

Montgomery County Community College  
 RAD 100  
 Introduction to Radiography and Patient Care  
 3-3-0

### COURSE DESCRIPTION:

This course will provide the student with an overview of the foundations in radiography and the practitioner's role in the health care delivery system. Principles, practices, and policies of the health care organizations will be examined and discussed in addition to the professional responsibilities of the radiographer. Communication skills and professional conduct of the radiographer in the clinical setting will also be introduced. Basic concepts of patient care, physical and psychological needs of the patient, and routine and emergency patient care will be described. Human diversity in health care will be discussed and its impact in the treatment of patients. In addition, a self-teaching workbook and self-assessments will be utilized to learn medical terminology.

### REQUISITES:

#### *Previous Course Requirements*

- BIO 131 Human Anatomy and Physiology I with a minimum grade of "C" within 2 attempts within the last 5 years of the date of enrollment in RAD 100
- BIO 132 Human Anatomy and Physiology II with a minimum grade of "C" within 2 attempts within the last 5 years of the date of enrollment in RAD 100
- MATH 106 or any other Quantitative Reasoning course except ACC 110 and MAT 103, with a minimum grade of "C" within 2 attempts within the last 5 years of the date of enrollment in RAD 100

#### *Previous or Concurrent Course Requirements*

- RAD 106 Radiographic Image Production and Analysis
- RAD 104 Clinical Education I
- RAD 111 Radiographic Procedures I

LEARNING OUTCOMES	LEARNING ACTIVITIES	EVALUATION METHODS
Upon successful completion of this course, the student will be able to:		
1. Identify the role of the radiographer in the	Lecture/Discussion Demonstration/Practice	Abstracts Radiation Protection

patient's total health care.	Case Study Student Presentation Assigned Readings Written Experiences	Assignment Discussion Questions and Group Interaction
2. Discuss the interrelationship between personal, community and societal values as they relate to utilization of the health care system.	Lecture/Discussion Case Study Role Play Assigned Readings Written Experiences On-Line Searches	Cultural Assignment Discussion Questions and Group Interaction Examination
3. Describe general environmental safety precautions.	Lecture/Discussion Assigned Readings Written Experiences On-Line Searches Infections Control Video	Hand Washing Competency Surgical Asepsis Skills Competency Examination Discussion Questions and Group Interaction
4. Demonstrate correct principles of body mechanics.	Lecture/Discussion Demonstration/Practice Assigned Readings Skills Competency	Skills Rubric Examination
5. Perform proper procedures for determining vital signs and obtain results.	Lecture/Discussion Demonstration/Practice Assigned Readings Skills Competency	Skills Rubric Examination
6. Explain concepts of personal honesty, integrity and compassion in health care.	Lecture/Discussion Role Play Student Presentation Assigned Readings Written Experiences	Standards of Ethics Assignment Discussion Questions and Group Interaction Ethical Issue Assignment

	On-Line Searches	
7. Perform basic venipuncture procedures through a competency examination process.	Lecture/Discussion Demonstration/Practice Assigned Readings Skills Competency	Skills Rubric Examinations
8. Exhibit verbal and written proficiency in medical terminology.	Demonstration/Practice Case Study Student Presentation Assigned Readings Written Experiences On-Line Searches	Medical Terminology Exams Abstract I & II Poster Presentation Examinations
9. Discuss basic radiation safety concepts and describe the potential risk of radiation exposure when asked.	Lecture/Discussion Student Presentation Assigned Readings Written Experiences On-Line Searches	Radiation Protection Assignment Discussion Questions and Group Interaction Examination
10. Explain Radiography related pharmacology as it relates to patient procedures and precautions.	Lecture/Discussion Assigned readings Written Experiences	Patient Safety Assignment Group Interaction Examinations

At the conclusion of each semester/session, assessment of the learning outcomes will be completed by course faculty using the listed evaluation method(s). Aggregated results will be submitted to the Director of Educational Effectiveness. The benchmark for each learning outcome is that *70% of students will meet or exceed outcome criteria.*

#### SEQUENCE OF TOPICS:

1. Medical Terminology
2. The Health Science Professions
3. The Health Care Environment
4. Hospital and Radiology Organization
5. Accrediting and Credentialing
6. Professional Organizations
7. Professional Development and Values
8. Culture, Ethnicity and Diversity

9. The Radiographer and the Health Care Team
10. Attitudes and Communication in Patient Care
11. Safety and Transfer Positioning
12. Infection Control
13. Evaluating Physical Needs
14. Medical Emergencies
15. Venipuncture and Pharmacology

#### LEARNING MATERIALS:

JRCERT Standards for an Accredited Educational Program in Radiologic Sciences

ARRT Code of Ethics for a Radiographer

#### Texts:

Adler, A., Carlton, R., Stewart, K. (2023). *Introduction to Radiography and Patient Care* (8<sup>th</sup> ed.). Philadelphia, PA: W.B. Saunders.

Cohen, B & Jones, S (2021). *Medical Terminology; An Illustrated Guide*, Burlington, MA: Jones & Bartlett Learning.

Other learning materials may be required and made available directly to the student and/or via the College's Libraries and/or course management system.

#### COURSE APPROVAL:

Prepared by: Debra Poelhuis, M.S., R.T. Date: 5/2004

Revised by: Debra Poelhuis, M.S., R.T. Date: 1/2009

VPAA/Provost Compliance Verification: Dr. John C. Flynn, Jr. Date: 9/11/2009

Revised by: Debra Poelhuis, R.T., M.S. Date: 10/26/2012

VPAA/Provost or designee Compliance Verification:  
Victoria L. Bastecki-Perez, Ed.D. Date: 10/26/2012

Revised by: Cheryl L. DiLanzo Date: 10/28/2016

VPAA/Provost or designee Compliance Verification:  
Victoria L. Bastecki-Perez, Ed.D. Date: 11/17/2016

Revised by: Cheryl L. DiLanzo and Debbie Dalrymple

Date: 1/8/2018

VPAA/Provost or designee Compliance Verification:

Victoria L. Bastecki-Perez, Ed.D.

Date: 1/9/2018

Revised by: Cheryl L. DiLanzo

Date: 4/2/2020

Provost or designee Compliance Verification:

Date: 4/2/2020

Revised by: Dana Smith, M.S., R.T.

Date: 3/7/2024

VPAA or designee Compliance Verification:

Date: 3/27/2024



*This course is consistent with Montgomery County Community College's mission. It was developed, approved and will be delivered in full compliance with the policies and procedures established by the College.*