XRY - RADIOGRAPHY

XRY 100 **3 credit hours (lecture: 2 | lab: 2)**
Introduction to Radiography and Patient Care
Course provides an overview of the field of medical imaging. Students practice the essential patient care skills of a radiographer. Safety in the workplace, ethics and law, and pharmacology are covered in the course.
Prerequisite: Admission to the Radiography program.
Note: Pending ICCB approval.
Instruction Type: In-Person
Term Typically Offered: Fall | Summer

XRY 101 **5 credit hours (lecture: 4 | lab: 2)**
Radiographic Procedures I
Course covers ARRT (American Registry of Radiologic Technologists) procedures and terminology required to position patients for radiographic imaging. Application of human anatomy is included in classroom discussion and throughout the demonstration of accurate positioning and x-ray image critique to achieve optimal image quality. Radiographic positioning will be practiced hands-on in the lab upon phantoms and students. Standard radiographic procedures of the chest, abdomen, upper extremities, including the shoulder girdle, and lower extremities, including the hip and pelvis, are covered in this course.
Prerequisite: Admission to the Radiography program.
Note: Pending ICCB approval.
Instruction Type: In-Person
Term Typically Offered: Fall

XRY 102 **1 credit hours (lecture: 0 | lab: 5)**
Radiography Practicum I
This beginning clinical practicum course provides for observation and performing radiologic procedures on patients under direct supervision. Students will become familiar with imaging equipment, department workflow, and perform standard radiographic procedures on the chest. Emphasis will be placed on developing culturally competent communication and practices for all patient populations in the field of medical imaging.
Prerequisite: Admission to the Radiography program.
Note: Pending ICCB approval.
Instruction Type: In-Person
Term Typically Offered: Fall | Summer

XRY 103 **3 credit hours (lecture: 3 | lab: 0)**
Radiographic Imaging I
Course covers the process and components of radiographic imaging. Students learn the factors affecting the production and quality of the radiographic image.
Prerequisite: Admission to the Radiography program.
Note: Pending ICCB approval.
Instruction Type: In-Person
Term Typically Offered: Fall

XRY 105 **3 credit hours (lecture: 0 | lab: 14)**
Radiography Practicum II
This second clinical practicum course prepares students to perform radiologic procedures on patients with direct supervision and a minimal indirect supervision once competency has been achieved. Students will apply radiation safety and appropriate infection control procedures. Critical thinking and problem-solving skills will be introduced as they relate to performing radiographic procedures. Students will continue developing culturally competent communication skills and practices for all patient populations in the field of medical imaging.
Prerequisite: XRY 100 and XRY 102 with minimum grades of C. XRY 101 and XRY 103 with minimum grades of C or concurrent enrollment in XRY 101 and XRY 103.
Note: Pending ICCB approval.
Instruction Type: In-Person
Term Typically Offered: Fall | Spring

XRY 106 **5 credit hours (lecture: 4 | lab: 2)**
Radiographic Procedures II
This course is a continuation of XRY 101. ARRT (American Registry of Radiologic Technologists) required procedures will be discussed and analyzed in classroom discussion. Radiographic positioning will be practiced hands-on in the lab upon phantoms and students. Standard radiographic procedures of the spinal column and bony thorax, fluoroscopy to include GI tract and biliary system, mobile and surgical imaging, urinary tract and headwork are covered in this course. Application of human anatomy is included in classroom discussion and throughout the demonstration of accurate positioning and x-ray image critique to achieve optimal image quality.
Prerequisite: XRY 101 and XRY 103 with minimum grades of C. XRY 105 with a minimum grade of C or concurrent enrollment in XRY 105.
Note: Pending ICCB approval.
Instruction Type: In-Person
Term Typically Offered: Spring

XRY 108 **3 credit hours (lecture: 3 | lab: 0)**
Radiographic Imaging II
Course covers the components of the x-ray unit and examines how the radiographic image is produced. Quality management techniques, including corrective actions, are also studied.
Prerequisite: XRY 103 with a minimum grade of C.
Note: Pending ICCB approval.
Instruction Type: In-Person
Term Typically Offered: Spring

XRY 110 **3 credit hours (lecture: 0 | lab: 14)**
Radiography Practicum III
This third clinical practicum course prepares students to perform radiographic procedures on patients with both direct and indirect supervision with continuing competence. Students will demonstrate radiation safety, proper infection control, and use critical thinking and problem-solving skills as they relate to performing radiographic procedures. Students will continue developing culturally competent communication skills and practices for all patient populations in the field of medical imaging.
Prerequisite: XRY 105 with a minimum grade of C. XRY 106 with a minimum grade of C or concurrent enrollment in XRY 106.
Note: Pending ICCB approval.
Instruction Type: In-Person
Term Typically Offered: Spring | Summer

XRY 201 **3 credit hours (lecture: 0 | lab: 14)**

Radiography Practicum IV

This fourth clinical practicum course prepares students to perform radiologic procedures on patients with supervision with continuing competence. Students will demonstrate radiation safety, proper infection control, and use critical thinking and problem-solving skills as they relate to performing radiographic procedures. Students will continue developing culturally competent communication skills and practices for all patient populations in the field of medical imaging.

