

Administrative Master Syllabus

Course Information

Course Title	Introduction to Radiography and Patient Care
Course Prefix, Num. and Title	RADR 1409 Introduction to Radiography and Patient Care
Division	Allied Health
Department	Radiologic Technology
Course Type	WECM Course
Course Catalog Description	An overview of the historical development of radiography, basic radiation protection, an introduction to medical terminology, ethical and legal issues for health care professionals, and an orientation to the profession and to the health care system. Patient assessment, infection control procedures, emergency and safety procedures, communication and patient interaction skills, and basic pharmacology are also included. A minimum grade of "C" is required to pass this course.
Pre-Requisites	ACCEPTANCE INTO THE RADIOLOGIC TECHNOLOGY PROGRAM AND BIOL 2401 and BIOL 2402
Co-Requisites	None

Semester Credit Hours

Total Semester Credit Hours (SCH): Lecture Hours:	4:3:3
Lab/Other Hours	
Equated Pay Hours	4.5
Lab/Other Hours Breakdown: Lab Hours	3
Lab/Other Hours Breakdown: Clinical Hours	0
Lab/Other Hours Breakdown: Practicum Hours	0
Other Hours Breakdown	0

Approval Signatures

Title	Signature	Date
Department Head:	Sharla Walker	09/27/2023
Division Chair:	CJDerkowski	11/15/2023
VPI:		

Additional Course Information

Topical Outline: Each offering of this course must include the following topics (be sure to include information regarding lab, practicum, and clinical or other non-lecture instruction).

- I. The Health Care Environment
 - a. Health care settings
 - b. Payment/reimbursement systems
- II. Medical Terminology
 - a. The word building process
 - b. Translation of medical terms into layman's terms
 - c. Correct Pronunciations of medical terms
- III. Medical Abbreviations
 - a. Abbreviations
 - b. Pharmaceutical terms
- IV. Procedures and Terminology
 - a. Radiography
- V. Understanding orders, Requests, and Diagnostic Reports
 - a. Procedure orders and requests
 - b. Diagnostic Reports
- VI. Hospital Organizations
 - a. Mission
 - b. Administrative Services
 - c. Medical Services
- VII. Radiology Organization
 - a. Professional personnel
 - b. Support personnel
 - c. Educational personnel
- VIII. Accreditation
 - a. Health care institutions
 - b. Educational
 - c. Programmatic (JRCERT)
 - d. Regional
- IX. Regulatory Agencies
- X. Professional Credentialing
 - a. ARRT
 - b. State Licensure
- XI. Professional Organizations
 - a. Purpose
 - b. Types
- XII. Professional Development and Advancement
 - a. Required
 - b. Clinical Experience
 - c. CEU
 - d. Employment Considerations
 - e. Advancement Opportunities
- XIII. Health Care Team
 - a. Responsibilities of Health care facility
 - b. Members



c. Responsibilities of Radiologic Technologists

XIV. Professionalism and Communication in Patient Care

- a. Health and illness
- b. Developing professional attitudes
- c. Age and generation communication
- d. Communication
- e. Other factors that impede communication
- f. Patient Interactions
- g. Communication with families
- h. Communication with health care professionals
- i. Psychological considerations
- j. Factors affecting patient's emotional responses

XV. Patient/Radiographer Interactions

- a. Patient identification methods
- b. Procedures and questions and explanations
- c. Interactions with patient's family members and friends

XVI. Safety and transfer

- a. Environmental
- b. Body mechanics
- c. Patient transfer and movement
- d. Fall prevention
- e. Patient positions
- f. Safety and immobilization
- g. Incident reporting

XVII. Evaluating Physical Needs

- a. Access patient status
- b. Vital Signs
- c. Acquiring and recording vital signs
- d. Normal ranges of lab data
- e. Patient Chart (paper and electronic)
- f. Pain assessment

XVIII. Infection Control

- a. Hospital acquired
- b. Communicable
- c. Infectious pathogens
- d. Multidrug-resistant organisms
- e. Centers for disease control(CDC)
- f. Cycle of infection
- g. Prevent disease transmission
- h. Health care worker
 - i. Immunization
 - ii. Booster
 - iii. Post-exposure protocols

i. Asepsis

- i. Medical
- ii. Surgical
- iii. Procedures
- iv. Packing
- v. Storage
- vi. Linen



