# **VT 204 : DIAGNOSTIC IMAGING**

### **Transcript title**

Diagnostic Imaging

#### **Credits**

3

## **Grading mode**

Standard letter grades

#### **Total contact hours**

50

#### **Lecture hours**

20

#### Lab hours

30

### **Prerequisites**

VT 200, VT 201, VT 203, VT 209 and VT 212.

### **Corequisites**

VT 202, VT 206, VT 208.

### **Course Description**

Covers the operation and use of fixed, portable, and dental x-ray machines; creating diagnostic images; radiographic positioning of animals; and evaluation of radiographic technique. Explores additional diagnostic imaging modalities, such as ultrasound, MRI, CT, and endoscopy.

### **Course learning outcomes**

- 1. Utilize radiographic technique charts to obtain optimal radiographic exposures.
- 2. Explain and demonstrate proper positioning of dogs, cats, and horses for radiographic studies.
- 3. Explain how to modify diagnostic imaging techniques for lab and exotic animals.
- 4. Utilize fixed and portable radiographic equipment to create diagnostic radiographic images.
- 5. Create diagnostic radiographic images.
- 6. Summarize and demonstrate proper labeling, filing, and storage of radiographic images.
- 7. Critique radiographic images and describe specific measures to improve technique.
- 8. Explain and perform radiographic contrast studies.
- 9. Explain and demonstrate techniques for dental radiography of dogs and cats
- 10. Summarize special diagnostic modalities, including ultrasound, MRI, CT, and endoscopy.

#### **Content outline**

- 1. Lecture/Lab (labs follow lecture topics)
  - a. Terminology and positioning, Dental radiography
  - b. Radiography of pelvis and pelvic limb
  - c. Radiography of thoracic limb
  - d. Radiography of thorax and abdomen
  - e. Radiography of skull and spine
  - f. Diagnostic imaging of equines
  - g. Contrast studies Avian and exotic radiography
  - h. CT, Fluoroscopy, MRI, Nuclear Medicine, Ultrasonography

## **Required materials**

Textbook, scrubs, stethoscope, watch with second hand, bandage scissors, small animal thermometer, COCC name tag, dosimeter (supplied by COCC).