



MERCER
COUNTY COMMUNITY COLLEGE

COURSE OUTLINE

Course Number RAD240	Course Title Advanced Clinical Experience I	Credits 3
Hours: Lecture/Lab/Other 340	Co- or Pre-requisite Pre-requisites: RAD228, RAD217 Co-requisites: RAD 224, RAD 232	Implementation Semester & Year Spring 2025

Catalog description:

Offers advanced clinical experience in all aspects of radiologic technology in cooperation with clinical affiliates. Students acquire clinical experiences and proficiencies sufficient to demonstrate competency in a specified number and variety of diagnostic radiographic procedures. Radiographic image analysis is assigned.

General Education Category:
Not GenEd

Course coordinator:
Sandra L. Kerr, 609-570-3337, kerrs@mccc.edu

Required texts & Other materials:

Title: Textbook of Radiographic Positioning and Related Anatomy
 Author: K. Bontrager
 Publisher: Elsevier Mosby
 Edition: Ninth

Course Student Learning Outcomes (SLO):

Upon successful completion of this course the student will be able to:

1. Develop the technical competence to perform all types of diagnostic imaging procedures on a variety of patient types using a variety of imaging equipment, technique formulations, and processing modes with specific focus on cranium fluoroscopic, operating suite, and portable radiographic examinations. [Supports ILG # 1-5, 8-11]
2. Demonstrate prudent judgment in administering ionizing radiation to produce diagnostic images. [Supports ILG # 2, 3]
3. Focus on providing optimum patient care in a society that is becoming increasingly diverse and experiencing generational, cultural and ethnic shifts. [Supports ILG # 8]
4. Expand the ability to work with others in a team relationship. [Supports ILG # 8]
5. Acquire expertise in trauma, pediatric and geriatric radiographic procedures. [Supports ILG # 11]
6. Analyze radiographic images to determine optimal quality in accordance with imaging standards and radiation safety. [Supports ILG # 3, 9]

Course-specific Institutional Learning Goals (ILG):

Institutional Learning Goal 1. Written and Oral Communication in English. Students will communicate effectively in both speech and writing.

Institutional Learning Goal 2. Mathematics. Students will use appropriate mathematical and statistical concepts and operations to interpret data and to solve problems.

Institutional Learning Goal 3. Science. Students will use the scientific method of inquiry, through the acquisition of scientific knowledge.

Institutional Learning Goal 4. Technology. Students will use computer systems or other appropriate forms of technology to achieve educational and personal goals.

Institutional Learning Goal 5. Social Science. Students will use social science theories and concepts to analyze human behavior and social and political institutions and to act as responsible citizens.

Institutional Learning Goal 8. Diversity and Global Perspective: Students will understand the importance of a global perspective and culturally diverse peoples

Institutional Learning Goal 9. Ethical Reasoning and Action. Students will understand ethical frameworks, issues, and situations.

Institutional Learning Goal 10. Information Literacy: Students will recognize when information is needed and have the knowledge and skills to locate, evaluate, and effectively use information for college level work.

Institutional Learning Goal 11. Critical Thinking: Students will use critical thinking skills understand, analyze, or apply information or solve problems.

Units of study in detail – Unit Student Learning Outcomes

Upon completion of the 340 hour clinical experience, the student will be able to:

[Supports Course SLO # 1 - 5]

- ◆ Exercise the priorities required in daily clinical practice.
- ◆ Execute medical imaging procedures under the appropriate level of supervision.
- ◆ Adhere to team practice concepts that focus on organizational theories, roles of team members and conflict resolution.
- ◆ Adapt to changes and varying clinical situations.
- ◆ Provide patient-centered clinically effective care for all patients regardless of age, gender, disability, special needs, ethnicity or culture.
- ◆ Integrate the use of appropriate and effective written, oral and nonverbal communication with patients, the public and members of the health care team in the clinical setting.
- ◆ Integrate appropriate personal and professional values into clinical practice.
- ◆ Recognize the influence of professional values on patient care.
- ◆ Provide desired psychosocial support to the patient and family.
- ◆ Demonstrate competent assessment skills through effective management of the patient's physical and mental status.
- ◆ Respond appropriately to medical emergencies.
- ◆ Adapt procedures to meet age-specific, disease-specific and cultural needs of patients
- ◆ Assess the patient and record clinical history.
- ◆ Use appropriate charting methods.
- ◆ Apply standard and transmission-based precautions.
- ◆ Apply the appropriate medical asepsis and sterile technique.
- ◆ Demonstrate competency in the principles of radiation protection standards.
- ◆ Report equipment malfunctions.
- ◆ Examine procedure orders for accuracy and make corrective actions when applicable.
- ◆ Demonstrate safe, ethical and legal practices.

- ◆ Integrate the radiographer's practice standards into clinical practice setting.
- ◆ Maintain patient confidentiality standards and meet HIPAA requirements.
- ◆ Demonstrate the principles of transferring, positioning and immobilizing patients.
- ◆ Differentiate between emergency and non-emergency procedures.
- ◆ Adhere to national, institutional and departmental standards, policies and procedures regarding care of patients, providing radiologic procedures and reducing medical errors.
- ◆ Select technical factors to produce quality diagnostic images with the lowest radiation exposure possible.
- ◆ Critique images for appropriate anatomy, image quality and patient identification.
- ◆ Determine corrective measures to improve inadequate images.

Evaluation of student learning:

A grade of "C+" (77%) or higher must be achieved in the course to progress to RAD 242. The following grading policy will be utilized:

Clinical grade is computed as follows:

Clinical Competency Evaluations	30%
Clinical Evaluations	35%
Image Evaluation	25%
CT Evaluation	10%