

Syllabus: Physics of Radiation Therapy for Residents 2008-2009**Time of Meeting: Thursdays from 7:30 – 8:30 AM****Room: WWW 201****Text: *Physics of Radiation Therapy*, 3rd ed., Faiz M. Khan. Lippincott Williams & Wilkins, Philadelphia, 2003.**

Date	Chapter #	Chapter	Instructor
18-Sep-08	1	Structure of Matter	Guo
25-Sep-08	2	Nuclear Transformation	Guo
02-Oct-08	2	Nuclear Transformation	Guo
09-Oct-08	3	Production of X-rays (ASTRO)	Guo
16-Oct-08	1-3	Test/review	
23-Oct-08	4	Clinical Radiation Generators	Chu
30-Oct-08	4	Clinical Radiation Generators	Chu
06-Nov-08	5	Interactions of Ionizing Radiation	Chu
13-Nov-08	5	Interactions of Ionizing Radiation	Chu
20-Nov-08	4,5	Test/review	
27-Nov-08		Thanksgiving	
04-Dec-08	6	Measurement of Ionizing Radiation	Deng
11-Dec-08	6	Measurement of Ionizing Radiation	Deng
18-Dec-08	8	Measurement of Absorbed Dose	Deng
25-Dec-08		Christmas	
08-Jan-09	8	Measurement of Absorbed Dose	Deng
15-Jan-09	6,7,8	Test/review	Deng
22-Jan-09	9	Dose Distribution and Scatter Analysis	Ahmad
29-Jan-09	9	Dose Distribution and Scatter Analysis	Ahmad
05-Feb-09	10	A system of Dosimetric Calculations	Ahmad
12-Feb-09	10	A system of Dosimetric Calculations	Ahmad
19-Feb-09	9,10	Test/review	
26-Feb-09	11	Treatment Planning I: Isodose Distributions	Fan
05-Mar-09	11	Treatment Planning I: Isodose Distributions	Fan
12-Mar-09	12	Treatment Planning II: Patient Data, Corrections, and Setup	Fan
19-Mar-09	12	Treatment Planning II: Patient Data, Corrections, and Setup	Fan
26-Mar-09	13	Treatment Planning III: Field Shaping, Skin Dose, and Field Separation	Fan
02-Apr-09	13	Treatment Planning III: Field Shaping, Skin Dose, and Field Separation	Fan
09-Apr-09	13	Treatment Planning III: Field Shaping, Skin Dose, and Field Separation	Fan
16-Apr-09	11,12,13	Test/review	

Date	Chapter #	Chapter	Instructor
23-Apr-09	14	Electron Beam Therapy	Chen
30-Apr-09	14	Electron Beam Therapy	Chen
07-May-09	14	Electron Beam Therapy	Chen
14-May-09	14	Electron Beam Therapy	Chen
21-May-09	19	Three-dimensional Conformal Radiation Therapy	Chen
28-May-09	20	Intensity-Modulated Radiation Therapy	Chen
04-Jun-09	20	Intensity-Modulated Radiation Therapy	Chen
11-Jun-09	14,19,20	Test/review	
18-Jun-09	18	Total Body Irradiation	Bond
25-Jun-09	21	Stereotactic Radiosurgery	Bond
02-Jul-09	15	Brachytherapy	Bond
09-Jul-09	15	Brachytherapy	Bond
16-Jul-09	15	Brachytherapy	Bond
23-Jul-09	15,18,21	Test/review	
30-Jul-09	22	High Dose Rate Brachytherapy	Carlson
06-Aug-09	23	Prostate Implants	Carlson
13-Aug-09	22,23	Test/review	Carlson
20-Aug-09	16	Radiation Protection	Carlson
27-Aug-09	17	Quality Assurance	Carlson
03-Sep-09	17	Quality Assurance	Carlson
10-Sep-09	16,17	Test/review	