

**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* (6<sup>th</sup> ed.). Philadelphia: Wolters Kluwer
- Khan, F.M. (2016). *Treatment planning in radiation oncology* (4<sup>th</sup> 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.**