

Radiographic Sci (RS)

Courses

RS 1105 Introduction to Radiographic Science: 1 semester hour.

History of the profession, responsibilities of the technologist, professional development, radiation protection, areas of specialization. F, S, W

RS 3310 Radiographic Methods I: 2 semester hours.

Introduces the student to basic terminology, theory and principles of anatomy, and positioning of the chest, abdomen, and upper extremities. F

RS 3311 Radiographic Methods II: 2 semester hours.

Introduces the student to basic theory and principles of radiographic procedures of the lower limb, femur, pelvic girdle, cervical/thoracic/lumbar spine, sacrum coccyx, and upper gastrointestinal system. S

RS 3312 Radiographic Methods III: 2 semester hours.

Continuation of 3311 emphasizing theory and principles of radiographic examinations of the lower gastrointestinal system, bony thorax, skull and cranial bones, facial bones, paranasal sinuses, and urinary system. F

RS 3320 Radiographic Imaging Applications: 1 semester hour.

Exploration of the methodology of various types of radiographic recording media applications including image acquisition, image processing, and image manipulation for compound radiography (CR), digital radiography (DR), and x-ray film screen. F

RS 3320L Radiographic Imaging Applications Laboratory: 1 semester hour.

Laboratory experience with photographic technique including image recording media, acquisition, manipulation of CR/DR, and film screen methods. F

RS 3325 Patient Care in Radiography: 3 semester hours.

Introduction to patient care principles and procedures utilized in radiography including vital signs, body mechanics, catheterization, sterile procedures, drug administration, isolation techniques and medical emergency procedures. F

RS 3330 Radiographic Exposure: 3 semester hours.

Determination of radiographic exposure values with emphasis on radiographic quality and equipment used in the production of radiographs. COREQ: RS 3330L. F

RS 3330L Radiographic Exposure Lab: 0 semester hours.

Assignments to apply principles from RS 3330. COREQ: RS 3330. F

RS 3340 Laboratory Practicum I: 1 semester hour.

Designed to develop pre-clinical competency in routine hospital procedures and radiographic tasks, basic x-ray interpretation, patient management, communications, and manipulation of x-ray equipment. F

RS 3341 Laboratory Practicum II: 1 semester hour.

Designed to develop pre-clinical competency in routine hospital procedures and radiographic tasks, basic x-ray interpretation, patient management, communications, and manipulation of x-ray equipment. COREQ: RS 3311. S

RS 3342 Laboratory Practicum III: 1 semester hour.

Designed to develop pre-clinical competency in routine hospital procedures and radiographic tasks, basic x-ray interpretation, patient management, communications, and manipulation of x-ray equipment. COREQ: RS 3312. S

RS 3375 Pediatric Radiography: 1 semester hour.

Study of the theory and clinical application of pediatric radiography. S

RS 3388 Radiation Protection: 1 semester hour.

Topics include: x-ray interaction with matter, quantities and units of radiation, biological effects of ionizing radiation, MPD, radiation detection instruments, methods to minimize radiation exposure to patients and personnel, and U.S. Government radiation control standards. S

RS 3389 Applied Radiography I: 4 semester hours.

Clinical applications of radiographic examinations with emphasis on the chest, abdomen, and upper limbs. F

RS 3390 Applied Radiography II: 4 semester hours.

Clinical applications of radiographic examinations with emphasis on the lower extremity, hips, and pelvis. S

RS 4421 Computed Tomography: 1 semester hour.

Basics of computed tomography covering fundamentals, equipment and instrumentation, data acquisition, image processing, reconstruction, patient safety, image quality, procedures, cross-sectional anatomy, and additional applications. Su

RS 4430 Radiologic Pathology: 2 semester hours.

Study of the pathological processes of various diseases and disorders with emphasis on the demonstration of pathology on radiographs. S

RS 4441 Advanced Radiographic Methods I: 1 semester hour.

Advanced methodology, theory and principles of radiographic procedures. Designed to develop proficiency in performance of specialized radiographic examinations. PREREQ: RS 3312 and RS 3342. S

RS 4450 Alternate Imaging Modalities with Introduction to Evidence-Based Research: 1 semester hour.

An introduction to Alternate Imaging Modalities such as CT and MRI with an emphasis on evidence-based research in radiographic science. F

RS 4460 Introduction to Radiographic Quality Assurance: 2 semester hours.

Study and application of equipment maintenance procedures to assure consistency in the contrast, density/brightness, and sharpness of radiographic images. F

RS 4470 Advanced Radiographic Exposure: 2 semester hours.

In-depth study in establishing radiographic exposure values; digital fluoroscopy; image intensification; and CR, DR, EMR, and PACS systems. S

RS 4475 Registry Review: 2 semester hours.

In-depth study of material that may be presented on the written registry review administered by the American Registry of Radiologic Technologists (ARRT). S

RS 4481 Independent Problems in Radiography: 1-2 semester hours.

Study of topics in radiography selected by students and faculty. May be repeated for up to 4 credits. D

RS 4488 Applied Radiography III: 5 semester hours.

Clinical application of radiographic examinations with emphasis on the pediatric chest, non-ambulatory chest, cervical, thoracic, lumbar spine, sacrum/coccyx, and gastrointestinal procedures. Su

RS 4489 Applied Radiography IV: 6 semester hours.

Clinical application of radiographic examinations performed in a trauma, mobile, and surgical setting. F

RS 4490 Applied Radiography V: 6 semester hours.

Clinical application of radiographic examinations including ribs, head radiography, urinary system, arthrography, and myelography. S

RS 4491 Seminar-Selected Topics: 1-6 semester hours.

Group studies of topics not covered in regular offerings. May be repeated for up to 6 credits with different content. PREREQ: Permission of instructor. D

RS 4495 Internship in Special Diagnostic Imaging: 2 semester hours.

Eight week internship providing opportunity to participate in diagnostic examinations requiring a special modality, e.g. peripheral or cardiac angiography, computerized tomography, ultrasound, magnetic resonance. PREREQ:

Permission of instructor. D