

## NORTHWESTERN CONNECTICUT COMMUNITY COLLEGE

### **COURSE SYLLABUS**

**Course Title:** Principles of Imaging

**Course #:** VET \* 212

**Course Description:** 1 semester hour (1.33 hour lecture / 0.67 hour lab). The principles of radiation and its uses in patient diagnostics are presented. Students will develop the technical skills needed to perform radiological imaging procedures. Alternative imaging techniques are also introduced. The dog and cat are used in the laboratory.

**Pre-requisite/Co-requisite:** VET\*151, 201, 202, and 280. Must be taken concurrently with VET\*230 and VET\*240.

**Goals:** The student will develop the skills to safely and efficiently produce quality diagnostic radiographic images in the clinical setting. Satisfactory completion of Principles of Imaging will prepare the student for the radiology/imaging questions of the National Veterinary Technician Exam.

**Outcomes:** After completion of this course the student will be able to:

- Describe how x-rays are produced
- Implement and observe recommended radiation safety measures while producing quality diagnostic radiographic images
- Implement effective radiographic quality control measures
- Develop and utilize accurate radiographic technique charts
- Demonstrate the general principles of animal positioning while taking radiographs (including laboratory and exotic animals)
- Describe and demonstrate radiographic techniques utilized in screening for canine hip dysplasia
- Utilize radiographic equipment to expose x-ray film (stationary and portable units)
- Process exposed films to create clear and lasting radiographic images (manual and automatic processing)
- Label, file and store film
- Complete radiographic logs, reports, files and records
- Utilize positive and negative radiographic contrast media (including GI series, pneumocystogram, and intravenous urogram)
- Demonstrate proper maintenance of radiographic equipment, including recognition of faulty equipment operation
- Explain how technical artifacts are generated and demonstrate how they are prevented when taking radiographs
- Describe the use of ultrasound and endoscopic equipment
- Explain how alternative imaging technologies are used in veterinary medicine

### **College Policies**

**Plagiarism:** Plagiarism and Academic Dishonesty are not tolerated at Northwestern Connecticut Community College. Violators of this policy will be subject to sanctions ranging from failure of the assignment (receiving a zero), failing the course, being removed/expelled

from the program and/or the College. Please refer to your “Student Handbook” under “Policy on Student Rights,” the Section entitled “Student Discipline,” or the College catalog for additional information.

**Americans with Disabilities Act (ADA):** The College will make reasonable accommodations for persons with documented learning, physical, or psychiatric disabilities. Students should notify Dr. Christine Woodcock, the Counselor for Students with Disabilities. She is located at Green Woods Hall, in the Center for Student Development. Her phone number is 860-738-6318 and her email is [cwoodcock@nwcc.edu](mailto:cwoodcock@nwcc.edu).

**School Cancellations:** If snowy or icy driving conditions cause the postponement or cancellation of classes, announcements will be made on local radio and television stations and posted on the College’s website at [www.nwcc.edu](http://www.nwcc.edu). Students may also call the College directly at **(860) 738-6464** to hear a recorded message concerning any inclement weather closings. Students are urged to exercise their own judgment if road conditions in their localities are hazardous.

**Use of Electronic Devices:** Some course content as presented in Blackboard Learn is not fully supported on mobile devices at this time. While mobile devices provide convenient access to check in and read information about your courses, they should not be used to perform work such as taking tests, quizzes, completing assignments, or submitting substantive discussion posts.

**Sexual Assault and Intimate Partner Violence Resource Team:** NCCC is committed to creating a community that is safe and supportive of people of all gender and sexual identities. This pertains to the entire campus community, whether on ground or virtual, students, faculty, or staff.

Sexual assault and intimate partner violence is an affront to our national conscience, and one we cannot ignore. It is our hope that no one within our campus community will become a victim of these crimes. However, if it occurs, NCCC has created the SART Team - Sexual Assault and Intimate Partner Violence Resource Team - to meet the victim’s needs.

SART is a campus and community based team that is fully trained to provide trauma-informed compassionate service and referrals for comprehensive care. The team works in partnership with The Susan B. Anthony Project to extend services 24 hours a day, 7 days a week throughout the year.

The NCCC team members are:

Ruth Gonzalez, Ph.D.	860-738-6315	Green Woods Hall Room 207
Susan Berg	860-738-6342	Green Woods Hall Room 223
Kathleen Chapman	860-738-6344	Green Woods Hall Room 110
Michael Emanuel	860-738-6389	Founders Hall Annex Room 308
Seth Kershner	860-738-6481	Library
Jane O’Grady	860-738-6393	Founders Hall Annex Room 212
Robin Orloski	860-738-6416	Business Office Room 201
Patricia Bouffard, Ex-Officio	860-738-6319	Founders Hall Room 103
Savannah Schmitt		Student Representative

At NCCC we care about our students, staff and faculty and their well-being. It is our intention to facilitate the resources needed to help achieve both physical and emotional health.