Course Acronym:	RTEC
Course Number:	109
Descriptive Title:	Clinical Experience 3
Division:	Health Sciences and Athletics
Department:	Radiologic Technology
Course Disciplines:	Radiologic Technology
Catalog Description:	This course provides continued development of clinical skills in the performance of radiographic examinations to include the chest, abdomen, upper and lower extremities and pelvis. Emphasis will be placed on radiation protection of the patient, self, and co-workers as well as effective communication and proper history taking prior to the start of any radiologic exam.
Prerequisite:	Radiologic Technology 106 AND Radiologic Technology 123 with a minimum grade of C in prerequisite
Co-requisite:	
Recommended Preparation:	
Enrollment Limitation:	
Hours Lecture (per week):	0
Hours Laboratory (per week):	7.5
Outside Study Hours:	0
Total Course Hours:	135
Course Units:	2.5
Grading Method:	Letter Grade only
Credit Status:	Credit, degree applicable
Transfer CSU:	Yes
Effective Date:	04/16/2012
Transfer UC:	No
Effective Date:	
General Education: ECC	
Term:	
Other:	
CSU GE:	
Term:	
Other:	
IGETC:	
Term:	
Other:	

Student Learning Outcomes:	**SLO #1 Contrast Routes** Students will identify the routes of administering contrast media for fluoroscopic examinations. **SLO #2 Patient Care** Students will apply patient care principles while positioning patients for radiographic examinations. **SLO #3 Radiation Safety Beginning** Students will apply radiation safety principles on patients, self, and other members of the health care team.
Course Objectives:	1. Demonstrate proper positioning and radiation protection while performing radiographic examination of the chest, abdomen, upper and lower extremities and pelvis. 2. Formulate correct techniques and identify how pathology can affect those techniques while performing radiographic examination of the chest, abdomen, upper and lower extremities and pelvis. 3. Develop methods to successfully perform radiographic examinations for patients who due to their physical condition, mental state, or age, are unable to cooperate for the procedure, while being attentive to their physical comfort, safety and needs. 4. Integrate the use of appropriate and effective forms of communication with patients, the public and members of the health care team in the clinical setting. 5. Demonstrate proper radiation protection for the patient, doctor, and technologist during radiographic examinations. 6. Ascertain possible pregnancy status for all patients prior to radiographic exams. 7. Set up the exam room and demonstrate the appropriate clinical skills required to successfully complete the minimum number of performance evaluations (competencies), as outlined in the student handbook and course syllabus. 8. Critique radiographic images for appropriate clinical information, patient positioning and image quality. Apply corrective action when applicable to produce a diagnostic quality radiographic image.
Major Topics:	**<u>While correctly using equipment and safety devices, perform the following procedures at the clinical education centers with direct and indirect supervision of a radiologic technologist.</u>** **I. Upright Chest (35 hours, lab)** A. Posterior Anterior B Lateral **II. Abdomen (15 hours, lab)** A. Supine C. Left Lateral decubitus **III. Upper Extremities (35 hours, lab)**

	A. Fingers and Thumb (Digits) B. Hand C. Wrist D. Forearm E. Elbow F. Humerus **IV. Lower Extremities (35 hours, lab)** A. Toes B. Foot C. Calcaneous D. Ankle E. Tibia/Fibula F. Knee G. Femur **V. Pelvis and Hips (5 hours, lab)** **VI. Image Critique (10 hours, lab)** A. Presentation of images B. Explanation of image quality
Total Lecture Hours:	0
Total Laboratory Hours:	135
Total Hours:	135
Primary Method of Evaluation:	3) Skills demonstration
Typical Assignment Using Primary Method of Evaluation:	Demonstrate proper positioning skills, technique development, and the utilization of appropriate radiation safety procedures in the performance of a fluoroscopic gastrointestinal examination.
Critical Thinking Assignment 1:	During an image critique session, present in an oral and written format, a review of a radiographic examination that you performed at the clinical site within the past month. Discuss the difficulties presented with performing and completing this procedure. The presentation must include an analysis and critique of all radiographs presented. The critique shall include the technical factors used, positioning, pathology involved, terminology explanation and radiation protection principles employed.

Critical Thinking Assignment 2:	At the clinical facility, demonstrate proper patient positioning, radiation protection and use of radiographic equipment for a trauma patient with a possible fracture of the cervical spine and right hip. Describe the sequencing of the projections taken, the adjustments needed to the routine images to obtain the best quality images possible for diagnosis, while assuring patient comfort and safety throughout the procedure.
Other Evaluation Methods:	Clinical Evaluation, Fieldwork, Performance Exams, Presentation, Reading Reports, Written Homework
Instructional Methods:	Demonstration, Lab, Role play/simulation
If other:	
Work Outside of Class:	None
If Other:	
Up-To-Date Representative Texts:	Rollins, J.et al. MERRILL'S ATLAS OF RADIOGRAPHIC POSITIONS AND RADIOGRAPHIC PROCEDURES; VOLUMES I, II & III. 15th edition Mosby/Elsevier 2023
Alternative Texts:	
Required Supplementary Readings:	Radiologic Technology Program Student Handbook
Other Required Materials:	Radiation monitoring dosimetry badges Lead Radiographic Positioning Markers with Student's initials Uniforms and shoes as described in the RT Program Dress Code Policy
Requisite:	Prerequisite
Category:	sequential
Requisite course(s): List both prerequisites and corequisites in this box.	Radiologic Technology 106 AND Radiologic Technology 123 with a minimum grade of C in prerequisite
Requisite and Matching skill(s):Bold the requisite skill. List the corresponding course objective under each skill(s).	**Demonstrate proper positioning and radiation protection while performing radiographic examination of the chest, abdomen, upper and lower extremities and pelvis.** RTEC 106: List body planes and topographic anatomy used in positioning routine radiographic procedures. Set control panel with appropriate technical factors under direct supervision. RTEC 123 Evaluate and analyze radiographic images for anatomy identification, technical quality, correct positioning and basic pathology. Demonstrate technical competence and prudent judgment and the proper use of protective devices while administering ionizing radiation to perform diagnostic imaging procedures of the Chest, Upper and Lower extremities, to meet acceptable patient care standards. Adapt radiographic procedures to meet age-specific, disease-specific and cultural needs of patients. **Demonstrate proper radiation protection for the patient, doctor, and technologist during radiographic examinations. Ascertain possible pregnancy status for all patients prior to radiographic exams.** RTEC 106 Demonstrate knowledge of radiation protection and application principles of patients, self and staff.

	RTEC 123 Describe methods to obtain a patient's history and correct identification while maintaining patient confidentiality standards prior to performing a radiographic examination. Demonstrate technical competence and prudent judgment and the proper use of protective devices while administering ionizing radiation to perform diagnostic imaging procedures of the Chest, Upper and Lower extremities, to meet acceptable patient care standards.
Requisite Skill:	
Requisite Skill and Matching Skill(s): Bold the requisite skill(s). If applicable	
Requisite course:	
Requisite and Matching skill(s):Bold the requisite skill. List the corresponding course objective under each skill(s).	
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Enrollment Limitations and Category:	
Enrollment Limitations Impact:	
Course Created by:	Dawn Charman
Date:	10/04/2011
Original Board Approval Date:	04/16/2012
Last Reviewed and/or Revised by:	Dawn Charman & Eric Villa
Date:	02/14/2024
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