

Midland College
MASTER SYLLABUS

RADR 2313: Radiation Biology and Protection (3-3-0)

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.

PREREQUISITES AND/OR COREQUISITES

None.

STUDENT LEARNING OUTCOMES

Upon successful completion of the course, the student will:

1. Describe the biophysical mechanisms of radiation damage on humans
2. Indicate typical dose ranges for routine radiographic procedures
3. Describe basic methods and instruments for radiation monitoring, detection, and measurement
4. Implement radiation protection practices

REQUIRED COURSE MATERIALS

Course materials will be listed in the individual course syllabus and may include:

- Textbooks and Open Educational Resources (OER)
- Online learning platforms or publisher software
- Lab kits, supplies, or specialized equipment
- Technology requirements

STUDENT CONTRIBUTIONS, RESPONSIBILITIES, AND CLASS POLICIES

Will be provided by the instructor in the individual course syllabus. Students should contact their instructor with any questions.

EVALUATION OF STUDENTS

Will be provided by the instructor in the individual course syllabus. Students should contact their instructor with any questions.

COURSE SCHEDULE

Will be provided by the instructor in the individual course syllabus. Students should contact their instructor with any questions.

ACADEMIC INTEGRITY

Refer to Midland College's Scholastic Dishonesty and Academic Misconduct policy:

<https://www.midland.edu/about/public-info/scholastic-dishonesty.php>

NON-DISCRIMINATION STATEMENT

Midland College does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs and activities. For information and inquiries regarding Midland College's non-discrimination policies, go to: <https://www.midland.edu/about/tix/index.php>.

For further information on notice of non-discrimination, visit the ED.gov Office of Civil Rights website, or call 1 (800) 421-3481.

DISABILITY SUPPORT SERVICES

Midland College provides support services for students with disabilities through Student Services. To request accommodations, students must visit <https://www.midland.edu/services-resources/accommodation-services.php> and complete the required steps.

Accommodations are not automatic; students must apply and be approved each semester.

GRIEVANCES AND COMPLAINTS

Students are encouraged to raise concerns as early as possible. Start by speaking with your instructor. If that is not feasible, you may contact the Department Chair, followed by the Dean of Allied Health. If needed, students may proceed with the formal complaint process.

LICENSURE ELIGIBILITY NOTIFICATION

Completion of a Midland College program does not guarantee eligibility for licensure or certification exams. Eligibility is determined individually by each regulatory agency.

If you have a criminal conviction (other than minor traffic violations), a physical or mental health condition, hospitalization/treatment for chemical dependency within the past five years, or previous licensure actions, contact the relevant agency for guidance.

[DIVISION OFFICE CONTACT INFORMATION](#)