

Cañada College
Official Course Outline

1. **COURSE ID:** RADT 418 **TITLE:** Clinical Education I
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: Acceptance into the Radiologic Technology Program. **Corequisite:** Concurrent enrollment in RADT 410. RADT 408 Concurrent Enrollment in RADT 408

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

3. **COURSE DESCRIPTIONS:**
Catalog Description:
Designed for the beginning radiologic technology student assigned to a clinical education facility. It consists of orientation to clerical, image processing, patient transportation, supplies and equipment, and radiographic equipment operation. Students observe, assist and perform radiographic examinations appropriate to the student's level of education 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. Correctly identify patient, procedure and transportation needs from information on radiographic examination request and safely transport patient as appropriate.
 2. Utilize appropriate radiation protection of patients, self and other health care workers.
 3. Assist technologists as appropriate for examinations.
 4. Correctly position patients for a routine chest, abdomen, hand or wrist, foot or ankle and long bone examinations.
 5. Correctly evaluate routine chest, abdomen, hand or wrist, foot or ankle and long bone images for accuracy.

5. **SPECIFIC INSTRUCTIONAL OBJECTIVES:**
Upon successful completion of this course, a student will be able to:
 1. Explain clerical procedures required for clinical orders, image processing and storage.

2. Describe patient preparations for various examinations.
3. Demonstrate understanding of emergency procedures appropriate to the assigned facility.
4. Operate radiographic, fluoroscopy and image processing equipment.
5. Locate emergency trays and carts.
6. Move, transport and transfer patients safely.
7. Apply professional standards to all patient related activities.
8. Use accessory equipment as appropriate to assist and perform radiographic examinations.
9. Demonstrate proper use of radiation protection.
10. Demonstrate the ability to perform entry level radiographic procedures.
11. Successfully complete four designated clinical competencies.
12. Apply patient privacy laws in all aspects of radiographic procedures.
13. Correctly evaluate routine chest, abdomen, hand or wrist, foot or ankle and long bone images for accuracy.

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 observing correct positioning, image receptor placement, and central beam alignment.
2. Perform with assistance radiographic examinations utilizing correct positioning, image receptor placement, and central beam alignment.
3. Perform radiographic examinations demonstrating correct positioning, image receptor placement, and central beam alignment.
4. Describe and demonstrate radiation safety for patient and personnel.
5. Relate appropriate projections to demonstrate specific anatomy.
6. Identify required radiographic anatomy on images.
7. Demonstrate safe operation of radiographic equipment while performing various radiographic examinations.
8. Describe medical conditions that affect performance of various radiographic examinations.

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 3 Image analyses with written assignments of 2 to 4 pages for oral case presentation. Research required.
2. Compare in writing, one page on two textbook procedures to practical application in assigned clinical education setting.

Reading Assignments:

3. Review every week, 10 to 14 pages in assigned positioning textbook of procedures performed.
4. Review every week, 4 to 6 pages in 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 Participation
1. Class Performance
2. Lab Activities
3. Oral Presentation
4. Papers
5. Simulation
6. a) Successful completion of 4 specific clinical competencies. b) Student is required to prepare and present three 2-4 page written image analyses radiological examinations. These exams may have been retrieved from image library, observed or performed and include positioning, anatomy, technical factors, radiation dose and areas for improvement c) Minimum 2 personal and professional growth assessments completed by the clinical instructor. d) Minimum 2 clinical observations completed by the clinical coordinator. e) Clinical evaluation completed by the clinical coordinator. f) Completion of required hours and all required clinical documentation.

10. REPRESENTATIVE TEXT(S):

Possible textbooks include:

1. McQuillen Martensen, Kathleen. *Radiographic Image Analysis*, 6th ed. St. Louis, Missouri: Mosby Elsevier, 2024
2. Frank, Eugene D., Bruce W. Long, and Barbara J. Smith. *Merrill's Atlas of Radiographic Positions and Procedures Vols. 1, 2 & 3*, 16th ed. St. Louis, Missouri: Mosby Elsevier, 2025
3. Adler, Arlene M., and Richard R. Carlton. *Introduction to Radiologic Sciences and Patient Care*, 8th ed. St. Louis, Missouri: Saunders Elsevier, 2022

Other:

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

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Course Originator: Lezlee Inman