Course Information Form (CIF)

Course Code: XRA 111

Course Title: Radiologic Technology I

Department: Allied Health
PCS Code: 1.2 - Occupational/Technical Instruction
CIP Code: 51.0907
Repeatability: 0

Effective Date: Summer 2026

Credit Hours

Catalog Notation: 2-3-3
Credit Hour Distribution:

Lecture: 2	Lab: 3	Clinical: 0	**Total: 3**

General Course Information

Catalog Description

Radiographic anatomy and positioning of upper and lower extremities, spine, thorax, contrast studies, and medical terminology.

General Course Objectives

The student will demonstrate knowledge and appropriate application of radiographic positioning to the upper and lower extremities and spine.

Minimum Placement Levels

English	Reading	Math
Placement out of ENG 099	Placement out of CCS 099	Placement out of MAT 072

Prerequisites

Credit or concurrent enrollment in XRA 114, XRA 131, and BIO 121
Admission into the Radiologic Technology program

Methods of Evaluation

3-5 objective exams, 3-4 laboratory practicals.

Instructional Materials and Additional Supplies

Merrill's Atlas of Radiographic Positions and Procedures, Volume I, current edition, Frank, E., Long, B. and Smith, B. Elsevier.
Merrill's Atlas of Radiographic Positions and Procedures, Volume II, current edition, Frank, E., Long, B. and Smith, B. Elsevier.
Merrill's Atlas of Radiographic Positioning and Procedures Workbook, current edition, Frank, E., Long, B. and Smith, B. Workbook non-returnable once opened.

Course Content

General Learning Outcomes (GLOs)

- Communication: Students will demonstrate the ability to read, write, listen, and speak effectively.
- Critical Thinking and Information Literacy: Students will demonstrate the ability to evaluate perspectives, evidence, and implications, and to locate, assess, and use information effectively.
- Technology: Students will demonstrate the ability to evaluate, select, and appropriately use current and emerging tools.

Course Segments and Student Learning Outcomes

Course Segment	Learning Outcomes	Lecture Hours	Lab Hours	Clinical Hours
Positioning	1. Demonstrate nomenclature of positioning, including planes of the body and terminology of x-ray projections. 2. Position and manipulate the human body correctly for all views that may be necessary of the abdomen, thoracic, and upper or lower extremities. 3. Position and manipulate for any special views of the abdomen, thoracic, and upper or lower extremities that may be needed from time to time.	6	12	0
Image Critique and Radiographic Anatomy	1. Demonstrate proper radiographic quality by: correctly identifying the radiograph; assessing the radiographic anatomy of the region involved; properly assessing the overall quality of the radiograph; and establishing errors in positioning, technique, and exposure and properly correcting those errors.	6	8	0
Radiographic Anatomy	1. Determine and identify anatomy and physiology. 2. Identify and describe bodily organization and structure units, including the identification of body cavities and body planes. 3. Administer anatomical nomenclature. 4. Determine and explain the relation of anatomy and physiology to radiologic technology.	6	7	0
Skeletal System	1. Classify the bones and organize as to type. 2. Establish the bones of the skeleton articulated, disarticulated, and radiographically, including bony prominence and markings. 3. Establish and describe the different types of fractures. 4. Classify and determine articulations, including articular surface.	4	6	0
Respiratory System	1. Identify and assess respiratory structures and abnormalities that are radiographically related.	4	6	0
Digestive System	1. Identify and determine important digestive structures. 2. Differentiate between mechanical and chemical digestion and food absorption.	4	6	0

Total Contact Hours

Lecture Hours	Lab Hours	Clinical Hours
30	45	0