

RADIOGRAPHY (RAD)

RAD 101 Radiographic Procedures I (4 credits)

This is an introductory radiography course which includes fundamentals such as patient positioning, equipment manipulation, terminology and radiographic image review. Students will also be introduced to the requirements of the profession.

RAD 104C Clinical Practice II Clinical (3 credits)

This clinical course is designed to reinforce the fundamentals of performing radiographic procedures. In addition, contrast agents used to enhance anatomical structures will be introduced.

Prerequisites: (RAD 122 or RAD 122C) and RAD 123

Attributes: Undergraduate

RAD 104L Clinical Practice II Lab (0 credits)

This clinical course is designed to reinforce the fundamentals of performing radiographic procedures. In addition, contrast agents used to enhance anatomical structures will be introduced. Students who register for RAD 104 must also register for a RAD 104 lab. For example, if you register for RAD 104 you must, at the same time, register for a section of RAD 104L.

Attributes: Undergraduate

RAD 122C Clinical Practice I Clinical (0 credits)

This clinical course is designed to introduce the student to the fundamentals of radiographic positioning. Basic terminology and radiographic examinations will be emphasized. Students who register for RAD 122 must also register for a RAD 122 clinical. For example, if you register for RAD 122 you must, at the same time, register for a section of RAD 122C.

Attributes: Undergraduate

RAD 122L Clinical Practice I Lab (3 credits)

This clinical course is designed to introduce the student to the fundamentals of radiographic positioning. Basic terminology and radiographic examinations will be emphasized.

Attributes: Undergraduate

RAD 123 Radiographic Procedures II (3-4 credits)

This course is a continued study of radiographic procedures to include appendicular skeleton, axial skeleton, and digestive system anatomy and positioning.

Prerequisites: RAD 101 and RAD 122

Restrictions: Enrollment is limited to students with a major in Radiography.

Attributes: Undergraduate

RAD 131 Radiologic Science I (2 credits)

This course will cover basic radiation physics and the radiographic imaging system. The image production process will also be introduced.

Restrictions: Enrollment is limited to students with a major in Radiography.

Attributes: Undergraduate

RAD 132 Radiologic Science II (3 credits)

Instruction on the image production process is continued. Establish knowledge of image components and quality. Discuss digital imaging and the principles of radiation protection.

Prerequisites: RAD 131

Restrictions: Enrollment is limited to students with a major in Radiography.

Attributes: Undergraduate

RAD 201 Radiographic Procedures III (3 credits)

This course is a study of radiographic anatomy, procedures and equipment manipulation. Trauma, surgical and portable radiography will be presented. Radiographic ethics, pediatrics, and geriatrics will be discussed.

Prerequisites: RAD 123 and RAD 104

Restrictions: Enrollment is limited to students with a major in Radiography.

Attributes: Undergraduate

RAD 221 Adv Radiographic Procedures I (4 credits)

This course emphasizes specialized positioning and more advanced imaging procedures. Imaging contrast and pharmacology will be discussed.

Prerequisites: RAD 201

Restrictions: Enrollment is limited to students with a major in Radiography.

Attributes: Undergraduate

RAD 222C Clinical Practice III Clinical (0 credits)

This clinical course is designed to allow students to gain proficiency when performing fundamental radiographic procedures. Imaging modifications when performing a non-routine examination and/or contrast administration will be emphasized. Students who register for RAD 222 must also register for a RAD 222 clinical. For example, if you register for RAD 222 you must, at the same time, register for a section of RAD 222C.

Attributes: Undergraduate

RAD 222L Clinical Practice III Lab (5 credits)

This clinical course is designed to allow students to gain proficiency when performing fundamental radiographic procedures. Imaging modifications when performing a non-routine examination and/or contrast administration will be emphasized.

Prerequisites: (RAD 104 or RAD 104L) and RAD 132

Attributes: Undergraduate

RAD 223 Adv Radiographic Procedures II (4 credits)

This course is the study of radiographic pathology and image analysis. Intravenous pyelograms and barium enema procedures will also be presented. In addition, radiographic procedural and science content is reviewed to prepare the student for the American Registry of Radiologic Technologist (ARRT) registry examination.

Prerequisites: RAD 131

RAD 224C Clinical Practice IV (5 credits)

This course is designed for the student to gain proficiency in the imaging examinations taught throughout the radiography curriculum. Image critique and radiographic pathology will be emphasized.

Prerequisites: (RAD 222 or RAD 222L) and RAD 223 (may be taken concurrently) and RAD 240 (may be taken concurrently)

Attributes: Undergraduate

RAD 224L Clinical Practice IV Lab (0 credits)

This course is designed for the student to gain proficiency in the imaging examinations taught throughout the radiography curriculum. Image critique and radiographic pathology will be emphasized. Students who register for RAD 224 must also register for a RAD 224 lab. For example, if you register for RAD 224 you must, at the same time, register for a section of RAD 224L.

Attributes: Undergraduate

RAD 233 Radiologic Science III (1 credit)

Continuation of digital imaging and factors affecting image quality. Introduction to specialized radiographic imaging and equipment. Quality control and quality assurance in radiography are presented.

Prerequisites: RAD 132

Restrictions: Enrollment is limited to students with a major in Radiography.

Attributes: Undergraduate

RAD 240 Radiation Biology (1 credit)

This course includes an overview of cell biology and the damage electromagnetic radiation causes to the cell. In addition, early and late radiation effects on the organ systems are presented.

Prerequisites: RAD 233

RAD 301 Computed Tomography Prin (3 credits)

The course includes in-depth instruction and guidance in the study of the principles of computerized tomography (CT). Successful students will be prepared to take the ARRT CT examination and will also be prepared for entry level practice as a CT technologist. Areas of instruction include imaging processes and procedures, CT physics, patient care and radiation protection processes.

RAD 302 Computed Tomography Clinical (1-5 credits)

This course is designed to provide the technologist with the clinical experience to apply for the ARRT advanced certification CT scan examination. Instruction will emphasize radiation protection, pathology, CT protocols, patient care and contrast media use and preparation explicit to CT scanning.

Prerequisites: RAD 301

RAD 311 Mag Resonance Imaging Theory (3 credits)

The course provides an introduction to magnetic resonance imaging (MRI). Areas of instruction include patient care, imaging procedures and physics, instrumentation, and ARRT MRI registry preparation.

RAD 360 Mammography (3 credits)

This course is designed to provide radiologic technologists with specific education required for advanced certification in mammography. This course includes breast anatomy and physiology, fundamental mammography positioning, pathology and treatment of breast disease and interventional procedures. Additionally, the foundational concepts of both analog and digital mammographic equipment, quality assurance and quality control equipment and film critique will be discussed.

RAD 361C Mammography Clinical (1 credit)

Instruction in this course is designed to provide the radiologic technologist with the clinical experience required for advance certification in mammography. Students will engage in mammography exams, quality control tests, patient education, interventional and special examinations of the breast and radiographic image analysis.

Prerequisites: RAD 360

Attributes: Undergraduate