Prerequisite: XRY 106 and XRY 110 with minimum grades of C.

Note: Pending ICCB approval.

Instruction Type: In-Person

Term Typically Offered: Fall | Summer

XRY 202 **2 credit hours (lecture: 2 | lab: 0)**

Radiographic Imaging III

Course examines elements that influence radiographic image acquisition, display, archiving and retrieval. Content includes principles for exposure factor selection and image evaluation, as well as quality assurance and maintenance of the digital system.

Prerequisite: XRY 108 with a minimum grade of C.

Note: Pending ICCB approval.

Instruction Type: In-Person

Term Typically Offered: Fall

XRY 203 **2 credit hours (lecture: 2 | lab: 0)**

Advanced Imaging Procedures

Course introduces students to medical imaging modalities with an emphasis on Computed Tomography. Content includes special diagnostic procedures, advanced medical imaging profession and their roles in healthcare as well as interprofessional skills.

Prerequisite: XRY 106 and XRY 110 with minimum grades of C.

Note: Pending ICCB approval.

Instruction Type: In-Person

Term Typically Offered: Fall | Spring

XRY 204 **2 credit hours (lecture: 2 | lab: 0)**

Radiographic Image Analysis

Course prepares students to analyze and critique radiographic images for quality. Students will learn to identify and correct procedural and equipment errors.

Prerequisite: XRY 106 with a minimum grade of C.

Note: Pending ICCB approval.

Instruction Type: In-Person

Term Typically Offered: Fall

XRY 205 **2 credit hours (lecture: 2 | lab: 0)**

Radiographic Pathology

Course covers pathology as it relates to radiographic sciences. Disease manifestations, causes and implications for radiographic procedures will be covered. Students will identify the radiographic appearance of pathologies.

Prerequisite: XRY 106 with a minimum grade of C.

Note: Pending ICCB approval.

Instruction Type: In-Person

Term Typically Offered: Spring

XRY 206 **3 credit hours (lecture: 3 | lab: 0)**

Radiation Biology and Safety

Course identifies different types of radiation and how they interact with biological tissues. Students will learn radiation safety practices and how to apply them for patients and personnel.

Prerequisite: XRY 100, XRY 103 and BIO 231 with minimum grades of C.

Note: Pending ICCB approval.

Instruction Type: In-Person

Term Typically Offered: Fall | Spring

XRY 207 **2 credit hours (lecture: 2 | lab: 0)**

ARRT Review

Course prepares students for the national American Registry of Radiologic Technologist (ARRT) examination. Each student will focus on their specific lowest scoring subjects on the ARRT content specification. Study materials and mock registry examinations are presented in the course.

Prerequisite: XRY 202, XRY 204, XRY 206 with minimum grades of C. XRY 203 and XRY 205 with minimum grades of C or concurrent enrollment in XRY 203 and XRY 205.

Note: Pending ICCB approval.

Instruction Type: In-Person

Term Typically Offered: Spring | Summer

XRY 208 **3 credit hours (lecture: 0 | lab: 14)**

Radiography Practicum V

This fifth clinical practicum course prepares students to perform radiologic procedures on patients with minimal supervision with continuing competence. Students will demonstrate radiation safety, proper infection control, and use critical thinking and problem-solving skills as they relate to performing radiographic procedures. Students will continue developing culturally competent communication skills and practices for all patient populations in the field of medical imaging.

Prerequisite: XRY 201 with minimum grade of C.

Note: Pending ICCB approval.

Instruction Type: In-Person

Term Typically Offered: Fall | Spring

XRY 209 **3 credit hours (lecture: 0 | lab: 14)**

Radiography Practicum VI

This capstone clinical practicum course requires students to competently perform radiographic procedures on patients by demonstrating knowledge obtained throughout the course of the Radiography program. Students will demonstrate radiation safety, proper infection control, and use critical thinking and problem-solving skills as they relate to performing radiographic procedures. Students will continue developing culturally competent communication skills and practices for all patient populations in the field of medical imaging.

Prerequisite: XRY 208 with a minimum grade of C. XRY 203 and XRY 205 with minimum grades of C or concurrent enrollment in XRY 203 and XRY 205.

Note: Pending ICCB approval.

Instruction Type: In-Person

Term Typically Offered: Spring | Summer