RADIOGRAPHY

For the Radiography program, please see the Medical Imaging section of the catalog.

RAD 100. Introduction to Radiology. 2 Credits.
Introduces the health care team and various aspects of radiological sciences. Includes medical ethics, professional organizations, medicolegal considerations, communication, cultural diversity, basic radiation protection, fundamental technical components, radiological history, health care organizations and medical specialties. Department permission required.

RAD 101. Radiographic Positioning I. 3 Credits.
Introduces basic positioning techniques used in radiography of the respiratory system, abdomen, upper and lower extremities. Lab includes peer positioning, film critique, anatomical identification, pathologies and an energized section using phantoms. Department permission required.

RAD 102. Radiographic Positioning II. 3 Credits.
Basic positioning techniques used in radiography of the digestive system, urinary system and continuation of the upper and lower extremities. Lab includes peer positioning, film critique, anatomical identification, pathologies and an energized section using phantoms. Department permission required. Prerequisite: RAD 101.

RAD 103. Radiographic Positioning III. 3 Credits.
Basic positioning techniques used in radiography of the bony thorax, spinal column and pelvic girdle. Lab includes peer positioning, film critique, anatomical identification, pathologies and an energized section using phantoms. Department permission required. Prerequisite: RAD 102.

RAD 105. Methods of Patient Care. 3 Credits.
Covers general care of patients in radiology department. Emphasizes radiographer’s role regarding patient care with cardiac arrest, vital signs, accident victims, bedside procedures, aseptic techniques, contagious disease control, blood borne pathogens, venipuncture, administration of medication and contrast media reactions. Introduces fundamentals of urinary catheterization. Lab provides application of theory. Department permission required.

RAD 106. Radiographic Equipment I. 4 Credits.
Covers fundamental concepts of energy and measurements, atomic structures, molecules, electricity, magnetism, electromagnetism, transformers, and rectifiers. Department permission required.

RAD 107. Radiographic Equipment II. 4 Credits.
Covers generators, timers, x-ray tubes, recording devices, physiology of sight, image intensifiers, television camera/monitors, digital radiography, mobile radiography and fluoroscopic equipment, tomography and teleradiography. Department permission required. Prerequisite: RAD 106.

RAD 110. Radiographic Clinic I. 4 Credits.
Provides clinical education experience in an affiliated hospital radiology department under the supervision of a registered radiographer and radiologist. Includes application of equipment manipulation and operation, radiological imaging procedures, radiation protection, medicolegal and ethical protocol, record keeping and patient care. Requires clinical competencies, objectives, performance assessment and attendance. Department permission required.

RAD 115. Principles of Exposure I. 3 Credits.
Covers production and control of scattered radiation, stereo radiography, grid technique, filtration, half value layer, magnification, contrast and density principles. Lab includes application of theories using energized equipment and test tools. Department permission required. Prerequisite: RAD 106.

RAD 120. Radiographic Clinic II. 4.5 Credits.
Provides clinical education experience in an affiliated hospital radiology department under the supervision of a registered radiographer and radiologist. Includes application of equipment manipulation and operation, radiological imaging procedures, radiation protection, medicolegal and ethical protocol, recordkeeping and patient care. Requires clinical competencies, objectives, performance assessment and attendance. Department permission required. Prerequisite: RAD 110.

RAD 122. Radiation Protection - Biology. 3 Credits.
Introduces biological effects of ionizing radiation and application of principles to minimize the risks of man-made radiation. Examines standards and requirements determined by government guidelines. Department permission required. Prerequisite: RAD 106.
RAD 220. Radiographic Clinic VI. 6.5 Credits.
Provides clinical education experience in an affiliated hospital radiology
department under the supervision of a registered radiographer and radiologist.
Includes application of equipment manipulation and operation, radiological
imaging procedures, radiation protection, medicolegal and ethical protocol,
record keeping and patient care. Requires clinical competencies, objectives,
performance assessment and attendance. Department permission required.
Prerequisite: RAD 210.

RAD 230. Radiographic Clinic VII. 9 Credits.
Provides clinical education experience in an affiliated hospital radiology
department under the supervision of registered radiographer and radiologist.
Includes application of equipment manipulation and operation, radiological
imaging procedures, radiation protection, medicolegal and ethical protocol,
recordkeeping, and patient care. Requires clinical competencies, objectives,
performance assessment and attendance. Department permission required.
Prerequisite: RAD 220.

RAD 240. Radiographic Clinic VIII. 7 Credits.
Provides clinical education experience in affiliated hospital radiology
department under supervision of registered radiographer and radiologist.
Includes application of equipment manipulation and operation, imaging
radiological procedures, radiation protection and patient care. Requires
clinical competencies, completion of clinical objectives, clinical assessments,
attendance and terminal clinical competencies in radiological imaging.
Department permission required. Prerequisite: RAD 230.