



**LAMAR INSTITUTE  
OF TECHNOLOGY**

Clinical IV Radiologic Technology-RADR 2360-7A1

### **INSTRUCTOR CONTACT INFORMATION**

Instructor: Sheryl A. Nance  
Multiple instructors assigned to clinical facilities

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Office Phone: 409.247.5093

Office Location: Multi-Purpose Center, Office 229

Office Hours: Monday/Wednesday 10:15 am- Noon

### **CREDIT**

3 Semester Credit Hours (0 hours lecture, 18 contact hours)

### **MODE OF INSTRUCTION**

Face to Face

### **PREREQUISITE/CO-REQUISITE:**

RADR 1266

### **COURSE DESCRIPTION**

Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student.

### **COURSE OBJECTIVES/GOALS**

This course is a continuation of previous clinical experiences. **The student is expected to maintain proficiency in the previously learned clinical objectives and continue to practice competencies on typical and atypical patients.** The student is assigned to the clinical facility for 18 hours per week to develop speed, high standards of quality, and affective behaviors consistent with a professional radiographer. Self-reliance habits are emphasized.

Students will be scheduled on various **specialty rotations**. The student will complete 48 hours of rotations on evenings and weekends in accordance with current program policy. During this semester students will be required to complete rotations through other affiliates.

The students are encouraged to perform procedures, in which they have achieved competency; emphasis is placed on self-reliance, speed, and development of independent judgment. **The students are encouraged to work with minimal or indirect supervision.**

## COURSE OBJECTIVES

1. The student will demonstrate positioning skills, knowledge of protocols, exposure factors, body systems, communication skills and radiation protection while performing procedures on atypical patients.
2. The student will demonstrate radiation protection for self, patient, and others.
3. The student will show competence in:
  - a. adding annotations to images
  - b. image rotation and flipping
4. The student will demonstrate an advanced understanding when manipulating digital images (window and level) on a monitor.
5. The student will begin employing problem-solving skills by selecting and adjusting technical factors while understanding their effects on data acquisition and dynamic range.
6. The student will demonstrate the ability to perform radiographic examinations on trauma, difficult, or uncooperative patients. They will demonstrate creative thinking ability and problem-solving skills by evaluating the patient and making decisions to...
  - a. use immobilization devices and positioning aids when needed
  - b. adjust technical factors to eliminate involuntary motion or to compensate for pathological conditions or injury
  - c. adjust radiographic equipment and employ alternate positioning methods when there are restrictions to movement of patient, anatomical part, or space limitations
  - d. use proper safety techniques and radiation principles despite the difficulties encountered with such patients
7. The student will perform portable and surgical radiography under the supervision of a technologist. They will demonstrate creative thinking ability, problem solving skills and proper decision making by evaluating the patient and...
  - a. utilizing 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. exhibit knowledge in radiation protection by using proper collimation, distance, and protective shielding for both patient and technologist
  - d. demonstrating proper aseptic technique when preparing mobile equipment for a sterile surgical procedure or performing an examination on an isolation patient
8. The student will rotate through special assignments. While assigned to the specialty areas the students will be able to:
  - a. show punctuality and availability for patient examinations
  - b. present a professional appearance
  - c. demonstrate an interest in the area of rotation
  - d. participate as much as is allowed in the imaging process
  - e. effectively communicate/interact with others
  - f. demonstrate a basic understanding of the examinations performed in the specialty area
9. While on off-hour rotations the students will demonstrate with **indirect supervision** the following skills:
  - a. successfully performing radiographs on difficult patients, i.e. E.R., trauma,

- uncooperative patients, etc.
  - b. making independent judgments in the areas of technique, positioning, restraining devices, and image quality using reasoning skills
  - c. exhibit increasing self-esteem and self-management skills.
10. The student will be able to visualize the exam, organize information, and pre-set the examination room by selecting proper equipment and materials that may be needed prior to admitting the patient to the examination room.
  11. The student will work as a team with first year radiology students on Fridays. They should demonstrate leadership skills and assist in orientating the new students into the field of radiology.
  12. The student will serve a diverse population.
  13. The student will be able to identify anatomy, as well as common pathologic or abnormal conditions on a radiograph. This will be demonstrated as part of the task analysis and film critique lessons.
  14. The student should be able to troubleshoot errors, correct problems, and maintain equipment.
  15. Four (4) written examinations will be administered by the clinical instructor. These will include two (2) film critique assignments on Blackboard, one (1) syllabus quiz on Blackboard, and one (1) additional test at the discretion of the clinical instructor.

