

RADT A276: CLINICAL LAB 6

Item	Value
Curriculum Committee Approval Date	11/01/2023
Top Code	122500 - Radiologic Technology
Units	1.5 Total Units
Hours	81 Total Hours (Lab Hours 81)
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 skills development. Radiographic skills emphasized are advanced contrast media procedures, trauma, portable radiography, pediatric and surgical exams. COREQUISITE: RADT A275. Transfer Credit: CSU.

Course Level Student Learning Outcome(s)

1. Apply positioning skills learned to performing minor and major contrast procedures in the clinical setting.
2. Demonstrate appropriate patient care skills, adherence to radiation protection practices, and exhibit professional behaviors.
3. Analyze images for common image errors and formulate corrections for the required exams.
4. Investigate career opportunities in other imaging modalities through observation and participation.

Course Objectives

- 1. Perform all routine contrast media exams.*
- 2. Participate, as a team member, in minor and major special procedure exams.*
- 3. Identify equipment and demonstrate correct exam set-up for minor and major special contrast procedures.*
- 4. Position patients properly for all exams as outline in the course content and scope.*
- 5. Demonstrate effective patient communication skills including required patient preparation procedure explanation and obtaining informed consent.**
- 6. Evaluate and analyze image quality. Demonstrate advanced image analysis skill with 85% modification accuracy.**
- 7. Demonstrate ability to modify exam protocols due to patient condition.**
- 8. Demonstrate correct techniques with all portable equipment to include surgery, trauma, and special care units.*
- 9. Participate in optional rotation in routine mammography, Nuclear medicine, Radiation oncology and CT.*
- 10. Perform under general supervision pediatric exams.*
- 11. Participate in department QA program performing routine QC responsibilities.*

- 12. Arrange and organize all course paperwork and documentation including AART terminal competencies.*
- 13. Demonstrate ability to employ age related care protocols.*
- 14. Demonstrate ability to perform ARRT terminal competencies.*
- I * Competencies
- II ** Foundation skills

Lecture Content

Lab Content

Clinical training Assignment to clinical rotations to include: General diagnostic Fluoroscopy Special procedures i.e. angiography Surgery Portables Under indirect supervision the student will perform All routine diagnostic procedures as outlined in previous clinical courses. All routine fluoroscopic procedures as identified in previous courses. Portable exams – requires direct supervision Chest Abdomen Extremity Surgical procedures – requires direct supervision Trauma radiography Variable shift assignments Pediatric exams Chest to include portable Abdomen to include portable Extremities to include portable Contrast media i.e. UGI, BE, VCUG Perform under direct supervision high risk portable exams. Begin ARRT terminal competencies requirements. Continue with clinical training Assignment to minor and major special contrast procedures. Identify equipment including correct exam setup. Identify exam protocols including necessary patient preparation history and consent requirements. Adhere to standard precautions to include sterile procedures protocols. Perform as a member of the special procedures team. Assess mid-semester clinical progress Complete RADT A276 evaluation. Revive clinical assignments as needed. Continue with clinical training Perform routine QC responsibilities Fluoroscopy checks Processor sensitometry and/or digital system Demonstrate advanced ability to evaluate and analyze image quality to include recognition of: Positioning errors Technique factors i.e. contrast, density Image artifacts Begin optional rotations Mammography Participate in routine mammographic exams/procedures Document experiences utilizing specific clinical forms Nuclear Medicine Radiation Oncology CT MRI Sonography Continue with completion ARRT terminal competencies Continue with clinical training Continue evaluation sheets required for competency check-off procedure Sing off practicum competency list-direct supervision category or indirect supervision category, which ever is appropriate Observe with final evaluation students ability to perform the identified exams Determine final clinical course grade by completing RADT A276 clinical objective – evaluate students ability in all areas identified Review completed RT 276 objectives with student-identify students strengths and areas of improvement Determine goals for next clinical course

Method(s) of Instruction

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

Instructional Techniques

Demonstration; Seminar-style lab; Clinical practice under direct and/or indirect supervision (when clinically competency has been achieved); Direct supervision required for all repeat images per accreditation standards and State law; Image analysis; Return skill demonstration

Writing Assignments

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

Demonstration of Critical Thinking

Performance evaluation; clinical practicum proficiency exams identified in course outline; completion of clinical training documentation utilizing forms from student clinical manual; RT 276 Clinical Objectives; attendance and appearance; clinical participation; completion of required clinical hours.

Required Writing, Problem Solving, Skills Demonstration

Clinical logs - daily, weekly, monthly Repeat analysis log RADT A276 Clinical Objectives Skills demonstration of required procedures to include ARRT terminal competencies Self Evaluation 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.

Textbooks Resources

1. Required Alder, A., Carlton, R. . Introduction to Radiology and Patient Care, 7th ed. Elsevier/Mosby, 2018 Rationale: - 2. Required Lampignano, J. P., Kendrick, L. E. . Bontragers Textbook of Radiographic Positioning and Related Anatomy., ed. Missouri: Elsevier/Mosby, 2020 3. Required Holt, K. , Sachs, L., Student Clinical Manual,, ed. Orange Coast College Bookstore, , 2022 Rationale: current edition. 4. Required McQuillen – Martensen, K. . Radiographic Critique Text and Workbook Set, 4th ed. Elsevier/Mosby , 2016 Rationale: -

Other Resources

1. Radiology Departments Procedure Manual.