RADIOGRAPHY (RAD)

RAD 105 Introduction to Radiology, Protection and Patient Care (2 CR.)
Presents brief history of radiologic profession, code of ethics, conduct for radiologic students, and basic fundamentals of radiation projection. Teaches the care and handling of the sick and injured patient in the Radiology Department. Introduces the use of contrast media necessary in the investigation of the internal organs. Lecture 2 hours per week.

RAD 115 Princ/of Magnetic Resonance Imaging (3 CR.)
Prerequisite is ARRT or ELIgible. Presents concepts of magnetic imaging, magnetic physics, fundamentals of magnetic resonance, and application of these principles. Lecture 3 hours per week.

RAD 121 Radiographic Procedures I (4 CR.)
Introduces procedures for positioning the patient's anatomical structures relative to X-ray beam and image receptor. Emphasizes procedures for routine examination of the chest, abdomen, extremities, and axial skeleton. Lecture 3 hours. Laboratory 3 hours. Total 6 hours per week.

RAD 125 Patient Care Procedures (3 CR.)
Presents the care and handling of the sick and injured patient in the Radiology Department. Introduces the fundamentals of nursing procedures, equipment, and supplies specific to radiology. Lecture 3 hours per week.

RAD 131 Elementary Clinical Procedures I (3 CR.)
Develops advanced technical skills in fundamental radiographic procedures. Focuses on manipulation of equipment, patient care, osseous studies, skull procedures, and contrast studies. Provides clinical experience in cooperating health agencies. Clinical 15 hours per week.

RAD 135 Elementary Clinical Procedures II (5 CR.)
Introduces advanced technical skills in fundamental radiographic procedures. Focuses on basic contrast media studies, osseous studies, and skull procedures. Provides clinical experiences in health care agencies. Clinical 25 hours per week.

RAD 136 Clinical Procedures For MRI (2 CR.)
Develops technical skills in Magnetic Resonance procedures. Focuses on manipulation of equipment, patient care, and procedures. Clinical 10 hours per week.

RAD 141 Principles of Radiographic Quality I (4 CR.)
Presents factors that control and influence radiographic quality, as well as, various technical conversion factors useful in radiography. Discusses automatic film processing, sensitometry, and quality assurance testing. Lecture 3 hours. Laboratory 3 hours. Total 6 hours per week.
Prerequisite(s) Admission to Program

RAD 142 Principles of Radiographic Quality II (4 CR.)
Presents factors that control and influence radiographic quality, as well as, various technical conversion factors useful in radiography. Discusses automatic film processing, sensitometry, and quality assurance testing. Lecture 3 hours. Laboratory 3 hours. Total 6 hours per week.
Prerequisite(s) Admission to Program

RAD 195 Topics In: (1-5 CR.)
Exploration of topical areas of interest to or needed by students. May be used also for special honors courses. May be repeated for credit. Variable hours.

RAD 196 On-Site Training (1-5 CR.)
On-Site Training

RAD 205 Radiation Protection And Radiobiolog (3 CR.)
Studies methods and devices used for protection from ionizing radiation. Teaches theories of biological effects, cell and organism sensitivity, and the somatic and genetic effects of ionizing radiation. Presents current radiation protection philosophy for protecting the patient and technologist. Lecture 3 hours per week.

RAD 215 Correlated Radiographic Theory (1 CR.)
Presents intensive correlation of all major radiologic technology subject areas. Studies interrelationships of biology, physics, principles of exposure, radiologic procedures, patient care, and radiation protection. Lecture 1 hr. per week.

RAD 221 Radiographic Procedures II (4 CR.)
Continues procedures for positioning the patient's anatomical structures relative to X-ray beam and image receptor. Emphasizes procedures for routine examination of the skull, contrast studies of internal organs, and special procedures employed in the more complicated investigation of the human body. Lecture 3 hours. Laboratory 3 hours. Total 6 hours per week.

RAD 231 Advanced Clinical Procedures I (5 CR.)
Reinforces technical skills in fundamental radiographic procedures. Introduces more intricate contrast media procedures. Focuses on technical proficiency, application of radiation, protection, nursing skills, and exposure principles. Teaches advanced technical procedures and principles of imaging modalities, correlating previous radiographic theory, focusing on full responsibility for patients in technical areas, perfecting technical skills, and developing awareness of related areas utilizing ionizing radiation. Provides clinical experience in cooperating health agencies. Clinical 25 hours per week.

RAD 232 Advanced Clinical Procedures II (5 CR.)
Reinforces technical skills in fundamental radiographic procedures. Introduces more intricate contrast media procedures. Focuses on technical proficiency, application of radiation, protection, nursing skills, and exposure principles. Teaches advanced technical procedures and principles of imaging modalities, correlating previous radiographic theory, focusing on full responsibility for patients in technical areas, perfecting technical skills, and developing awareness of related areas utilizing ionizing radiation. Provides clinical experience in cooperating health agencies. Clinical 25 hours per week.

RAD 240 Radiographic Pathology (3 CR.)
Presents a survey of common medical and surgical disorders that affect radiographic image. Discusses conditions related to different systems of the human body. Studies the correlation of these conditions with radiographs. Lecture 3 hours per week.

RAD 242 Computed Tomography Proced/Instrumen. (2 CR.)
Prerequisite is ARRT or ELIgible. Focuses on the patient care, imaging procedures, physics, and instrumentation related to computed tomography imaging. Lecture 2 hours per week

RAD 246 Special Procedures (1 CR.)
Studies special radiographic and surgical procedures and equipment employed in the more complicated investigation of internal conditions of the human body. Lecture 1hour per week.

RAD 247 Cross-Sectional Anatomy (3 CR.)
Prerequisite is ARRT or ELIgible. Presents a specialized study of cross-sectional anatomy relevant to sectional imaging modalities such as computed tomography and magnetic resonance imaging. Lecture 3 hours per week.

RAD 255 Radiographic Equipment (3 CR.)
Studies principles and operation of general and specialized X-ray equipment. Lecture 3 hours per week.