

# 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:** Admission to technical study; and radiologic technology major.

**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:** None.

**Corequisite:** None.

**Schedule Type:** Clinical Laboratory, 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:** None.

**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:** Clinical Laboratory, 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:** None.

**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 image evaluation of the upper extremities, shoulder girdle, lower extremities, pelvic girdle, vertebral spine and bony thorax.

**Prerequisite:** None.

**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:** Clinical Laboratory, 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.

**Prerequisite:** RADT 14018.

**Schedule Type:** Combined Lecture and Lab

**Contact Hours:** 1 lecture, 2 lab

**Grade Mode:** Standard Letter

## **RADT 14085 CLINICAL EDUCATION IV 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.

**Prerequisite:** RADT 14025.

**Schedule Type:** Clinical Laboratory, Laboratory

**Contact Hours:** 2.5 lab, 15 other

**Grade Mode:** Standard Letter-IP

## **RADT 14096 INDIVIDUAL INVESTIGATION IN DIRECTED READINGS IN RADIOLOGIC 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 RADIOLOGIC 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 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 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:** None.

**Corequisite:** AHS 24014.

**Schedule Type:** Clinical Laboratory, 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, electrostatics, magnetism and electromagnetic devices, x-ray tube and x-ray circuitry.

**Prerequisite:** 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:** None.

**Schedule Type:** Clinical Laboratory, Laboratory

**Contact Hours:** 7.5 lab, 15 other

**Grade Mode:** Standard Letter-IP

**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:** None.

**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 RADIOLOGIC 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:** Admission to technical study; and RADT 14003 with a minimum C grade; and radiologic technology major.

**Schedule Type:** Individual Investigation

**Contact Hours:** 3 other

**Grade Mode:** Standard Letter

**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:** Admission to technical study; and radiologic technology major.

**Schedule Type:** Individual Investigation

**Contact Hours:** 3 other

**Grade Mode:** Standard Letter