

## 2019-2020 Physics Core Lectures (Version for the Lecturers ONLY\_

Will be broadcast (Zoom) as part of the Master Conference, Mondays.

**NOTE: The Residents are expected to complete the Quizzes at the end of the RSNA modules and submit the certificates to Dion BEFORE the corresponding lectures. This will be one of the components of the final grade.**

Textbook: The Essential Physics of Medical Imaging, Bushberg, et al.,

#	Topic	Chap.	Modules	Date	Faculty
1	Introduction and Basic Physics	1, 2	Fund-1, 3	M 09/09; 8am	Andre
2	Interaction of Radiation with Matter	3	Fund-2	M 09/09; 9am	Andre
3	X-Ray Production \\\ Generators	6	Fund-1,4	M 09/16; 9am	Andre
4	Fluoroscopy	9	Fluro: 1, 2	M 09/30; 8am	Andre
5	Ultrasound		Ultrasound: 2,3,4,5,6	M 9/30; 9am	Andre
6	Screen-Film Radiography, Processing	6, 7		M 10/07; 9am	Hall
7	Digital Radiography	7		M 10/21; 8am	Hall
8	Mammography	8, 14	Proj. Imag: 1,2,3,4,1,	M 10/21; 9am	Hall
9	Computed Tomography	10	CT1,2	M 11/04; 9am	McVeigh
<b>VETERAN'S DAY HOLIDAY</b>				<b>11/11</b>	
10	Computed Tomography	11	CT2,3,4	M 11/18; 8am	McVeigh
11	Radionuclide production and Radiopharmaceuticals	19	NM3	M 11/18; 9am	Hoh
<b>Thanksgiving and RSNA Week</b>				<b>11/28 to 12/8</b>	
12	Nuclear Imaging: the scintillation camera and SPECT	21, 22	NM 2,4	M 12/9; 8am	Hoh
13	Nuclear Imaging: PET	22	NM-5	M 12/9; 9am	Hoh
14	Radiation Protection	23	RP-1,2	M 12/16; 9am	Hoh
<b>Christmas and New Year's Holiday</b>				<b>12/23-1/2/20</b>	
15	Radiation Biology and Dosimetry	25, 24	RP-3,4	<b>M 1/6/2020; 8am</b>	Hoh
16	Radioactivity, Nuclear Transformation	15, 16	Funda.: 1, 2, 3	<b>M 1/6/2020; 9am</b>	Huang
17	Radiation Detection and Measurement-1	17	Nuc Med 1,2,3	M 1/13; 9am	Huang
<b>MLK Holiday</b>			<b>1/20/2020</b>		
18	Radiation Detection and Measurement-2	17	Nuc Med 1,2,3	M 02/03; 8am	Huang
19	Computers \\\ Medical Imaging Informatics \\\ Image Quality	5	Imag-1,2,3,4,	M 02/03; 9am	Sinha
20	Magnetic Resonance Imaging-1	12	MR: 1,2,3	M 02/10; 8am	Sinha
21	Magnetic Resonance Imaging-2	13	MR: 4, 5, 7	M 02/10; 9am	Sinha
22	Magnetic Resonance Imaging-3	13	MR: 6,8,9,10	M 03/2/20; 9am	Sinha
23	Magnetic Resonance Imaging-4			M 03/9/20; 9am	Sinha
24	Magnetic Resonance Imaging-5			M 03/16/20; 9am	Sinha
<b>Final Exam</b>				<b>TBD</b>	Andrew/Sinha