

**Syllabus: Physics of Radiation Therapy for Residents 2007-2008****Time of Meeting: Thursdays from 7:30 – 8:30 AM****Room: WWW 201****Text: *Physics of Radiation Therapy*, 3<sup>rd</sup> ed., Faiz M. Khan. Lippincott Williams & Wilkins, Philadelphia, 2003.**

Date	Chapter #	Chapter	Instructor
30-Aug-07	1	Structure of Matter	Guo
06-Sep-07	2	Nuclear Transformation	Guo
13-Sep-07	2	Nuclear Transformation	Guo
20-Sep-07	3	Production of X-rays	Guo
27-Sep-07	1-3	Test/review	
04-Oct-07	4	Clinical Radiation Generators	Chu
11-Oct-07	4	Clinical Radiation Generators	Chu
18-Oct-07	5	Interactions of Ionizing Radiation	Chu
25-Oct-07	5	Interactions of Ionizing Radiation	Chu
01-Nov-07		ASTRO	
08-Nov-07	4,5	Test/review	Chu
15-Nov-07	6	Measurement of Ionizing Radiation	Deng
22-Nov-07	6	Measurement of Ionizing Radiation	Deng
29-Nov-07		Thanksgiving	
06-Dec-07	7	Quality of X-ray Beams	Deng
13-Dec-07	8	Measurement of Absorbed Dose	Deng
22-Dec-07	8	Measurement of Absorbed Dose	Deng
29-Dec-07		Christmas	
03-Jan-08	6,7,8	Test/review	Deng
10-Jan-08	9	Dose Distribution and Scatter Analysis	Ahmad
17-Jan-08	9	Dose Distribution and Scatter Analysis	Ahmad
24-Jan-08	10	A system of Dosimetric Calculations	Ahmad
31-Jan-08	10	A system of Dosimetric Calculations	Ahmad
07-Feb-08	9,10	Test/review	Ahmad
14-Feb-08	11	Treatment Planning I: Isodose Distributions	Fan
21-Feb-08	11	Treatment Planning I: Isodose Distributions	Fan
28-Feb-08	12	Treatment Planning II: Patient Data, Corrections, and Setup	Fan
06-Mar-08	12	Treatment Planning II: Patient Data, Corrections, and Setup	Fan
13-Mar-08	13	Treatment Planning III: Field Shaping, Skin Dose, and Field Separation	Fan
20-Mar-08	13	Treatment Planning III: Field Shaping, Skin Dose, and Field Separation	Fan
27-Mar-08	13	Treatment Planning III: Field Shaping, Skin Dose, and Field Separation	Fan
03-Apr-08	11,12,13	Test/review	Fan

<b>Date</b>	<b>Chapter #</b>	<b>Chapter</b>	<b>Instructor</b>
10-Apr-08	14	Electron Beam Therapy	Chen
17-Apr-08	14	Electron Beam Therapy	Chen
24-Apr-08	14	Electron Beam Therapy	Chen
01-May-08	14	Electron Beam Therapy	Chen
08-May-08	19	Three-dimensional Conformal Radiation Therapy	Chen
15-May-08	20	Intensity-Modulated Radiation Therapy	Chen
22-May-08	20	Intensity-Modulated Radiation Therapy	Chen
29-May-08	14,19,20	Test/review	Chen
05-Jun-08	18	Total Body Irradiation	Bond
12-Jun-08	21	Stereotactic Radiosurgery	Bond
19-Jun-08	15	Brachytherapy	Bond
26-Jun-08	15	Brachytherapy	Bond
03-Jul-08	15	Brachytherapy	Bond
10-Jul-08	15,18,21	Test/review	Bond
17-July-08	22	High Dose Rate Brachytherapy	Deng
24-July-08	23	Prostate Implants	Deng
31-July-08	22,23	Test/review	Deng
07-Aug-08	16	Radiation Protection	Guo
14-Aug-08	17	Quality Assurance	Guo
21-Aug-08	17	Quality Assurance	Guo
28-Aug-08	16,17	Test/review	Guo