

Cañada College
Official Course Outline

1. **COURSE ID:** RADT 438 **TITLE:** Clinical Education III
Units: 4.5 units **Hours/Semester:** 224.0-243.0 Field Experience hours; 224.0-243.0 Total Student Learning hours
Method of Grading: Letter Grade Only
Prerequisite: RADT 420, RADT 428

2. **COURSE DESIGNATION:**
Degree Credit
Transfer credit: CSU

3. **COURSE DESCRIPTIONS:**
Catalog Description:
Designed for the third semester radiologic technology student. It is the third segment of the first rotation. Based on skills mastered and maintained in RADT 428, the student continues to build knowledge and clinical application of radiographic positioning and related anatomy. Students assist and perform radiographic examinations appropriate to the student's level of knowledge following accepted radiation protection standards.

4. **STUDENT LEARNING OUTCOME(S) (SLO'S):**
Upon successful completion of this course, a student will meet the following outcomes:
 1. Identify anatomy on radiographic images .
 2. Provide patients with a safe and comfortable environment while performing radiographic exam.
 3. Perform radiographic examinations using general radiographic equipment.
 4. Apply radiation safety standard of practice at all times.

5. **SPECIFIC INSTRUCTIONAL OBJECTIVES:**
Upon successful completion of this course, a student will be able to:
 1. Safely operate radiographic fluoroscopy and image processing equipment.
 2. Employ ancillary competencies.
 3. Demonstrate general patient care and transportation.
 4. Consistently demonstrate radiation safety for patient and personnel.
 5. Practice radiographic positioning techniques to all general radiographic procedures.

6. Identify appropriate technical factors for minor anatomic variations.
7. Identify required variations in technical factors when changing SID (source to image distance), or grids.
8. Apply radiographic anatomy to image analyses.
9. Employ appropriate measures to ensure patient safety and comfort when performing radiographic examinations.
10. Demonstrate radiographic exposures utilizing technical factors approved by a supervising technologist.
11. Apply patient privacy laws in all aspects of radiographic procedures.
12. Recognize and respond appropriately to emergency situations should they arise.
13. Demonstrate the personal and professional qualities generally expected of certified Radiologic Technologists.

6. COURSE CONTENT:

Lab Content:

This course provides students with real-life experience in a clinical setting. Each clinical setting is different and students are exposed to a variety of radiologic exams depending on the clinic. The number of hours for the clinical experience, and thus units, correspond with the time needed for students to gain knowledge and skills in the clinical setting as they work towards being job ready.

1. Students are assigned to specific work areas in which a variety of experiences are obtained.
2. Observe radiographic examinations for correct positioning, image receptor placement, and central beam alignment.
3. Perform with assistance radiographic examinations observing correct positioning, image receptor placement, and central beam alignment.
4. Demonstrate competency on a minimum of 8 radiographic examinations demonstrating correct positioning, image receptor placement, and central beam alignment.
5. Describe and demonstrate radiation safety for patient and personnel.
6. Complete and present a minimum of 1 image analysis.
7. Relate radiographic projections to demonstrate specific anatomy.
8. Identify required radiographic anatomy on images.
9. Demonstrate safe operation of radiographic equipment while performing various radiographic examinations.
10. Describe medical conditions that effect performance of various radiographic examinations.

11. Demonstrate an understanding of examination requisitions.
12. Observe and assist in operating room and portable examination procedures.

7. REPRESENTATIVE METHODS OF INSTRUCTION:

Typical methods of instruction may include:

1. Critique
2. Field Experience
3. Other (Specify): Under supervision, students perform radiographic examinations in assigned facilities.

8. REPRESENTATIVE ASSIGNMENTS

Representative assignments in this course may include, but are not limited to the following:

Writing Assignments:

1. A minimum of one multi-page written image analysis on pre-determined radiological examinations for oral case presentation. These exams must be performed by the student, and include positioning, anatomy, technical factors, radiation dose and areas for improvement.
2. One page comparing five textbook procedures to their practical applications in an assigned clinical education setting.

Reading Assignments:

3. Review procedures performed each day in assigned positioning textbook, 6 to 10 pages per week.
4. Review 4 pages per week department policy and procedure manuals.

Other Outside Assignments:

- o None.

To be Arranged Assignments:

- o Not applicable.

9. REPRESENTATIVE METHODS OF EVALUATION

Representative methods of evaluation may include:

0. Class Performance
1. Lab Activities
2. Oral Presentation
3. Papers
4. Simulation
5. a) Successful completion of all remaining first year clinical competencies. b) Present a minimum of 1 image analysis with a passing score. c) Participation in coaching session(s) on site with the clinical

- coordinator. d) Performance evaluations completed by the clinical instructor. e) 2 clinical observations completed by the clinical coordinator. f) Clinical evaluation completed by the clinical coordinator. g) Completion of all required clinical hours and documentation.

10. REPRESENTATIVE TEXT(S):

Possible textbooks include:

1. Frank, Eugene D., Bruce W. Long, and Barbara J. Smith. *MERRILL'S ATLAS OF RADIOGRAPHIC POSITIONS AND RADIOLOGIC PROCEDURES Vols. 1, 2 & 3*, 16th ed. St. Louis, Missouri: Mosby Elsevier, 2025
2. McQuillen Martensen, Kathleen. *RADIOGRAPHIC IMAGE ANALYSIS*, 6th ed. St. Louis, Missouri: Mosby Elsevier, 2024
3. Adler, Arlene M., and Richard R. Carlton. *INTRODUCTION TO RADIOLOGIC SCIENCES AND PATIENT CARE*, 8th ed. St. Louis, Missouri: Saunders Elsevier, 2023

Other:

1. Anatomy textbook
2. Medical Terminology book
3. Required texts for RADT 400, 408, 410, 420, 415 and 430
4. Clinical Education Manual

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Course Originator: Lezlee Inman