



Radiographic Practicum III (RADR 1266)

Credit: 2 semester credit hours (28 hours lab)

Prerequisite/Co-requisite: RADR 1367

Course Description

Radiologic Technology Course covering practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student. Students make standard radiographs under close supervision by a qualified radiologic technologist. Course requires 28 hours/ week in clinical participation.

Required Textbook and Materials

No textbook is required for this course. We recommend you purchase the textbook,

1. Ethical and Legal Issues for Imaging Professionals, 2nd edition, Towsley-Cook/Young, ISBN 9780323045995
2. A computer with internet access

Course Objectives

Upon completion of this course, the student will be able to

1. Demonstrate proficiency in previously learned clinical and radiation protection skills.
2. Exhibit high standards of quality.
3. Develop affective behaviors consistent with a professional radiographer.
4. Build self-reliance.
5. Increase speed when performing exams.
6. Work with atypical patients.
7. Demonstrate a basic understanding of digital image manipulation:
 - a. Density and contrast changed by window and leveling
 - b. Adding text to images
 - c. Image rotation and flipping
8. Evaluate images for technical quality and radiographic anatomy
9. With *Direct Supervision*, utilize problem-solving skills to make technique decisions based on the exposure index on each image
10. Perform portable and surgical radiography. They will demonstrate creative thinking ability, proper decision making and problem solving skills by patient evaluation and
 - a. Demonstrating knowledge and expertise in adapting positioning skills for bedside and surgical radiography.
 - b. Adjusting technical factors within the limitations of the mobile equipment for body habitus, pathology, presence of a wet or dry cast, etc.
 - c. Demonstrating knowledge in radiation protection by using proper collimation, distance, and protective shielding for both patient and technologist.

RADR 1266
Course Syllabus

- d. Demonstrating proper aseptic technique when preparing mobile equipment for a sterile surgical procedure or performing an examination on an isolation patient.
- 11. Observe and assist with a C-arm surgical procedure to include
 - a. Preparation and set up of equipment
 - b. Assist with manipulation of equipment during procedure
 - c. Removal of equipment upon completion of procedure

Course Outline

1. Continue development of:
 - a. positioning skills
 - b. protocols
 - c. exposure factors
 - d. radiation protection practices for self and patient
2. Communication skills
 - a. working with diverse populations
 - b. team building skills
3. Decision making and problem solving skills
 - a. patient evaluation
 - b. technical factors and equipment manipulation
 - c. visualizing the exam
 - d. organizing the information
 - e. equipment and materials
4. Creative thinking and reasoning ability
 - a. trauma, difficult, or uncooperative patients
 - b. anatomical identification
 - c. identification of pathology or abnormal conditions
5. Patient evaluation
 - a. bedside and surgical radiography
 - b. adjustment of technical factors
 - c. body habitus
 - d. pathology
 - e. presence of a wet or dry cast, etc.
 - f. radiation protection
 - g. aseptic technique for a sterile surgical procedure or isolation patient
6. Digital image manipulation
 - a. density and contrast changed by window and leveling
 - b. adding text to images
 - c. image rotation and flipping
7. C-arm procedure
 - a. preparation
 - b. equipment set-up
 - c. assistance technologist with procedure
 - d. removal of equipment from the work area
 - e. radiation protection for self, patient, and other staff
8. Specialty rotations

RADR 1266

Course Syllabus

- a. punctuality and availability for patient examinations
- b. professional appearance
- c. demonstrate an interest in the rotation
- d. participation in the imaging process
- e. communicating effectively with others
- f. basic understanding of the examinations performed in the specialty area
- g. radiation protection practices
9. Off-hour rotations
 - a. difficult or uncooperative patients
 - b. technique,
 - c. positioning
 - d. restraining devices
 - e. film quality
10. Through indirect supervision
 - a. building self-esteem
 - b. building management skills
11. Ethical and legal issues
 - a. analyzing and evaluating ethical dilemmas
 - b. analyzing and evaluating legal dilemmas
12. Film critique

Grading Scale

- 95 – 100 = A
87 – 94 = B
80 – 86 = C
70 – 79 = D
0 – 69 = F

Course Evaluation

- | | |
|--|-----|
| 1. Task Analysis (10) | 43% |
| 2. Clinical Behavior Report(2) | 43% |
| 3. Written Tests (3-9) & Special Assignment Evaluations(3-5) | 14% |

Course Requirements

By the end of each summer session the student will:

1. Successfully complete 10 Task Analysis, two from each of the following categories:
 - Headwork
 - Spine
 - Contrast studies
 - Trauma, difficult or uncooperative patient
 - Portable radiography

Part of the task analysis process is to monitor and correct their performance if repeat radiographs are required. The task analyses are at the discretion of your clinical instructor; they may choose the examination you are to perform. **Students may**

be given the opportunity to repeat 2 task analysis during the summer semester under the following conditions:

