

Course List and Descriptions

Semester 1

XRAY 101 Intro to Radiography

Provides an overview of the foundations in radiography and the practitioner's role in the health care delivery system and professional responsibilities of the radiographer.

XRAY 102 Patient Care Imaging Science

Content is designed to identify the role of the radiographer in patient care, including consideration for the physical and psychological needs of the patient and family.

XRAY 104 Radiographic Anatomy

Content is designed to introduce the student to radiographic anatomy. Emphasis is placed on identifying structures visible on correctly performed radiographic procedures.

XRAY 105 Imaging Procedures 1

Content is designed to provide the knowledge base necessary to perform standard imaging procedures. Students will practice imaging procedures in the lab prior to performing them on patients.

XRAY 106 Clinical Practice I

Content and clinical practice experiences are designed to sequentially develop, apply, critically analyze, integrate, synthesize and evaluate concepts and theories in the performance of radiologic procedures.

XRAY 111 Seminar I

Seminar on new and emerging techniques in imaging sciences.

Semester 2

XRAY 110 Clinical Practice II

Clinical practice experiences are designed for sequential development, application, critical analysis, integration, synthesis and evaluation of concepts and theories in the performance of radiologic procedures. Through structured sequential, competency-based assignments in the clinical setting.

XRAY 107 Imaging Procedures II

Content is designed to provide the knowledge base necessary to perform special imaging procedures and basic computed tomography.

XRAY 108 Pharmacology for Imaging Science

Content is designed to provide basic concepts of pharmacology including delivery of and pharmacodynamics associated with imaging contrast media.

XRAY 109 Intro to Imaging Equipment

Content is designed to provide knowledge in radiographic, fluoroscopic, mobile and tomographic equipment requirements and design.

XRAY 112 Seminar Imaging Sciences II

Seminar on new and emerging technologies in imaging sciences.

XRAY 204 Radiographic Pathology

Introduces students to concepts related to disease and etiological considerations with emphasis on radiographic appearance of disease and impact on exposure factor selection.

Semester 3

XRAY 202 Principles of Radiation Physics

Introduces students to the nature and characteristics of radiation production and the fundamentals of photon interactions with matter.

XRAY 203 Image Acquisition

Introduces students to the factors that govern the image production process.

XRAY 205 Clinical Practice IV

Clinical practice experiences are designed for sequential development, application, critical analysis, integration, synthesis and evaluation of concepts and theories in the performance of radiologic procedures. Through structured sequential, competency-based assignments in the clinical setting, concepts of team practice, patient-centered clinical practice and professional development shall be discussed, examined and evaluated. The emphasis is on developing basic radiography skills.

XRAY 206 Seminar Imaging Science

Students will research and make short presentations on advanced practice methodologies in imaging science. Emphasis is placed on developing the student's oral communication skills, research skills, and introducing the student to the concept of continuing education as mandated by the ASRT.

XRAY 207 Radiobiology

Content is designed to provide an overview of the principles of the interaction of radiation with living systems.

XRAY 221 Imaging Procedures III

Course is designed to provide the knowledge for advanced diagnostic radiographic imaging procedures.

Semester 4

XRAY 208 Radiographic Image Analysis

Image analysis content is designed to provide a basis for analyzing radiographic images.

XRAY 209 Image Acquisition II

Content is designed to impart an understanding of the components, principles and operation of digital imaging systems found in diagnostic radiography.

XRAY 210 Clinical Practice V

Clinical practice experiences are designed for sequential development, application, critical analysis, integration, synthesis and evaluation of concepts and theories in the performance of radiologic procedures.

XRAY 211 Seminar Imaging Sciences III

Seminar on new and emerging techniques in imaging sciences.

XRAY 222 Radiation Safety

This course focuses on radiation safety including ionizing radiation limits for the occupational worker, patient, and general public.

XRAY 235 Registry Review

This is a review course for the ARRT primary certification examination.

