

RADIOLOGIC TECHNOLOGY (RAD)

RAD 1502 Radiographic Procedures I 3 s.h.

This course includes content designed to provide the knowledge necessary to perform imaging procedures. The student will be introduced to radiographic terminology. Radiographic anatomy, positioning and image evaluation of the chest, abdomen, upper extremities, shoulder girdle, and lower extremities are emphasized.

Prereq.: Admission to the Radiologic Technology Program.

Coreq.: RAD 1502L.

RAD 1502L Radiographic Procedures I Lab 1 s.h.

This course includes content designed to provide the knowledge necessary to perform imaging procedures. The student will be introduced to radiographic terminology. Radiographic anatomy, positioning and image evaluation of the chest, abdomen, upper extremities, shoulder girdle, and lower extremities are emphasized.

Prereq.: Admission to the Radiologic Technology Program.

Coreq.: RAD 1502.

RAD 1503 Clinical Practice I 1 s.h.

Selected and supervised clinical education experiences are planned to reinforce learning and provide the student with clinical education opportunities to apply principles and techniques of radiographic procedures discussed in lecture. 15 hours per week of clinical.

Prereq.: Admission to the Radiologic Technology Program.

RAD 1504 Introduction to Radiologic Science and Patient Care 2 s.h.

Venipuncture technique, body mechanics, vital signs, aseptic and non-aseptic technique, hospital emergencies, comfort measures, transporting, contrast media and pharmacology are included. The student will also learn the history of radiology, basic radiation protection, production and control of the x-ray beam, professionalism, ethical and legal considerations, and medical terminology.

Prereq.: Admittance to the Radiology Program.

RAD 1505 Radiographic Imaging Equipment and Exposure 3 s.h.

Emphasis is placed on overall image quality and technical factors affecting patient dosage and basic problem-solving techniques. This course concentrates on both computer and digital radiology.

Prereq.: Admission to Radiographic Technology Program.

RAD 1506 Radiographic Procedures II 3 s.h.

This course includes content designed to provide the knowledge necessary to perform imaging procedures. Radiographic anatomy, positioning, and image evaluation of the femur, pelvic girdle, vertebral spine, and bony thorax are emphasized.

Prereq.: C or better in RAD 1502.

Prereq. or Coreq.: RAD 1506L.

RAD 1506L Radiographic Procedures II Lab 1 s.h.

This course includes content designed to provide the knowledge necessary to perform imaging procedures. Radiographic anatomy, positioning, and image evaluation of the femur, pelvic girdle, vertebral spine, and bony thorax are emphasized.

Prereq. or Coreq.: RAD 1506.

RAD 1507 Clinical Practice II 2 s.h.

Selected and supervised clinical experiences are planned to reinforce learning and provide the student with clinical education opportunities to apply principles and techniques of radiographic procedures discussed in theory and lab. 15 hours of clinical per week.

Prereq.: C or better in RAD 1503.

RAD 1508 Clinical Practice III 3 s.h.

This course is a continuation of Clinical Practice I and Clinical Practice II. Selected and supervised clinical experiences are planned to reinforce learning and provide the student with clinical education opportunities to apply principles and techniques of radiographic procedures discussed in theory and lab. Students focus on indirect supervision and becoming more independent with previously mastered skills.

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RAD 2600 Radiographics Procedures III 2 s.h.

This course includes content designed to provide the knowledge necessary to perform imaging procedures. Radiographic anatomy, positioning, and image evaluation of the cranium and facial bones, biliary tract, upper and lower gastrointestinal system, and urinary system are emphasized. Radiographic variations for trauma, pediatric, geriatric, and atypical patients are studied. Special modalities and interventional procedures and the use of contrast media for a variety of these procedures is studied.

Prereq.: C or better in both RAD 1502/L and RAD 1506/L.

Prereq. or Coreq.: RAD 2600L.

RAD 2600L Radiographics Procedures III Lab 1 s.h.

Radiographic anatomy, positioning, and image evaluation of the cranium and facial bones, biliary tract, upper and lower gastrointestinal system, and urinary system are emphasized. Radiographic variations for trauma, pediatric, geriatric, and atypical patients are studied. Special modalities and interventional procedures and the use of contrast media for a variety of these procedures is studied.

Prereq.: C or better in both RAD 1502/L and RAD 1506/L.

Coreq.: RAD 2600.

RAD 2601 Radiation Biology and Protection 3 s.h.

Radiation health and safety requirements of federal and state regulatory agencies, accreditation agencies and health care organizations are incorporated. An overview of the principles of the interaction of radiation with living systems is provided. Radiation effects on molecules, cells, tissues, and the body are presented. Factors affecting biological response are presented, including acute and chronic effects of radiation.

RAD 2602 Radiographic Physics 2 s.h.

The production and properties of x-ray, x-ray tubes, circuits and equipment are emphasized. Mathematical solutions of practical problems are included.

RAD 2603 Clinical Practice IV 3 s.h.

Selected and supervised clinical experiences are planned to reinforce learning and provide the student with clinical education opportunities to apply principles and techniques of radiographic procedures discussed in lecture. Students become more confident with indirect supervision and more independent with mastered skills. 22.5 hours of clinical per week.

Prereq.: C or better in RAD 1508.

RAD 2604 Radiographic Pathology 3 s.h.

This course introduces theories of disease causation and pathophysiological disorders that comprise health systems. The content provides a basis for analyzing radiographic images and their application to radiologic modalities. It includes etiology, pathophysiological responses, clinical manifestations, radiographic appearance, and management of alterations in body systems; the importance of minimum imaging standards; discussion of a problem-solving technique for image evaluation and the factors that can affect image quality.

RAD 2605 Clinical Practice V 3 s.h.

Selected and supervised clinical experiences are planned to reinforce learning and provide the student with clinical education opportunities to apply principles and techniques of radiographic procedures discussed in lectures. Students can perform all exams and focus on autonomy during previously mastered skills with a registered radiologic technologist's supervision. 22.5 hours of clinical per week.

Prereq.: C or better in RAD 2603.

RAD 2606 Radiology Registry Review Seminar 3 s.h.

This course focuses on preparing students for the AART National Registry Exam. This course is a comprehensive review of important aspects of the entire radiography program in preparation for the ARRT National Certification Exam. Mock registry exams and group review will be completed to reinforce subject material discussed in previous courses.