

**RADT 61A Course Outline as of Fall 2021****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: 00 - Two Repeats if Grade was D, F, NC, or NP

Also Listed As:

Formerly:

**Catalog Description:**

Radiographic anatomy, positioning, and image analysis. Instruction includes lecture and positioning demonstrations. 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 into the Radiologic Technology Program

**Schedule of Classes Information:**

Description: Radiographic anatomy, positioning, and image analysis. Instruction includes lecture and positioning demonstrations. 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 into the Radiologic Technology Program

Transfer Credit: CSU;

Repeatability: Two Repeats if Grade was D, F, NC, or NP

## **ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:**

<b>AS Degree:</b>	<b>Area</b>	Effective:	Inactive:
<b>CSU GE:</b>	<b>Transfer Area</b>	Effective:	Inactive:
<b>IGETC:</b>	<b>Transfer Area</b>	Effective:	Inactive:
<b>CSU Transfer:</b>	Transferable	Effective: Fall 1981	Inactive:
<b>UC Transfer:</b>		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, shoulder, hips, and pelvis.
2. Practice safe radiation protection measures for patients, self, and others.

### **Objectives:**

Students will be able to:

1. Perform correct positioning for radiography of the chest, abdomen, upper and lower extremities, pelvis, hip, shoulder, femur, knee, and ankle.
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
- D. Shoulder girdle
- E. Humerus
- F. Wrist
- G. Pelvis
- H. Hip
- I. Femur
- J. Knee
- K. Tibia

L. Lower extremities

## 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, cassettes, 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. Unit exams (4-6)
3. Written final exam

#### Lab-Related Assignments:

1. Image analyses (6-8)
2. Positioning check-offs (40-50)
3. Practical final exam

### 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.

None, This is a degree applicable course but assessment tools based on writing are not included because skill demonstrations are more appropriate for this course.

Writing  
0 - 0%

**Problem Solving:** Assessment tools, other than exams, that demonstrate competence in computational or non-computational problem solving skills.

Image analyses

Problem solving  
20 - 30%

**Skill Demonstrations:** All skill-based and physical demonstrations used for assessment purposes including skill performance exams.

Positioning check-offs, practical final exam	Skill Demonstrations 20 - 30%
<b>Exams:</b> All forms of formal testing, other than skill performance exams.	
Unit exams and written final	Exams 40 - 55%
<b>Other:</b> Includes any assessment tools that do not logically fit into the above categories.	
Attendance and participation	Other Category 5 - 10%

**Representative Textbooks and Materials:**

Merrill's Atlas of Radiographic Positions and Radiographic Procedures. Long, Bruce and Rollins, Jeannean and Smith, Barbara. Current Edition.  
 Instructor prepared materials