# MIDWESTERN STATE UNIVERSITY

# GUNN COLLEGE OF HEALTH SCIENCES & HUMAN SERVICES SHIMADZU SCHOOL OF RADIOLOGIC SCIENCES

# RADS 3313 Introduction to Radiation Therapy

#### **Summer 2021**

# **Faculty**

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#### **Text**

No text required.

#### **Additional Resources**

It is recommended that students download Google Chrome or Mozilla Firefox and use one of those as the default browser for ALL D2L courses. This appears to eliminate 99% of technical issues encountered with Internet Explorer, Apple Safari, etc.

Students MUST have reliable computer and internet access. ALL STUDENTS MUST HAVE A WEBCAM AND MICROPHONE - NO EXCEPTIONS! Computers must be either a PC or MAC. Chromebooks are not compatible with the Lockdown Browser and Respondus Monitor software and cannot be used for the final exam.

# **Prerequisites**

None

#### Course Overview

This course provides an overview of radiation therapy by examining how cancer is treated with radiation. Discussions of radiobiology, treatment modalities, basic radiotherapy physics, and malignant disease processes are provided.

### **Course Objectives**

Upon completion of this course, the student should be able to:

- Assess the impact of cancer on the individual, their family & friends, and society in general.
- Evaluate the effects of radiotherapy.
- Discuss types of tumors.
- o Discuss the treatment of tumors utilizing a variety of modalities including radiations.
- Discuss treatment planning and its procedures.
- Assess the treatment planning procedures for radiation therapy.
- Demonstrate various aspects of radiation therapy as it relates to the patient, the therapist, or the general public.

# **Methodology/Teaching Strategies**

Independent reading assignments and study guide. The content of this course can be found in the **Course Notes**. The Course Notes are broken down into instructional Units. Each **Unit** begins with a list of learning **Objectives**. You should read each objective so that you will know what you are expected to learn from that particular unit of instruction. The examinations for this course are based upon those learning objectives.

The objectives are followed by the **Unit Notes**. This contains the reading assignments that you will be tested over. Following each reading assignment is a **Review Exercise**. Complete each Review Exercise after completion of the respective unit of instruction. If necessary, search through the text to locate answers. Review Exercises are designed to assist the student in preparation for the unit examinations. This is followed by the **Unit Exam**, which will be discussed later.

### Conduct/Honesty/Honor System Policy

RADS 3313 adheres to the MSU Code of Conduct. In particular, academic dishonesty, however small, creates a breach in academic integrity. A student's participation in this course comes with the expectation that his or her work will be completed in full observance of the MSU Code of Student Conduct. A student should consult the current Student Handbook for answers to any questions about the code.

Many components of this course are designed to be highly interactive with students helping each other learn. Students are encouraged to take full advantage of many resources available including online Desire2Learn (D2L) course resources, Internet sites, other textbooks and journals, faculty, and peers when answering objectives. This interactive collegial learning environment is conducive for life-long learning.

All components of this course are designed to represent the efforts of each student INDIVIDUALLY and are NOT to be shared, copied, or plagiarized from other sources. When students submit their efforts for grading, they are attesting they are in compliance with this rule.

Cheating includes, but is not limited to, (1) use of any unauthorized assistance in taking quizzes, tests, or examinations; (2) dependence upon the aid of sources beyond those authorized by the instructor in writing papers, preparing reports, solving problems, or completing other assignments; or (3) the acquisition of tests or other academic materials belonging to the university faculty or staff without permission.

Plagiarism includes, but is not limited to, the use of, by paraphrase or direct quotation without correct citation in the text and on the reference list, the published or unpublished works of another person. Students may NOT submit papers and assignments that they have previously submitted for this or other courses. The use of materials generated by agencies engaged in "selling" term papers is also plagiarism. Students are encouraged to review the tutorials and suggested websites for more information about plagiarism.

Academic dishonesty (cheating, plagiarism, etc.) will not be tolerated in this class. Whenever a student is unsure of whether a particular situation will be interpreted as academic dishonesty, he/she should ask the instructor for clarification. If students are guilty of academic dishonesty, a grade of zero (0) will be given for the quiz, assignment, etc. Cases may also be referred to the Dean of Students for possible dismissal from the university.

PLEASE NOTE: By enrolling in this course, the student expressly grants MSU a "limited right" in all intellectual property created by the student for the purpose of this course. The "limited right" shall include but shall not be limited to the right to reproduce the student's work product in order to verify originality and authenticity, and for educational purposes. Specifically, faculty may submit student papers and assignments to an external agency (TurnItIn) to verify originality and authenticity, and to detect for plagiarism.

### **Special Needs**

In accordance with Section 504 of the Federal Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990, Midwestern State University endeavors to make reasonable adjustments in its policies, practices, services, and facilities to ensure equal opportunity for qualified persons with disabilities to participate in all educational programs and activities.

