RADT 104
Radiographic Procedures I
1 Credit

Community College of Baltimore County
Common Course Outline

Description

RADT 104 – Radiographic Procedures I: a course in which students examine physical positioning of the patient and equipment to produce routine radiographs of the chest, abdomen, and upper extremities. Topics include routine procedures as well as special radiographic views. 1 credit hour: 1.5 lecture hours per week; 13 weeks. Offered fall semester.

Pre-requisites: RADT 101 and admission into the Radiography program
Co-requisites: RADT 103, RADT 105

Overall Course Objectives

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

1. identify anatomy of the chest, abdomen, and upper extremities that can be demonstrated on radiographs;
2. identify routine chest, abdomen, and upper extremity projections on radiographs;
3. identify special radiographic projections of the chest, abdomen, and upper extremities;
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. analyze 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. employ 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 Chest, Abdomen, and Upper Extremity Regions
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. Posterior-Anterior (PA) and lateral ambulatory chest
b. PA and lateral chest, with wheelchair and IV pole or oxygen tank, erect
c. Anterior-Posterior (AP) and lateral stretcher chest
d. Lateral decubitus chest
e. Oblique chest
f. Lordotic chest
g. Soft tissue neck for airway
h. AP abdomen, supine
i. Erect Abdomen
j. Lateral decubitus abdomen
k. Lateral abdomen
l. Oblique abdomen
m. Dorsal decubitus abdomen
n. Acute abdominal series
o. Finger
p. Thumb
q. Hand
r. Wrist
s. Forearm
t. Elbow
u. Humerus
v. Shoulder
w. Clavicle
x. Acromioclavicular joints
y. Scapula
z. 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

- Cumulative Final Exam

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.

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