

RADIOLOGIC TECHNOLOGY (RAD)

RAD 301. Basic Patient Care. 2 Hours.

This course discusses patient assessment and interaction skills, infection control and emergency and safety procedures, venipuncture and peripheral intravenous access, and basic pharmaceuticals common to medical imaging. Students must also register for RAD 302.

RAD 302. Basic Patient Care Lab. 1 Hour.

This course focuses on the practice and application of common patient care skills during imaging procedures. Students must also register for RAD 301.

RAD 303. Radiologic Anatomy. 3 Hours.

This course examines human anatomy of the skeletal, gastrointestinal, genitourinary, cardiovascular, and central nervous systems as demonstrated on radiologic images.

RAD 304. Radiographic Procedures I. 3 Hours.

This course focuses on radiographic positioning of the chest, abdomen, extremities, and vertebral column.

RAD 305. Radiographic Procedures Lab I. 1 Hour.

This course provides guided practice in principles of radiographic positioning. Laboratory session to accompany RAD 304.

RAD 306. Imaging Foundations I. 3 Hours.

This course is a study of the fundamental concepts related to electromagnetic radiation, generators, transformers, and basic circuitry of the x-ray unit; to culminate in an understanding of x-ray production, filtration, spectral analysis, interactions and x-ray energy and matter. Prime factors that affect x-ray emission are included.

RAD 307. Clinical Practicum I. 2 Hours.

This course provides supervised clinical experience in an affiliated hospital or clinic setting where students apply theories, concepts, and skills in patient care, positioning, image acquisition and processing, and radiation protection.

RAD 308. Radiographic Procedures II. 3 Hours.

This course focuses on radiographic positioning of the cranium, gastrointestinal structures, and genitourinary structures. Prerequisite: RAD 304 and RAD 305.

RAD 309. Radiographic Procedures II Lab. 1 Hour.

This course provides guided practice in principles of radiographic positioning. Laboratory session to accompany RAD 308. Prerequisites: RAD 304 and RAD 305.

RAD 310. Imaging Foundations II. 3 Hours.

This course is a study of image characteristics including IR exposure, contrast, spatial resolution and distortion; digital image capture systems, informatics in medical imaging, image critique, and quality management. Prerequisite: RAD 306.

RAD 311. Special Imaging Procedures. 3 Hours.

This course discusses advanced radiologic procedures emphasizing pharmacology, the use of radiologic contrast media, and the equipment used during these procedures.

RAD 312. Radiation Protection and Radiobiology. 3 Hours.

This course details the principles and practices of the safe application of radiation and of the responses of biological systems to irradiation.

RAD 313. Clinical Practicum II. 3 Hours.

This course provides a continuation of supervised clinical experience in an affiliated hospital or clinic setting where students apply theories, concepts, and skills in patient care, positioning, image acquisition and processing, and radiation protection. Prerequisite: RAD 307.

RAD 314. Radiographic Sectional Anatomy. 3 Hours.

This course examines human sectional anatomy in transverse, longitudinal, and coronal planes with an emphasis on the organs of interest in Computed Tomography and Magnetic Resonance Imaging.

RAD 315. Clinical Practicum III. 3 Hours.

This course provides a continuation of supervised clinical experience in an affiliated hospital or clinic setting where students apply theories, concepts, and skills in patient care, positioning, image acquisition and processing, and radiation protection. Prerequisites: RAD 307 and RAD 313.