

**2016-2017 Physics Core Lectures (Ver.1)**  
**VA Radiology and Lasser Conference Rooms, Mondays 7:00 a.m.**

#	Topic	Chap.	Modules	Date	Faculty
1	Introduction and Basic Physics	1, 2	Fund-1, 3	M 8/22	Andre
2	Interaction of Radiation with Matter	3	Fund-2	M 8/29	Andre
	<b>HOLIDAY</b>		-	<b>M 9/5</b>	
3	X-Ray Production \\ Generators	6	Fund-1,4	9/12	Andre
4	Computers \\ Medical Imaging Informatics \\ Image Quality	5	Imag-1,2,3,4,	M 9/19	Hall
5	Digital Radiography	7		M 9/26	Hall
6	Screen-Film Radiography, Processing	6, 7		M 10/3	Dubowitz
7	Fluoroscopy	9	Fluro: 1, 2	M 10/10	Dubowitz
8	Mammography	8	Proj. Imag: 1,2,3,4,5,6	M 10/17	Nelson
9	Ultrasound	14	Ultrasound: 1,2,3,4	M 10/24	Nelson
10	Computed Tomography	10	CT1,2	M 10/31	Andre
11	Computed Tomography	11	CT2,3,4	M 11/7	Andre
12	Magnetic Resonance	12	MR: 1,2,3	M 11/14	Sinha
13	Magnetic Resonance Imaging	13	MR: 4, 5, 7	M 11/21	Sinha
	<b>Thanksgiving and RSNA Week</b>			11/24 to 12/4	
14	Magnetic Resonance Imaging	13	MR: 6,8,9,10	M 12/5	Sinha
15	Radioactivity, Nuclear Transformation	15, 16	Funda.: 1, 2, 3	M 12/12	Huang
16	Radiation Detection and Measurement-1	17	Nuc Med 1,2,3	M 12/19	Huang
	<b>Christmas and New Year's Holiday</b>		-	<b>M 12/23-31</b>	
17	Radiation Detection and Measurement-2	17	Nuc Med 1,2,3	M 2017/1/9	Huang
	<b>HOLIDAY</b>			<b>1/16</b>	
18	Radionuclide production and Radiopharmaceuticals	19		M 01/23	Hoh
19	Nuclear Imaging: the scintillation camera and SPECT	21, 22		M 01/30	Hoh
20	Nuclear Imaging: PET	22		M 02/06	Hoh
21	Radiation Biology and Dosimetry	25, 24		M 02/13	Hoh
	<b>HOLIDAY</b>			<b>2/20</b>	
22	Radiation Protection	23		M 02/27	Hoh
23	Misc Topics	21		M 3/06	Sinha
				M 03/13	
				M 03/20	
				M 03/27	
				M 4/03	
				M 4/10	
				M 4/17	

**Final Exam**

Textbook: The Essential Physics of Medical Imaging, Bushberg, et al., Philadelphia:  
Lippincott Williams & Wilkins,

**TBD**

Tudor/Sinha