



**College of Southern Idaho**  
**22 Month Associate of Applied Science Degree Radiography Program**  
**72 Semester Credits (Reviewed for 2022)**

<b>Fall Semester (15 Weeks)</b>		
ENGL 101	English Composition I	3
ALLH 101	Medical Terminology	2
BIOL 227 (or BIOL 105)	Anatomy & Physiology I (or Human Structure & Function)	4
RADT 102	Orientation to Radiologic Technology	1
RADT 101	Radiologic Science	3
RADT 152	Radiation Protection	2
<b>Total</b>		<b>15</b>
<b>Spring Semester (15 Weeks)</b>		
COMM 101		3
MATH 123, 143, 147, 153, 160, 170	Any General Education Math	3
BIOL 228 (or a 4 credit Gen. Ed. Core course if BIOL 105 is taken)	Anatomy & Physiology II	4
RADT 151	Radiographic Procedures I	4
RADT 151L	Radiographic Procedures I Lab	1
RADT 153	Image Analysis	1
RADT 163	Imaging Equipment	2
<b>Total</b>		<b>18</b>
<b>Summer Semester (8 weeks)</b>		
RADT 180	Clinical Education I	7
<b>Total</b>		<b>7</b>
<b>Fall Semester (15 weeks)</b>		
PSYC 101	General Psychology or Intro to Sociology	3
RADT 162	Radiographic Procedures II	4
RADT 162L	Radiographic Procedures II Lab	1
RADT 164	Imaging & Processing	2
RADT 181	Clinical Education II	8
<b>Total</b>		<b>18</b>
<b>Spring Semester (15 weeks)</b>		
RADT 182	Clinical Education III	11
RADT 165	Fundamentals of Computed Tomography	3
<b>Total</b>		<b>14</b>
<b>Summary (68 Weeks)</b>		
General (Academic) Education		<b>22</b>
Didactic Education		<b>24</b>
Clinical Education		<b>26</b>
<b>Grand Total</b>		<b>72</b>

**CSI Radiologic Technology  
AAS Degree Radiologic Technology Program  
Summary of Course Credits & Clock Hours**

<b>General Education</b>	<b>Credit</b>	<b>Clock Hours</b>
English Composition I	3	45
Communication	3	45
Human Structure & Function or Anatomy & Physiology I & II	4 (8)	60 + 30 = 90 (120 + 60 = 180)
General Education Core Course	4	60
Any General Education Math (123, 143, 147, 153, 160, 170)	3	45
General Psychology (or Sociology)	3	45
Medical Terminology	2	30
<b>Total</b>	<b>22 (26)</b>	<b>360 (450)</b>
<b>Didactic Education</b>		
Orientation to Radiologic Technology	1	15
Radiologic Science	3	45
Radiographic Procedures I	4	60
Radiographic Procedures I Lab	1	30
Radiographic Procedures II	4	60
Radiographic Procedures II Lab	1	30
Radiation Protection	2	30
Imaging Equipment	2	30
Imaging & Processing	2	30
Image Analysis	1	15
Fundamentals of Computed Tomography	3	45
<b>Total</b>	<b>24</b>	<b>390</b>
<b>Clinical Education</b>		
Clinical Education I	7	315
Clinical Education II	8	360
Clinical Education III	11	495
<b>Total</b>	<b>26</b>	<b>1170</b>
<b>Grand Total</b>	<b>72 (76)</b>	<b>1920 (2010)</b>

## College of Southern Idaho Radiography Course Titles, Descriptions and Credits

*Note: Not included are the Certificated Nursing Assistant or Emergency Medical Technician, Anatomy and Physiology or Human Structure and Function, and Medical Terminology courses which are taught by non-radiologic technology faculty.*

### **RADT 101 3 Cr Hrs**

#### Radiologic Science

A course designed to teach students how ionizing x-radiation is produced. Emphasis is on radiologic concepts, structure of matter, electromagnetic radiation, electricity, magnetism, electromagnetism, the x-ray imaging system, x-ray tube construction, x-ray production, x-ray emission spectrum, and x-ray interactions with matter. Prerequisite: Official admission into the Radiologic Technology Program.

### **RADT 102 1 Cr Hr**

#### Orientation to Radiologic Technology

A course designed to teach students how to provide quality radiography patient care. Emphasis is on understanding the early days of radiography, the radiographer as a member of the health care team, legal and ethical responsibilities, professional communications, safety and transfer, positioning, patient care and assessment, and infection control. Prerequisite: Official admission into the Radiologic Technology Program.

