

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



MASTER SYLLABUS

COURSE NUMBER – COURSE NAME
VSCT 206 – Anesthetic Principles

CIP Code: 01.8301

For assistance determining CIP Code, please refer to this webpage

<https://nces.ed.gov/ipeds/cipcode/browse.aspx?y=55>

or reach out to Sarah Todd at todds@canton.edu

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School of Science, Health, and Criminal Justice

Department: Veterinary Science Technology

Semester/Year: Spring 2025

- A. TITLE: Anesthetic Principles
- B. COURSE NUMBER: VSCT 206
- C. CREDIT HOURS: (Hours of Lecture, Laboratory, Recitation, Tutorial, Activity)

Credit Hours: 3
 # Lecture Hours: 3 per week
 # Lab Hours: per week
 Other: per week

Course Length: 15 Weeks

- D. WRITING INTENSIVE COURSE: Yes No

- E. GER CATEGORY: None: Yes: GER
If course satisfies more than one: GER

- F. SEMESTER(S) OFFERED: Fall Spring Fall & Spring

G. COURSE DESCRIPTION:

This course is an introduction to anesthetic principles as they relate to animal medical and surgical care. The student will be presented with information on basic preanesthetic agents, anesthetic agents, and anesthetic monitoring devices. Special anesthetic techniques used on horses, ruminants, and exotics will be covered though concentration will be on small animal medicine. Students will be presented with the potential human and animal hazards associated with anesthetic drugs. CPR and the recognition and treatment of emergency situations will be addressed. Pain control and analgesics commonly used in multi-modal pain treatment will be covered.

- H. PRE-REQUISITES: None Yes If yes, list below:

VSCT 101

CO-REQUISITES: None Yes If yes, list below:

VSCT 114 and VSCT 115

- I. STUDENT LEARNING OUTCOMES: (*see key below*)

By the end of this course, the student will be able to:

<u>Course Student Learning Outcome</u> [SLO]	<u>Program Student Learning Outcome</u> [PSLO]	<u>GER</u> [If Applicable]	<u>ISLO & SUBSETS</u>

a. Accurately calculate anesthetic drug dosages for animals when given the appropriate information.	AVMA #4 Anesthesia		3-Found Skills 2-Crit Think ISLO	Subsets QTR Subsets Subsets
b. Discuss the various preanesthetic drugs and the pros and cons of each.	AVMA #4 Anesthesia		5-Ind, Prof, Disc, Know Skills ISLO ISLO	Subsets Subsets Subsets Subsets
c. List the commonly used veterinary anesthetic drugs (injectable & inhalant) and discuss their characteristics and their uses	AVMA #4 Anesthesia		5-Ind, Prof, Disc, Know Skills ISLO ISLO	Subsets Subsets Subsets Subsets
d. Describe the stages and planes of anesthesia.	AVMA #4 Anesthesia		5-Ind, Prof, Disc, Know Skills ISLO ISLO	Subsets Subsets Subsets Subsets
e. Trace a molecule of gas through an anesthetic machine.	AVMA #4 Anesthesia		5-Ind, Prof, Disc, Know Skills ISLO ISLO	Subsets Subsets Subsets Subsets
f. Discuss alternative anesthetic modalities and their risks.	AVMA #4 Anesthesia		2-Crit Think 5-Ind, Prof, Disc, Know Skills ISLO	Subsets Subsets Subsets Subsets
g. Discuss anesthetic hazards and emergency protocols. Describe how to perform CPR.	AVMA #4 Anesthesia		5-Ind, Prof, Disc, Know Skills 4-Soc Respons 2-Crit Think	Subsets Subsets Subsets Subsets
h. Discuss and perform the proper method for endotracheal intubation.	AVMA #4 Anesthesia		5-Ind, Prof, Disc, Know Skills ISLO ISLO	Subsets Subsets Subsets Subsets
Discuss common drugs used in exotic anesthesia and drugs that should be avoided.	AVMA #4 Anesthesia		5-Ind, Prof, Disc, Know Skills 2-Crit Think ISLO	Subsets Subsets Subsets Subsets
j. Operate and discuss the use of monitoring devices	AVMA #4 Anesthesia		5-Ind, Prof, Disc, Know Skills 4-Soc Respons ISLO	Subsets Subsets Subsets Subsets

KEY	<u>Institutional Student Learning Outcomes [ISLO 1 – 5]</u>
ISLO #	ISLO & Subsets
1	Communication Skills Oral [O], Written [W]
2	Critical Thinking <i>Critical Analysis [CA], Inquiry & Analysis [IA], Problem Solving [PS]</i>
3	Foundational Skills

	<i>Information Management [IM], Quantitative Lit./Reasoning [QTR]</i>
4	Social Responsibility <i>Ethical Reasoning [ER], Global Learning [GL], Intercultural Knowledge [IK], Teamwork [T]</i>
5	Industry, Professional, Discipline Specific Knowledge and Skills

*Include program objectives if applicable. Please consult with Program Coordinator

J. **APPLIED LEARNING COMPONENT:** Yes No

If YES, select one or more of the following categories:

- | | |
|---|--|
| <input type="checkbox"/> Classroom/Lab | <input type="checkbox"/> Civic Engagement |
| <input type="checkbox"/> Internship | <input type="checkbox"/> Creative Works/Senior Project |
| <input type="checkbox"/> Clinical Placement | <input type="checkbox"/> Research |
| <input type="checkbox"/> Practicum | <input type="checkbox"/> Entrepreneurship |
| <input type="checkbox"/> Service Learning | (program, class, project) |
| <input type="checkbox"/> Community Service | |

K. **TEXTS:**

(Not Required) Anesthesia and Pain Management for Veterinary Nurses and Technicians 1st Edition
by Tamara Grubb (Author), Mary Albi (Author), Janel Holden (Author), Shelley Ensign (Author), Shona Meyer (Author), Valdez Nicole (Author)

L. **REFERENCES:**

Medical Mathematis and Dosage Calculations for Veterinary Professionals. Second Edition. Robert Bill 2009

Sedation and Anesthesia of Zoological Companion Animals. Veterinary Clinics-Exotic Animal Practice. Edited by Miranda J. Sadar. Joao Brandao. 2022

Handbook of Veterinary Pain Management. Third Edition. Edited by James S. Gaynor and William W. Muir,III. 2015

Small Animal Anesthesia Techniques. Second Edition. Edited by Amanda M. Shelby, Carolyn M. McKune. 2022

M. **EQUIPMENT:** None **Needed:** Calculator

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

O. **SUGGESTED MEASUREMENT CRITERIA/METHODS:**

Exams

P. DETAILED COURSE OUTLINE:

I. Drug Calculations

II. Introduction to Anesthesia and Analgesia

III. Patient Preparation

IV. Anesthetic Monitoring of Canine and Feline Patients

V. Anesthetic Analgesic Pharmaceuticals used in Veterinary Medicine

VI. Gas Anesthesia Machine

VII. Emergency and Triage

VIII. Troubleshooting Anesthetic Problems

X. Anesthesia with Exotic Pets and Large Animal

Q. LABORATORY OUTLINE: None Yes