COURSE DEFINITION:
RAD 510-2 Simulation and Cross Sectional Anatomy in Medical Dosimetry - This course covers the conventional and CT simulation techniques used in initiating radiation therapy for cancer patients. Identification of cross-sectional anatomy at different anatomical locations within the human body is also reviewed. This course is twenty weeks in length. Prerequisite: Admission to the Medical Dosimetry Program.

COURSE OBJECTIVES:
1. Demonstrate an understanding of Radiation Safety.
2. Demonstrate an understanding of CT simulation procedures.
3. Demonstrate an understanding of conventional simulation procedures.
4. Demonstrate an understanding of the cross sectional anatomy of the human body.
5. Demonstrate an understanding of the treatment planning process.
6. Demonstrate an understanding of the role of a medical dosimetrist.

COURSE OUTLINE:
Topics
1. Radiation Safety
2. CT simulation procedures
3. Conventional simulation procedures
4. Cranial cross sectional anatomy
4. Thorax cross sectional anatomy
5. Abdominal cross sectional anatomy
6. Pelvic cross sectional anatomy

COURSE REQUIREMENTS:
Purchase all texts, attend all lectures, and complete required examinations and quizzes. Participate in clinical internship. Purchase a T130XA scientific calculator.

PREREQUISITES: Admittance to the Medical Dosimetry Program.

TEXTBOOKS:
Required:
Optional: (Students typically use clinical sites’ copy)
3. Students should reference the nccn.org website for information. You will have to create a user name and login.

**GRADING SCALE:**

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
</tr>
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<tbody>
<tr>
<td>90-100</td>
<td>A</td>
</tr>
<tr>
<td>80-89</td>
<td>B</td>
</tr>
<tr>
<td>70-79</td>
<td>C</td>
</tr>
<tr>
<td>&lt;70</td>
<td>Failing</td>
</tr>
</tbody>
</table>

Grades will be determined by:

- Test Performance: 70%
- Quizzes/Homework/Presentations: 30%

**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.

Please see all assignments in the Medical Dosimetry Student Handbook and D2L.