### **RADT 151 4 Cr Hrs**

#### Radiographic Procedures 1

A course designed to teach students radiographic anatomy and positioning that results in the production of diagnostic quality radiographs of the chest, abdomen, upper and lower limbs, humerus and shoulder girdle, femur and pelvic girdle, cervical, thoracic and lumbar spines, sacrum and coccyx, and sternum and ribs. Associated radiographic pathologies will be covered. Prerequisite: RADT 101, 102, 152

### **RADT 151L 1 Cr Hrs**

#### Radiographic Procedures 1 Lab

A laboratory course to accompany RADT 151 Radiographic Procedures 1. Prerequisite: RADT 101, 102, 152

### **RADT 152 2 Cr Hrs**

#### Radiation Protection

A course designed to teach students how to protect themselves and others during radiographic procedures. Emphasis is on the biological effects of radiation, personnel and patient protection procedures, and radiation control. Prerequisite: Official admission into the Radiologic Technology Program.

**RADT 153 1 Cr Hr**

## Image Analysis

A course designed to teach students how to evaluate the quality of digital diagnostic quality radiographs. Emphasis is on what causes poor image quality and how to improve it, proper radiographic exposure technique for digital imaging using the exposure index (EI), target exposure index (TEI), and deviation index (DI).

Prerequisite: RADT 101, 102, 152

**RADT 162 4 Cr Hrs**

## Radiographic Procedures 2

A course designed to teach students radiographic anatomy and positioning that results in the production of diagnostic quality radiographs of the cranial bones, facial bones and paranasal sinuses. Review of the biliary tract and upper gastrointestinal system, lower gastrointestinal system, urinary system, trauma, mobile, and surgical radiography, and pediatric radiography. Associated radiographic pathologies will be included.

Prerequisite: RADT 151, 151L

**RADT 162L 1 Cr Hrs**

## Radiographic Procedures 2 Lab

A laboratory course to accompany RADT 162 Radiographic Procedures 2. Venipuncture didactic certification will be included.

Prerequisite: RADT 151, 151L

**RADT 163 2 Cr Hrs**

## Imaging Equipment

A course designed to teach students the operation and quality control maintenance of computed and digital radiography systems and digital image acquisition. Fluoroscopy, tomography, mobile imaging systems and calibration tools will be included.

Prerequisite: RADT 101, 102, 152

**RADT 164 2 Cr Hrs**

## Imaging &amp; Processing

A course designed to teach students how diagnostic quality digital radiographic images are processed, communicated, archived and retrieved. Proper exposure technique selection, digital image processing to include histogram analysis, rescaling, gradation processing, and detail processing, and related quality control tests will be included.

Prerequisite: RADT 101, 102, 151, 151L, 152, 153, 163, 180C

**RADT 165 3 Cr Hrs**

## Fundamentals of Computed Tomography

A course designed to teach students how to perform computed tomography procedures on patients that results in diagnostic quality images. Topics include CT fundamentals, equipment instrumentation, data acquisition, image processing and reconstruction,

patient safety, image quality, CT procedures, cross sectional anatomy of the head and neck, chest, abdomen and pelvis, additional applications, pharmacology and venipuncture. Venipuncture competency will be included. Prerequisites: RADT 180C Clinical Education 1, 181C Clinical Education 2 or currently an ARRT Registered Technologist in Radiography

### **RADT 170 3 Cr Hrs**

#### Initial Training in Mammography

A post certification course designed to provide students the required hours of initial training in Mammography necessary to fulfill the requirements established by the Mammography Quality Standards Act (MQSA). Students will learn breast anatomy and pathology, breast positioning, develop skills to produce high quality mammography images, and complete quality management tests. Hands on positioning will be provided.

### **RADT 180C 7 CR Hrs**

#### Clinical Education 1

A course providing students in their third semester of radiography education the opportunity to practice and achieve competence in radiographic examination of the chest, abdomen, upper and lower limbs, humerus and shoulder girdle, femur and pelvis girdle, cervical, thoracic and lumbar spines, sacrum and coccyx, sternum and ribs, the biliary tract and upper gastrointestinal system, lower gastrointestinal system, urinary system, trauma, mobile, and surgical radiography, and pediatric radiography. Proper exposure technique selection to meet the target exposure index and deviation index and image analysis are reinforced. Use of the C-Arm Fluoroscope in surgery and clinic will be included. Initial instruction on the biliary tract and upper gastrointestinal system, lower gastrointestinal system, urinary system, trauma, mobile, and surgical radiography, and pediatric radiography. Prerequisites: RADT 101, 102, 151, 151L, 152, 153, 163

### **RADT 181C 8 Cr Hrs**

#### Clinical Education 2

A continuation of RADT 180C. The examination of the cranial bones, facial bones, and paranasal sinuses will be added. Prerequisite: RADT 101, 102, 151, 151L, 152, 153, 163, 180C

### **RADT 182C 11 Cr Hrs**

#### Clinical Education 3

A continuation of RADT 181. Students in their last semester of clinical education practice and achieve competence in any remaining noninvasive and invasive radiographic examinations. Prerequisites: RADT 101, 102, 151, 151L, 152, 153, 162, 162L, 163, 164, 180C, 181C