### **RADT 64 Course Outline as of Fall 2024**

## **CATALOG INFORMATION**

Dept and Nbr: RADT 64 Title: PATIENTCARE IN RADIOLOGY Full Title: Patient Care in Radiology Last Reviewed: 4/24/2023

Units		Course Hours per Week		Nbr of Weeks	<b>Course Hours Total</b>	
Maximum	3.00	Lecture Scheduled	3.00	17.5	Lecture Scheduled	52.50
Minimum	3.00	Lab Scheduled	0	17.5	Lab Scheduled	0
		Contact DHR	0		Contact DHR	0
		Contact Total	3.00		Contact Total	52.50
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 105.00

Total Student Learning Hours: 157.50

Title 5 Category:AA Degree ApplicableGrading:Grade OnlyRepeatability:43 - No RepeatsAlso Listed As:Formerly:

### **Catalog Description:**

In this course, students will learn the principles of patient care, including consideration for the physical and psychological needs of the patient and family. Students will study routine and emergency patient care procedures, infection control, and the role of the radiologic technologist in patient education.

### **Prerequisites/Corequisites:**

Concurrent Enrollment in RADT 60, RADT 61A, RADT 71A (or formerly RADT 61.1AL), and RADT 64L

### **Recommended Preparation:**

### Limits on Enrollment:

Acceptance in program

### Schedule of Classes Information:

Description: In this course, students will learn the principles of patient care, including consideration for the physical and psychological needs of the patient and family. Students will study routine and emergency patient care procedures, infection control, and the role of the radiologic technologist in patient education. (Grade Only)

Prerequisites/Corequisites: Concurrent Enrollment in RADT 60, RADT 61A, RADT 71A (or formerly RADT 61.1AL), and RADT 64L Recommended: Limits on Enrollment: Acceptance in program Transfer Credit: CSU; Repeatability: No Repeats

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

AS Degree: CSU GE:	Area Transfer Area	I		Effective: Effective:	Inactive: Inactive:
<b>IGETC:</b>	Transfer Area	l	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. Explain the responsibilities and scope of practice of a radiologic technologist.
- 2. Define infection control as put in practice in radiology.
- 3. Describe the difference between medical and surgical asepsis and their practices.

## **Objectives:**

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

- 1. Explain responsibilities of a health care facility and the radiologic technologist.
- 2. Describe and demonstrate good principles of body mechanics, patient transfer, and patient restraint.
- 3. Describe the administration of parenteral fluids.
- 4. Discuss procedures for assuring security of patient records.

5. Summarize ethical, emotional, and physical aspects of dying and support mechanisms available to the terminally ill patients.

6. Define medical and surgical asepsis, antiseptics, disinfectants, sterile/clean/contaminated areas.

7. Describe methods of sterilization.

8. Define infectious pathogens, communicable diseases, and hospital-acquired or associated infections.

- 9. Describe the practice of standard precautions, isolation procedures, and infection control.
- 10. Discuss psychological considerations for management of patients.
- 11. Identify symptoms and treatment of life-threatening situations.
- 12. Discuss the use of medical emergency equipment and supplies.
- 13. Define and identify categories of contrast media.
- 14. Describe techniques for administration of contrast media.

- 15. Define communication modes and identify communication problems and their intervention.
- 16. Recognize various drugs and related use in radiology.

17. List the contents of an emergency drug box.

### **Topics and Scope:**

- I. Principles of Patient Care in Medical Imaging
  - A. Effective communication
  - B. Psychology considerations (death & factors affecting emotional responses)
  - C. Body mechanics
  - D. Medical and surgical asepsis
  - E. Administration of barium, medications and contrast media
  - F. Infection control
  - G. Isolation techniques
  - H. Vital signs assessment
  - I. Safe tube handling
  - J. Urinary collection
  - K. Fluid administration
  - L. Oxygen administration
  - M. Standard precautions
  - N. Patient education
  - O. Developing professional attitudes
  - P. Patient support services
  - Q. Patient identification methods
  - R. Normal lab values
  - S. Implanted devices
  - T. Pain assessment
- II. Medico-legal Aspects of Patient Care in Medical Imaging
  - A. Patient as consumer
  - B. Organization of hospital and Radiology Department
  - C. Medical records and images
  - D. Informed and implied consents
- III. Radiation Protection
  - A. Patients
  - B. Self
  - C. Others
- IV. Pharmacology in Medical Imaging
  - A. Contrast media
  - B. Medication
  - C. Injection modes
  - D. Crash cart (emergency drug box)
- V. Documentation
  - A. Health Insurance Portability and Accountability Act (HIPAA)
  - B. Patient's rights
- VI. Symptoms and Treatment of Life-Threatening Situations
  - A. Cardiac arrest
  - B. Anaphylactic shock
  - C. Convulsions
  - D. Seizure
  - E. Hemorrhage
  - F. Aspiration
  - G. Fractures

- H. Diabetes
- I. Respiratory failure
- J. Airway obstruction
- K. Cerebral vascular accident
- VII. Communication
  - A. Verbal
  - B. Non-verbal
  - C. Problems
  - D. Intervention
- VIII. Occupational Safety and Health Administration (OSHA)
  - A. Environmental safety
- B. Magnetic Resonance (MR) safety
- IX. Trauma
  - A. Head injuries
  - B. Spinal injuries
  - C. Wounds
  - D. Burns
- X. Mobile and Surgical Radiography
  - A. Neonatal
  - B. Orthopedic
  - C. Surgical

## Assignment:

- 1. Weekly chapter readings (20-30 pages/week)
- 2. Weekly written assignments and chapter worksheets (10-15)
- 3. Case studies (5-8)
- 4. Quizzes (10-12)
- 5. Midterm exam
- 6. 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.

Written assignments and chapter worksheets

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

Case studies

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

Writing 5 - 25%



None

Quizzes; midterm; final exam

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

None

### **Representative Textbooks and Materials:**

Patient Care in Radiography. 10th ed. Ehrlich, Ruth and Coakes, Dawn. Elsevier. 2021. Introduction to Radiologic & Imaging Sciences & Patient Care. 7th ed. Adler, Arlene and Carlton, Richard. 2019. Instructor prepared materials

Exams 50 - 70%

Other Category 0 - 0%