



El Camino College
COURSE OUTLINE OF RECORD – Official

Course Acronym:	RTEC
Course Number:	220
Descriptive Title:	Clinical Experience 6
Division:	Health Sciences and Athletics
Department:	Radiologic Technology
Course Disciplines:	Radiologic Technology
Catalog Description:	This course continues the development of clinical skills in the performance of radiographic examinations, with a special emphasis in specialized radiography, new modalities and age-specific competencies. Advanced clinical practice experiences are designed to provide competent performance of radiologic imaging. Students will perform independently, with appropriate supervision to assess their skills for employability. The course emphasizes completions of all mandatory, elective and final clinical performance evaluations.
Prerequisite:	Radiologic Technology 217 with a minimum grade of C
Co-requisite:	
Recommended Preparation:	
Enrollment Limitation:	
Hours Lecture (per week):	0
Hours Laboratory (per week):	9
Outside Study Hours:	0
Total Course Hours:	162
Course Units:	3
Grading Method:	Letter Grade only
Credit Status:	Credit, degree applicable
Transfer CSU:	Yes
Effective Date:	4/16/2012
Transfer UC:	No
Effective Date:	
General Education:	ECC
Term:	
Other:	
CSU GE:	
Term:	
Other:	
IGETC:	
Term:	

Other:	
Student Learning Outcomes:	<p>SLO #1 Effective Communication</p> <p>Students will demonstrate effective communication in written, oral and non-verbal communication with patients, family and hospital</p> <p>SLO #2 Radiation Safety Advanced</p> <p>Students will apply ALARA (as low as reasonably achievable) radiation safety principles on patients, self and other members of health care team.</p> <p>SLO #3 Adapt to PT Condition</p> <p>Students will assess patient's condition and make appropriate modifications to the examination based on their condition.</p>
Course Objectives:	<ol style="list-style-type: none"> 1. Rotate through the subspecialties of radiography and be able to identify common types of procedures performed; compare and contrast the advantages of the special imaging modality verses diagnostic imaging in the ability to diagnose abnormalities; and describe the additional educational requirements for the pursuit of the specialty. 2. Compare and contrast the workload and types of procedures performed in the radiology department between the hours of 7:00 am to 9:00 pm. 3. Expand personal and technical abilities to the expected level required of a newly graduated radiologic technologist. 4. Communicate effectively by integrating the use of appropriate written, oral and nonverbal communication with patients, family members, and hospital personnel. 5. Interpret written orders for radiographic exams, assist and perform radiologic examinations of all areas under the appropriate level of supervision as outlined in the RT program supervision policy located in the student handbook. 6. Demonstrate competency in the principles of radiation protection standards and select technical factors to produce quality diagnostic images with the lowest radiation exposure possible to patients. 7. Adapt to changes and varying clinical situations, and respond appropriately in emergency and non-emergency situations. 8. Critique images for appropriate clinical information, patient positioning and image quality. Apply appropriate corrective action when applicable to produce a diagnostic quality image. 9. Set up the exam room and demonstrate the appropriate clinical skills required to successfully complete all mandatory, elective and final competencies as outlined in the student handbook and course syllabus.
Major Topics:	<p>I. Code of Ethics and Professional Behavior (10 hours, lab)</p> <p>A. Consistency, accuracy, responsibility and excellence (CARE) in medical imaging</p> <p>B. Standards for supervision</p> <ol style="list-style-type: none"> 1. Direct 2. Indirect <p>C. Patient care</p> <ol style="list-style-type: none"> 1. Expectations 2. Rights 3. Responsibilities 4. Safety 5. Incident reporting <p>II. Professional and Effective Communication (10 hours, lab)</p> <p>A. Patients</p> <p>B. Patient's family</p>