The <u>Office of Disability Services</u> (ODS) provides information and assistance, arranges accommodations, and serves as a liaison for students, instructors, and staff. The ODS has assistive devices such as books on tape, recorders, and adaptive software which can be loaned to qualified individuals. A student/employee who seeks accommodations on the basis of disability must register with the <u>Office of Disability Services</u> in the Counseling Center, Clark Student Center Room 108. Documentation of disability from a competent professional is required.

Individuals with grievances related to discrimination or lack of accommodation on the basis of a disability are encouraged to resolve the problem directly with the area involved. If the matter remains unresolved, advice and/or assistance will be provided by the Office of Disability Services for resolution. The grievance procedure may be found in the Student Handbook and Activities Calendar.

The Director of the Counseling Center serves as the ADA Coordinator and may be contacted at (940)397-4618, TDD (940)397-4515, or 3410 Taft Blvd., Clark Student Center Room 108.

#### Assignments/Exams

LABORATORY ASSIGNMENT - The student will complete on-site visits to a radiation therapy facility near to them. To maximize the benefit of your time in radiation therapy, you are encouraged to complete all readings and Unit Exams prior to starting the laboratory assignment. The guidelines and form for this assignment are located in the course content path. Please read the lab assignment before contacting the facility so that the assignment can be clearly explained to the facility. This will assist the facility in determining if they can meet the student's learning needs. Basically the assignment involves the student visiting the therapy department 2-3 times.

The student will begin by observing a simulation procedure on a patient and then follow that patient through 1-2 treatments. The student will then complete the laboratory form and submit it to the instructor for assessment. See the Course Calendar for due date.

<u>UNIT EXAMS</u> - Each reading assignment in the course notes is followed by a Unit Exam. While the Unit Exams are "open book" and not timed, students are encouraged to complete them without the aid of the Course Notes. This will help you better determine your readiness for the Final Exam, which is **NOT** "open book" and **IS** timed. Recommended due dates for each of the Unit Exams are published in the Course Calendar.

<u>FINAL EXAM</u> - The final examination is an online, "closed book", proctored, comprehensive examination of multiple-choice format based upon the unit objectives. The final exam is a timed, seventy-five (75) minute test. Please schedule the time for the final with the proctoring service. All students are REQUIRED to have a webcam, microphone, and 2 forms of identification for the Final Exam. The reading assignments, unit objectives, study guides, and examinations can be utilized to review for the final.

Students must complete the final (and all course work) by the dates published in the course calendar. NO LATE SUBMISSIONS. If there are any problems during the exam, you may be asked to try a different browser. Students are encouraged to have the latest version of Google Chrome AND Mozilla Firefox installed on their computer.

# **Grading/Evaluation**

All course requirements must be satisfied before a course grade will be awarded. Unit examinations that were completed during a prior enrollment may not need to be repeated. Contact the course instructor if repeating this course. Your course grade will be based on the following:

#### Grade Breakdown

Unit Exams	45%
Lab Assignment	25%
Final Exam	30%

## **Grading Scale**

89.5 and Above	Α
79.5-89.4	В
69.5-79.4	С
59.5-69.4	D
59.4 and Below	F

The last opportunity to drop this course with a grade of "W" is **4:00 pm July 8, 2021**. Refer to the Undergraduate Bulletin for details about receiving a grade of "Incomplete" in a course. In an emergency or extenuating circumstance, a student may request a grade of "Incomplete" in a course before grades are submitted. If the instructor grants the "Incomplete," the student has until thirty (30) days after the beginning of the next long semester to complete the course requirements. If the student does not complete the course requirements within the deadline, the grade of "Incomplete" will automatically convert into a grade of "F". Poor time management does not constitute an emergency or extenuating circumstances.

#### **Administrative Process**

Unresolved issues related to this course should be first addressed between the student and the course instructor. If there is no resolution, students must follow this sequence:

- Department Chair Dr. Beth Veale' (940-397-4611)
- College Dean Dr. Jeff Killion (940-397-4594)
- Dean of Students Matthew Park (940-397-7500)

#### Communication with Instructor

Contact information for the instructor is listed at the beginning of this syllabus. Email is the preferred mode of communication. Students may use any e-mail account when corresponding with the instructor. However, when the instructor initiates correspondence about this course, it will be with the D2L e-mail tool or through a news item. You are encouraged to set the D2L e-mail to forward to your private account. While you are doing this, you may as well set up your profile and turn on your notifications if you wish to take advantage of this feature.

Faculty members will not be responsible for keeping up with other email addresses for students. The instructor will respond or at least acknowledge email messages from students within a maximum of five (5) business days when MSU is in session. Beyond standard university holidays and breaks, the instructor will notify students of any extended periods of time when email contact is not practical (professional meetings, etc)