

RADT A277: CLINICAL LAB 7

Item	Value
Curriculum Committee Approval Date	02/09/2022
Top Code	122500 - Radiologic Technology
Units	7 Total Units
Hours	384 Total Hours (Lab Hours 384)
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. Emphasis on independent radiography and decision making. Professional growth and program exit skills are expected. PREREQUISITE: RADT A276 or concurrent enrollment. Transfer Credit: CSU.

Course Level Student Learning Outcome(s)

1. Apply positioning skills learned to performing the radiographic exams and procedures expected of the entry-level radiographer in the clinical setting.
2. Demonstrate appropriate patient care skills, adherence to radiation protection practices, and exhibit professional behaviors.
3. Assess radiographic images for diagnostic quality, identify errors and formulate and apply appropriate corrections.
4. Enumerate the QA/QC skills that comprise a typical Quality Assurance Program.
5. Perform 90% of the radiographic exams as listed in the Second Year Clinical Practicum.

Course Objectives

- 1. Demonstrate independent ability with 95% accuracy to image quality.**
- 2. Exercise appropriate critical thinking and interpersonal skills in an environment that includes varying and unpredictable circumstances.**
- 3. Maintains image repeat rate that demonstrates ALARA compliance as indicated by repeat analysis logs.*
- 4. Demonstrate 90% of second year competency list under general supervision.*
- 5. Independently explain designated departmental QC procedures.*
- 6. Demonstrate increased professional growth as indicated by decreasing supervision in the performance of radiographic exams.**
- 7. Demonstrate competency under indirect supervision to perform all routine radiographic procedures covered in RADT A171 through RADT A277.*
- 8. Demonstrate with direct supervision portable and surgical procedures.*
- 9. Demonstrate ability to perform as a team member in all contrast media exams.**

- 10. Demonstrate staff radiologic technologist entry level skills according to radiology department protocol.*
- 11. Completion of all terminal competencies and program clinical documentation, to include clinical hours required.*
- 12. Demonstrate ability to employ age related care protocols.

Lecture Content

Clinical training Final assignment to clinical rotations to include all phases of general diagnostic procedures. Continue to perform under general supervision. All routine diagnostic procedures as outline in previous clinical courses. All routine fluoroscopy. Portable and surgical exams require direct supervision Continue with ARRT Terminal Competencies Clinical training Complete outstanding clinical optional rotations Mammography CT Nuclear Medicine Radiation Oncology Continue independent performance of departmental Quality Control procedures. Sensitometry and/or digital system protocols Fluoroscopy checks Assess students ability to image analysis and make modifications with 95% accuracy. Identify outstanding clinical competencies that must be completed. Assess Mid-Semester clinical progress Complete RADT A277 mid-semester evaluation. Revise clinical assignment if necessary. Continue with clinical training Complete all outstanding clinical exams as indicated on 2nd year proficiency practicum Complete all ARRT Terminal Competencies. Complete all ARRT Patient Care Competencies. Clinical final assessment Completion of evaluation sheets for competency check-off procedures. Complete sign-off process on proficiency practicum form, minimum requirement 90% of listed exams. Observe with final evaluation students ability to perform routine diagnostic procedures. Verify completion of all clinical course documentation: clinical hours terminal competencies Verify repeat rate to be within ALARA compliance. Completion of all clinical objectives, RADT A171 - RADT A277 Verify completion of ARRT terminal competencies exam and patient care skills. Verify ability to perform analysis with 95% accuracy. Determine final clinical grade by completion of RADT A277 Clinical Objectives. Based upon the above requirements, student can assume the functions and responsibilities of any entry level Radiologic Technologist. If all final clinical competencies as outlined are not completed then clinical education will be extended.

Lab Content

Clinical training Final assignment to clinical rotations to include all phases of general diagnostic procedures. Continue to perform under general supervision. All routine diagnostic procedures as outline in previous clinical courses. All routine fluoroscopy. Portable and surgical exams require direct supervision Continue with ARRT Terminal Competencies Clinical training Complete outstanding clinical optional rotations Mammography CT Nuclear Medicine Radiation Oncology Continue independent performance of departmental Quality Control procedures. Sensitometry and/or digital system protocols Fluoroscopy checks Assess students ability to image analysis and make modifications with 95% accuracy. Identify outstanding clinical competencies that must be completed. Assess Mid-Semester clinical progress Complete RADT A277 mid-semester evaluation. Revise clinical assignment if necessary. Continue with clinical training Complete all outstanding clinical exams as indicated on 2nd year proficiency practicum Complete all ARRT Terminal Competencies. Complete all ARRT Patient Care Competencies. Clinical final assessment Completion of evaluation sheets for competency check-off procedures. Complete sign-off process on proficiency practicum form, minimum requirement 90% of listed exams. Observe with final evaluation students ability to perform routine diagnostic

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Method(s) of Instruction

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

Instructional Techniques

1. Demonstration 2. 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. 3. Film analysis and critique. 4. Return skill demonstration.

Writing Assignments

1 hour per week 1. Clinical logs-daily, weekly, monthly 2. Repeat analysis log 3. RADT A277 Clinical Objectives 4. Evaluation of clinical assignment/site 5. Skills demonstration of required exams to include ARRT Terminal Competencies. 6. Self evaluation.

Out-of-class Assignments

1 hour per week 1. Clinical logs-daily, weekly, monthly 2. Repeat analysis log 3. RADT A277 Clinical Objectives 4. Evaluation of clinical assignment/site 5. Skills demonstration of required exams to include ARRT Terminal Competencies. 6. Self evaluation.

Demonstration of Critical Thinking

1. Performance evaluation sheet 2. Clinical practicum proficiency exams identified in the course outline. 3. Completion of clinical training documentation utilizing forms from student clinical manual. 4. RT A277 Clinical Objectives. 6. Clinical participation. 7. Completion of required clinical hours.

Required Writing, Problem Solving, Skills Demonstration

1. Clinical logs-daily, weekly, monthly 2. Repeat analysis log 3. RADT A277 Clinical Objectives 4. Evaluation of clinical assignment/site 5. Skills demonstration of required exams to include ARRT Terminal Competencies. 6. Self evaluation.

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. 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., 10th ed. Missouri: Elsevier/Mosby, 2007 Rationale: . 3. Required Holt, K. A., Sachs, L.. Radiologic Technology Student Clinical Handbook., ed. Orange Coast College Bookstore, 2022 Rationale: - 4.

Required McQuillen – Martensen, Kathy, . Radiographic Critique Text and Workbook Set, 4th ed. Elsevier , 2016 Rationale: -

Other Resources

1. Radiology Departments Procedure Manual.