



# **SCHOOL OF NURSING AND ALLIED HEALTH PROFESSIONS**

INDIANA UNIVERSITY

KOKOMO

**Associate of Science Radiography**

**Five-Year Assessment Plan  
(2020 – 2025)**

## Contents

<b>Radiography Program Mission:</b> .....	2
<b>Program Goals</b> .....	2
<b>Program Goals and Student Learning Outcomes</b> .....	2
<b>Goal 1:</b> .....	2
<b>Goal 2:</b> .....	2
<b>Goal 3:</b> .....	2
<b>Goal 4:</b> .....	3
<b>Curriculum map: Didactic Curriculum and Outcomes</b> .....	4
<b>Curriculum map: Clinical Experience and Outcomes</b> .....	5
<b>Ongoing Assessment and Reporting</b> .....	3
<b>Assessment Activities with Benchmarks and Data Collection Responsibilities</b> .....	6
<b>JRCERT Radiography Curriculum Analysis</b> .....	8

### **Radiography Program Mission:**

The Radiography Science Program at Indiana University Kokomo upholds the mission statement of IU Kokomo by the preparation of highly qualified, entry level Radiographers. As a health-related science, Radiography is dedicated to the health and welfare of the patient through the diagnosis of disease. The program will meet the radiologic health needs and expectations of the communities in its region through partnerships in clinical education with regional healthcare facilities.

### **Program Goals**

1. To provide the regional (north central Indiana) healthcare community with entry-level radiographers who display professionalism.
2. To provide students opportunities that will allow them to communicate effectively.
3. To provide students opportunities that will allow them to think critically and solve problems.
4. To provide educational experiences that produce clinically competent individuals prepared for employment as entry-level radiographers.

### **Program Goals and Student Learning Outcomes**

**Goal 1:** To provide the regional (north central Indiana) healthcare community with entry-level radiographers who display professionalism.

Outcome 1: Students will demonstrate professional and ethical behaviors according to the ARRT (American Registry of Radiologic Technologists) Code of Ethics while in the clinical education setting.

Outcome 2: Students will demonstrate a desire for life-long learning through completion of a portfolio and accumulation of professional development.

Outcome 3: Students will operate complex radiographic equipment to produce quality images (Relates to ARRT Code of Ethics, Tenant 4: “The radiologic technologist practices technology founded upon theoretical knowledge and concepts, uses equipment and accessories consistent with the purposes for which they were designed, and employs procedures and techniques appropriately.”).

**Goal 2:** To provide students opportunities that will allow them to communicate effectively.

Outcome 1: Students will be able to assess the patient’s condition, interpret medical data, and assist the radiologist/physician by communicating data and assisting with procedures.

Outcome 2: Students will be able to assess the patient’s condition, interpret medical data, and assist the radiologist/physician by communicating data and assisting with procedures.

**Goal 3:** To provide students opportunities that will allow them to think critically and solve problems.

Outcome 1: Students will demonstrate knowledge and practice radiation protection by applying ALARA principles in practices.

Outcome 2: Students will select appropriate technical factors to assure quality images and patient care.

Outcome 3: Students will develop organizational and critical thinking skills to increase efficiency in the performance of radiographic examinations.

**Goal 4:** To provide educational experiences that produce clinically competent individuals prepared for employment as entry-level radiographers.

Outcome 1: Students will be able to communicate effectively and apply interpersonal skills with patients, peers, physicians, and other vital members of the healthcare team.

Outcome 2: Students will demonstrate positioning skills in the clinical area which allows the students to work in routine, emergency, and trauma situations while completing the procedure with speed and accuracy.

### Ongoing Assessment and Reporting

Following Standard 6: Programmatic Effectiveness and Assessment: Using Data for Sustained Improvement of the 2021 JRCERT Standards for an Accredited Educational Program in Radiography, the program will have a written systematic assessment plan which meets the following minimum requirements:

1. Goals in relation to clinical competency, communication, and critical thinking.
2. A measurement of at least two student learning outcomes per goal.
3. Utilization of at least two assessment tools per student learning outcome.
4. Benchmarks for each assessment method to determine level of achievement.
5. Has a timeframe for data collection.
6. Student learning outcome data, analysis, and action plans that is compared to program expectations.
7. Identification of failure of the course/program to meet benchmarks which includes identification of issues/problems, trending data, and areas for improvement.
8. Analysis of program effectiveness data in relationship to the program's goals for facilitation of continuous ongoing programmatic improvement.
9. Documentation of a five-year average for credentialing examination pass rate, job placement rate, and annual program completion rate.
10. Presentation of these assessment metrics to the Radiography Advisory Committee annually in the fall semester.

