

VETT 222

Veterinary Imaging Laboratory

1 Credit: 3 hours lab

Community College of Baltimore County
Common Course Outline

Description

VETT 222 – Veterinary Imaging Laboratory: introduces the student to the theory, principles and uses of veterinary radiology, radiography, and other imaging modalities. The veterinary technician will learn radiographic technique and how to achieve the best quality. These diagnostics enable the veterinarian to diagnose and establish a treatment protocol for the patient. The course also introduces the student to the proper operation of equipment and associated safety protocols. This is the laboratory component to VETT 202, Veterinary Imaging.

Pre-requisite(s): VETT 112, VETT 113, VETT 114, VETT 202, VETT 203, VETT 212

Co-requisite(s): VETT 208, VETT 209, VETT 223

Overall Course Objectives

Upon completion of this course, students will be able to:

1. demonstrate basic radiographic theory, terminology, and applications;
2. demonstrate radiographic and personnel safety and applications of radiology PPE;
3. perform quality control surveillance of radiology PPE;
4. utilize standard radiographic positioning of companion animals;
5. demonstrate basic patient positioning, utilizing positioning devices and appropriate labeling, for proper radiographic images;
6. compare and contrast digital radiography systems (CR, DR), DICOM (digital communication), and PACS (picture archival system);
7. compare special imaging procedures (contrast studies) used in veterinary medicine;
8. explain additional imaging modalities used in veterinary medicine;
9. apply the principles of ultrasonography and applications; and
10. demonstrate dental radiography positioning, technique, and imaging.

Major Topics

- I. Production and properties of x-rays, including electromagnetic radiation (EMR) spectrum
- II. Radiation safety and application, PPE
- III. Radiographic labeling and positioning devices
- IV. Radiographic quality
- V. Radiographic technique and technique charts
- VI. Exposure factors (kV, mA, s)
- VII. Patient positioning
- VIII. Imaging terminology
- IX. Special radiographic procedures (contrast studies)

The Common Course Outline (CCO) determines the essential nature of each course.

For more information, see your professor's syllabus.

- X. Dental radiography (digital and film)
- XI. Additional imaging modalities
 - a. Ultrasonography (US)
 - b. Computed tomography (CT)
 - c. Magnetic resonance imaging (MRI)
 - d. Fluoroscopy
 - e. Nuclear medicine
 - f. Positron Emission Tomography (PET scan)
- XII. Standing, mobile and portable x-ray machines
- XIII. Recording image into patient record

Course Requirements

Grading will be determined by the individual faculty member, but shall include the following, at minimum:

- Two examinations
- Two assignments
- Required attendance at all labs

Written assignments and research projects: Students are required to use appropriate academic resources in their research and cite sources according to the most current APA format.

Other Course Information

An overall grade of “C” (70%) or higher is required for satisfactory completion of the course.

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