



RADR-2313-101I6-S12025
Radiation Protection and Biology
Summer 2025
Online

Instructor's name, email, and phone number

- Laura Schrettner
- lschrettner@com.edu
- 409-933-8681

Student hours and location

- Monday 10am - 12pm Room 225-51 or via Teams
- Other times as requested

Required Textbook/Materials:

- **Textbook**
 - Required:
 - *Radiation Protection in Medical Radiography*, Mary Alice Statkiewicz Sherer, Paula Visconti, E. Russel Ritenour, Kelli Welch Haynes ISBN 978-0-323-82503-0
 - Optional:
 - *Workbook in Radiation Protection in Medical Radiography*, Mary Alice Statkiewicz Sherer, Paula Visconti, E. Russel Ritenour, Kelli Welch Haynes ISBN 978-0-323-82508-5
- **Brightspace/D2L**
 - We will be using Brightspace D2L for this course, so you will need access to a computer and the Internet. There is also a **mobile-friendly** app and can be used on your phone or tablet through the or a mobile browser!
- **Computers**

You will need a computer with audio and video capabilities. Exams will be given online and require a webcam and microphone. You may take your exams on campus, and computers are located in the library and the tutoring center.

See the student handbook for additional requirements.

Course Description:

Effects of radiation exposure on biological systems. Includes typical medical exposure levels, methods for measuring and monitoring radiation, and methods for protecting personnel and patients from excessive exposure.

Course requirements:

- check-in and interact in the course at least three times a week.
- participate in all discussions.
- participate in group activities.
- complete all exams and assignments.

Determination of Course Grade/Grading Formula:

The Radiologic Technology program utilizes this course grading scale:

- 92-100 = A
- 80-89 = B
- 75-79 = C
- 69-74 = D
- 0 – 68 = F

Late Assignments/Make-Up Policy:

Late assignments are not accepted for any course in the Radiologic Technology Program. Students are responsible for completing all assignments and are responsible for any course content missed by absence or tardiness.

Attendance Policy:

Students are required to attend and participate in every session of all classes for which they are registered. Regular attendance is a critical component of being successful in courses. Students should consult with their instructors when it is necessary to miss a class prior to the class. COM recognizes no excused absences other than those prescribed by law: religious holy days and military service. Students are expected to attend all classes.

Online courses turn the idea of attendance on its head. Online, you can "attend" class in your pajamas at 2 am in the morning or sitting by the pool on a sunny day. Attendance is not marked by your body being in a class, but rather by your participation in the class activities:

Here are the brief "rules" we will follow to guide participation:

- **check-in and interact in the course at least three times a week.**
- **participate in all discussions.**
- **participate in group activities.**

While some courses are self-paced, **this course follows a regular schedule**. In each module, you will interact with your peers in discussions, and complete a series of activities and assignments. The regular schedule allows us to learn from one another, and it keeps everyone on a path toward our learning goals.

Communicating with your instructor:

- All electronic communications with your instructor must be through your COM email. Due to FERPA restrictions, faculty cannot share any information about performance in the class through other electronic means.
- The best way to get a hold of me is through my school email – lschrettner@com.edu. If this is an emergency (such as you are in the clinical site and ran over your toe with the portable, and broke your toe), please text me so I can get back to you sooner (281-968-1626). You may also contact me through your course mailbox.
- If you are contacting me regarding a particular course, and you use the school email, please be sure to tell me which course it is.
- Student Lounge - Here is where you can ask questions of each other. If you do not understand a concept, post your questions here and a peer can answer you with their knowledge. This way you can learn from each other. You can also ask simple questions such as "when is". I will monitor this, so if you do not get a response from a peer, I can help you.
- Office Hours are Monday 10am - 12pm Room 225-49 or via Teamss.
- I will respond to emails within 48 hours, Monday through Friday. I check my emails various times throughout the day Monday through Friday, during regular business hours.

