RADT 2680: Introduction to Mammography

A. COURSE DESCRIPTION

Credits: 2
Lecture Hours/Week: 1
Lab Hours/Week: 2
OJT Hours/Week: *.*
Prerequisites: None
Corequisites: None
MnTC Goals: None

This special modality course will cover patient education and assessment, anatomy, physiology, pathology, positioning and compression of the breast. Emphasis will be on the screening projections. A second component of the course is presentation of the physical principles of mammography to include unique aspects of the machine, image processing, dose issues, mammography technique, image evaluation, breast imaging procedures (including implant imaging) and quality control/assurance techniques. Both analog and digital film acquisition will be applied. The Mammography Quality Standards Act will be discussed. (Prerequisite: RADT2630, RADT 2635) (Prerequisite or Concurrent: RADT2653 or graduate of associate degree or certificate program in medical imaging/therapy or radiography [official transcript or current ARRT credential review required]) (2 credits: 1 lecture/1 lab)

B. COURSE EFFECTIVE DATES: 06/16/2009 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

1. Identify breast anatomical structures, tissue classifications and possible pathologies
2. Describe mammographic equipment
3. Describe patient positioning criteria and evaluation of images
4. Discuss primary certification requirements in mammography
D. LEARNING OUTCOMES (General)

1. Identify anatomical structures of the breast and associated tissues.
2. Apply anatomical nomenclature.
3. Identify pathologies best demonstrated in mammography.
4. Describe the various breast tissue classifications.
5. Differentiate between screening and detection mammography.
6. Describe the equipment used for mammography.
7. Describe patient positioning for mammography.
8. Describe the purpose of compression and other positioning aids in mammography.
9. Discuss marker placement for mammography.
10. Discuss breast dose exposures for mammography.
11. Explain pre and post procedure requirements/care for mammography.
12. Identify anatomical structures on radiographic images.
13. Evaluate images for proper radiographic demonstration of breast and associated anatomy.
15. Analyze adjunct breast imaging modalities.
16. Analyze the educational requirements for mammography certification.
17. Discuss the Mammography Quality Standards Acts (MQSA).
18. Identify quality control processes in digital and film mammography.

E. Minnesota Transfer Curriculum Goal Area(s) and Competencies

None

F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

G. SPECIAL INFORMATION

None noted