RADIOLOGIC TECHNOLOGY (RADT)

RADT 14003 INTRODUCTION TO RADIOLOGIC TECHNOLOGY 2 Credit Hours
Introduction to radiologic technology program, general anatomy, radiographic procedures, imaging equipment and techniques, radiation protection, professional organizations and clinical education.
Prerequisite: radiologic technology (RADT) major and admission to technical study.
Schedule Type: Combined Lecture and Lab
Contact Hours: 1.5 lecture, .5 lab
Grade Mode: Standard Letter

RADT 14005 CLINICAL EDUCATION I 1 Credit Hour
Supervised observation and experience at the clinical education site with emphasis on clinical practice of basic skills of radiologic technology and the exams covered in Radiographic Procedures I (chest and abdomen). Student is assigned to the clinical education site for 15 hours per week for 7.5 weeks in summer.
Prerequisite: radiologic technology (RADT) major.
Corequisite: RADT 14003 and 14006 with a minimum grade of C (2.000).
Schedule Type: Clinic, Laboratory
Contact Hours: 2.5 lab, 5 other
Grade Mode: Standard Letter-IP

RADT 14006 RADIOGRAPHIC PROCEDURES I 1 Credit Hour
Introduction to radiographic procedures and positioning of the chest and abdomen.
Prerequisite: Radiologic Technology (RADT) major and admission to technical study.
Corequisite: RADT 14003 and 14005.
Schedule Type: Laboratory
Contact Hours: 2 lab
Grade Mode: Standard Letter

RADT 14015 CLINICAL EDUCATION II 3 Credit Hours
Continuation of Clinical Education I with emphasis on skeletal radiography that includes upper and lower extremities, shoulder and pelvic girdles, vertebral spine and bony thorax. Student is assigned to the clinical site 22.5 hours per week.
Prerequisite: RADT 14005 and 14006.
Schedule Type: Clinic, Laboratory
Contact Hours: 7.5 lab, 15 other
Grade Mode: Standard Letter-IP

RADT 14018 IMAGING EQUIPMENT 2 Credit Hours
A study of the equipment used in radiographic imaging including x-ray tubes, x-ray filters, beam restrictors, grids, image receptors, fluoroscopic and mobile equipment and methods of quality control.
Prerequisite: RADT 14003.
Corequisite: RADT 14015.
Schedule Type: Combined Lecture and Lab
Contact Hours: 1.8 lecture, .2 lab
Grade Mode: Standard Letter

RADT 14021 RADIOGRAPHIC PROCEDURES II 4 Credit Hours
Radiographic anatomy, positioning and evaluation of image quality of the upper extremities, shoulder girdle, lower extremities, pelvic girdle, vertebral spine and bony thorax.
Prerequisite: RADT 14006.
Corequisite: RADT 14015.
Schedule Type: Combined Lecture and Lab
Contact Hours: 3 lecture, 2 lab
Grade Mode: Standard Letter

RADT 14024 RADIOGRAPHIC PROCEDURES III 4 Credit Hours
Radiographic anatomy, positioning, procedures and image evaluation of the gastrointestinal, biliary and urinary systems and skull and facial bones positioning.
Prerequisite: BSCI 11010 or ATTR 25057 or EXSC 25057; and RADT 14021.
Corequisite: RADT 14025.
Schedule Type: Combined Lecture and Lab
Contact Hours: 3 lecture, 2 lab
Grade Mode: Standard Letter

RADT 14025 CLINICAL EDUCATION III 3 Credit Hours
Continuation of Clinical Education II with emphasis on clinical practice of previous course content plus digestive, biliary and urinary procedures as well as skull and facial bones positioning. Student assigned to clinical education setting 22.5 hours per week.
Prerequisite: RADT 14015.
Corequisite: RADT 14024.
Schedule Type: Clinic, Laboratory
Contact Hours: 7.5 lab, 15 other
Grade Mode: Standard Letter-IP

RADT 14034 IMAGE ACQUISITION AND PROCESSING 2 Credit Hours
Study of the technical factors and process of image acquisition, factors affecting image quality, processing of digital images and data management. Prerequisites: RADT 14018
Schedule Type: Combined Lecture and Lab
Contact Hours: 1 lecture, 2 lab
Grade Mode: Standard Letter

RADT 14075 CLINICAL EDUCATION IV 3 Credit Hours
Continuation of Clinical Education III with emphasis on clinical practice of content in previous clinical courses. More emphasis on independent clinical practice of procedures previously mastered. Students assigned to clinical education site 30 hours per week for 8 weeks.
Prerequisite: RADT 14025.
Schedule Type: Clinic, Laboratory
Contact Hours: 10 lab, 20 other
Grade Mode: Standard Letter-IP

RADT 14085 CLINICAL EDUCATION V 2 Credit Hours
Continuation of Clinical Education III with emphasis on clinical practice of content in previous clinical courses. More emphasis on independent clinical practice of procedures previously mastered. Clinical and lab time is equivalent to 262.5 hours. Prerequisites: RADT 14025
Schedule Type: Clinic, Laboratory
Contact Hours: 2.5 lab, 15 other
Grade Mode: Standard Letter-IP
RADT 14096  INDIVIDUAL INVESTIGATION IN DIRECTED READINGS IN RADILOGIC TECHNOLOGY  3 Credit Hours
(Repeatable for credit) Student selects prescribed number of medical journals, completes questions, paper and presentation.
Prerequisite: special approval.
Schedule Type: Individual Investigation
Contact Hours: 3 other
Grade Mode: Standard Letter

