

## Master Syllabus

### RAT 2647 - Principles of Mammography

**Division:** Health Sciences

**Department:** Radiologic Technology

**Credit Hour Total:** 2.0

**Lecture Hrs:** 2.0

**Other Prerequisite(s):** Approval of Department

**Date Revised:** January 2017

---

### 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:**

75% or higher achieved

#### Technical and equipment considerations

Describe basic mammographic equipment and technical considerations in mammography.

**Assessment Method:** Locally developed exams

**Performance Criteria:**

75% 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:**

75 % 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:**

75% 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:**

75% 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