SECTION HEADING

RADT 1140: Radiological Exposures II

Description

Radiological Exposure II implements radiological exposure compensations as well as the effects of each compensation on image quality and the knowledge and ability to process and evaluate radiographic images will be emphasized. Requirements will focus on digital imaging, digital imaging system components, imaging processing, image analysis, image acquisition, and the ability to identify and recognize diagnostic quality. The principle and operation of automatic exposure control is also presented. Advancement in examination difficulty and complexity of mathematical applications will be reflected.

Credits

4

Prerequisite

RADT 1130

Corequisite

None

Topics to be Covered

1. Digital Imaging, PACS, Imaging Processing, Image Analysis, Image Acquisition, and Technical Evaluation, Image Quality Factors, Beam Restriction

Learning Outcomes

1. Analyze radiographic quality as it relates to technical factors.

2. Recognize the impact relationships of factors have on radiographic technique selection.

3. Critique radiographic images and perform corrective actions based on image quality.

4. Describe the characteristics of digital processing.

5. Determine the types, causes and effects of artifacts on a radiographic image

6. Describe the concept and components of automatic exposure control (AEC).

7. Describe all aspects of digital imaging.

8. Describe components associated with picture archive communication systems (PACS), radiology information systems (RIS) and digital imaging and communications in medicine (DICOM).

Credit Details

Lecture: 3

Lab: 1

OJT: 0

MnTC Goal Area(s): None