

# MEDICAL IMAGING (RADR)

## **RADR 1160 Clinical - Radiologic Technology/Science - Radiographer 1 Credit (0 Lec, 4 Lab)**

This is a health-related, work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.  
Prerequisite(s): Acceptance into the Medical Radiography Program

Course Type: Technical

## **RADR 1201 Introduction to Radiography 2 Credits (2 Lec, 0 Lab)**

This course is an overview of the historical development of radiography, basic radiation protection, an introduction to medical terminology, ethical and legal issues for health care professionals, and an orientation to the profession and the health care system.  
Prerequisite(s): Reading level 7

Course Type: Technical

## **RADR 1202 Radiographic Image Evaluation I 2 Credits (2 Lec, 1 Lab)**

This course is the study of the scientific process of radiographic image evaluation.  
Prerequisite(s): RADR 1267, RADR 2205, RADR 2331, RADR 2313

Course Type: Technical

## **RADR 1203 Patient Care 2 Credits (2 Lec, 1 Lab)**

This course is an introduction in patient assessment, infection control procedures, emergency and safety procedures, communication and patient interaction skills, and basic pharmacology.  
Prerequisite(s): Acceptance into the Medical Radiography Program

Course Type: Technical

## **RADR 1213 Principles of Radiographic Imaging I 2 Credits (2 Lec, 1 Lab)**

This course is the study of radiographic image quality and the effects of exposure variables.  
Prerequisite(s): RADR 2209, RADR 1311, RADR 1202, RADR 1203, RADR 1166

Course Type: Technical

## **RADR 1266 Practicum 2 Credits (0 Lec, 16 Lab)**

This course offers practical, general workplace training supported by an individualized learning plan developed by the employer, College, and student.  
Prerequisite(s): RADR 1203, RADR 1411, RADR 2209, RADR 1160

Course Type: Technical

## **RADR 1267 Practicum 2 Credits (0 Lec, 16 Lab)**

This course is the study of the practical, general workplace training supported by an individualized learning plan/syllabus developed by the employer, College, and student.  
Prerequisite(s): RADR 2236, RADR 1313, RADR 1266, RADR 2401

Course Type: Technical

## **RADR 1303 Patient Care 3 Credits (3 Lec, 1 Lab)**

This course is an introduction in patient assessment, infection control procedures, emergency and safety procedures, communication and patient interaction skills, and basic pharmacology.  
Prerequisite(s): Admission to MRI program

Course Type: Technical

## **RADR 1311 Basic Radiographic Procedures 3 Credits (2 Lec, 3 Lab)**

This course is an introduction to radiographic positioning terminology, the proper manipulation of equipment, positioning and alignment of the anatomic structure and equipment, and evaluation of images for proper demonstration of basic anatomy.  
Prerequisite(s): Acceptance into the Medical Radiography Program

Course Type: Technical

## **RADR 1313 Principles of Radiographic Imaging I 3 Credits (3 Lec, 1 Lab)**

This course is the study of radiographic image quality and the effects of exposure variables.  
Prerequisite(s): RADR 2209, RADR 1411, RADR 1203, RADR 1160

Course Type: Technical

## **RADR 1411 Basic Radiographic Procedures 4 Credits (3 Lec, 3 Lab)**

This course is an introduction to radiographic positioning terminology, the manipulation of equipment, positioning and alignment of the anatomic structure and equipment, and evaluation of images for demonstration of basic anatomy.  
Prerequisite(s): Acceptance into the Medical Radiography Program

Course Type: Technical

## **RADR 2205 Principles of Radiographic Imaging II 2 Credits (2 Lec, 1 Lab)**

This course is a study in radiographic image quality and the effects of exposure variables, and the synthesis of all variables in image production.  
Prerequisite(s): RADR 1266, RADR 1313, RADR 2401, and RADR 2236

Course Type: Technical

## **RADR 2209 Radiographic Imaging Equipment 2 Credits (2 Lec, 1 Lab)**

This course is the study of the equipment and physics of x-ray production. Includes basic x-ray circuits. Also examines the relationship of conventional and digital equipment components to the imaging process.  
Prerequisite(s): Acceptance into the Medical Radiography Program

Course Type: Technical

## **RADR 2217 Radiographic Pathology 2 Credits (2 Lec, 0 Lab)**

This course is the study of the disease processes and their appearance on radiographic images.  
Prerequisite(s): RADR 2233, RADR 1202, RADR 2266, RADR 2340