### Curriculum map: Didactic Curriculum and Outcomes

GOAL #. COMPONENT #	AHLT-R100	AHLT-R101	AHLT-R102	AHLT-R200	AHLT-R201	AHLT-R202	AHLT-R205	AHLT-R207	AHLT-R208	AHLT-R250	AHLT-R260
1.1 Students will demonstrate professional and ethical behaviors according to the ARRT (American Registry of Radiologic Technologists) Code of Ethics while in the clinical education setting.	Ethics Quiz										
1.2 Students will demonstrate a desire for life-long learning through completion of a portfolio and accumulation of professional development.											
1.3 Students will operate complex radiographic equipment to produce quality images (Relates to ARRT Code of Ethics, Tenant 4: "The radiologic technologist practices technology founded upon theoretical knowledge and concepts, uses equipment and accessories consistent with the purposes for which they were designed, and employs procedures and techniques appropriately.").	Lab Exam						Lab Exam				
2.1 Students will be able to assess the patient's condition, interpret medical data, and assist the radiologist/physician by communicating data and assisting with procedures.	Vital Signs & Transport Lab										
2.2 Students will be able to assess the patient's condition, interpret medical data, and assist the radiologist/physician by communicating data and assisting with procedures.									Emerg Mgmt Quiz		
3.1 Students will demonstrate knowledge and practice radiation protection by applying ALARA principles in practices.	Rad Safety Quiz				Fluoro Exam						Equip Design Quiz
3.2 Students will select appropriate technical factors to assure quality images and patient care.			Effect Tech Grid			Effect Tech Grid		Inverse Square ?		X-ray Prod. Quiz	
3.3 Students will develop organizational and critical thinking skills to increase efficiency in the performance of radiographic examinations.											
4.1 Students will be able to communicate effectively and apply interpersonal skills with patients, peers, physicians, and other vital members of the healthcare team.				Present Quiz							
4.2 Students will demonstrate positioning skills in the clinical area which allows the students to work in routine, emergency, and trauma situations while completing the procedure with speed and accuracy.											

## Curriculum map: Clinical Experience and Outcomes

GOAL #. COMPONENT #

	AHLT- R181	AHLT- R182	AHLT- R281	AHLT- R282	AHLT- R283	AHLT- R290	Other
1.1 Students will demonstrate professional and ethical behaviors according to the ARRT (American Registry of Radiologic Technologists) Code of Ethics while in the clinical education setting.	Castle Branch Tracker				Castle Branch Tracker		Employer Survey
1.2 Students will demonstrate a desire for life-long learning through completion of a portfolio and accumulation of professional development.						Program Portfolio	Graduate Survey
1.3 Students will operate complex radiographic equipment to produce quality images (Relates to ARRT Code of Ethics, Tenant 4: "The radiologic technologist practices technology founded upon theoretical knowledge and concepts, uses equipment and accessories consistent with the purposes for which they were designed, and employs procedures and techniques appropriately.").		All Comps Forms				All Comp Forms	
2.1 Students will be able to assess the patient's condition, interpret medical data, and assist the radiologist/physician by communicating data and assisting with procedures.			Vital Sign Comp	Age Specific Comps	Age Specific Comps		
2.2 Students will be able to assess the patient's condition, interpret medical data, and assist the radiologist/physician by communicating data and assisting with procedures.	Clinical Evaluation			Clinical Evaluation			
3.1 Students will demonstrate knowledge and practice radiation protection by applying ALARA principles in practices.							
3.2 Students will select appropriate technical factors to assure quality images and patient care.							
3.3 Students will develop organizational and critical thinking skills to increase efficiency in the performance of radiographic examinations.		All Comp Forms	Portfolio		All Comp Forms		Employer Survey
4.1 Students will be able to communicate effectively and apply interpersonal skills with patients, peers, physicians, and other vital members of the healthcare team.	Clinical Evaluation				Clinical Evaluation		
4.2 Students will demonstrate positioning skills in the clinical area which allows the students to work in routine, emergency, and trauma situations while completing the procedure with speed and accuracy.				Clinical Evaluation			Employer Survey

### Assessment Activities with Benchmarks and Data Collection Responsibilities

<b>Goal 1. To provide the regional (north central Indiana) healthcare community with entry-level radiographers who display professionalism.</b>			
<b>Outcome</b>	<b>Components/Tools</b>	<b>Courses/Timeframe</b>	<b>Responsible Individual</b>
1.1 Students will demonstrate professional and ethical behaviors according to the ARRT Code of Ethics while in the clinical education system.	1.1. A. All students will score a minimum of 75% on the Ethics quiz in AHLT R100. (Ethical Behavior: Knowledge of the ARRT Code of Ethics)	AHLT – R100 Quiz Fall Semester, Year 1	Professor of Record
	1.1. B. 100% of students will turn in the required documentation in the Castle Branch Tracker by the assigned date each Fall Semester. (Professional Behavior)	AHLT-R181; Fall, Year 1 AHLT-R283; Fall, Year 2	Clinical Coordinator
	1.1. C. 100% of employer surveys returned will receive a score of 2.0/3.0 on Q.#3 Ethical and Professional Behavior	Employer Survey; Annually	Program Director
1.2 Students will demonstrate a desire for life-long learning through completion of a portfolio and accumulation of professional development.	1.2. A. All students will obtain a minimum of 15 professional development points by the conclusion of AHLT-R290.	AHLT-R290; Spring, Year 2	Clinical Coordinator
	1.2. B. 50% of Graduate Surveys returned will indicate continuing their education.	Graduate Survey; Annually after graduation	Program Director
1.3 Students will operate complex radiographic equipment to produce quality images.	1.3. A. All students will be able to correctly perform a lab simulation with a minimum score of 80%.	AHLT-R101: Midterm Lab Exam; Fall, Year 1 AHLT-R205: Lab Final; Fall, Year 2	Professor of Record
	1.3. B. All students will score a minimum of 2.0/3.0 on General Competency Form Q#2.	AHLT – R182; Spring, Year 1 AHLT – R290; Spring, Year 1	Professor of Record Clinical Coordinator
<b>Goal 2. To provide students opportunities that will allow them to communicate effectively.</b>			
<b>Outcome</b>	<b>Components/Tools</b>	<b>Courses</b>	<b>Responsible Individual</b>
2.1 Students will be able to perform basic patient care skills and assessments.	2.1. A. All students will score a minimum of 80% on the Vital Signs and Patient Transportation lab in R100.	AHLT - R100; Fall, Year 1	Professor of Record
	2.1. B. All students will successfully complete a Vital Signs Assessment Competency in AHLT-R281.	AHLT – R281; Summer, Year 1	Professor of Record
	2.1. C. All students will successfully complete age specific competencies.	AHLT – R282; Summer, Year 1 AHLT – R283; Fall, Year 2	Professor of Record Clinical Coordinator

