

VT 200 : RADIATION SAFETY

Transcript title

Radiation Safety

Credits

2

Grading mode

Standard letter grades

Total contact hours

20

Lecture hours

20

Prerequisites

VT 111, VT 112, VT 113 and VT 116.

Corequisites

VT 201, VT 203, VT 209, VT 212.

Course Description

Introduces x-radiation and safety principles involved in using x-ray machines.

Course learning outcomes

1. Explain how x-rays are produced, the dangers of radiation, and appropriate safety measures when working around radiation.
2. Summarize radiographic quality control measures.
3. Explain the procedure used to develop a radiographic technique chart.
4. Discuss the principles and methods used to develop x-ray films.
5. Compare and contrast types of animal restraints and positioning techniques for obtaining quality radiographs.
6. Critique radiographic images and describe specific measures to improve techniques.
7. Explain how to properly label, file, and store radiographic images.
8. Summarize federal and state regulations related to radiation.

Content outline

I. X-rays: Characteristics and properties II. X-ray tube anatomy and function III. Exposure factors and technique charts IV. Radiographic image quality V. Radiographic technique evaluation VI. Scatter radiation, grids, collimation VII. Radiation safety VIII. Overview of positioning IX. Digital imaging X. Causes of x-ray tube failure XI. Radiographic artifacts

Required materials

Textbook.