LEARNING OUTCOMES):**  
By the end of this course, the student will be able to:

<i>Course Objective</i>	<i>Institutional SLO</i>
a. Discuss the purpose of regulatory medicine and the use of regulatory forms.	2. Crit. Thinking 3. Prof. Competence
b. Perform a complete physical exam and apply therapeutic techniques for common equine medical issues.	2. Crit. Thinking 3. Prof. Competence
c. Perform a complete physical exam and apply therapeutic techniques for common ruminant medical issues.	1. Communication 3. Prof. Competence
d. Restrain horses, cattle, sheep, goats and poultry.	3. Prof. Competence
e. Explain the function of a veterinary technician during common bovine & equine field surgeries	3. Prof. Competence
f. Research a topic in large animal practice and write a client newsletter on the topic	1. Communication

**K. TEXTS:**

McCurnin, *Clinical Textbook for Veterinary Technicians*, W.B. Saunders Co., Philadelphia, PA

Loomis, Mary; Laboratory Manual for Large Animal Medicine and Therapeutic Techniques, SUNY Canton Textbook Center.

**L. REFERENCES: none**

**M. EQUIPMENT: none**

**N. GRADING METHOD: A-F**

**O. MEASUREMENT CRITERIA/METHODS:**

- Exams
- Quizzes
- Research Paper

**P. DETAILED COURSE OUTLINE:**

- A. Introduction to food & fiber animal and equine practice
  1. Discuss the evolution of veterinary practice
  2. Discuss the special challenges associated with large animal practice
- B. Physical Exam and behavior
  1. Discuss general behavior patterns of livestock
  2. Explain parameters assessed in a physical exam
- C. Equine Medicine and Therapeutics
  1. The components of the physical exam of the equine patient
  2. Explain common equine lamenesses and discuss their management (e.g. navicular, laminitis).
  3. Describe how horses are aged by dental eruption and wear.
  4. Discuss common equine procedures, diagnostics and diseases and their management.
  5. Discuss common agents used in equine anesthesia and their actions.
  6. Explain the function of the surgical assistant during common equine surgeries.
- D. Bovine Medicine and Therapeutics
  1. The components of the physical exam of the ruminant patient
  2. Aspects of herd health management
  3. Describe common ruminant procedures (dehorning, castration, tail docking)
  4. Explain the common bovine abdominal surgeries (e.g. rumenotomy, abomasopexy, Cesarean section) and the function of the surgical assistant
- E. Large Animal Fluid Therapy
  1. Be able to calculate fluid deficit in large animals.
  2. List the fluids used in replacement therapy and discuss when each is used.
- F. Large Animal Obstetrics
  1. List the stages of parturition.
  2. Discuss normal anterior and posterior presentation.
  3. Explain how to recognize dystocia and list the instruments that might be needed to correct one.
  4. Discuss normal care of a newborn.

- G. Regulatory Medicine
1. Discuss the purpose of regulatory medicine
  2. Explain the responsibilities of regulatory agencies at both federal and state levels
  3. Describe the three major reportable diseases (brucellosis, TB, EIA) and explain their disease control programs

**Q. LABORATORY OUTLINE:**

- Lab 1 Clinical sampling and sample submission
- Lab 2 Animal identification
- Lab 3 Equine examination and therapeutic techniques
- Lab 4 Equine bandaging techniques
- Lab 5 Farrier demonstration
- Lab 6 Feeding and feed identification/ BCS/ bedding
- Lab 7 Bovine examination and therapeutic techniques
- Lab 8 Bovine therapeutic techniques/ mastitis
- Lab 9 Sheep physical exam and therapeutic techniques
- Lab 10 Greenwood Dairy field trip
- Lab 11 Goats, pigs, llamas/ examination and therapeutics
- Lab 12 Regulatory medicine
- Lab 13 Equine radiology
- Lab 14 Euthanasia/ necropsy