2.2 Students will be able to assess the patient's condition, interpret medical data, and assist the radiologist/physician by communicating data and assisting with procedures.	2.2. A. All students will score a minimum of 75% on Emergency Management Quiz.	AHLT – R208; Spring, Year 1	Professor of Record
	2.2. B. All students will score an average score of 3.0/4.0 on Student Semester Clinical Education Evaluation Q.#1.	AHLT – R181; Fall, Year 1 AHLT – R282; Summer, Year 1	Clinical Coordinator Professor of Record
<b>Goal 3.</b> To provide students opportunities that will allow them to think critically and solve problems.			
<b>Outcome</b>	<b>Components/Tools</b>	<b>Courses/Timeline</b>	<b>Responsible Individual</b>
3.1 Students will demonstrate knowledge and practice radiation protection by applying ALARA principles in practice.	3.1. A. All students will score a minimum of 75% on AHLT – R100 Radiation Safety/Protection Post-test.	AHLT – R100; Fall, Year 1	Professor of Record
	3.1. B. All students will correctly identify ways to decrease radiation exposure for the technologist during fluoroscopy on Exam 3 in AHLT – R201.	AHLT – R201; Spring, Year 1	Professor of Record
	3.1. C. All students will score a minimum of 75% on AHLT – R260 Equipment Design and Radiation Protection quiz.	AHLT – R260; Spring, Year 2	Professor of Record
3.2 Students will select appropriate technical factors to assure quality images and patient care.	3.2. A. All students will score a minimum of 75% on the Effects of Technique Changes Grid on the final examination in AHLT – R102 and AHLT – R 202.	AHLT – R102; Fall, Year 1 AHLT – R202; Spring, Year 1	Professor of Record Professor of Record
	3.2. B. All students will be able to correctly solve an inverse square law problem on at least 1 of the examinations in AHLT – R207.	AHLT – R207; Spring, Year 2	Professor of Record
	3.2. C. All students will score a minimum of 75% on AHLT – R250 Quiz over X-Ray Production, Emission, and Interactions with Matter.	AHLT – R250; Fall, Year 2	Professor of Record
3.3 Students will develop organizational and critical thinking skills to increase efficiency in the performance of radiographic examinations.	3.3. A. 100% of employer surveys returned will receive a score of 2.0/3.0 on Q.#8 Critical Thinking Ability.	Employer Survey, Annually	Program Director
	3.3. B. All students will be able to position patients properly according to department protocol and patient conditions with a minimum score of 2/3 on General Clinical Competency Form Patient/Equipment Q.#5.	AHLT – R182; Spring, Year 1 AHLT – R283; Fall, Year 2	Professor of Record Professor of Record
	3.3. C. All students will score a minimum of 75% on AHLT-R281 Semester Portfolio.	AHLT – R281; Summer, Year 1	Professor of Record
<b>Goal 4.</b> To provide educational experiences that produce clinically competent individuals prepared for employment as entry-level radiographers.			
<b>Outcome</b>	<b>Components/Tools</b>	<b>Courses</b>	<b>Responsible Individual</b>
4.1 Students will be able to communicate effectively and	4.1. A. All students will score a minimum of 75% on Pathology Presentation In-class quiz.	AHLT – R200; Spring, Year 2	Professor of Record



apply interpersonal skills with patients, peers, physicians, and other vital members of the healthcare team.	4.1. B. All students will score a minimum of 2.5/4.0 on Student Semester Clinical Education Evaluation Q.#7.	AHLT = R181; Fall, Year 1 AHLT – R283; Fall, Year 2	Clinical Coordinator Professor of Record
4.2. Students will demonstrate positioning skills in the clinical area which allows the students to work in routine, emergency, and trauma situations while completing the procedure with speed and accuracy.	4.2. A. All students will score a minimum score of 3.0/4.0 on Student Semester Clinical Education Evaluation Q.#2.	AHLT – R282, Summer, Year 1	Professor of Record
	4.2.B. 100% of employer surveys returned will receive an average score of 2/3.	Employer Survey, Annually	Program Director

JRCERT Radiography Curriculum Analysis

**Date** 05/01/2021

### Radiography Curriculum Analysis

**DIRECTIONS:** Determine the course(s) in which each of the following content area is covered and enter the course number(s) and/or title(s). For guidance in what should be covered for each content area, please refer to the Radiography Curriculum (2017) published by the American Society of Radiologic Technologists.

