# RAD COURSE STUDENT LEARNING OUTCOMES

## RAD 101 - Exploration of Radiology

Students will be able to identify the duties and responsibilities (practice standards) of a Radiologic Technologist.

## RAD 103 - Medical Ethics

Students will be able to define legal terms, and apply them to cases associated with healthcare in a radiology setting.

Students will be able to apply the ARRT Code of Ethics.

## RAD 110 - Fundamentals of Clinical Radiography I

CSLOs are under review.

## RAD 112 - Patient Care and Medical Terminology

Students will be able to demonstrate patient care skills specific to radiology.

Students will be able to demonstrate appropriate use of medical terminology used in radiology.

Students will be able to apply effective oral communication skills.

## RAD 116 - Radiography I

Students will be able to demonstrate the ability to identify and critique structures on chest, abdomen, upper and lower extremity radiographic images.

Students will be able to demonstrate the ability to position anatomical structures for a radiographic examination of the chest, abdomen, and upper and lower extremities.

## RAD 118 - Radiology Physics and Circuitry

CSLOs are under review.

## RAD 124 - Radiographic Photography and Techniques

Students will be able to demonstrate the ability to predict the effect of exposure factor changes on the radiographic image.

Students will be able to demonstrate the ability to use mathematics and logic to solve problems in radiographic quality affected by changes to multiple exposure factors.

## RAD 125 - Clinical Radiography I

Students will be able to demonstrate the ability to perform radiographic competency evaluations which are commensurate with the requirements (as outlined in the program curriculum) of a second-semester radiologic technology student while providing appropriate patient care in the clinical setting.

Students will be able to demonstrate the ability to work effectively with other health care personnel in the clinical setting.

Students will be able to synthesize prior classroom knowledge and application in the performance of competency evaluations.

## RAD 126 - Radiography II

Students will be able to position anatomical structures for radiographic examinations of the vertebral column and skull.

Students will be able to determine necessary adjustments for trauma examinations.

Students will be able to evaluate radiographic images for diagnostic quality.

## RAD 128 - Imaging Equipment

CSLOs are under review.

## RAD 220 - Clinical Radiography II

Students will be able to demonstrate the ability to perform radiographic competency evaluations which are commensurate with the requirements (as outlined in the program curriculum) of a third-semester radiologic technology student while providing appropriate patient care in the clinical setting.

Students will be able to demonstrate the ability to work effectively with other health care personnel in the clinical setting.

Students will be able to synthesize prior classroom knowledge and application in the performance of competency evaluations.

## RAD 230 - Clinical Radiography III

CSLOs are under review.

## RAD 236 - Radiographic Contrast-Routine Exams

CSLOs are under review.

## RAD 238 - Radiation Safety and Protection

Students will be able to define effective dose equivalent and identify the correct use of different radiation monitoring devices.

Students will be able to identify methods of radiation protection and how they apply to patients and clinical staff.

Students will be able to prepare a written communication project.

## RAD 242 - Radiography Quality Management

CSLOs are under review.

## RAD 244 - Diagnostic and Therapeutic Radiation

Students will be able to identify pathology that can be visualized on radiographic images.

Students will be able to prepare a written communication project emphasizing pathology terminology.

## RAD 245 - Clinical Radiography IV

Students will be able to apply effective oral communication skills.

Students will be able to determine necessary adjustments for trauma examinations.

Students will be able to demonstrate professionalism in the clinical setting.

## RAD 247 - Radiography Quality Control

CSLOs are under review.

## RAD 259 - Seminar in Radiography

CSLOs are under review.

## RAD 310 - Advanced Communication

Students will be able to define effective communication strategies within the professional environment.

Students will be able to apply professional values in daily communications.

Students will be able to demonstrate active listening skills and interprofessional communication.

Students will be able to create and deliver a professional presentation that integrates interprofessional collaborative health care practice.

## RAD 312 - Radiologic Technology Advanced Patient Care

Students will be able to describe the procedure for and importance of obtaining a complete patient clinical history.

Students will be able to examine required patient education in medical imaging.

Students will be able to evaluate an imaging plan based on patient assessment.

Students will be able to perform proper charting and documentation using manual or electronic formats.

## RAD 314 - Health Care Delivery, Ethics and Medical Law

Students will be able to differentiate between the types of healthcare delivery systems and explain influencing factors.

Students will be able to analyze various scenarios involving roles and responsibilities of radiologic technologists to determine if they are working within their scope of practice and using appropriate practice standards.

Students will be able to determine implications of civil and criminal law upon professional licensing/certification and accreditation.

Students will be able to apply principles and strategies of ethical behavior to cultivate an ethical environment.

## RAD 320 - Health Care Informatics

Students will be able to describe the role of technology in health care.

Students will be able to examine the impact of regulations, laws and standards related to informatics on health care delivery.

Students will be able to evaluate decision-making strategies used in informatics.

Students will be able to explain the ethical concerns related to healthcare informatics.

## RAD 322 - Leadership and Team Building

Students will be able to identify the skills necessary to be an effective team leader.

Students will be able to analyze different leadership styles and evaluate their effectiveness.

Students will be able to evaluate the characteristics of a team as they relate to the effectiveness of the team.

## RAD 324 - Educational Principles for Technologists

Students will be able to identify common learning opportunities in the direct patient care clinical setting in which technologists assume the role of a facilitator of learning.

Students will be able to employ Gagne's nine events of instruction in the delivery of an instructional experience.

Students will be able to describe how the information processing theory influences the planning of an instructional event.

## RAD 335 - Forensic Radiology

Students will be able to describe Forensic Radiology.

Students will be able to explain the process by which Forensic Radiology is used to assist physicians and law enforcement.

Students will be able to identify the modalities that are used in Forensic Radiology.

Students will be able to analyze the role of the Radiologic Technologist in Forensic Imaging.

## RAD 410 - Advanced Quality Management

Students will be able to differentiate between quality management (QM), quality assurance (QA) and quality control (QC).

Students will be able to apply QM principles to a given scenario.

Students will be able to analyze the benefits of a QM program.

Students will be able to develop a QM plan to collect data for digital imaging equipment and make appropriate recommendations based on findings.

## RAD 412 - Diversity and Cultural Competence

Students will be able to explain patterns in population health data and disparities in health care.

Students will be able to evaluate situations to determine if the radiologic technologist interacts appropriately and respectfully with members of diverse populations.

Students will be able to apply strategies for addressing bias and discrimination in health care delivery.

Students will be able to develop models to assist staff and students in understanding cultural competence as it relates to patient care.

## RAD 414 - Health Care Compliance and Accreditation

Students will be able to define The Joint Commission standards and Health Insurance Portability and Accountability Act (HIPAA) regulations regarding the accountability and protection of patient information.

Students will be able to explain the process by which imaging departments develop and revise policies and procedures to maintain compliance regarding patient information.

Students will be able to identify accreditation and compliance issues relevant to health care facilities.

Students will be able to analyze the potential abuses in maintaining confidential patient information.

## RAD 416 - Artificial Intelligence in Radiology

Students will be able to define Artificial Intelligence.

Students will be able to explain the process by which imaging departments develop and revise policies to include Artificial Intelligence.

Students will be able to identify accreditation and compliance issues relevant to health care facilities and Artificial Intelligence.

Students will be able to analyze Artificial Intelligence influences on the current health care system.

## RAD 430 - Research Methods and Information Literacy

Students will be able to analyze research articles to determine the accuracy and validity of findings.

Students will be able to integrate information literacy concepts into a research paper.

Students will be able to critique research papers to determine appropriateness and usefulness to the profession.