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

COURSE OUTLINE

VSCT 203 – SMALL ANIMAL MEDICINE AND THERAPEUTIC TECHNIQUES

PREPARED BY: TONY BEANE, DVM

SCHOOL OF SCIENCE, HEALTH, AND CRIMINAL JUSTICE
VETERINARY SCIENCE TECHNOLOGY
AUGUST 2018
A. **TITLE:** SMALL ANIMAL MEDICINE AND THERAPEUTIC TECHNIQUES

B. **COURSE NUMBER:** VSCT-203

C. **CREDIT HOURS:** 3

D. **WRITING INTENSIVE COURSE:** No

E. **COURSE LENGTH:** 15 weeks

F. **SEMESTER(S) OFFERED:** Fall

G. **HOURS OF LECTURE, LABORATORY, RECITATION, TUTORIAL, ACTIVITY:**
   2 hours lecture, 3 hours laboratory per week

H. **CATALOG DESCRIPTION:** This course is designed to introduce the students to many of the common procedures performed by licensed veterinary technicians in a small animal clinical situation. The students will be instructed on many of the common canine and feline diseases and will become familiar with the signs, therapeutic treatments and methods of prevention. Small animal zoonotic diseases will be discussed to familiarize the students to the topics that veterinary staff are frequently called upon to answer. The students will perform venipuncture and intravenous catheter placements. Other procedures such as cystocentesis, stomach tube placement, blood transfusions, EKG use and splint application will be demonstrated. Students will anesthetize the animals used in the laboratories so that the skill for that week can be performed. Students will assist with the neutering of the animals after the lab skills for that week are completed and will be allowed to assist with the anesthetic monitoring and the recovery of the animals.

I. **PRE-REQUISITES/CO-COURSES:**
   a. Pre-requisite(s): VSCT-112, VSCT-114 and VSCT-115
   b. Co-requisite(s): None

J. **GOALS (STUDENT LEARNING OUTCOMES):**
   By the end of this course, the student will be able to:

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<tr>
<th>Course Objective</th>
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<tr>
<td>a. describe the clinical signs, treatments and preventative measures for some of the common zoonotic diseases.</td>
<td>5. Industry, Professional, Discipline-Specific Knowledge and Skills</td>
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<td>b. list the common canine and feline diseases, their signs, treatments and vaccines available.</td>
<td>5. Industry, Professional, Discipline-Specific Knowledge and Skills</td>
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<td>c. calculate fluid therapy amounts and flow rates.</td>
<td>5. Industry, Professional, Discipline-Specific Knowledge and Skills</td>
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<td>d. participate in a dental procedure and recognize common dental diseases and instruments used.</td>
<td>5. Industry, Professional, Discipline-Specific Knowledge and Skills</td>
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<tr>
<td>e. list common skin diseases and treatments available.</td>
<td>5. Industry, Professional, Discipline-Specific Knowledge and Skills</td>
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<td>f. place an IV catheter successfully.</td>
<td>5. Industry, Professional, Discipline-Specific Knowledge and Skills</td>
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g. anesthetize, monitor and recover animals who have been anesthetized.

5. Industry, Professional, Discipline-Specific Knowledge and Skills

K. TEXTS:


Beane, Tony 2018 SAMTT Note Packet

L. REFERENCES: NA

M. EQUIPMENT: technology enhanced classroom, university supplied equipment for laboratory

N. GRADING METHOD: A/F

O. MEASUREMENT CRITERIA/METHODS:

Quizzes  
Exams  
Practical

P. DETAILED COURSE OUTLINE:

I. Zoonoses
   A. Causative organisms
   B. Disease signs/symptoms
   C. Prevention and treatment

II. Blood Types/Blood Donation
   A. Major feline and canine blood types
   B. Transfusion reactions
   C. Cross matching

III. Fluid Therapy
   A. Causes of dehydration
   B. How to detect
   C. Calculate amounts to give

IV. Canine and Feline Diseases
   A. Causative agents
   B. Signs associated with the disease
   C. Treatment and preventative measures

V. Vaccinations and Immunity
   A. Common protocols
   B. Pros and cons of various types of vaccines
C. Vaccine failure

VI. Renal Disease
   A. Discuss normal function
   B. Acute vs. Chronic renal failure
   C. Therapies for renal disease

VII. Parasitic Skin Disease
   A. Causative agents
   B. Signs of disease
   C. Treatments

VIII. Allergic and Fungal Skin Disease
   A. Causes
   B. Diagnostic testing
   C. Therapies and prevention

IX. Electrocardiogram
   A. Terminology
   B. Heart rate calculations
   C. Common arrhythmias

X. Dentistry
   A. Dental formulas
   B. Dental conditions
   C. Therapeutics

XI. Dog and Cat Breeding
   A. Phases of the estrous cycle
   B. Pyometra
   C. Artificial insemination

Q. LABORATORY OUTLINE:

I. Introduction
   A. Lab/kennel requirements
   B. Lab/kennel forms
   C. Kennel contract

II. Venipuncture
   A. Common veins used
   B. Perform procedure
   C. Hematomas and collapsing veins

III. Butterfly Catheters/Subcutaneous Fluid Administration
IV. Over-the-Needle Catheter Placement
   A. Appropriate veins to use
   B. Perform the procedure
   C. Reasons for failure

V. Over-the-Needle Catheter continued

VI. Blood Collection and Administration
   A. Ideal donor
   B. Steps to perform
   C. Blood products and their uses

VII. Orogastric/Nasogastric Intubation
   A. Reasons for performing
   B. Steps to perform
   C. Complications

VIII. Urethral Catheterization/Cystocentesis
   A. Reasons for performing
   B. Complications
   C. Urine culturing

IX. Bandaging and Splinting
   A. Benefits of these techniques
   B. Robert Jones bandage
   C. Thomas splint

X. Electrocardiogram
   A. Place leads on appropriate legs
   B. Take recordings of various leads
   C. Interference

XI. Dental Procedure
   A. Instruments
   B. Identify abnormalities
   C. Steps in a dental prophylaxis

XII. Wound Care, Surgical Site Preparation and Suture Materials
    A. Absorbable vs. Non-Absorbable suture
    B. Skin flora
    C. Antiseptic agents
XIII. Tonopen/Ophthalmology
   A. Tonopen use
   B. Common eye diseases
   C. Therapies

XIV. Practical Exam