RADT A176: CLINICAL LAB 3

Item	Value
Curriculum Committee Approval Date	02/09/2022
Top Code	122500 - Radiologic Technology
Units	7 Total Units
Hours	378 Total Hours (Lab Hours 378)
Total Outside of Class Hours	0
Course Credit Status	Credit: Degree Applicable (D)
Material Fee	No
Basic Skills	Not Basic Skills (N)
Repeatable	No
Grading Policy	Standard Letter (S)

Course Description

This course consists of clinical lab experience and the application of radiologic technology skills. The course utilizes a competency-based curriculum emphasizing radiologic technology skill development. Radiographic skills to be emphasized will be fluoroscopic procedures, GU tract, upper and lower extremities, and routine spinal column. COREQUISITE: RADT A175. Transfer Credit: CSU.

Course Level Student Learning Outcome(s)

1. Apply positioning skills learned to performing extremity, basic GI and GU contrast, and spinal exams in the clinical setting.
2. Demonstrate appropriate patient care skills, adherence to radiation protection practices, and exhibit professional behaviors.
3. Recognize common image errors for the required exams.

Course Objectives

- I * 1. Perform routine fluoroscopic procedures of the gastrointestinal tract under direct supervision.
- II * 2. Perform routine Genito-Urinary tract examinations under direct supervision.
- III * 3. Position patient and set technical factors for upper extremities, lower extremities, and the spinal column
- IV * 4. Identify the specific contrast media agents utilized for GI and GU procedures.
- V ** 5. Compare and contrast ionic and non-ionic contrast agents.
- VI * 6. List precaution and contra indications of ionic, non-ionic and barium contrast media agents.
- VII ** 7. Differentiate types of contrast media reactions and respond to such reactions utilizing appropriate patient care protocols.
- VIII * 8. Display effective patient communication skills as related to specific exam requirements.
- IX * 9. Participate as a member of the health care team.
- X ** 10. Evaluate and analyze diagnostic image quality with 70% accuracy.
- XI * 11. Complete all clinical training documentation.
- XII * 12. Complete image repeat rate – log sheet
- XIII SCAN Skills Identification: *Competencies **Foundation skills

Lecture Content

Course has Lab content only

Lab Content

Clinical training: Orientation to departmental procedures Clerical responsibilities - exam requisitions and related department documents. Understanding work flow/patient exam scheduling, recommended assignment: Reception area rotation Assignments to fluoroscopic rooms. Demonstrate correct fluoro room set-up. Identify and prepare appropriate contrast media for specific fluoro exams Demonstrate effective patient communication skills. exam preparation instructions to patient patient history procedure explanation patient consent according to department policy Under direct supervision, the student will perform the following exams to include positioning and setting technical factors on equipment control panel. UGI BE Esophagram Other related fluoroscopic exams, I. e. small bowel Continue with clinical training as specified per rotation schedule: Assignment to GU tract procedures. Demonstrate correct room set-up for GU procedures. Identify and prepare appropriate contrast media to include ionic and non-ionic media Demonstrate correct exam protocol. exam prep instructions patient history procedure explanation patient consent according to department policy Under direct supervision the student will perform the GU tract procedures to include positioning and setting technical factor on equipment control panel. Patient care skills Differentiate stages of contrast media reactions. Respond to patient in an emergency contrast reaction to include operation of required equipme nt according to department protocol. location, purpose of crash cart oxygen Assignments to upper and lower extremity, and spinal column procedures. The student will, under direct supervision, perform the following exams to include positioning and setting technical factors on equipment control panel. Upper extremities hand wrist elbow other related exams, i.e., finger, forearm, humerus Lower extremities foot ankle knee other related exams, i.e., toe, patella, femur Spinal column cervical thoracic lumbar other related exams, i.e., sacrum, coccyx Adhere to exam protocols to include: Usage of appropriate image receptor combinations and/or sizes Effective equipment use Safe patient handling and moving Correct body mechanics Adherence to radiation protection practices, i.e., shielding, collimation Assess mid – semester clinical progress Complete RT 176 mid semester evaluation Identify strengths and areas for improvement Revise Clinical Assignments as needed Identify goals for remaining weeks Begin evaluation sheets required for course competency check-offs Continue with clinical training in areas identified Upper extremities Lower extremities Spinal Column Course completion evaluation Observe with final evaluati on of students ability to perform the following routine procedures: Fluoroscopic procedures UGI BE Spinal column GU procedures Upper extremities hand wrist elbow Lower extremities foot ankle knee Spinal column cervical thoracic lumbar Sign off competency list for direct supervision Student must successfully complete performance evaluations. Minimum required number of RT 176 competencies is 5 (see clinical objectives) Complete RT 176 clinical objectives: Determine final course grade by completing RT 176 objectives assessing students ability in all areas identified. Review completed RT 176 objectives with student, student must sign. Identify strengths, and areas for improvement. Determine goals for next clinical course

Method(s) of Instruction

- Lab (04)
- Directed Clinical (DIR)
- Non-Directed Clinical (NDR)

Instructional Techniques

Demonstration, Seminar-style lab, clinical practice under direct supervision, image analysis, return skill demonstration.

Writing Assignments

1 hour per week to complete: 1. Clinical logs - daily, weekly, monthly2. Repeat analysis log3. RT 171 Clinical Objectives4. Skills demonstration - chest, abdomen5. Self evaluation6. Evaluation of clinical assignment/site

Out-of-class Assignments

1 hour per week to complete: 1. Clinical logs - daily, weekly, monthly2. Repeat analysis log3. RT 171 Clinical Objectives4. Skills demonstration - chest, abdomen5. Self evaluation6. Evaluation of clinical assignment/site

Demonstration of Critical Thinking

1. Performance evaluation sheet.2. Clinical practicum proficiency - 5 exams required to be signed off in direct supervision.a. routine fluorob. GUc. upper extremitiesd. lower extremitiese. routine spinal column3. Completion of clinical training documentation utilizing forms from student clinical handbook.4. RADT A176 Clinical Objectives5. Attendance and appearance6. Clinical participation7. Completion of required clinical hours

Required Writing, Problem Solving, Skills Demonstration

1. Clinical logs - daily, weekly, monthly2. Repeat analysis log3. RADT A176 clinical objectives, self analysis4. Skills demonstration of required exams5. Self evaluation6. Evaluation of clinical assignment/site

Eligible Disciplines

Radiological technology: Any bachelors degree and two years of professional experience, or any associate degree and six years of professional experience. Radiological technology: Any bachelors degree and two years of professional experience, or any associate degree and six years of professional experience.

Textbooks Resources

1. Required Holt, K. , Sachs, L.,. Student Clinical Manual,, ed. Orange Coast College Bookstore, 2022 Rationale: - 2. Required Lampignano, J. P., Kendrick, L. E. . Bontragers Textbook of Radiographic Positioning and Related Anatomy., 10th ed. Missouri: Elsevier/Mosby, 2020

Other Resources

1. Radiology Department procedure manual