Professional Curriculum	Program Course(s)
<b>Introduction to Radiologic Science and Health Care</b>	
The Health Science Professions	<b>AHLT-R 100 Orientation to Radiologic Technology; AHLT-R222 Principles of Radiography 3</b>
The Health Care Environment	<b>AHLT-R 100 Orientation to Radiologic Technology; AHLT-R101 Radiographic Procedures 1; AHLT-R207 Seminar in Radiography</b>
Medical Terminology	<b>CLAS - C 209 or AHLT - M 195/R185 Medical Terminology</b>
Medical Abbreviations and Symbols	<b>CLAS - C 209 or AHLT - M 195/R185 Medical Terminology; AHLT-R 100 Orientation to Radiologic Technology; AHLT-R101 Radiographic Procedures I; AHLT-R201 Radiographic Procedures II; AHLT-R207 Seminar in Radiography</b>
Procedures and Terminology	<b>AHLT-R 100 Orientation to Radiologic Technology; AHLT-R101 Radiographic Procedures I; AHLT-R201 Radiographic Procedures II; AHLT-R207 Seminar in Radiography</b>
Understanding Orders, Requests and Diagnostic Reports	<b>AHLT-R 100 Orientation to Radiologic Technology; AHLT-R101 Radiographic Procedures I; AHLT-R201 Radiographic Procedures II</b>
Hospital Organizations	<b>AHLT-R 100 Orientation to Radiologic Technology</b>
Radiology Organizations	<b>AHLT-R 100 Orientation to Radiologic Technology; AHLT-R208 Topics in Radiography</b>
Accreditation	<b>AHLT-R 100 Orientation to Radiologic Technology; AHLT-R208 Topics in Radiography</b>
Regulatory Agencies	<b>AHLT-R 100 Orientation to Radiologic Technology; AHLT-R208 Topics in Radiography; AHLT-R260 Radiobiology and Radiation Protection</b>
Professional Credentialing	<b>AHLT-R 100 Orientation to Radiologic Technology; AHLT-</b>

	<b>R208 Topics in Radiography</b>
Professional Organizations	<b>AHLT-R 100 Orientation to Radiologic Technology; AHLT-R208 Topics in Radiography</b>
Professional Development and Advancement	<b>AHLT-R 100 Orientation to Radiologic Technology; AHLT-R205 Radiographic Procedures 3;</b>
<b>Ethics and Law in the Radiologic Sciences</b>	
Ethics and Ethical Behavior	AHLT-R 100 Orientation to Radiologic Technology; AHLT-R208 Topics in Radiography
Ethical Issues in Health Care	AHLT-R 100 Orientation to Radiologic Technology; AHLT-R208 Topics in Radiography
Legal Issues	AHLT-R 100 Orientation to Radiologic Technology
Legal Doctrines and Standards	AHLT-R 100 Orientation to Radiologic Technology; AHLT-R208 Topics in Radiography
Patient Consent	AHLT-R 100 Orientation to Radiologic Technology; AHLT-R208 Topics in Radiography

Professional Curriculum	Program Course(s)
<b>Human Anatomy and Physiology</b>	
Anatomical Nomenclature	ANAT-A 215 Human Anatomy; AHLT-R 101 Radiographic Procedures ; AHLT- R 201 Radiographic Procedures 2; AHLT- R 200 Pathology; AHLT-R 205 Radiographic Procedures 3;AHLT- R 207 Seminar in Radiography
Chemical Composition	ANAT-A 215 Human Anatomy; AHLT-R102 Principles of Radiography 1; AHLT-R260 Radiobiology and Radiation Protection
Cell Structure and Genetic Control	PHYS-P 215 Human Physiology;AHLT-R260 Radiobiology and Radiation Protection
Metabolism	PHYS-P 215 Human Physiology;AHLT-R260 Radiobiology and Radiation Protection
Tissues	ANAT-A 215 Human Anatomy; PHYS-P 215 Human Physiology; AHLT-R200 Pathology; AHLT-R260 Radiobiology and Radiation Protection
Skeletal System	ANAT-A 215 Human Anatomy; PHYS-P 215 Human Physiology; AHLT-R101 Radiographic Procedures 1; AHLT-R200 Pathology; AHLT-R201 Radiographic Procedures 2
Muscular System	ANAT-A 215 Human Anatomy; PHYS-P 215 Human Physiology; AHLT-R101 Radiographic Procedures 1; AHLT-R200 Pathology; AHLT-R201 Radiographic Procedures 2
Nervous System	ANAT-A 215 Human Anatomy; PHYS-P 215 Human Physiology; AHLT-R200 Pathology; AHLT-R222 Principles of Radiography 3
Sensory System	ANAT-A 215 Human Anatomy; PHYS-P 215 Human Physiology; AHLT-R200 Pathology
Endocrine System	ANAT-A 215 Human Anatomy; PHYS-P 215 Human Physiology; AHLT-R200 Pathology
Digestive System	ANAT-A 215 Human Anatomy; PHYS-P 215 Human Physiology; AHLT-R200 Pathology; AHLT-R201 Radiographic Procedures 2; AHLT-R222 Principles of Radiography 3
Cardiovascular System	ANAT-A 215 Human Anatomy; PHYS-P 215 Human Physiology; AHLT-R200 Pathology; AHLT-R222 Principles of Radiography 3
Lymphatic System and Immunity	ANAT-A 215 Human Anatomy; PHYS-P 215 Human Physiology; AHLT-R200 Pathology; AHLT-R222 Principles of Radiography 3
Respiratory System	ANAT-A 215 Human Anatomy; PHYS-P 215 Human Physiology; AHLT-R101 Radiographic Procedures 1; AHLT-R200 Pathology

