

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



MASTER SYLLABUS

COURSE NUMBER – COURSE NAME
VSCT 205 – Radiographic Techniques

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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Updated by: Wendy Kuceyeski, DVM

School of Science, Health, and Criminal Justice

Department: Veterinary Science Technology

Semester/Year: Fall 2024

- A. TITLE: Radiographic Techniques
- B. COURSE NUMBER: VSCT 205
- C. CREDIT HOURS: (Hours of Lecture, Laboratory, Recitation, Tutorial, Activity)

Credit Hours: 2
 # Lecture Hours: 1 per week
 # Lab Hours: 2 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 designed as an introduction to radiology and other types of imaging in a veterinary facility. Students will be required to position patients, calculate exposure values, exposed radiographic film, and process images manually and digitally. Students will be instructed on radiation hazards and how to avoid them. The use of ultrasound will be demonstrated and alternative technologies for imaging such as fluoroscopy, CT, MRI, endoscopy, and nuclear scintigraphy will be discussed.

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

VSCT 112, 114, and 115.

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

- 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>

Define common terms associated with taking a radiograph such as kVp, mAs, etc.			5-Ind, Prof, Disc, Know Skills ISLO ISLO	Subsets Subsets Subsets Subsets
List hazards associated with the use of radiographic equipment.			5-Ind, Prof, Disc, Know Skills ISLO ISLO	Subsets Subsets Subsets Subsets
Use appropriate terminology for alternative imaging technologies.			5-Ind, Prof, Disc, Know Skills ISLO ISLO	Subsets Subsets Subsets Subsets
Position, measure, label, and collect radiographic images of live specimens.	AVMA #3 Nursing AVMA #7 Imaging		5-Ind, Prof, Disc, Know Skills ISLO ISLO	Subsets Subsets Subsets Subsets
Identify and critique finished radiographs and make suggestions for improvement.	AVMA #7 Imaging		2-Crit Think 5-Ind, Prof, Disc, Know Skills ISLO	Subsets Subsets Subsets Subsets
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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 checked="" 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:

N/A

L. REFERENCES:

Lavin, Lisa M. Radiography in Veterinary Technology, Saunders Elsevier, 2007.

M. EQUIPMENT: **None** **Needed:** Equipment and supplies provided by the program; subscription to Trajecsys for essential skill tracking; scrub set and closed toed shoes.

N. GRADING METHOD: A-F

O. SUGGESTED MEASUREMENT CRITERIA/METHODS:

Quizzes

Exams

Practical Exam

Scored Radiographic Images

P. DETAILED COURSE OUTLINE:

Fundamentals of Radiology

Imaging the Abdomen

Imaging the Thorax

Imaging the Spine

Imaging the Thoracic Limb

Imaging the Pelvic Limb

Imaging the Skull/Dental Radiographs

Contrast Studies
Advanced Imaging
Equine Radiology
Exotics/Avian Radiology
Processing Film Radiographs

Q. LABORATORY OUTLINE: None Yes

Lab #1 Safety and Basics/Labeling Radiographs
Lab #2 Producing an Image/Terms/Technique Charts
Lab #3 Abdominal Radiographs
Lab #4 Thoracic Radiographs
Lab #5 Spinal Radiographs
Lab #6 Thoracic Limb Radiographs
Lab #7 Laboratory Practical
Lab #8 Pelvic Limb Radiographs
Lab #9 Skull/Dental Radiographs
Lab #10 Contrast Studies
Lab #11 Advanced Imaging
Lab #12 Make up lab
Lab #13 Equine Radiology