Student Learning outcome – Upon completion of the course, the student will be able to:	Maps to Core Objective	Assessed with this assignment
Describe the biophysical mechanisms of radiation damage on humans	Students will employ effective communication skills	Assessment Module 4
Indicate typical dose ranges for routine radiographic procedures	Apply the knowledge and skills to be a clinically competent entry-level radiographer.	Assessment Module 1
Describe basic methods and instruments for radiation monitoring, detection, and measurement	Students will employ effective communication skills	Assessment Module 2

Implement radiation protection practices	Students will demonstrate independent critical thinking and problem-solving skills	Assignment Informational Shielding Paper
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Academic Dishonesty statement: Academic Dishonesty: Any incident of academic policy will be dealt with in accordance with college policy and the Student Handbook. Academic dishonesty – such as cheating on exams is an extremely serious offense and will result in a grade of zero on that exam and the student will be referred to the Office of Student Conduct for appropriate discipline action. Unauthorized use of AI-content generators is a form of academic dishonesty.

Plagiarism statement: Plagiarism is using someone else’s words or ideas and claiming them as your own. Plagiarism is a very serious offense. Plagiarism includes paraphrasing someone else’s words without giving proper citation, copying directly from a website, and pasting it into your paper, using someone else’s words without quotation marks. Any assignment containing any plagiarized material will receive a grade of zero and the student will be referred to the Office of Student Conduct for appropriate discipline action.

Links to resources about avoiding plagiarism:

- [Purdue OWL](#)
- [Excelsior OWL](#)
- [YouTube UMass Dartmouth](#)

Concerns/Questions Statement: If you have any questions or concerns about any aspect of this course, please contact me using the information previously provided. If, after discussing your concern with me, you continue to have questions, please contact Laura Schrettner, Program Director, at 409-933-8681 or lschrettner@com.edu.

Please review the Radiologic Technology Student Handbook and the [COM Student Handbook](#) for the process.

Notice to Students Regarding Licensing Effective September 1, 2017, HB 1508 amends the Texas Occupations Code Section 53 that requires education providers to notify potential or enrolled students that a criminal history may make them ineligible for an occupational license upon program completion. The following website provides links to information about the licensing process and requirements: www.tdlr.texas.gov.

Disclaimers / Additional Policies: Course policies are subject to change. It is the student’s responsibility to check Brightspace/D2L for corrections or updates to the syllabus. Any changes will be posted in Brightspace/D2L.

The Radiologic Technology Program courses build upon each other. The ARRT board exam covers ALL content taught in the program. In each course, there will be test questions from prior modules within the course, as well as prior classes.

Handbook for more information on specific program policies.

Course Schedule

Module	Dates	Assignment
Module 0	June 2, 2025	<ul style="list-style-type: none"> Review Course Content Module 0 Quiz
Module 1	June 2 – June 14, 2025	<ul style="list-style-type: none"> Discussion - Superhero Cloverleaf Learning Radiation Protection ASRT Webinar Radiation Protection Module Exam
Module 2	June 14 – June 28, 2025	<ul style="list-style-type: none"> Discussion - Gonadal Shielding State Laws ASRT Radiation Protection in Medical Imaging Cloverleaf Learning – Radiation Units of Measurement Cloverleaf Learning – Radiation Detection Devices Module Exam
Module 3	June 28 – July 10, 2025	<ul style="list-style-type: none"> Discussion - Radiation Protection Plan ASRT Webinar Radiation Protection and Radiobiology Cloverleaf Learning Radiation Biology Module Exam
Module 4	July 10 – July 22, 2025	<ul style="list-style-type: none"> Informational Shielding Paper ASRT Webinar Types of Radiation Cloverleaf Learning Radiosensitivity Module Exam
Module 5	July 22 – August 5, 2025	<ul style="list-style-type: none"> Discussion – Information Shielding paper summary Discussion - Shielding Requirements ASRT Webinar Radiation Biology Module Exam
Final Exam	August 5 – 8, 2025	<ul style="list-style-type: none"> Final Exam

All due dates are posted in the course calendar.

The schedule is subject to change based on needs.

