

MASTER COURSE OUTLINE

A. RADT 2286 Principles of Mammography

B. COURSE DESCRIPTION:

This course includes two distinct components of mammography education: clinical mammography and the physics of mammography. Anatomy and physiology of the breast, clinical positioning of the breast and the physical principles of mammography machine operation and exposure technique are included. Additional content on quality assurance in mammography and the Mammography Quality Standards Act (MQSA) are presented. Prerequisites: RADT 2215, 2283 or registered Radiologic Technologist. This course is part of the Radiography program which is accredited by the Joint Review Committee on Education in Radiologic Technology (JRCERT).
(2 Cr – 2 lect, 0 lab)

C. **Core Theme: Critical Thinking

D. RIVERLAND INSTITUTIONAL LEARNING OUTCOMES:

This course addresses the following Riverland Institutional Learning Outcome(s):

- ILO 1: critical thinking (*Core Theme Goal 2*)
- ILO 2: awareness of the larger global community (*Core Theme Goal 7 or Goal 8*)
- ILO 3: ethical, engaged citizenship (*Core Theme Goal 9 or Goal 10*)
- ILO 4: communication and collaboration (*Discipline Goal 1 and by any learning outcome(s) involving communication or collaboration*)

E. MAJOR CONTENT AREAS:

- Anatomy and physiology of the breast
- Mammography positioning
- Communication skills for the mammographer
- Pathology and procedures
- Clinical positioning
- X-ray generation for mammography
- Mammography physics
- Quality assurance
- MQSA
- Digital mammography

F. GOAL TYPE, OBJECTIVES, AND OUTCOMES:

<u>GOAL TYPE</u>	<u>OBJECTIVES</u> Students will be able to	<u>OUTCOMES</u> The student will successfully
<u>**Critical Thinking</u>	gather factual information and apply it to a given problem in a manner that is relevant, clear, comprehensive, and conscious of possible bias in the information selected.	1. identify and critique the anatomy and technique identified on the mammograms.
<u>CS</u>	acquire cognitive and psychomotor skills required in clinical mammography practice.	1. demonstrate accurate positioning for a mammogram in the lab and clinical setting.
<u>CS</u>	apply knowledge of the physical components of mammography equipment.	1. demonstrate proficiency in using the mammography equipment.
<u>CS</u>	discuss the MQSA standards.	1. maintain and monitor a record of participation in meeting the MQSA standards.

G. SPECIAL INFORMATION:

This course may require use of the Internet, the submission of electronically prepared documents and the use of a course management software program. Students who have a disability and need accommodations should contact Accessibility Services at the beginning of the semester. This information will be made available in alternative format, such as Braille, large print, or current media, upon request.

H. COURSE CODING INFORMATION:

Course Code X/Class Maximum 20; Letter Grade

Revision date: 12/15/10; 03/30/22; 04/04/23

AASC Approval date: 12/21/10; 05/03/22; 05/02/23

*Riverland Community College Disciplines	MnTC Goal Number
Communication (CM)	1
Natural Sciences (NS)	3
Mathematics/Logical Reasoning (MA)	4
History and the Social & Behavioral Sciences (SS)	5
Humanities and Fine Arts (HU)	6

**Riverland Community College Core Themes	MnTC Goal Number
Critical Thinking (CT)	2
Human Diversity (HD)	7
Global Perspective (GP)	8
Ethical and Civic Responsibility (EC)	9
People and the Environment (PE)	10

*These five MnTC Goals have been identified as Riverland Community College Disciplines.

** These five MnTC Goals have been identified as Riverland Community College Core Themes.

NOTE: The Minnesota Transfer Curriculum “10 Goal Areas of Emphasis” are reflected in the five required discipline areas and five core themes noted in the Riverland Community College program of study guide and/or college catalog.

Riverland