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%