

RADR 1213 Principles of Radiographic Imaging I**0-2**

Radiographic image quality and the effects of exposure variables.

End-of-Course Outcomes: Apply the basic principles of radiographic image acquisition to image quality; and analyze the effects of exposure variables upon image quality.

RADR 1260 Clinical-Medical Radiologic Technology/Radiographer**0-12**

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.

End-of-Course Outcomes: As outlined in the learning plan, apply the theory, concepts, and skills involving specialized materials, tools, equipment, procedures, regulations, laws, and interactions within and among political, economic, environmental, social, and legal systems associated with the occupation and the business/industry; and will demonstrate legal and ethical behavior, safety practices, interpersonal and teamwork skills, and appropriate written and verbal communication skills using the terminology of the occupation and the business/industry.

RADR 1261 Clinical-Medical Technology/Radiographer**0-16**

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.

End-of-Course Outcomes: As outlined in the learning plan, apply the theory, concepts, and skills involving specialized materials, tools, equipment, procedures, regulations, laws, and interactions within and among political, economic, environmental, social, and legal systems associated with the occupation and the business/industry; and will demonstrate legal and ethical behavior, safety practices, interpersonal and teamwork skills, and appropriate written and verbal communication skills using the terminology of the occupation and the business/industry.

RADR 1262 Clinical-Medical Technology/Radiographer**0-16**

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.

End-of-Course Outcomes: As outlined in the learning plan, apply the theory, concepts, and skills involving specialized materials, tools, equipment, procedures, regulations, laws, and interactions within and among political, economic, environmental, social, and legal systems associated with the occupation and the business/industry; and will demonstrate legal and ethical behavior, safety practices, interpersonal and teamwork skills, and appropriate written and verbal communication skills using the terminology of the occupation and the business/industry.

RADR 1201 Introduction to Radiology and Patient Care

0-3

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.

End-of-Course Outcomes: Define basic medical terms; identify ethical and legal standards; explain basic radiation protection practices; and relate the role of radiography to health care.

RADR 1411 Basic Radiographic Procedures

2-3

An introduction to radiographic positioning terminology, manipulation of equipment, positioning and alignment of the anatomic structure and equipment, and evaluation of images for demonstration of basic anatomy.

End-of-Course Outcomes: Define radiographic positioning terms; manipulate equipment; perform basic level procedures in positioning; align anatomic structures and equipment; and evaluate images.

RADR 2217 Radiographic Pathology

0-2

Disease processes and their appearance on radiographic images.

End-of-Course Outcomes: Classify types of diseases; explain the pathogenesis of common diseases; differentiate between normal and abnormal radiographic findings; and correlate normal and abnormal radiographic findings.

RADR 2401 Intermediate Radiographic Procedures

2-4

Prerequisite: RADR 1411

A continuation of the study of the manipulation of radiographic equipment, positioning and alignment of the anatomic structure and equipment, and evaluation of images for demonstration of anatomy.

End-of-Course Outcomes: Manipulate equipment; perform intermediate level procedures in positioning; align anatomic structures and equipment; and evaluate images.

RADR 2205 Principles of Radiographic Imaging II

0-3

Prerequisite: RADR 1213

Radiographic image quality and the effects of exposure variables, and the synthesis of all variables in image production.

End-of-Course Outcomes: Analyze image quality; utilize procedures for minimizing patient exposure; and adapt technical variables to changing conditions.

RADR 2309 Radiographic Imaging Equipment

0-3

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.

End-of-Course Outcomes: Differentiate between conventional and digital equipment; explain the physics of x-ray production; describe x-ray circuits; and relate conventional and digital equipment components to the imaging process.

RADR 2313 Radiation Biology and Protection

0-3

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.

End-of-Course Outcomes: Describe the biophysical mechanisms of radiation damage on humans; indicate typical dose ranges for routine radiographic procedures; describe basic methods and instruments for radiation monitoring, detection, and measurement; and implement radiation protection practices.

RADR 2333 Advanced Medical Imaging

0-3

An exploration of specialized imaging modalities.

End-of-Course Outcomes: Describe the various specialized imaging modalities; and differentiate between images produced by different modalities and identify the anatomy demonstrated.

RADR 2235 Radiologic Seminar (Capstone)

0-3

A capstone course focusing on the synthesis of professional knowledge, skills, and attitudes in preparation for professional employment and lifelong learning.

End-of-Course Outcomes: Demonstrate entry level proficiency in knowledge, skills, and attitudes necessary for professional employment; and articulate the need for lifelong learning.

RADR 2261 Clinical-Medical Technology/Radiographer

0-16

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.

End-of-Course Outcomes: As outlined in the learning plan, apply the theory, concepts, and skills involving specialized materials, tools, equipment, procedures, regulations, laws, and interactions within and among political, economic, environmental, social, and legal systems associated with the occupation and the business/industry; and will demonstrate legal and ethical behavior, safety practices, interpersonal and teamwork skills, and appropriate written and verbal communication skills using the terminology of the occupation and the business/industry.

RADR 2262 Clinical-Medical Technology/Radiographer

0-16

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.

End-of-Course Outcomes: As outlined in the learning plan, apply the theory, concepts, and skills involving specialized materials, tools, equipment, procedures, regulations, laws, and interactions within and among political, economic, environmental, social, and legal systems associated with the occupation and the business/industry; and will demonstrate legal and ethical behavior, safety practices, interpersonal and teamwork skills, and appropriate written and verbal communication skills using the terminology of the occupation and the business/industry.

RADR 2331 Advanced Radiographic Procedures

0-3

Prerequisite: RADR 2401

Positioning and alignment of anatomic structures and equipment, evaluation of images for demonstration of anatomy and related pathology.

End-of-Course Outcomes: Perform advanced level procedures in positioning; align anatomic structures and equipment; and evaluate images.