## **REQUIRED TEXTBOOK AND MATERIALS**

A computer with internet access is required. The computer must be able to run current programs and platforms such as Windows 10 and the internet connection must be reliable and robust. The course has online requirements. The computer must have a camera and microphone for online conferencing. Computers are available for student use in the Learning Lab Eagle's Nest Room 101 and the Mary and John Gray Library.

## **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 time missed at the end of the semester. Time will be made-up after the last scheduled clinic day or at the discretion of the clinical instructor. 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. If a student is unable to arrive at clinic within one hour of their scheduled time they will not be allowed to attend clinic on that day.
5. 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.**
6. Students who exhibit excessive tardiness will receive a warning with the DAF. Further tardiness will result in disciplinary action which may include an attendance contract and/or lowering of the student's clinical grade.
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.
8. Extenuating circumstances will be reviewed.

### **DROP POLICY**

If you wish to drop a course, you are responsible for initiating and completing the drop process by the specified drop date as listed on the [Academic Calendar](#). If you stop coming to class and fail to drop the course, you will earn an "F" in the course.

### **STUDENT EXPECTED TIME REQUIREMENT**

For every hour in class (or unit of credit), students should expect to spend at least two to three hours per week studying and completing assignments. For a 3-credit-hour class, students should prepare to allocate approximately six to nine hours per week outside of class in a 16- week session OR approximately twelve to eighteen hours in an 8-week session. Online/Hybrid students should expect to spend at least as much time in this course as in the traditional, face-to-face class.

### **COURSE CALENDAR**

<b>DATE</b>	<b>TOPIC</b>	<b>READINGS (Due on this Date)</b>	<b>ASSIGNMENTS (Due on this Date)</b>
Aug 26, 2024 through Dec 6, 2024	Students will x-ray hospital/clinic patients with direct and indirect supervision each day.		Monday-Sunday 7am-6pm Schedule posted on Blackboard

## COURSE EVALUATION

Final grades will be calculated according to the following criteria:

- 40% Task Analyses
- 40% Clinical Behavior Reports
- 20% Four (4) written tests including: two (2) film critiques, one (1) syllabus quiz, and one (1) additional clinic test.

## GRADING SCALE

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

LIT does not use +/- grading scales

Failure to successfully complete the required objectives will result in an "I" (Incomplete) in the clinical course. An incomplete must be removed by 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\*\*\***

By the end of the semester each student will:

1. Successfully complete six (6) **Task Analyses** from the categories listed below.
  - a. Difficult or atypical patient (Trauma, Multiple exams, Lumbar puncture)
  - b. Portable (Chest, Abdomen, or extremity)
  - c. Head (Skull, Sinus, Facial, Mandible, CT Brain)
  - d. Spine
  - e. Contrast Studies (BE, IVU, Retrograde Pyelogram, Arthrogram)
  - f. Pediatric or geriatric (Chest, Extremity, or Portable)
  - g. C-arm (Only after a C-arm Competency)

This is a list of exams that qualify for this category. It is not comprehensive and will be determined at the discretion of the clinical instructor.

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

**A student may be given the opportunity to repeat 1 task analysis during the 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. Receive at least two (2) **Clinical Behavior Reports**. They will demonstrate affective

behaviors needed by a professional including: integrity, time management, sociability, and responsibility.

3. Demonstrate critical thinking, problem solving and cognitive skills on four (4) written tests. Students will have at least two (2) film critique assignments, a syllabus quiz assigned on Blackboard, and one (1) other test at the discretion of the clinical instructor.
4. Rotate through **Special Assignments**. At least one task analysis should be accomplished during the special assignment.

### **ACADEMIC DISHONESTY**

Students found to be committing academic dishonesty (cheating, plagiarism, or collusion) may receive disciplinary action. Students need to familiarize themselves with the institution's Academic Dishonesty Policy available in the Student Catalog & Handbook at <http://catalog.lit.edu/content.php?catoid=3&navoid=80#academic-dishonesty>.

### **TECHNICAL REQUIREMENTS**

The latest technical requirements, including hardware, compatible browsers, operating systems, etc. can be online at <https://lit.edu/online-learning/online-learning-minimum-computer-requirements>. A functional broadband internet connection, such as DSL, cable, or WiFi is necessary to maximize the use of online technology and resources.

