

## **RADT 124**

### **Radiographic Procedures II**

1 Credit

## Community College of Baltimore County Common Course Outline

### **Description**

**RADT 124 – Radiographic Procedures II:** students examine the physical positioning of the patient and equipment needed to produce routine radiographs of the lower extremities and spine and thorax regions. Topics include routine procedures as well as special radiographic views. 1 credit hour: 1.5 lecture hours per week; 13 weeks. Offered spring semester.

**Pre-requisites:** RADT 121

**Co-requisites:** RADT 123, RADT 125

### **Overall Course Objectives**

Upon completion of this course, students will be able to:

1. identify anatomy of the lower extremities, spinal column, and thorax region that can be demonstrated on radiographs;
2. locate lower extremity, spine, and thorax projections on radiographs;
3. identify special radiographic projections of the lower extremities, spinal column, and thorax region;
4. describe the patient preparation and instructions for radiographic exams, including patient position, part placement, image receptor selection and placement, beam alignment and angulation, patient comfort and stability, breathing instructions, and any special procedural considerations;
5. recognize technical factors that affect the quality of images, including radiographic techniques, control panel settings, source-to-image receptor distance, and image identification placement;
6. demonstrate radiation protection practices for patient and staff safety, including collimation, shielding, and use of grids; and
7. analyze case studies to illustrate best practices for radiographic exams by discussing pathology, non-routine or trauma positioning, and ethical and special issues.

### **Major Topics**

- I. Anatomy of the Lower Extremities, Spinal Column, and Thorax Region
- II. Patient Positioning
- III. Procedural Considerations
- IV. Ethical and Special Issues

- V. Technical Factors
  - a. Radiographic techniques
  - b. Control panel settings
  - c. Source-to-image receptor distance
  - d. Image identification placement
- VI. Patient Preparation and Instructions
  - a. Part placement
  - b. Image receptor selection and placement
  - c. Beam alignment and angulation
  - d. Patient comfort and stability techniques
  - e. Breathing instructions
- VII. Radiation Safety
  - a. Collimation
  - b. Shielding
  - c. Use of grids
- VIII. Radiographic Exams
  - a. Toes
  - b. Foot
  - c. Ankle
  - d. Heel
  - e. Lower leg
  - f. Knee
  - g. Patella
  - h. Femur
  - i. Pelvis
  - j. Hip
  - k. Cervical spine
  - l. Thoracic spine
  - m. Lumbar spine
  - n. Sacrum
  - o. Coccyx
  - p. Sacroiliac joints
  - q. Ribs
  - r. Sternum
  - s. Sternoclavicular joints
  - t. Special Views

### **Course Requirements**

Grading will be determined by the individual faculty member, but shall include the following, at minimum:

- 2 Case Studies
- 6 Quizzes
- 2 Tests

The Common Course Outline (CCO) determines the essential nature of each course.  
For more information, see your professor's syllabus.

- 1 Cumulative Final Exam

Written assignments and research projects: Students are required to use appropriate academic resources in their research and cite sources according to the style selected by their professor.

### **Other Course Information**

The American Registry of Radiologic Technologists (ARRT) has established a minimum scaled passing score of 75%. The Radiography program has developed standards of grading that are consistent with grading systems of other programs. Letter grades will be distributed according to the following standards:

92 -100 A

83 -91 B

75 -82 C

65 -74 D

Below 65 F

This course is a required course in the AAS Radiography program within the Medical Imaging Department. All RADT courses must be passed with a grade of C or better.

Date Revised: 9/5/2019