

SYLLABUS  
PART I  
EDISON STATE COMMUNITY COLLEGE  
VET 230S VETERINARY RADIOLOGY AND DIAGNOSTIC IMAGING  
2 CREDIT HOURS

**COURSE DESCRIPTION**

Overview of radiology diagnostics, radiation safety, appropriate positioning for radiographs, and related imaging. Hands-on experience completed over 16 hours. Prerequisite: VET 160S. Lab fee.

**COURSE GOALS**

The student will:

Bloom's Level		Program Outcomes
3	1. Determine proper measurements and positioning techniques to minimize repeat exposures and to produce an image of diagnostic quality.	1, 2, 3, 6
5	2. Anticipate and minimize risks to personnel and patients during radiographic procedures.	1, 2, 3, 6
1	3. Identify all radiographic, dark room materials, accessories, and individual components of each piece of equipment to determine how they create a quality image.	1, 2, 3, 6
1	4. Identify maintenance requirements and faulty equipment.	1, 2, 3, 6
2	5. Discuss the concepts used to create a technique chart.	1, 3, 8
1	6. Identify and define proper directional terminology used in radiography.	1, 3, 8
2	7. Discuss common large animal, avian, and exotic animal positions and principles.	1, 2, 3, 6
3	8. Transfer measurements and positioning techniques into medical records and radiology logs.	1, 3, 8

**CORE VALUES**

The Core Values are a set of principles that guide in creating educational programs and environments at Edison State Community College. They include communication, ethics, critical thinking, human diversity, inquiry/respect for learning, and interpersonal skills/teamwork. The goals, objectives and activities in this course will introduce/reinforce those Core Values wherever appropriate.

**TOPIC OUTLINE**

1. X-ray production
2. X-ray equipment
3. Radiation safety
4. Technique selection
5. Darkroom and process techniques
6. Technical errors and artifacts
7. Technique chart method
8. Radiographic quality
9. Positioning techniques
  - a. Hands-on techniques with both dogs and cats
10. Radiographic logs
11. Contrast radiography
  - a. GI Series

12. Digital radiography
13. Equine and large animal radiography
  - a. Hands-on technique with equine (portable)
14. Modifications of techniques for rodents, guinea pigs, birds, reptiles, and amphibians
15. Introduction to alternative imaging technology