

Master Syllabus

RAT 2647 - Principles of Mammography

Division: Health Sciences

Department: Radiologic Technology

Credit Hour Total: 3.0

Lecture Hrs: 3.0

Other Prerequisite(s): Approval of Department

Date Revised: February 2014

Course Description:

Comprehensive overview of mammographic concepts and equipment, including patient care/education, communication, anatomy and physiology, epidemiology, pathology, positioning techniques, interventional procedures, image analysis, imaging media and processing, quality assurance testing and principles of exposure.

General Education Outcomes:

- Critical Thinking/Problem Solving

Course Outcomes:

Quality control and quality assurance

Identify quality control, quality assurance measures and federal and/or state regulations governing mammography.

Assessment Method: Locally developed exams

Performance Criteria: 71% or higher achieved

Historical development of mammography

Describe the historical development of mammography as an advanced imaging modality.

Assessment Method: Locally developed exams

Performance Criteria: 71 % or higher achieved

Breast anatomy/physiology and radiographic positioning

Identify breast anatomy and physiology and describe routine positioning techniques for routine and non-routine mammographic procedures.

Assessment Method: Locally developed exams

Performance Criteria: 71% or higher achieved

Technical and equipment considerations

Describe basic mammographic equipment and technical considerations in mammography.

Assessment Method: Locally developed exams

Performance Criteria: 71% or higher achieved

Patient care, education, and communication

Describe the importance of quality patient care, education, and communication in mammography.

Assessment Method: Locally developed exams

Performance Criteria: 71% or higher achieved

Outline:

Introduction/historical developments in mammography
Anatomy and physiology of breast and surrounding tissues
Technical and equipment considerations
Patient care/education and communication
Positioning of the breast and image quality/analysis
Pathological considerations and interventions
Quality control and quality assurance, Mammography Quality Standards Act (MQSA)/American College of Radiology (ACR) requirements