

## 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

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#### 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 Competency

#### 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