- Repeating the task analysis will change the student's letter grade for the semester
 - Repeating the task analysis will not prohibit another student from completing the required Task Analysis.
2. Use critical thinking skills to critique selected radiographs for the following factors:
 - technical quality
 - positioning
 - proper collimation
 - artifacts/identification markers
 - anatomical structures demonstrated
 3. Use critical thinking and problem solving skills to solve ethical and legal dilemmas discussed in various textbooks covering ethical and legal issues for imaging professionals. Students will have at least two legal and ethical assignments which may be assigned through Blackboard.
 4. Receive two **Clinical Behavior** Evaluations during the summer semester. They will demonstrate affective skills needed by a professional like: integrity, time management, sociability, and responsibility.
 5. Demonstrate cognitive skills, critical thinking and problem skills on film critique assignments. Students will have at least three film critique assignments which may be assigned through Blackboard.
 6. Rotate through **Special Assignments**. At least one of the task analysis should be accomplished during the Special Assignment. This area includes evenings and weekends.

By the end of the Summer Semester the student will:

1. Observe at least 1 documented C-arm procedure in its entirety
2. Attend scheduled student Radiologic Technology meetings on the LIT campus

No task analysis may be repeated after the date assigned by the instructor or after the last clinical behavior report. Special Assignment must be turned in by the assigned date or a grade of zero "0" will be given for that evaluation.

Failure to successfully complete the required objectives will result in an incomplete (I) in the clinical course. An incomplete must be removed by the end of the next long semester or the (I) will be recorded as an (F) and the student will be required to repeat the clinical course.

***** A minimum of 80% is required for successful completion of this course*****

Course Schedule

This course requires 28 hours per week in the assigned clinical facility. Weekly rotations can be found on the clinical schedule distributed by the instructor and posted in the Blackboard course.

RADR 1266

Course Syllabus

Contact Information

Instructor Name	Office	Phone	E-mail
Brenda Barrow	232 MPC	880-8848	brenda.barrow@lit.edu
Lisa Bland	230 MPC	839-2040	lisa.bland@lit.edu
Gina McMahon	234 MPC	839-2936	gina.mcmahon@lit.edu
Sheryl Nance	229 MPC	880-8864	sheryl.nance@lit.edu
Samantha Robinson	233 MPC	880-1851	samantha.robinson@lit.edu
April Smith	234 MPC	839-2936	alsmith1@lit.edu

Office Hours

Clinical Instructors are available to assist students at the clinical affiliates from 7:00-3:00.

Blackboard

This course is Web Enhanced. All students will be required to login to **Blackboard at least once a week** to check e-mail and complete assignments. Assignments will be posted throughout the semester. It is your responsibility to meet the deadlines.

Late work will not be accepted. If you are unable to meet a deadline in this course send an e-mail and we will discuss your options.

Attendance Policy

1. For students in the radiology program to acquire the necessary clinical competency outlined in our curriculum, it is necessary that students complete all assigned clinical hours. Therefore, students missing **any** clinical hours will be required to make up hours missed at the end of the semester. Time will be made up after the **last scheduled** clinic day. Students not completing make up time before the grades are due for the semester, will receive an incomplete (I) in the clinical course.
2. Any absence while assigned to a specialty area or off-hour rotation will require the clinical instructor to adjust the clinical schedule to assure all students meet the accreditation guidelines. For example, a student missing a day when assigned to an evening shift will have one of the future clinical days changed to an evening shift. The schedule adjustments will be made by the clinical instructor at their discretion.
3. Students who have tardy time totaling at least one (1) hour will be required to make up all the missed time at the end of the semester. When a student is tardy he/she will not be allowed to make up the time that day. If a student leaves clinic early for any reason, it will be added to the total tardy time.
4. Students who miss a total of 24 hours during a Fall or Spring semester or 21 hours in the Summer semester **will receive a warning with the Disciplinary Action Form (DAF). When a fourth day is missed a DAF will be filled out and the Student's clinical grade will be lowered one full letter grade. Each subsequent absence may result in dropping of a letter grade pending a review by department committee.**
5. Students who exhibit excessive tardiness will receive a warning with the DAF. Further tardies will result in disciplinary action which may include an attendance contract and/or lowering of the student's clinical grade.
6. Extenuating circumstances will be taken into account. Extenuating circumstances

RADR 1266
Course Syllabus

include funeral of immediate family, maternity, hospitalizations etc.

7. Students who fail to follow proper call in procedures when unable to attend clinic will have their clinic grade lowered one full letter grade for **EACH** day they fail to follow proper call in procedure.

Disabilities Statement

The Americans with Disabilities Act of 1992 and Section 504 of the Rehabilitation Act of 1973 are federal anti-discrimination statutes that provide comprehensive civil rights for persons with disabilities. Among other things, these statutes require that all students with documented disabilities be guaranteed a learning environment that provides for reasonable accommodations for their disabilities. If you believe you have a disability requiring an accommodation, please contact the Special Populations Coordinator at (409) 880-1737 or visit the office located in the Cecil Beeson Building, room 116B.