Course Title: SCTC 5301 – Medical Dosimetry – Clinical Hours I

Prerequisites:
Admission to the program: PSM in medical dosimetry

Textbook(s):


Course Description:
The purpose of the clinical assignment is to correlate didactic knowledge with practical skills. The students will be assigned to a clinical site at Fox Chase Cancer Center, or any other collaborative site. All students must attend a minimum number of clinical training hours. This clinical practical will allow the students to familiarize with safe clinical practices and policies and also professional behavior.

While in the clinical setting students will observe and work directly with a medical dosimetrist. They will be closely cooperating with the rest of the radiation treatment team, the radiation oncologist and the medical physicist. Emphasis is given on learning and understanding the role and responsibilities of a medical dosimetrist in the clinical setting.

This is the first course of a two course sequence. During the two course sequence, students will complete practical training in a broad range of medical dosimetry aspects such as Brachytherapy, Simulation, Gamma Knife, Proton Therapy, Medical Physics, Special Measurements and Quality Assurance. In this first course emphasis is given on physics and radiation safety in the clinical environment, and computers and networking within the radiation oncology field. Students will begin basic calculations and treatment planning while being introduced to brachytherapy procedures.

While in the clinical setting students will observe and work directly with a medical dosimetrist. Emphasis is given on learning and understanding the role and responsibilities of a medical dosimetrist in the clinical setting. In order to achieve this the students will follow clinical rotations.
Course Objectives:

1. Demonstrate an understanding of the basic clinical concepts of medical dosimetry.
2. Demonstrate an understanding of theory and principles of operation of treatment planning computers.
3. Demonstrate an understanding of the different types of radiation production.
4. Understand and calculate radiation attenuation and decay.
5. Demonstrate an understanding of the different types of radiation detectors.
6. Demonstrate a basic understanding of treatment planning.
7. Demonstrate an understanding of the role of a medical dosimetrist.

GRADING SCALE:

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