Urinary System	ANAT-A 215 Human Anatomy; PHYS-P 215 Human Physiology; AHLT-R200 Pathology; AHLT-R201 Radiographic Procedures 2; AHLT-R222 Principles of Radiography 3
Reproductive System	ANAT-A 215 Human Anatomy; PHYS-P 215 Human Physiology; AHLT-R200 Pathology; AHLT-R222 Principles of Radiography 3
Introduction to Sectional Anatomy	ANAT-A 215 Human Anatomy; AHLT-R205 Radiographic Procedures 3; AHLT-R222 Principles of Radiography 3
<b>Pharmacology and Venipuncture</b>	
Drug Nomenclature	<b>AHLT-R 100 Orientation to Radiologic Technology; AHLT-R208 Topics in Radiography</b>
Drug Classification	AHLT-R 100 Orientation to Radiologic Technology; AHLT-R208 Topics in Radiography
General Pharmacologic Principles	AHLT-R 100 Orientation to Radiologic Technology; AHLT-R208 Topics in Radiography
Six Rights of Drug Safety	AHLT-R 100 Orientation to Radiologic Technology; AHLT-R207 Seminar; AHLT-R208 Topics in Radiography
Drug Categories Relevant to Radiography (Uses and Impact on Patient)	AHLT-R 100 Orientation to Radiologic Technology; AHLT-R201 Radiographic Procedures 2; AHLT-R208 Topics in Radiography
Contrast Agents	AHLT-R 100 Orientation to Radiologic Technology; AHLT-R201 Radiographic Procedures 2; AHLT-R208 Topics in Radiography; AHLT-R222 Principles of Radiography 3
Routes of Drug Administration	AHLT-R 100 Orientation to Radiologic Technology; AHLT-R201 Radiographic Procedures 2; AHLT-R208 Topics in Radiography
Venipuncture	AHLT-R 100 Orientation to Radiologic Technology; AHLT-R201 Radiographic Procedures 2; AHLT-R208 Topics in Radiography
Current Practice Status	AHLT-R 100 Orientation to Radiologic Technology; AHLT-R205 Radiographic Procedures 3; AHLT-R207 Seminar in Radiography
<b>Imaging Equipment</b>	
X-ray Circuit	<b>AHLT-R 102 Principles of Radiography 1; AHLT-R250 Physics Applied to Radiography</b>
Radiographic Equipment	AHLT-R 102 Principles of Radiography 1; AHLT-R250 Physics Applied to Radiography
Diagnostic X-ray Tubes	AHLT-R 102 Principles of Radiography 1; AHLT-R250 Physics Applied to Radiography
Fluoroscopy	AHLT-R 202 Principles of Radiography 2; AHLT-R222 Principles of Radiography 3; AHLT-R250 Physics Applied to Radiography
Overview of Quality Control	AHLT-R 202 Principles of Radiography 2; AHLT-R208 Topics in



