

RADIOLOGIC TECHNOLOGY (RAD)

RAD 1502 Radiographic Procedures I 3 s.h.

Emphasis is placed on basic radiographic procedures of the chest, boney thorax, and abdomen, upper Coreq.: RAD 1502L.

Emphasis is placed on basic radiographic procedures of the chest, boney thorax, and abdomen, upper **Prereq.:** Admission to the Radiologic Technology Program.

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

Emphasis is placed on basic radiographic procedures of the chest, boney thorax, and abdomen, upper 3 hour lab. Coreq.: RAD 1502.

Emphasis is placed on basic radiographic procedures of the chest, boney thorax, and abdomen, upper **Prereq.:** Admission to the Radiologic Technology Program.

RAD 1503 Directed Practice I 1 s.h.

Selected and supervised clinical education experiences are planned to reinforce learning and provide the student with clinical education opportunities in which to apply principles and techniques of radiographic procedures discussed in theory and lab. 7.5 hours per week of clinical supervision.

Prereq.: Admission to the Radiologic Technology Program.

RAD 1504 Methods of Patient Care with an Introduction to Radiology 2 s.h.

This course will provide the student radiographer with the basic concepts of patient care. Venipuncture technique, body mechanics, vital signs, asepsis, 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, medico legal considerations, medical terminology and the responsibilities of the radiographer. 2 Lecture Hours.

Prereq.: Admittance to the Radiology Program.

Coreq.: RAD 1504L.

RAD 1504L Methods of Patient Care with an Intro to Radiology 1 s.h.

This course will provide the student radiographer with the basic concepts of patient care. Venipuncture technique, body mechanics, vital signs, asepsis, 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, medico legal considerations, medical terminology and the responsibilities of the radiographer. 3 hour lab.

Coreq.: RAD 1504.

RAD 1505 Radiography I 3 s.h.

Lecture and laboratory sessions focus on the primary factors of radiographic exposure and on proper utilization of accessory devices such as grids, intensifying screens and beam limiting devices. 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. During laboratory sessions, educational experiences are planned to provide the student with opportunities to apply classroom theories. Lecture = 3 credit hours.

Prereq.: RAD 1502, RAD 1503, and RAD 1504.

Coreq.: RAD 1505L.

RAD 1505L Radiography I Lab 1 s.h.

Lecture and laboratory sessions focus on the primary factors of radiographic exposure and on proper utilization of accessory devices such as grids, intensifying screens and beam limiting devices. 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. During laboratory sessions, educational experiences are planned to provide the student with opportunities to apply classroom theories. 3 hour lab.

Coreq.: RAD 1505.

RAD 1506 Radiographic Procedures II 4 s.h.

This course includes radiographic procedures of the lumbar and dorsal spines as well as the sacrum and coccyx, cranium, facial bones, body system, special modalities and interventional procedures. Radiographic variations for trauma pediatric, geriatric and atypical patients are also studied. Emphasis is on anatomy, patient positioning and use of contrast media for a variety of invasive techniques. : RAD 1502, RAD 1503, & RAD 1504. Prereq. or Coreq.: RAD 1506L.

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

This course includes radiographic procedures of the lumbar and dorsal spines as well as the sacrum and coccyx, cranium, facial bones, body system, special modalities and interventional procedures. Radiographic variations for trauma pediatric, geriatric and atypical patients are also studied. Emphasis is on anatomy, patient positioning and use of contrast media for a variety of invasive techniques. or Coreq.: RAD 1506.

RAD 1507 Directed Practice II 2 s.h.

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

RAD 1508 Directed Practice III 3 s.h.

Selected and supervised clinical experiences are planned to reinforce learning and provide the student with clinical education opportunities in which to apply principles and techniques of radiographic procedures discussed in theory and lab. 1 Lecture Hour.

Prereq.: RAD 1507.

Prereq. or Coreq.: RAD 1508C.

RAD 2601 Radiography II 2 s.h.

This course focuses on the more advanced principles of radiographic imaging such as specialized equipment, advanced problem-solving and the technical aspects of quality assurance. Concentrating on the principles of radiation protection, topics also include: principles of radiobiology, effects of radiation and health physics. During laboratory sessions, educational experiences are planned to provide the student with opportunities to apply classroom theories. Lecture Hours = 2.

Prereq.: RAD 1508 and RAD 1508L.

Coreq.: RAD 2601L.

RAD 2601L Radiography II Lab 1 s.h.

This course focuses on the more advanced principles of radiographic imaging such as specialized equipment, advanced problem-solving and the technical aspects of quality assurance. Concentrating on the principles of radiation protection, topics also include: principles of radiobiology, effects of radiation and health physics. During laboratory sessions, educational experiences are planned to provide the student with opportunities to apply classroom theories. 3 hour lab.

Coreq.: RAD 2601.

RAD 2602 Radiologic Physics 2 s.h.

General theories of physics including units of measurement; mechanics; structure of matter; electrostatics; magnetism; electro-dynamics-electrical circuits; fundamentals of electromagnetism; and rectification are presented. The production and properties of x-ray, x-ray tubes, circuits and equipment are emphasized. Mathematical solutions of practical problems are included.

RAD 2603 Directed Practice IV 3 s.h.

Selected and supervised clinical education experiences are planned to reinforce learning and provide the student with clinical education opportunities in which to apply principles and techniques of radiographic procedures discussed in theory and lab. 37.5 hours per week of clinical supervision.

Prereq.: RAD 1508.

RAD 2605 Directed Practice V 3 s.h.

Selected and supervised clinical experiences are planned to reinforce learning and provide the student with clinical education opportunities in which to apply principles and techniques of radiographic procedures discussed in theory/lab. 22.5 hours per week of clinical supervision.

Prereq.: RAD 2603.