

RAD 530
The Essentials of Medical Dosimetry
Spring Semester Syllabus

COURSE DEFINITION:

RAD 530-2 The Essentials of Medical Dosimetry - This course covers the various quality assurance procedures performed in a radiation oncology department. Also included are various statistics topics to educate the student in becoming a good consumer of medical dosimetry research literature. Professional development, billing/coding, HIPAA, and professional service are also addressed. This course is twenty weeks in length. Prerequisite: A grade of “C” or better in RAD 510, RAD 515, RAD 520, and RAD 525.

COURSE OBJECTIVES:

1. Demonstrate an understanding of quality assurance procedures.
2. Demonstrate an understanding of statistics/research terms.
3. Demonstrate an understanding of professional development.
4. Demonstrate an understanding of billing/coding and HIPAA.
5. Demonstrate an understanding of professional service in the field of medical dosimetry.

COURSE OUTLINE:

Topics

1. Quality assurance
2. Statistical terminology
3. Professional development
4. Resumes
5. Billing/coding
6. HIPAA
7. Professional service

COURSE REQUIREMENTS:

Purchase all texts, attend all lectures, and complete required examinations, quizzes, and homework. Purchase a T130XA scientific calculator.

PREREQUISITES: A grade of “C” or better in RAD 510, RAD 515, RAD 520, and RAD 525.

TEXTBOOKS:

Required:

- Khan, F. M. (2020). *The physics of radiation therapy* (6th ed.). Philadelphia: Wolters Kluwer
- Khan, F.M. (2016). *Treatment planning in radiation oncology* (4th ed.). Philadelphia: Wolters Kluwer
- Washington, C. M., & Leaver, D. T. (2019). *Principles and practices of radiation therapy* (5th Ed). St. Louis: Mosby.

GRADING SCALE:

90-100	A
80-89	B
70-79	C
<70	Failing

Grades will be determined by:

Test Performance	70%
Quizzes/Homework/Presentations/Papers	30%

Late work will not be accepted. No credit will be awarded for work submitted after the deadline.

Note: An overall GPA of 3.0 or greater in all graduate coursework is required to successfully complete the Medical Dosimetry Program. This is a SIUC Graduate School Policy.