<b>Professional Curriculum</b>	<b>Program Course(s)</b>
<b>Radiation Production and Characteristics</b>	
Structure of the Atom	AHLT-R 102 Principles of Radiography 1; AHLT-R250 Physics Applied to Radiography
Nature of Radiation	AHLT-R 102 Principles of Radiography 1; AHLT-R250 Physics Applied to Radiography; AHLT-R260 Radiobiology and Radiation Protection
X-ray Production	AHLT-R 102 Principles of Radiography 1; AHLT-R202 Principles of Radiography 2; AHLT-R207 Seminar in Radiography; AHLT-R250 Physics Applied to Radiography
Interaction of Photons with Matter	AHLT-R 102 Principles of Radiography 1; AHLT-R207 Seminar in Radiography; AHLT-R250 Physics Applied to Radiography; AHLT-R260 Radiobiology and Radiation Protection
<b>Principles of Exposure and Image Production</b>	
Exposure Factors	AHLT-R 102 Principles of Radiography 1; AHLT-R202 Principles of Radiography 2; AHLT-R207 Seminar in Radiography; AHLT-R222 Principles of Radiography 3; AHLT-R250 Physics Applied to Radiography
Receptor Exposure	AHLT-R 102 Principles of Radiography 1; AHLT-R202 Principles of Radiography 2; AHLT-R207 Seminar in Radiography; AHLT-R222 Principles of Radiography 3; AHLT-R250 Physics Applied to Radiography
Differential Absorption	AHLT-R 102 Principles of Radiography 1; AHLT-R202 Principles of Radiography 2; AHLT-R207 Seminar in Radiography; AHLT-R222 Principles of Radiography 3; AHLT-R250 Physics Applied to Radiography
Spatial Resolution	AHLT-R 102 Principles of Radiography 1; AHLT-R202 Principles of Radiography 2; AHLT-R207 Seminar in Radiography; AHLT-R222 Principles of Radiography 3; AHLT-R250 Physics Applied to Radiography
Shape Distortion	AHLT-R 102 Principles of Radiography 1; AHLT-R202 Principles of Radiography 2; AHLT-R207 Seminar in Radiography; AHLT-R222 Principles of Radiography 3; AHLT-R250 Physics Applied to Radiography
Magnification	AHLT-R 102 Principles of Radiography 1; AHLT-R202 Principles of Radiography 2; AHLT-R207 Seminar in Radiography; AHLT-

	R222 Principles of Radiography 3; AHLT-R250 Physics Applied to Radiography
Beam Restriction	AHLT-R 102 Principles of Radiography 1; AHLT-R202 Principles of Radiography 2
Beam Filtration	AHLT-R 102 Principles of Radiography 1; AHLT-R202 Principles of Radiography 2; AHLT-R207 Seminar in Radiography; AHLT-R222 Principles of Radiography 3; AHLT-R250 Physics Applied to Radiography; AHLT-R260 Radiobiology and Radiation Protection
Scatter Radiation	AHLT-R 102 Principles of Radiography 1; AHLT-R202 Principles of Radiography 2; AHLT-R207 Seminar in Radiography; AHLT-R250 Physics Applied to Radiography; AHLT-R260 Radiobiology and Radiation Protection
Grids	AHLT-R 102 Principles of Radiography 1; AHLT-R202 Principles of Radiography 2; AHLT-R207 Seminar in Radiography
Exposure Factor Formulation	AHLT-R 102 Principles of Radiography 1; AHLT-R202 Principles of Radiography 2; AHLT-R207 Seminar in Radiography; AHLT-R260 Radiobiology and Radiation Protection
<b>Digital Image Acquisition and Display</b>	
Image Acquisition	AHLT-R207 Seminar in Radiography; AHLT-R222 Principles of Radiography 3
Initial Processing	AHLT-R202 Principles of Radiography 2; AHLT-R207 Seminar in Radiography; AHLT-R222 Principles of Radiography 3
Post Processing	AHLT-R202 Principles of Radiography 2; AHLT-R207 Seminar in Radiography; AHLT-R222 Principles of Radiography 3
Image Acquisition Errors	AHLT-R207 Seminar in Radiography; AHLT-R222 Principles of Radiography 3
Quality Management	AHLT-R207 Seminar in Radiography; AHLT-R208 Topics in Radiography; AHLT-R222 Principles of Radiography 3
Image Display	AHLT-R202 Principles of Radiography 2; AHLT-R207 Seminar in Radiography; AHLT-R208 Topics in Radiography; AHLT-R222 Principles of Radiography 3
Data Management	AHLT-R207 Seminar in Radiography; AHLT-R222 Principles of Radiography 3
<b>Image Analysis</b>	
Image Appearance Standards	AHLT-R207 Seminar in Radiography; AHLT-R222 Principles of Radiography 3
Imaging Standards	AHLT-R207 Seminar in Radiography; AHLT-R222 Principles of



	Radiography 3
Image Appearance Characteristics	AHLT-R207 Seminar in Radiography; AHLT-R222 Principles of Radiography 3
Procedural Factors	AHLT-R101 Radiographic Procedures 1; AHLT-R201 Radiographic Procedures 2; AHLT-R205 Radiographic Procedures 3; AHLT-R207 Seminar in Radiography; AHLT-R222 Principles of Radiography 3
Corrective Action	AHLT-R207 Seminar in Radiography; AHLT-R222 Principles of Radiography 3

