

Montgomery County Community College  
RAD 114  
Clinical Education II  
3-0-15

**COURSE DESCRIPTION:**

This clinical course is a continuation of Clinical Education I. Emphasis is placed on clinical rotations where students can observe, practice and perform those examinations learned and simulated in the Radiographic Procedures I and II course. Students will be required to perform competency examinations, image evaluations and proper patient care procedures. 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*

- RAD 100 Introduction to Radiography and Patient Care
- RAD 106 Radiographic Image Production and Analysis
- RAD 104 Clinical Education I
- RAD 111 Radiographic Procedures I

*Previous or Concurrent Course Requirements*

- RAD 105 Radiation Physics and Imaging Equipment
- RAD 121 Radiographic Procedures II

LEARNING OUTCOMES Upon successful completion of this course, the student will be able to:	LEARNING ACTIVITIES	EVALUATION METHODS
1. Perform patient assessment by attaining and recording pertinent medical history.	Observation Demonstration and Practice Computer Technology Critical Thinking Activities Oral Communication Simulations	Clinical Evaluations Bi Weekly Evaluations
2. Demonstrate removal of radiopaque materials from the exposure field that could interfere with the image (e.g., clothing, jewelry)	Observation Demonstration and Practice Critical Thinking Activities Oral Communication	Clinical Evaluations Bi Weekly Evaluations
3. Demonstrate proper evaluation of a requisition, facility readiness, equipment operation and technical	Observation Demonstration and Practice Computer Technology Critical Thinking Activities	Clinical Evaluations Bi Weekly Evaluations Image Evaluation Rubric

factors selection, positioning skills, radiation protection, and image processing.	Oral Communication Simulations Image Evaluation Assignment	
4. Respond appropriately to exposure indicator values.	Observation Demonstration and Practice Oral Communication Simulations Image Evaluation Assignment	Clinical Evaluations Bi Weekly Evaluations Image Evaluation Rubric

LEARNING OUTCOMES	LEARNING ACTIVITIES	EVALUATION METHODS
5. Execute medical imaging procedures under the appropriate level of supervision.	Observation Demonstration and Practice Computer Technology Critical Thinking Activities Oral Communication	Clinical Evaluations Bi Weekly Evaluations
6. Evaluate images for proper anatomical parts, alignment, exposure techniques, patient identification and radiation protection.	Observation Demonstration and Practice Computer Technology Critical Thinking Activities Image Evaluation Assignment Oral Communication	Clinical Evaluations Bi Weekly Evaluations Image Evaluation Rubric
7. Demonstrate proper patient care skills, interpersonal skills and use of time.	Observation Demonstration and Practice Computer Technology Critical Thinking Activities Oral Communication	Clinical Evaluations Bi Weekly Evaluations
8. Explain the influence of professional values on patient care.	Observation Demonstration and Practice Computer Technology Critical Thinking Activities Oral Communication Simulations	Clinical Evaluations Bi Weekly Evaluations
9. Adapt procedures to meet age-specific, disease-specific and cultural needs of patients.	Observation Demonstration and Practice Computer Technology Critical Thinking Activities Oral Communication	Clinical Evaluations Bi Weekly Evaluations
10. Provide desired psychosocial support to patient and family.	Observation Demonstration and Practice Computer Technology Critical Thinking Activities Oral Communication Simulations	Clinical Evaluations Bi Weekly Evaluations

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:

According to the American Registry of Radiologic Technologists (ARRT), students must demonstrate competency in all 36 mandatory procedures. Procedures should be performed on patients whenever possible, but up to ten (10) mandatory procedures may be simulated if demonstration on patients is not feasible. Students must also demonstrate competence in 15 of the 34 \*elective procedures. Elective procedures should be performed on patients whenever possible, but electives may be simulated if demonstration on patients is not feasible. Based on the topics presented in RAD 111 and 121, Students will be required to achieve a minimum of 7 competencies. Any competencies from the previous semester that are required for the total may also be attempted.

1. Toes\*
2. Foot/Ankle
3. Calcaneus\*
4. Tibia/fibula
5. Knee
6. Patella\*
7. Femur
8. Hip
9. Pelvis
10. Cross-Table Lateral Hip
11. Soft Tissue Neck\*
12. Cervical vertebrae
13. Thoracic vertebrae
14. Lumbar vertebrae
15. Cross-table Lateral Spine
16. Sacrum/coccyx\*
17. Scoliosis Series\*
18. Pediatric Upper or Lower Extremity\*
19. Geriatric Upper or Lower Extremity
20. Geriatric Hip/Spine\*
21. Trauma Lower Extremity
22. Sacroiliac Joints\*
23. C-arm Procedure
24. Surgical C-arm Procedure

## LEARNING MATERIALS:

### Text:

Long, Curtis, and Smith, (2023). *Merrill's Pocket Guide to Radiography* (15<sup>th</sup> 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 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:	10/28/2016
VPAA/Provost or designee Compliance Verification:	Victoria L. Bastecki-Perez, Ed.D.	Date:	11/5/2016
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:	10/27/2022
VPAA or designee Compliance Verification:		Date:	10/27/2023



*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.*