Institutional Policies and Guidelines

Grade Appeal Process: Concerns about the accuracy of grades should first be discussed with the instructor. A request for a change of grade is a formal request and must be made within six months of the grade assignment. Directions for filing an appeal can be found in the student handbook https://www.com.edu/student-services/docs/Student_Handbook_2024-2025_v2.pdf. *An appeal will not be considered because of general dissatisfaction with a grade, penalty, or outcome of a course. Disagreement with the instructor's professional judgment of the quality of the student's work and performance is also not an admissible basis for a grade appeal.*

Academic Success & Support Services: College of the Mainland is committed to providing students with the necessary support and tools for success in their college careers. Support is offered through our Tutoring Services, Library, Counseling, and through Student Services. Please discuss any concerns with your faculty or an advisor.

ADA Statement: Any student with a documented disability needing academic accommodations is requested to contact:

- Kimberly Lachney, Student Accessibility Services Coordinator
- Phone: 409-933-8919
- Email: AccessibilityServices@com.edu
- Location: COM Doyle Family Administration Building, Student Success Center

Textbook Purchasing Statement: A student attending College of the Mainland is not under any obligation to purchase a textbook from the college-affiliated bookstore. The same textbook may also be available from an independent retailer, including an online retailer.

Withdrawal Policy: Students may withdraw from this course for any reason prior to the last eligible day for a "W" grade. Before withdrawing students should speak with the instructor and consult an advisor. Students are permitted to withdraw only six times during their college career by state law. The last date to withdraw is July 29, 2025.

FN Grading: The FN grade is issued in cases of *failure due to a lack of attendance*, as determined by the instructor. The FN grade may be issued for cases in which the student ceases or fails to attend class, submit assignments, or participate in required capacities, and for which the student has failed to withdraw. The issuing of the FN grade is at the discretion of the instructor. The last date of attendance should be documented for submission of an FN grade.

Early Alert Program: The Student Success Center at College of the Mainland has implemented an Early Alert Program because student success and retention are very important to us. I have

been asked to refer students to the program throughout the semester if they are having difficulty completing assignments or have poor attendance. If you are referred to the Early Alert Program you will be contacted by someone in the Student Success Center who will schedule a meeting with you to see what assistance they can offer in order for you to meet your academic goals.

Resources to Help with Stress:

If you are experiencing stress or anxiety about your daily living needs including food, housing or just feel you could benefit from free resources to help you through a difficult time, please click here <https://www.com.edu/community-resource-center/>. College of the Mainland has partnered with free community resources to help you stay on track with your schoolwork, by addressing life issues that get in the way of doing your best in school. All services are private and confidential. You may also contact the Dean of Students office at deanofstudents@com.edu or communityresources@com.edu.

Nondiscrimination Statement:

The College District prohibits discrimination, including harassment, against any individual on the basis of race, color, religion, national origin, age, veteran status, disability, sex, sexual orientation, gender (including gender identity and gender expression), or any other basis prohibited by law. Retaliation against anyone involved in the complaint process is a violation of College District policy.

Student services

Counseling

Counseling Services offers free academic and personal counseling. Workshops and individual sessions are available to assist students in recognizing and resolving academic and personal concerns. Students who may need assistance with goal setting, problem solving, study skills, motivation, or communicating effectively are encouraged to access services in the Student Success Center located on the first floor of the Doyle Family Administration Building.

Tutoring

Tutoring is available for Math, Science, and writing and is available face-to-face, online, or by eTutoring sessions.

Disability Services

Accommodation is available to COM students with documented disabilities. To request accommodations, contact the Office for Students with Disabilities, located in the Student Success Center on the first floor of the Doyle Family Administration Building.

COM Library Radiologic Technology Page

CM Library staff have created a webpage of resources, just for you.

Library

The library hosts a variety of resources for students, including books, journals, and learning material. The library also hosts a computer lab accessible to students.

Trio-Student Support Services

TRIO-Student Support Services (TRIO-SSS) is a federally funded grant program through the U.S. Department of Education that provides support for students in meeting their academic, personal, career and other education-related goals.