<b>Professional Curriculum</b>	<b>Program Course(s)</b>
<b>Radiation Biology</b>	
Introduction	AHLT-R 100 Orientation to Radiologic Technology; AHLT-R260 Radiobiology and Radiation Protection
Molecule	AHLT-R260 Radiobiology and Radiation Protection
Basic cellular biology	PHYS-P215 Human Physiology; AHLT-R260 Radiobiology and Radiation Protection
Types of ionizing radiation	AHLT-R 102 Principles of Radiography 1; AHLT-R250 Physics Applied to Radiography; AHLT-R260 Radiobiology and Radiation Protection
Sources of medical radiation exposure	AHLT-R 100 Orientation to Radiologic Technology; AHLT-R250 Physics Applied to Radiography; AHLT-R260 Radiobiology and Radiation Protection
Other sources of radiation exposure	AHLT-R 100 Orientation to Radiologic Technology; AHLT-R250 Physics Applied to Radiography; AHLT-R260 Radiobiology and Radiation Protection
Radiation Energy Transfer	AHLT-R 102 Principles of Radiography 1; AHLT-R250 Physics Applied to Radiography; AHLT-R260 Radiobiology and Radiation Protection
Radiation Effects	AHLT-R 100 Orientation to Radiologic Technology; AHLT-R 102 Principles of Radiography 1; AHLT-R260 Radiobiology and Radiation Protection
Radiosensitivity and Response	AHLT-R 100 Orientation to Radiologic Technology; AHLT-R260 Radiobiology and Radiation Protection
<b>Radiation Protection</b>	
Introduction	AHLT-R 100 Orientation to Radiologic Technology
Justification for radiation protection	AHLT-R 102 Principles of Radiography 1; AHLT-R250 Physics Applied to Radiography; AHLT-R260 Radiobiology and Radiation Protection
Potential biological damage of ionizing radiation	AHLT-R 102 Principles of Radiography 1; AHLT-R250 Physics Applied to Radiography; AHLT-R260 Radiobiology and Radiation Protection
Objectives of a radiation protection program	AHLT-R 102 Principles of Radiography 1; AHLT-R250 Physics Applied to Radiography; AHLT-R260 Radiobiology and Radiation Protection
Sources of radiation	AHLT-R 100 Orientation to Radiologic Technology; AHLT-R250

	Physics Applied to Radiography; AHLT-R260 Radiobiology and Radiation Protection
Legal and ethical responsibilities	AHLT-R 100 Orientation to Radiologic Technology; AHLT-R260 Radiobiology and Radiation Protection
Units, Detection and Measurement	AHLT-R 100 Orientation to Radiologic Technology; AHLT-R260 Radiobiology and Radiation Protection
Surveys, Regulatory/Advisory Agencies and Regulations	AHLT-R260 Radiobiology and Radiation Protection
Personnel Monitoring	AHLT-R 100 Orientation to Radiologic Technology; AHLT-R260 Radiobiology and Radiation Protection
Application	AHLT-R 100 Orientation to Radiologic Technology; AHLT-R260 Radiobiology and Radiation Protection
Patient Protection	AHLT-R 100 Orientation to Radiologic Technology; AHLT-R260 Radiobiology and Radiation Protection
<b>Clinical Practice</b>	
Clinical Practice	AHLT-R181 Clinical Experience 1; AHLT-R182 Clinical Experience 2; AHLT-R281 Clinical Experience 3; AHLT-R282 Clinical Experience 4; AHLT-R283 Clinical Experience 5; AHLT-R290 Comprehensive Clinical Experience
Procedural Performance	AHLT-R181 Clinical Experience 1; AHLT-R182 Clinical Experience 2; AHLT-R281 Clinical Experience 3; AHLT-R282 Clinical Experience 4; AHLT-R283 Clinical Experience 5; AHLT-R290 Comprehensive Clinical Experience
Clinical Competency	AHLT-R181 Clinical Experience 1; AHLT-R182 Clinical Experience 2; AHLT-R281 Clinical Experience 3; AHLT-R282 Clinical Experience 4; AHLT-R283 Clinical Experience 5; AHLT-R290 Comprehensive Clinical Experience

Professional Curriculum	Program Course(s)
<b>Patient Care in Radiologic Sciences</b>	

Health Care Team	AHLT-R 100 Orientation to Radiologic Technology; AHLT-R101 Radiographic Procedures 1
Professionalism and Communication in Patient Care	AHLT-R 100 Orientation to Radiologic Technology; AHLT-R101 Radiographic Procedures 1; AHLT-R201 Radiographic Procedures 2; AHLT-R205 Radiographic Procedures 3; All Clinical Experience Courses AHLT-R181 - AHLT-R290
Patient/Radiographer Interactions	AHLT-R 100 Orientation to Radiologic Technology; AHLT-R101 Radiographic Procedures 1; All Clinical Experience Courses AHLT-R181 - AHLT-R290
Safety and Transfer	AHLT-R 100 Orientation to Radiologic Technology; AHLT-R101 Radiographic Procedures 1; AHLT-R201 Radiographic Procedures 2; AHLT-R205 Radiographic Procedures 3; All Clinical Experience Courses AHLT-R181 - AHLT-R290
Evaluating Physical Needs	AHLT-R 100 Orientation to Radiologic Technology; AHLT-R101 Radiographic Procedures 1; AHLT-R201 Radiographic Procedures 2; AHLT-R205 Radiographic Procedures 3; All Clinical Experience Courses AHLT-R181 - AHLT-R290
Infection Control	AHLT-R 100 Orientation to Radiologic Technology; AHLT-R208 Topics in Radiography
Medical Emergencies	AHLT-R 100 Orientation to Radiologic Technology; AHLT-R208 Topics in Radiography
Trauma	AHLT-R 100 Orientation to Radiologic Technology; AHLT-R101 Radiographic Procedures 1; AHLT-R201 Radiographic Procedures 2; AHLT-R208 Topics in Radiography; AHLT-R281 Clinical Experience 3; AHLT-R282 Clinical Experience 4
Reactions to Contrast Agents	AHLT-R 100 Orientation to Radiologic Technology; AHLT-R201 Radiographic Procedures 2; AHLT-R208 Topics in Radiography; AHLT-R222 Principles of Radiography 3
Tubes, Catheters, Lines and Other Devices	AHLT-R 100 Orientation to Radiologic Technology; AHLT-R201 Radiographic Procedures 2; AHLT-R208 Topics in Radiography; AHLT-R222 Principles of Radiography 3
Mobile and Surgical Radiography	AHLT-R 100 Orientation to Radiologic Technology; AHLT-R201 Radiographic Procedures 2; AHLT-R202 Principles of Radiography 2; AHLT-R222 Principles of Radiography 3; AHLT-R260 Radiobiology and Radiation Protection; Clinical Courses AHLT-R 281-AHLT-R290
<b>Radiographic Procedures</b>	