RADT 21095  SPECIAL TOPICS IN RADILOGIC TECHNOLOGY  2-4 Credit Hours
(repeated registration permitted) Student participation course on topics pertinent to radiologic technology. Topics are chosen by the instructor. Student may enroll in course more than once.
Prerequisite: special approval from instructor.
Schedule Type: Lecture
Contact Hours: 2-4 lecture
Grade Mode: Standard Letter

RADT 24006  RADILOGIC PHYSICS  4 Credit Hours
Introduction to general physics, units and measurement, atomic structure, electromagnetic spectrum, x-ray production, electricity, magnetism, electromagnetism, x-ray tube, x-ray circuitry and fluoroscopic equipment are covered. 000
Prerequisite: RADT 14018 with a minimum grade of C (2.000).
Schedule Type: Lecture
Contact Hours: 4 lecture
Grade Mode: Standard Letter

RADT 24008  RADIOBIOLOGY AND RADIATION PROTECTION  3 Credit Hours
Biological aspects of radiation, radiation interaction with matter, minimizing patient radiation exposure, and personnel protection are topics covered.
Prerequisite: BSCI 11010 and BSCI 11020, or BSCI 21010 and BSCI 21020, or ATTR 25057 and ATTR 25058, or EXSC 25057 and EXSC 25058; and RADT 14003.
Corequisite: RADT 24018.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

RADT 24014  ADVANCED IMAGING  3 Credit Hours
Procedures and equipment used in advanced medical imaging including fluoroscopy, mammography, CT, MRI, interventional imaging, nuclear medicine, PET imaging, diagnostic medical sonography, radiation therapy and fusion studies as well as quality assurance.
Prerequisite: RADT 14075.
Corequisite: RADT 24015.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

RADT 24015  CLINICAL EDUCATION V  3 Credit Hours
Continuation of Clinical Education IV with emphasis on clinical practice of content of previous clinical courses. More emphasis on independent clinical practice previously mastered. Students assigned to clinical education setting 22.5 hours per week and rotates to special medical imaging areas.
Prerequisite: RADT 14075.
Corequisite: RADT 24014.
Schedule Type: Clinic, Laboratory
Contact Hours: 7.5 lab, 15 other
Grade Mode: Standard Letter-IP

RADT 24016  IMAGING PHYSICS  3 Credit Hours
Introduction to general physics, units and measurement, atomic structure, electromagnetic energy, x-ray production, electrodynamics, magnetism and electromagnetic devices, x-ray tube and x-ray circuitry.
Prerequisites: RADT 14018
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

RADT 24025  CLINICAL EDUCATION VI  3 Credit Hours
Continuation of Clinical Education V with emphasis on mastery of clinical procedures. Students assigned to clinical education site 22.5 hours per week.
Prerequisite: RADT 24018.
Schedule Type: Clinic, Laboratory
Contact Hours: 7.5 lab, 15 other
Grade Mode: Standard Letter-IP

RADT 24028  RADILOGIC PATHOLOGY  3 Credit Hours
Disease process and the pathologies associated with each anatomical system are described and their application to all modalities in the radiologic and imaging sciences.
Prerequisite: radiologic technology (RADT) major; and admission to technical study; and HED 14020; and BSCI 11010 and BSCI 11020 all with a minimum grade of C (2.000).
Corequisite: RADT 24025.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

RADT 24048  RADIOGRAPHIC TECHNIQUES  3 Credit Hours
Review of radiologic technology to include patient care, anatomy and physiology, radiologic procedures, equipment and image production, radiologic physics, and radiation protection in preparation for the radiography certification exam.
Prerequisite: AHS 14016; and BSCI 11010 and BSCI 11020 or BSCI 21010 and BSCI 21020; and RADT 14024, RADT 14034, RADT 24008 and RADT 24016 all with a minimum grade of C.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

RADT 24058  DIVERSIFIED EMPLOYMENT SKILLS  3 Credit Hours
Course features multiple topics in medical imaging to prepare graduates for employment in healthcare.
Prerequisite: AHS 14016.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

RADT 24096  INDIVIDUAL INVESTIGATION IN RADILOGIC TECHNOLOGY  1 Credit Hour
Directed research of special interest or need in the student's program. A research paper will be written on an assigned topic in radiologic technology.
Prerequisite: RADT 14003 with a minimum grade of C (2.000); and radiologic technology (RADT) major; and admission to technical study.
Schedule Type: Individual Investigation
Contact Hours: 3 other
Grade Mode: Standard Investigation
RADT 24196  INDIVIDUAL INVESTIGATION IN ADVANCED READINGS IN RADIOLOGIC TECHNOLOGY  3 Credit Hours
(Repeatable for credit) Course permits scholarly activities for research, study and summary of medical journal articles. Information aids in understanding recent advancements in medical imaging.
Prerequisite: Radiologic technology (RADT) major and admission to technical study.
Schedule Type: Individual Investigation
Contact Hours: 3 other
Grade Mode: Standard Letter