

Cañada College
Official Course Outline

1. **COURSE ID:** RADT 428 **TITLE:** Clinical Education II
Units: 6.5 units **Hours/Semester:** 320.0-351.0 Field Experience hours; 320.0-351.0 Total Student Learning hours
Method of Grading: Letter Grade Only
Prerequisite: RADT 418 **Corequisite:** Concurrent enrollment in RADT 420

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

3. **COURSE DESCRIPTIONS:**
Catalog Description:
Second semester clinical education course for the radiologic technology student. Based on skills mastered and maintained in RADT 418, 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. Illustrate knowledge of assigned facility's radiographic equipment.
 2. Demonstrate knowledge of radiographic anatomy.
 3. Perform a minimum of 22 basic radiographic positioning competencies.

5. **SPECIFIC INSTRUCTIONAL OBJECTIVES:**
Upon successful completion of this course, a student will be able to:
 1. Practice radiographic positioning techniques to all general radiographic procedures.
 2. Apply radiographic anatomy to imaging analysis.
 3. Demonstrate knowledge of patient care techniques.
 4. Construct entry level radiographic exposure chart.
 5. Operate safely radiographic fluoroscopy and image processing equipment.
 6. Apply patient privacy laws in all aspects of radiographic procedures.
 7. Differentiate various receptor sizes and grid types in the assigned departments.
 8. Demonstrate proper use of radiation protection.

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. Observe radiographic examinations for correct positioning, image receptor placement, and central beam alignment.
2. Perform with assistance radiographic examinations observing correct positioning, image receptor placement, and central beam alignment.
3. Perform a minimum of 22 radiographic examinations demonstrating correct positioning, image receptor placement, and central beam alignment.
4. Describe and demonstrate radiation safety for patient and personnel.
5. Complete image analysis forms and present cases.
6. Relate radiographic projections to demonstrate specific anatomy.
7. Identify required radiographic anatomy on images.
8. Demonstrate safe operation of radiographic equipment while performing various radiographic examinations.
9. Describe medical conditions that effect performance of various radiographic examinations.
10. Demonstrate an understanding of routine radiographic examination requisitions.

7. REPRESENTATIVE METHODS OF INSTRUCTION:

Typical methods of instruction may include:

1. Field Experience

8. REPRESENTATIVE ASSIGNMENTS

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

Writing Assignments:

1. Complete 4 Image analysis forms with written assignments of 2 to 4 pages for oral case presentation. Research required.

2. Compare in writing, one page on four textbook procedures to practical application in assigned clinical education setting.

Reading Assignments:

3. Review procedures performed each day in assigned positioning textbook approximately 10 to 15 pages per week.
4. Review department policy and procedure manuals approximately 6 pages per week.

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 Participation
1. Class Performance
2. Lab Activities
3. Oral Presentation
4. Papers
5. Simulation
6. a) Successful completion of a minimum of 22 clinical competencies. b) Prepare and present four multi-page written image analyses on pre-determined radiological examinations. These exams must have been performed by the student, and include positioning, anatomy, technical factors, radiation dose and areas for improvement . c)Participation in coaching session(s) on site with the clinical coordinator. d) Minimum 2 personal and professional growth assessments completed by the clinical instructor e) Minimum 2 clinical observations completed by the clinical coordinator. f) Clinical evaluation completed by the clinical coordinator. g) Completion of all clinical hours and education documentation.

10. REPRESENTATIVE TEXT(S):

Possible textbooks include:

1. McQuillen Martensen, Kathleen. *RADIOGRAPHIC IMAGE ANALYSIS*, 6th ed. St. Louis, Missouri: Mosby Elsevier, 2024
2. Adler, Arlene M., and Richard R. Carlton. *INTRODUCTION TO RADIOLOGIC SCIENCES AND PATIENT CARE*, 8th ed. St. Louis, Missouri: Saunders Elsevier, 2023
3. 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

Other:

1. Anatomy and physiology textbooks
2. Medical Terminology book
3. Required text for RADT 400, 408 and 410
4. Clinical Education Manual

Origination Date: February 2025

Curriculum Committee Approval Date: May 2025

Effective Term: Fall 2025

Course Originator: Lezlee Inman