	<p>C. Radiology and health care team</p> <p>D. Confidentiality of patient records</p> <ol style="list-style-type: none"> 1. Health Insurance Portability and Accountability Act <p>III. Radiography of Torso (15 hours, lab)</p> <p>A. Chest Radiography</p> <ol style="list-style-type: none"> 1. Portable Chest exam 2. Bilateral decubitus <p>B. Abdomen</p> <ol style="list-style-type: none"> 1. Upright 2. Decubitus 3. Supine chest exam <p>C. Bony thorax</p> <ol style="list-style-type: none"> 1. Sternoclavicular joints 2. Acromioclavicular joints 3. Scapula <p>IV. Fluoroscopic Imaging (25 hours, lab)</p> <p>A. Cholangiography</p> <p>B. Gastrointestinal</p> <p>C. Urogram</p> <p>V. Skull Radiography (15 hours, lab)</p> <p>A. Facial Bones</p> <p>B. Paranasal Sinuses</p> <p>C. Mandible</p> <p>D. Orbits</p> <p>E. Temporomandibular articulations</p> <p>F. Nasal Bones</p> <p>G. Zygomatic Arches</p> <p>VI. Trauma Examinations (25 hours, lab)</p> <p>A. Orthopedic trauma exams</p> <p>B. Trauma chest radiography</p> <p>C. Portable trauma exams</p> <p>VII. Age-Related Radiography (24 hours, lab)</p> <p>A. Geriatric Radiography</p> <ol style="list-style-type: none"> 1. Older than 65 with impairment <p>B. Pediatric Radiography</p> <ol style="list-style-type: none"> 1. Under age 6 2. Over age 6 <p>C. Special Needs Patients</p> <p>VIII. Extremity Exams (30 hours, lab)</p> <p>A. Upper extremities</p> <p>B. Lower extremities</p> <p>IX. Image Critique (8 hours, lab)</p> <p>A. Presentation of images</p> <p>B. Explanation of image quality</p>
Total Lecture Hours:	0
Total Laboratory Hours:	162
Total Hours:	162
Primary Method of Evaluation:	3) Skills demonstration

Typical Assignment Using Primary Method of Evaluation:	At the clinical facility, demonstrate proper patient positioning and radiation protection for a special procedure myelography examination using fluoroscopy. Describe the sterile technique employed when setting up for the procedure and the sequencing needed for the images taken before and after the contrast media injection, while assuring patient comfort and safety throughout the procedure.
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:	Demonstrate the ability to modify radiographic examination protocol due to the patient's condition, based on age-specific competencies.
Other Evaluation Methods:	Clinical Evaluation, Fieldwork, Performance Exams, Presentation
Instructional Methods:	Demonstration, Group Activities, Lab, Role play/simulation
If other:	
Work Outside of Class:	Course is lab only - minimum required hours satisfied by scheduled lab time
If Other:	
Up-To-Date Representative Texts:	<u>Merrill's Radiographic Positioning & Procedures</u> (VOL 1& 2) Long et al, 15 th Ed. Elsevier 2022
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-217
Requisite and Matching skill(s): Bold the requisite skill. List the corresponding course objective under each skill(s).	<p>Adapt to changes and varying clinical situations, and respond appropriately in emergency and non-emergency situations RTEC 217 - Differentiate between emergency and non-emergency procedures and assist as necessary.</p> <p>Knowledge of radiation protection and safety during fluoroscopic procedures. RTEC 217 Demonstrate competency in the principles of radiation protections standards. RTEC 217 - Select technical factors to produce quality diagnostic images with the lowest radiation exposure possible.</p> <p>Knowledge of the radiographic and fluoroscopic equipment and positioning skills utilized in the performance of all radiographic procedures. RTEC 217 - Assist and perform radiographic examinations of all areas, excluding special</p>

	procedures, under the appropriate level of supervision in all aspects. RTEC 217 - Critique images for appropriate clinical information, patient positioning and recorded detail. Apply appropriate corrective action when applicable to produce a diagnostic quality image.
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:	10/14/2011
Original Board Approval Date:	04/16/2012
Last Reviewed and/or Revised by:	Eric Villa
Date:	02/14/2024
Last Board Approval Date:	05/20/2024
Effective Term:	FALL 2025