- j. Isolation techniques and communicable diseases
- k. Procedures
- l. Precautions

XIX. Medical Emergencies

- a. Emergency Equipment
- b. Latex reaction
- c. Shock
- d. Diabetic emergencies
- e. Respiratory and cardiac failure
- f. Airway obstruction
- g. Cerebral Vascular Accident (stroke)

XX. Trauma

- a. Head injuries
- b. Spinal injuries
- c. Fractures
- d. Wounds
- e. Burns

XXI. Reactions to Contrast Agents

XXII. Tubes, Catheters, Lines and Other Devices

- a. Functions
- b. Nasogastric
- c. Suction
- d. Tracheostomy
- e. Chest tube
- f. Implanted devices
- g. Venous catheters
- h. Tissue drains
- i. Oxygen administration
- j. Urinary collection
- k. Ostomies

XXIII. Mobile and Surgical Radiography

- a. Bedside
- b. Surgery
- c. Radiation protection

XXIV. Ethics and Ethical Behavior

XXV. Ethical issues in Health Care

XXVI. Legal Issues

XXVII. Legal Doctrine and Standards

XXVIII. Patient Consent

XXIX. Right of refusal

XXX. Pharmacology and Venipuncture

- a. Drug Nomenclature
- b. Drug Classification
- c. General Pharmacologic Principles
- d. Six Rights of Drug Safety
- e. Drug Categories relevant to radiography
- f. Contrast Agents
- g. Routes and Drug Administration
- h. Venipuncture
 - i. Methods

- ii. Sites of administration
 - iii. Procedures
 - iv. Complications
 - v. Discontinuation
 - vi. Documentation of administration
 - vii. Documentation of complication or reaction
- i. Current Practice Standard
- i. Scope
 - ii. Practice standards for radiographers
 - iii. Professional liability and negligence
 - iv. Employer prerogative

Course Learning Outcomes:

Learning Outcomes – Upon successful completion of this course, students will:

Define basic medical terms, identify ethical and legal standards; explain basic radiation protection practices
Assess patient condition; describe infection control procedures; recognize and respond to emergency situations
Identify relevant pharmaceuticals and their applications; and describe basic medical equipment operations.

Methods of Assessment:

Final Comprehensive Examination

Lab Demonstration of: Vital Signs, Sterile and Aseptic Techniques, Venipuncture, Patient Transfer, and Care of Patient Medical Equipment

Required text(s), optional text(s) and/or materials to be supplied by the student:

William J. Callaway and Laverne Tolley Gurley, Introduction to Radiologic Technology, latest edition, G. V. (latest edition) Mosby Co., St. Louis, Mo.

Peggy C. Leonard, Quick and Easy Medical Terminology, latest edition, W.B. Saunders Co., Philadelphia, PA.

Ehrlich and Ellen Doble McCloskey, Patient Care in Radiography, latest edition, G.V. Mosby Co., St. Louis, Mo.

Suggested Course Maximum:

18

List any specific or physical requirements beyond a typical classroom required to teach the course.

RADIOLOGY CLASSROOM AND ENERGIZED LABORATORY

Course Requirements/Grading System: Describe any course specific requirements such as research papers or reading assignments and the generalized grading format for the course.

Reading assignments and the generalized grading format for the course.

A. End-of-unit exams 75%

B. Comprehensive final** 25%

Total 100%

**Students must score a grade of 75 or higher on the comprehensive final in order to pass the course.

100-92 A

91-83 B

82-75 C

74.9 and below F

Curriculum Checklist:

- Administrative General Education Course** (from ACGM, but not in WCJC Core) – No additional documents needed.
- Administrative WCJC Core Course** – Attach the Core Curriculum Review Forms
 - Critical Thinking
 - Communication
 - Empirical & Quantitative Skills
 - Teamwork
 - Social Responsibility
 - Personal Responsibility
- WECM Course** – If needed, revise the Program SCANS Matrix and Competencies Checklist