

Montgomery County Community College
RAD 104
Clinical Education I
3-0-15

COURSE DESCRIPTION:

During this first semester of Clinical Education, students will be assigned to clinical areas in the clinical education center, which coincide with didactic information covered during the semester in Procedures I (RAD 111), Radiographic Image Production and Analysis (RAD 106), and RAD 100. Students will be oriented to ethics and laws as they pertain to imaging, clinical rules and regulations, the department of radiology to which they are assigned, and the clinical education handbook. Students will attend clinical education for at least 15 hours per week. This course is subject to a course fee. Refer to <http://mc3.edu/adm-fin-aid/paying/tuition/course-fees> for current rates.

REQUISITES:

Previous Course Requirements

- BIO 131 Human Anatomy and Physiology I with a “C” or better on the second attempt within the last 5 years of the date of enrollment in RAD 100
- BIO 132 Human Anatomy and Physiology II with a “C” or better on the second attempt 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 100 Introduction to Radiography and Patient Care
- RAD 106 Radiographic image Production and Analysis
- RAD 111 Radiographic Procedures I

LEARNING OUTCOMES Upon successful completion of this course, the student will be able to:	LEARNING ACTIVITIES	EVALUATION METHODS
1. Discuss ethics and the elements of ethical behavior and apply these principles.	Lecture/Discussion Case Study Student Presentation Assigned Readings Demonstration and Practice Competency Simulation Lab Assignments	Critical Thinking Assignment Discussion Questions Exams
2. Comply with the concepts of the Patient’s Bill of Rights.	Lecture/Discussion Case Study Assigned Readings	Critical Thinking Assignment Discussion Questions

		Exams
LEARNING OUTCOMES	LEARNING ACTIVITIES	EVALUATION METHODS
3. Explain the legal implications of professional liability, malpractice, professional liability, malpractice, professional negligence/carelessness and other legal doctrines applicable to professional practice.	Lecture/Discussion Case Study Assigned Readings	Discussion Questions Quizzes
4. Compare and contrast the influence of patient's cultural beliefs toward illness and health.	Lecture/Discussion Case Study Assigned Readings	Critical Thinking Assignment Discussion Questions Exams
5. Demonstrate proper evaluation of a requisition, evaluation of patient assessment, facility readiness, patient care and management, equipment operation and technique selection, positioning skills, radiation protection for patient, self and others, image processing, and evaluation of the resulting image.	Assigned Readings Demonstration and Practice Competency Simulation Image Evaluation Assignments	Clinical Evaluations Bi weekly Evaluations Discussion Questions Image Evaluation Rubric
6. Assess the processed image for proper anatomical parts, alignment, image technique, image identification and radiation protection.	Assigned Readings Demonstration and Practice Competency Simulation Image Evaluation Assignments	Clinical Evaluations Bi weekly Evaluations Discussion Questions Image Evaluation Rubric
7. Demonstrate proper patient care skills, interpersonal skills and use of time.	Lecture/Discussion Demonstration and Practice Competency Simulation Assigned Readings Lab Assignments	Clinical Evaluations Bi weekly Evaluations Discussion Questions

LEARNING OUTCOMES	LEARNING ACTIVITIES	EVALUATION METHODS
8. Perform required image procedure competencies.	Assigned Readings Demonstration and Practice Competency Simulation	Clinical Evaluations Bi Weekly Evaluations Discussion Questions

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 Associate Vice President of Academic Affairs. The benchmark for each learning outcome is that *70% of students will meet or exceed outcome criteria.*

SEQUENCE OF TOPICS:

For the orientation period of this course, the sequence of topics is as follows:

1. Historical and Philosophical Context
2. Ethics and Ethical Behavior
3. Ethical Issues in Health Care
4. Legal Responsibilities
5. Patient Consent

At the completion of the orientation period, students will begin their clinical rotations at their assigned clinical education site. They will then follow a sequence of topics relative to that experience. According to the American Registry of Radiologic Technologists (ARRT), students must demonstrate competency in 37 mandatory Radiologic procedures. At least 30 of those competencies must be demonstrated on patients (not phantoms or simulated) Students must demonstrate competency in at least 15 of the 34 elective radiological procedures. Electives may be demonstrated on patients or phantoms or as simulations. For Clinical Education I, based on topics presented in RAD 111, students will be required to achieve a minimum of 7 clinical competencies. (* indicate elective procedures)

1. Chest, routine
2. Pediatric Chest
3. AP Wheelchair or Stretcher Chest
4. Lateral Decubitus Chest*
5. Finger or thumb
6. Hand
7. Wrist
8. Forearm
9. Elbow
10. Humerus
11. Shoulder
12. Trauma Upper Extremity
13. Pediatric Upper Extremity*
14. Scapula*
15. Clavicle
16. Acromioclavicular Joints*

17. Trauma Shoulder or Humerus
18. Abdomen (Supine and Upright)
19. Abdomen (Decubitus)
20. Portable Chest
21. Portable Abdomen
22. Portable Extremity
23. Geriatric Chest Routine
24. Geriatric Upper Extremity

LEARNING MATERIALS:

Text:

Long, Curtis, and Smith, (2023). *Merrill's Pocket Guide to Radiography* (15th ed.). St. Louis, MO: Mosby Publishing Inc.

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: Cheryl L. Weiss, M.S., R.T. and Dr. Victoria Bastecki-Perez	Date: 12/2002
Revised by: Debra J. 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, M.S., R.T.	Date: 6/2017
VPAA/Provost or designee Compliance Verification: Victoria L. Bastecki-Perez, Ed.D.	Date: 6/26/2017
Revised by: Debbie Dalrymple and Cheryl L. DiLanzo, M.S., R.T.	Date: 1/9/2018
VPAA/Provost or designee Compliance Verification: Victoria L. Bastecki-Perez, Ed.D.	Date: 1/9/2018
Revised by: Dana Smith, M.S., R.T.	Date: 7/11/2023
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.