Diagnostic Radiology Imaging Physics Course Syllabus 2008-2009

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Textbook: ***The Essential Physics of Medical Imaging, 2nd edition***
Bushberg, Seibert, Leidholdt and Boone. Lippincott Williams & Wilkins, 2002.

MRI Textbook **: MRI from Picture to Proton, 2nd edition by McRobbie will be used.**
McRobbie, Moore, Graves, Prince. Cambridge University Press; 2007.

Few copies of this book are available in the radiology library. These books can be purchased from www.amazon.com or www.bn.com

Date	Week	5-6 PM in RR202	Reading
3-Jul-2008	1	Introduction to Medical Imaging Radiation and the Atom	Chapter 1 Chapter 2
10-Jul-2008	2	Interaction of Radiation with Matter	Chapter 3
17-Jul-2008	3	Interaction of Radiation with Matter (cont.)	Chapter 3
24-Jul-2008	4	Computers in Medical Imaging Computer Networks, PACS and Teleradiology	Chapter 4 Chapter 17
31-Jul-2008	5	X-Ray Production, Tubes and Generators	Chapter 5
7-Aug-2008	6	X-Ray Production, Tubes and Generators (cont.)	Chapter 5
14-Aug-2008	7	Screen-Film Radiography	Chapter 6
21-Aug-2008	8	Screen-Film Radiography (cont.)	Chapter 6
28-Aug-2008	9	Image Quality	Chapter 10
4-Sep-2008	10	Image Quality (cont.)	Chapter 10
		Board Format Quarterly Quiz #1 (outside of class)	
11-Sep-2008	11	Digital Radiography	Chapter 11
18-Sep-2008	12	Digital Radiography (cont.)	Chapter 11
25-Sep-2008	13	Fluoroscopy	Chapter 9
2-Oct-2008	14	Radiation Safety in Fluoroscopy	Handout
9-Oct-2008	15	***X-ray and Fluoro Lab 1***	
16-Oct-2008	16	***X-ray and Fluoro Lab 2***	
23-Oct-2008	17	Radiation Protection	Chapter 23
30-Oct-2008	18	Radiation Biology	Chapter 25
6-Nov-2008	19	Radiation Biology (cont.)	Chapter 25
13-Nov-2008	20	Radiation Dosimetry	Chapter 24
		Board Format Quarterly Quiz #2 (outside of class)	

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20-Nov-2008	21	Ultrasound	Chapter 16
27-Nov-2008	22	**No Class - Holiday Break**	
4-Dec-2008	23	**No Class - RSNA**	
11-Dec-2008	24	Ultrasound (cont.)	Chapter 16
18-Dec-2008	25	***Ultrasound - Clinical Lecture & Lab***	***MD Faculty***
25-Dec-2008	26	**No Class - Holiday Break**	
1-Jan-2009	27	**No Class - Holiday Break**	
8-Jan-2009	28	Computed Tomography	Chapter 13
15-Jan-2009	29	Computed Tomography (cont.)	Chapter 13
22-Jan-2009	30	Computed Tomography (cont.)	Chapter 13
29-Jan-2009	31	**No Class (Ski Day)**	
5-Feb-2009	32	**No Class (ACR In-Training Exam)**	
12-Feb-2009	33	Computed Tomography (cont.)	Chapter 13
19-Feb-2009	34	***CT - Clinical Lecture***	***MD Faculty***
		Board Format Quarterly Quiz #3 (outside of class)	
26-Feb-2009	35	Ch 1-4	McRobbie
5-Mar-2009	36	Ch 5-6	McRobbie
12-Mar-2009	37	Ch 7-8	McRobbie
19-Mar-2009	38	Ch 9-10	McRobbie
26-Mar-2009	39	Ch 11-12	McRobbie
2-Apr-2009	40	Ch 13-14	McRobbie
9-Apr-2009	41	Ch 14-15	McRobbie
16-Apr-2009	42	Ch 16-17	McRobbie
23-Apr-2009	43	Mammography	Chapter 8
30-Apr-2009	44	Mammography (cont.)	Chapter 8
7-May-2009	45	***Mammography - Clinical Lecture***	***MD Faculty***
14-May-2009	46	***Q&A Review (all topics)***	
		Board Format Quarterly Quiz #4 (outside of class)	
21-May-2009 through 25-Jun-09	47	***Nuclear Medicine Physics Lectures begin (more information coming)***	