

RADT 61A Course Outline as of Fall 2024**CATALOG INFORMATION**

Dept and Nbr: RADT 61A Title: RAD POSITIONING 1
 Full Title: Radiographic Positioning 1
 Last Reviewed: 4/24/2023

Units		Course Hours per Week		Nbr of Weeks	Course Hours Total	
Maximum	4.00	Lecture Scheduled	3.00	17.5	Lecture Scheduled	52.50
Minimum	4.00	Lab Scheduled	3.00	17.5	Lab Scheduled	52.50
		Contact DHR	0		Contact DHR	0
		Contact Total	6.00		Contact Total	105.00
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 105.00

Total Student Learning Hours: 210.00

Title 5 Category: AA Degree Applicable

Grading: Grade Only

Repeatability: 43 - No Repeats

Also Listed As:

Formerly:

Catalog Description:

In this course, students will be introduced to radiographic anatomical positioning and image analysis. Instruction includes lecture and positioning demonstrations for radiographic procedures of the chest, abdomen, extremities, hips, and pelvis. Radiographic image analysis for diagnostic quality.

Prerequisites/Corequisites:

Concurrent Enrollment in RADT 60, RADT 64, RADT 64L, and RADT 71A

Recommended Preparation:**Limits on Enrollment:**

Acceptance to Program

Schedule of Classes Information:

Description: In this course, students will be introduced to radiographic anatomical positioning and image analysis. Instruction includes lecture and positioning demonstrations for radiographic procedures of the chest, abdomen, extremities, hips, and pelvis. Radiographic image analysis for diagnostic quality. (Grade Only)

Prerequisites/Corequisites: Concurrent Enrollment in RADT 60, RADT 64, RADT 64L, and

RADT 71A

Recommended:

Limits on Enrollment: Acceptance to Program

Transfer Credit: CSU;

Repeatability: No Repeats

ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:

AS Degree:	Area	Effective:	Inactive:
CSU GE:	Transfer Area	Effective:	Inactive:
IGETC:	Transfer Area	Effective:	Inactive:
CSU Transfer:	Transferable	Effective: Fall 1981	Inactive:
UC Transfer:		Effective:	Inactive:

CID:

Certificate/Major Applicable:

Both Certificate and Major Applicable

COURSE CONTENT

Student Learning Outcomes:

At the conclusion of this course, the student should be able to:

1. Competently perform radiographic procedures of the chest, abdomen, upper and lower extremities, hips, and pelvis.
2. Practice safe radiation protection measures for patients, self, and others.

Objectives:

At the conclusion of this course, the student should be able to:

1. Perform correct positioning for radiography of the chest, abdomen, upper and lower extremities, pelvis, and hip.
2. Correctly manipulate the radiographic equipment and accessories.
3. Demonstrate observance of safety practices including technologist ergonomics.
4. Name anatomical structures on radiographic images.
5. Evaluate the diagnostic quality of the image.

Topics and Scope:

I. Principles of Radiographic Positioning

- A. Chest
- B. Abdomen
- C. Upper extremities including shoulder girdle, humerus, and wrist
- D. Pelvis
- E. Hip
- F. Lower extremities including knee, tibia, and femur

II. Principles of Safety and Protection and Related Equipment

- A. Safety and radiation protection to patient
- B. Safety and radiation protection to technologist, physician, and ancillary personnel

- C. Use of anti-scatter grid, image receptors, and accessories
 - D. Comfort measures for the patient
- III. Image Quality Analysis
- A. Technical and photographic critiques
 - B. Positioning errors
 - C. Pathology and fracture identification
 - D. Establishing the criteria for acceptable diagnostic radiographs
- IV. Body Mechanics
- A. Principles
 - B. Safety practice

All topics are covered in the lecture and lab portions of the course.

Assignment:

Lecture-Related Assignments:

1. Reading and study of (10-15) anatomy and positioning modules
2. Chapter worksheets and weekly writing assignments
3. Quizzes (4-6)
4. Midterm exam
5. Final exam

Lab-Related Assignments:

1. Image analyses (6-8)
2. Positioning competencies (40-50)
3. Practical skill competency demonstration
4. Final practical skills demonstration

Methods of Evaluation/Basis of Grade:

Writing: Assessment tools that demonstrate writing skills and/or require students to select, organize and explain ideas in writing.

Chapter worksheets and weekly writing assessments	Writing 10 - 15%
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Problem Solving: Assessment tools, other than exams, that demonstrate competence in computational or non-computational problem solving skills.

Image analyses	Problem solving 5 - 10%
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Skill Demonstrations: All skill-based and physical demonstrations used for assessment purposes including skill performance exams.

Positioning competencies; practical skills competency demonstration; final practical skills demonstration	Skill Demonstrations 35 - 40%
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Exams: All forms of formal testing, other than skill performance exams.

Quizzes; midterm; final

Exams
35 - 40%

Other: Includes any assessment tools that do not logically fit into the above categories.

None

Other Category
0 - 0%

Representative Textbooks and Materials:

Merrill's Atlas of Radiographic Positions and Radiographic Procedures. 15th ed. Long, Bruce and Rollins, Jeannean and Smith, Barbara. Elsevier 2023.

Instructor prepared materials