### Radiologic Technology (RADT)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
<th>Grade Mode</th>
<th>Schedule Type</th>
<th>Corequisite</th>
<th>Prerequisite</th>
</tr>
</thead>
<tbody>
<tr>
<td>RADT 14003</td>
<td>Introduction to Radiologic Technology</td>
<td>2</td>
<td>Standard Letter</td>
<td>Combined Lecture and Lab</td>
<td>None</td>
<td>Admission to technical study, and radiologic technology major.</td>
</tr>
<tr>
<td>RADT 14005</td>
<td>Clinical Education I</td>
<td>1</td>
<td>Standard Letter</td>
<td>Laboratory, Laboratory</td>
<td>None</td>
<td>None.</td>
</tr>
<tr>
<td>RADT 14006</td>
<td>Radiographic Procedures I</td>
<td>1</td>
<td>Standard Letter-IP</td>
<td>Laboratory</td>
<td>None</td>
<td>None.</td>
</tr>
<tr>
<td>RADT 14015</td>
<td>Clinical Education II</td>
<td>3</td>
<td>Standard Letter</td>
<td>Laboratory, Laboratory</td>
<td>RADT 14005 and 14006</td>
<td>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 education site for 15 hours per week for 7.5 weeks in summer.</td>
</tr>
<tr>
<td>RADT 14016</td>
<td>Patient Care Management</td>
<td>2</td>
<td>Standard Letter-IP</td>
<td>Laboratory</td>
<td>None</td>
<td>Interpersonal communication, history taking, medical legal issues in radiology, physical assistance, patient monitoring, vital signs, patient tubes and catheters, infection control, aseptic and non-aseptic techniques, sterile procedures, tube and line insertions, medical emergencies, pharmacology and contrast media.</td>
</tr>
<tr>
<td>RADT 14018</td>
<td>Imaging Equipment</td>
<td>2</td>
<td>Standard Letter</td>
<td>Laboratory</td>
<td>None</td>
<td>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.</td>
</tr>
<tr>
<td>RADT 14021</td>
<td>Radiographic Procedures II</td>
<td>4</td>
<td>Standard Letter</td>
<td>Combined Lecture and Lab</td>
<td>None</td>
<td>Radiographic anatomy, positioning and image evaluation of the upper extremities, shoulder girdle, lower extremities, pelvic girdle, vertebral spine and bony thorax.</td>
</tr>
<tr>
<td>RADT 14024</td>
<td>Radiographic Procedures III</td>
<td>4</td>
<td>Standard Letter</td>
<td>Clinical Laboratory, Laboratory</td>
<td>None</td>
<td>Radiographic anatomy, positioning, procedures and image evaluation of the gastrointestinal, biliary and urinary systems and skull and facial bones positioning.</td>
</tr>
<tr>
<td>RADT 14025</td>
<td>Clinical Education III</td>
<td>3</td>
<td>Standard Letter-IP</td>
<td>Laboratory</td>
<td>RADT 14015</td>
<td>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.</td>
</tr>
<tr>
<td>RADT 14034</td>
<td>Image Acquisition and Processing</td>
<td>2</td>
<td>Standard Letter</td>
<td>Laboratory</td>
<td>None</td>
<td>Study of the technical factors and process of image acquisition, factors affecting image quality, processing of digital images and data management.</td>
</tr>
<tr>
<td>RADT 14085</td>
<td>Clinical Education IV</td>
<td>2</td>
<td>Standard Letter</td>
<td>Laboratory</td>
<td>RADT 14025</td>
<td>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.</td>
</tr>
<tr>
<td>RADT 14096</td>
<td>Individual Investigation in Directed Readings in Radiologic Technology</td>
<td>3</td>
<td>Standard Letter-IP</td>
<td>Individual Investigation</td>
<td>Special approval</td>
<td>(Repeatable for credit) Student selects prescribed number of medical journals, completes questions, paper and presentation.</td>
</tr>
</tbody>
</table>

**Radiologic Technology (RADT)**

- **Introduction to Radiologic Technology (RADT 14003)**: 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.
- **Clinical Education I (RADT 14005)**: 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.
- **Radiographic Procedures I (RADT 14006)**: Introduction to radiographic procedures and positioning of the chest and abdomen. **Prerequisite**: None.
- **Clinical Education II (RADT 14015)**: 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.
- **Patient Care Management (RADT 14016)**: Interpersonal communication, history taking, medical legal issues in radiology, physical assistance, patient monitoring, vital signs, patient tubes and catheters, infection control, aseptic and non-aseptic techniques, sterile procedures, tube and line insertions, medical emergencies, pharmacology and contrast media. **Prerequisite**: RADT 14003 with a grade of C or better.
- **Imaging Equipment (RADT 14018)**: 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.
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 24014 ADVANCED IMAGING  2 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 14025.
Schedule Type: Lecture
Contact Hours: 2 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, electrodynamics, 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 24028 RADIOLOGIC 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: RADT 24015.
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: None.
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