



MASTER COURSE OUTLINE

A. RADT 2303 Cross Sectional Anatomy

B. COURSE DESCRIPTION:

This course introduces the student to the cross-sectional anatomy of the body and its appearance on computed tomography (CT) and magnetic resonance imaging (MRI). This course begins with a review of cross-sectional imaging modalities and traditional anatomic positions and planes. Normal anatomic structures of the head, neck, thorax, vascular, abdomen, pelvis, spine and extremities are presented in multi-planar sections. The course enables the student to differentiate between normal and abnormal anatomical structures. Prerequisites: RADT 1235, 2261 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).
(3 Cr – 3 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:

- Computed tomography (CT) and magnetic resonance (MR) images
- Anatomical body planes
- Abdominal quadrants
- Location of specific organs and structures
- Cerebral anatomy
- Thorax anatomy
- Abdominal anatomy
- Pelvis anatomy
- Vascular anatomy
- Skeletal anatomy
- Pathologic processes

F. GOAL TYPE, OBJECTIVES, AND OUTCOMES:

<u>GOAL TYPE</u>	<u>OBJECTIVES</u>	<u>OUTCOMES</u>
	Students will be able to	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 cross-sectional anatomy in the sagittal, coronal and axial planes on CT and MR images.
<u>CS</u>	recognize anatomy for the cerebrum, thorax, and abdomen.	1. locate and identify pertinent cerebral, upper thorax, midthorax, and abdominal anatomy.
<u>CS</u>	recall arterial and venous anatomy.	1. distinguish between arterial and venous anatomy of the vascular system.
<u>CS</u>	recognize normal anatomy from those involved in pathology.	1. compare and contrast between normal anatomy and a pathologic condition.
<u>CS</u>	understand the regions of the body and the associated structures.	1. classify the various sections of anatomical regions and the associated structures.

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 the instructor or the Student Success Center 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: 09/01/16; 03/30/22

AASC Approval date: 09/20/16; 05/03/22

*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