

Montgomery County Community College  
RAD 124  
Clinical Education III  
4-0-20

**COURSE DESCRIPTION:**

This course is a continuation of the Clinical Education series. Students will spend 320 hours per week (to include lunch and break) during the Summer Session at the clinical education center observing, assisting and performing radiologic examinations. Students will utilize this concentrated time to master positioning, technique and patient care skills that they learned throughout the first year of the program. 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 105 Radiation Physics and Imaging Equipment
- RAD 121 Radiographic Procedures II
- RAD 114 Clinical Education II

*Concurrent Course Requirements*

None

LEARNING OUTCOMES Upon successful completion of this course, the student will be able to:	LEARNING ACTIVITIES	EVALUATION METHODS
1. Execute medical imaging procedures under the appropriate level of supervision.	Observation Demonstration and Practice Computer Technology Critical Thinking Activities Oral Communication Simulations	Clinical Evaluations Biweekly Evaluations Discussion Questions Critical Thinking Assignments
2. Assess the image for proper anatomical parts, alignment, radiographic techniques, patient identification and radiation protection.	Observation Demonstration and Practice Computer Technology Critical Thinking Activities Image Evaluation Assignment Oral Communication Simulations	Clinical Evaluations Biweekly Evaluations Discussion Questions Critical Thinking Assignments Image Evaluation Rubric

LEARNING OUTCOMES	LEARNING ACTIVITIES	EVALUATION METHODS
3. Determine corrective measures to improve inadequate images.	Observation Demonstration and Practice Computer Technology Critical Thinking Activities Image Evaluation Assignment Oral Communication Simulations	Clinical Evaluations Biweekly Evaluations Discussion Questions Critical Thinking Assignments Image Evaluation Rubric
4. Respond and adapt to changes and varying clinical situations.	Observation Demonstration and Practice Computer Technology Critical Thinking Activities Oral Communication Simulations	Clinical Evaluations Biweekly Evaluations Discussion Questions Critical Thinking Assignments
5. Differentiate between emergency and non-emergency procedures.	Observation Demonstration and Practice Computer Technology Critical Thinking Activities Oral Communication Simulations	Clinical Evaluations Biweekly Evaluations Discussion Questions Critical Thinking Assignments
6. Comply with departmental and institutional response to emergencies, disasters and accidents.	Observation Demonstration and Practice Computer Technology Critical Thinking Activities Oral Communication Simulations	Clinical Evaluations Biweekly Evaluations Discussion Questions Critical Thinking Assignments
7. Demonstrate appropriate charting methods.	Observation Demonstration and Practice Computer Technology Critical Thinking Activities Oral Communication Simulations	Clinical Evaluations Biweekly Evaluations Discussion Questions Critical Thinking Assignments

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:

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 eight 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 13 competencies. Any competencies from the previous semester that are required for the total may also be attempted. For Clinical Education III, students will be required to complete the mandatory competencies from the first 2 semesters in Clinical Education and Procedures I and II. The list of mandatory and elective\* competencies are as follows and should be used as the guideline for this semester objective completion:

1. Chest, routine
2. Pediatric Chest
3. AP Wheelchair or Stretcher Chest
4. Lateral Decubitus Chest\*
5. Geriatric Chest Routine
6. Finger or Thumb
7. Hand
8. Wrist
9. Forearm
10. Elbow
11. Humerus
12. Shoulder
13. Trauma Extremity
14. Pediatric Upper or Lower Extremity\*
15. Scapula\*
16. Clavicle
17. Acromioclavicular Joints\*
18. Trauma Shoulder
19. Abdomen (Supine and Upright)
20. Abdomen (Decubitus)
21. Portable Chest
22. Portable Abdomen
23. Portable Extremity
24. Toes\*
25. Foot
26. Ankle
27. Calcaneus\*
28. Tibia/Fibula
29. Knee
30. Patella\*

31. Femur
32. Pelvis
33. Hip
34. Cervical Vertebrae
35. Thoracic Vertebrae
36. Lumbar Vertebrae
37. Sacrum/Coccyx\*
38. Scoliosis Survey\*
39. Pediatric Lower Extremity\*
40. Sacroiliac Joints\*
41. Geriatric Upper or Lower Extremity
42. Geriatric Hip or Spine
43. Pediatric Abdomen\*
44. Pediatric Mobile Study\*
45. C-arm Procedure
46. 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:	Erin Carroll-Defusco, M.Ed. RT(R)(MR)	Date:	11/11/2015
VPAA/Provost or designee Compliance Verification:	Victoria L. Bastecki-Perez, Ed.D.	Date:	11/11/2015
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.  
VPAA or designee Compliance Verification:

Date: 2/21/2023  
Date: 2/21/2023

A handwritten signature in cursive script, reading "Sherol J. Dix". The signature is written in black ink on a white background.

*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.*