Course Type: Technical

## **RADR 2233 Advanced Medical Imaging 2 Credits (2 Lec, 0 Lab)**

This course is an exploration of specialized imaging modalities. Includes concepts and theories of equipment operations and their integration for medical diagnosis.  
Prerequisite(s): RADR 2313, RADR 2331, RADR 1267, RADR 2205

Course Type: Technical

**RADR 2236 Special Patient Applications 2 Credits (2 Lec, 1 Lab)**

This course is the study of the advanced concepts of pediatrics, geriatrics, trauma, history documentation and electrocardiogram (ECG). Includes phlebotomy, venipuncture and concepts of pharmacology.  
Prerequisite(s): RADR 2209, RADR 1411, RADR 1203, RADR 1160

Course Type: Technical

**RADR 2266 Practicum 2 Credits (0 Lec, 20 Lab)**

This course is the study of the practical, general workplace training supported by an individualized learning plan/syllabus developed by the employer, College, and student.  
Prerequisite(s): RADR 2313, RADR 2205, RADR 1267, RADR 2331

Course Type: Technical

**RADR 2267 Practicum 2 Credits (0 Lec, 20 Lab)**

This course is the study of the practical, general workplace training supported by an individualized learning plan/syllabus developed by the employer, College, and student.  
Prerequisite(s): RADR 2266, RADR 1202, RADR 2233, RADR 2340

Course Type: Technical

**RADR 2301 Intermediate Radiographic Procedures 3 Credits (2 Lec, 3 Lab)**

This course is a continuation of the study of the proper manipulation of radiographic equipment, positioning and alignment of the anatomic structure and equipment, and evaluation of images for proper demonstration of anatomy.  
Prerequisite(s): RADR 1311, RADR 1166, RADR 1202, RADR 1203, RADR 2209

Course Type: Technical

**RADR 2305 Principles of Radiographic Imaging II 3 Credits (3 Lec, 1 Lab)**

This is a continuation of Radiographic image quality and the effects of exposure variables, and the synthesis of all variables in image production.  
Prerequisite(s): RADR 1266, RADR 1313, RADR 2401, RADR 2236

Course Type: Technical

**RADR 2313 Radiation Biology and Protection 3 Credits (3 Lec, 0 Lab)**

This course is the study of the effects of radiation exposure on biological systems. Includes typical medical exposure levels, methods for measuring and monitoring radiation, and methods for protecting personnel and patients from excessive exposure.  
Prerequisite(s): RADR 1266, RADR 1313, RADR 2401, RADR 2236

Course Type: Technical

**RADR 2331 Advanced Radiographic Procedures 3 Credits (2 Lec, 2 Lab)**

This course a continuation of positioning and alignment of anatomic structures and equipment, evaluation of images for demonstration of anatomy and related pathology.  
Prerequisite(s): RADR 2236, RADR 1313, RADR 2401, RADR 1266

Course Type: Technical

**RADR 2333 Advanced Medical Imaging 3 Credits (3 Lec, 0 Lab)**

This course covers specialized imaging modalities. Includes concepts and theories of equipment operations and their integration for medical diagnosis.  
Prerequisite(s): RADR 2360, RADR 2309

Course Type: Technical

**RADR 2335 Radiologic Technology Seminar 3 Credits (3 Lec, 1 Lab)**

This is a capstone course focusing on the synthesis of professional knowledge, skills, and attitudes in preparation for professional employment and lifelong learning.  
Prerequisite(s): RADR 2233, RADR 1202, RADR 2266, RADR 2340

Course Type: Technical

**RADR 2340 Sectional Anatomy for Medical Imaging 3 Credits (3 Lec, 0 Lab)**

This course presents an in-depth coverage of anatomic relationships that are present under various sectional orientations.  
Prerequisite(s): Acceptance into a Medical Imaging program or Department Chair approval

Course Type: Technical

**RADR 2401 Intermediate Radiographic Procedures 4 Credits (3 Lec, 3 Lab)**

This course is a continuation of the study of the proper manipulation of radiographic equipment, positioning and alignment of the anatomic structure and equipment, and evaluation of images for proper demonstration of anatomy.  
Prerequisite(s): RADR 2209, RADR 1203, RADR 1411, RADR 1160

Course Type: Technical