### **DISABILITIES STATEMENT**

The Americans with Disabilities Act of 1990 and Section 504 of the Rehabilitation Act of 1973 are federal anti-discrimination statutes that provide comprehensive civil rights for persons with disabilities. LIT provides reasonable accommodations as defined in the Rehabilitation Act of 1973, Section 504 and the Americans with Disabilities Act of 1990, to students with a diagnosed disability. The Special Populations Office is located in the Eagles' Nest Room 129 and helps foster a supportive and inclusive educational environment by maintaining partnerships with faculty and staff, as well as promoting awareness among all members of the Lamar Institute of Technology community. If you believe you have a disability requiring an accommodation, please contact the Special Populations Coordinator at (409)-951-5708 or email [specialpopulations@lit.edu](mailto:specialpopulations@lit.edu). You may also visit the online resource at [Special Populations - Lamar Institute of Technology \(lit.edu\)](#).

### **STUDENT CODE OF CONDUCT STATEMENT**

It is the responsibility of all registered Lamar Institute of Technology students to access, read, understand and abide by all published policies, regulations, and procedures listed in the *LIT Catalog and Student Handbook*. The *LIT Catalog and Student Handbook* may be accessed at [www.lit.edu](http://www.lit.edu). Please note that the online version of the *LIT Catalog and Student Handbook* supersedes all other versions of the same document.

### **AI Statement**

Lamar Institute of Technology (LIT) recognizes the recent advances in Artificial Intelligence (AI), such as ChatGPT, have changed the landscape of many career disciplines and will impact many students in and out of the classroom. To prepare students for their selected careers, LIT desires

to guide students in the ethical use of these technologies and incorporate AI into classroom instruction and assignments appropriately. Appropriate use of these technologies is at the discretion of the instructor. Students are reminded that all submitted work must be their own original work unless otherwise specified. Students should contact their instructor with any questions as to the acceptable use of AI / ChatGPT in their courses.

### **STARFISH**

LIT utilizes an early alert system called Starfish. Throughout the semester, you may receive emails from Starfish regarding your course grades, attendance, or academic performance. Faculty members record student attendance, raise flags and kudos to express concern or give praise, and you can make an appointment with faculty and staff all through the Starfish home page. You can also login to Blackboard or MyLIT and click on the Starfish link to view academic alerts and detailed information. It is the responsibility of the student to pay attention to these emails and information in Starfish and consider taking the recommended actions. Starfish is used to help you be a successful student at LIT.

### **ADDITIONAL COURSE POLICIES/INFORMATION**

#### **CLINIC POLICIES**

1. Dosimeters must be worn at all times.
2. Identification badges must be worn at all times with name CLEARLY visible.
3. Beepers, cell phones, laptops, and any other electronic devices are NOT allowed in clinic.
4. Students will abide by ALL handbook policies.
5. Student's failure to abide by handbook policies may result in the clinical grade being **lowered one full letter** for each occurrence.

There will be grade and monetary consequences if a student loses their dosimeter. Each dosimeter is a three month record of their occupational radiation dose. A lost badge removes three months of the lifetime occupational exposure from their record. It is lost and cannot be replaced. If a student loses their dosimeter the following will occur:

- The student will report the lost dosimeter to Brenda Barrow and their clinical instructor.
- The student will pay \$28 to the program to cover the cost of ordering a new dosimeter. The student will have point deductions on the next Clinical Behavior Report to emphasize the importance of the dosimeter. The student will receive a "Poor" in the Professional Appearance category due to the dosimeter being a part of the uniform of a student radiographer. The student will receive a "Poor" in the Quality of Work category which emphasizes professional standards including radiation protection. The clinical instructor will report the loss by documenting on the Disciplinary Action Form.

### **BLACKBOARD**

This course is Web Enhanced. All students will be required to login to **BLACKBOARD once a week on Tuesday**, to check e-mail and complete assignments. Assignments will be posted throughout the semester. It is your responsibility to meet the deadlines. **Students should access**

**Blackboard on a computer and not a cell phone. Not all information displays correctly in the Blackboard app or on the cell phone browser. Issues caused by using a cell phone for access will be the responsibility of the student. For example, if you take a quiz, and it does not work properly, the quiz will not be reset. You will receive the grade assigned. 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.**