Standard Terminology for Positioning and Projection	AHLT-R101 Radiographic Procedures 1; AHLT-R201 Radiographic Procedures 2; AHLT-R205 Radiographic Procedures 3; AHLT-R207 Seminar in Radiography
General Considerations	AHLT-R101 Radiographic Procedures 1; AHLT-R201 Radiographic Procedures 2; AHLT-R205 Radiographic Procedures 3; AHLT-R207 Seminar in Radiography
Patient Considerations	AHLT-R101 Radiographic Procedures 1; AHLT-R201 Radiographic Procedures 2; AHLT-R205 Radiographic Procedures 3; AHLT-R207 Seminar in Radiography
Positioning Considerations for Routine Radiographic Procedures	AHLT-R101 Radiographic Procedures 1; AHLT-R201 Radiographic Procedures 2; AHLT-R205 Radiographic Procedures 3; AHLT-R207 Seminar in Radiography
Procedural Considerations for Contrast Studies	AHLT-R101 Radiographic Procedures 1; AHLT-R201 Radiographic Procedures 2; AHLT-R205 Radiographic Procedures 3; AHLT-R207 Seminar in Radiography; AHLT-R208 Topics in Radiography
<b>Radiographic Pathology</b>	
Definitions/Terminology	AHLT-R101 Radiographic Procedures 1; AHLT-R200 Pathology; AHLT-R201 Radiographic Procedures 2; AHLT-R205 Radiographic Procedures 3; AHLT-R207 Seminar in Radiography
Causes of Disease (Process, Examples)	AHLT-R101 Radiographic Procedures 1; AHLT-R200 Pathology; AHLT-R201 Radiographic Procedures 2; AHLT-R205 Radiographic Procedures 3; AHLT-R208 Topics in Radiography
Radiologic Pathology (Definitions, Etiology, Examples, Sites, Complications, Prognosis, Radiographic Appearance, Procedural and Technical Considerations, Appropriate Imaging Modality)	AHLT-R200 Pathology
Implications for Practice	AHLT-R101 Radiographic Procedures 1; AHLT-R200 Pathology; AHLT-R201 Radiographic Procedures 2; AHLT-R205 Radiographic Procedures 3
<b>Additional Modalities and Radiation Therapy</b>	
Bone Densitometry	AHLT-100 Orientation to Radiologic Technology; AHLT-R208 Topics in Radiography; AHLT-R 222 Principles of Radiography 3
Cardiac-interventional	AHLT-100 Orientation to Radiologic Technology; AHLT-R208 Topics in Radiography; AHLT-R 222 Principles of Radiography 3
Computed Tomography	AHLT-100 Orientation to Radiologic Technology; AHLT-R208 Topics in Radiography; AHLT-R 222 Principles of Radiography 3; AHLT-R281 Clinical Experience 3
Magnetic Resonance	AHLT-100 Orientation to Radiologic Technology; AHLT-R208 Topics in Radiography; AHLT-R 222 Principles of Radiography 3; AHLT-R281 Clinical Experience 3

Mammography	AHLT-100 Orientation to Radiologic Technology; AHLT-R208 Topics in Radiography; AHLT-R 222 Principles of Radiography 3
Medical Dosimetry	AHLT-100 Orientation to Radiologic Technology; AHLT-R208 Topics in Radiography; AHLT-R 222 Principles of Radiography 3; AHLT-R282 Clinical Experience 4
Nuclear Medicine	AHLT-100 Orientation to Radiologic Technology; AHLT-R208 Topics in Radiography; AHLT-R 222 Principles of Radiography 3; AHLT-R282 Clinical Experience 4
Radiation Therapy	AHLT-100 Orientation to Radiologic Technology; AHLT-R208 Topics in Radiography; AHLT-R 222 Principles of Radiography 3; AHLT-R282 Clinical Experience 4
Ultrasound/Sonography	AHLT-100 Orientation to Radiologic Technology; AHLT-R208 Topics in Radiography; AHLT-R 222 Principles of Radiography 3; AHLT-R282 Clinical Experience 4
Vascular-interventional	AHLT-100 Orientation to Radiologic Technology; AHLT-R208 Topics in Radiography; AHLT-R 222 Principles of Radiography 3; AHLT-R282 Clinical Experience 4