

Week	Date	Topic	RSNA/AAPM Module	Faculty
FUNDAMENTALS				
1	6-Jan-22	Intro to Radiography (Interactions/X-ray tubes)	Atoms, Radiation and Radioactivity X-Ray Tubes and Spectra	MA
2	13-Jan-22	Intro to Radiography (Interactions/Terminology)	Interactions of Radiation with Tissue Radiation Measurements and Units	CB
3	20-Jan-22	Intro to Radiography (Geometry/Contrast/Technique)	Interactions of Radiation with Tissue Radiation Measurements and Units	MA
4	27-Jan-22	Digital X-Ray Imaging	Radiographic Systems, Digital X-Ray Imaging, Radiographic Image Receptors	MA
INTRODUCTION TO MODALITIES				
5	3-Feb-22	Intro to US	Refer to lecture Presentation	JM
6	10-Feb-22	Intro to Fluoroscopy	Fluoroscopy Systems	JM
7	17-Feb-22	Intro to Mammography	Mammographic Systems	KK
8	24-Feb-22	NO CLASS	Ski Day!	
9	3-Mar-22	Intro to CT	CT Systems, Rad Dose in CT	DZ
IMAGE PERCEPTION, DISPLAY AND PROCESSING				
10	10-Mar-22	NO CLASS	Research and Electives Day!	
11	17-Mar-22	Image Perception, Display and PACS	Image Perception, Display and PACS	CB
12	24-Mar-22	Image Processing and Reconstruction	Image Processing and Reconstruction	CB
13	31-Mar-22	Review Session - Q&A (Assign Take Home Quiz 1)		DPS
MAGNETIC RESONANCE IMAGING				
14	7-Apr-22	MRI: Fundamentals I	MR Fundamentals	CB
15	14-Apr-22	MRI: Image Formation I	Image Formation	CB
16	21-Apr-22	MRI: Image Formation II	Image Formation	CB
17	28-Apr-22	MRI: Pulse Sequences I	Pulse Sequences	SL
18	5-May-22	MRI: Pulse Sequences II	Pulse Sequences	SL
19	12-May-22	MRI: Pulse Sequences III	Pulse Sequences	SL
20	19-May-22	MRI: Image Characteristics	Image Characteristics	CB
21	26-May-22	MRI: Artifacts	Artifacts	CB
22	2-Jun-22	MRI: Quality/Bioeffects/Safety MRI: Siting and Environmental Protection (self-study)	Quality/Bioeffects/Safety Siting and Environmental Protection (self-study)	KK
		MRI Review Session - review pre-recorded video on your own (Assign Take Home quiz 2)		CB
IMAGING MODALITIES				
23	9-Jun-22	CT Systems	CT Systems	DZ
24	16-Jun-22	CT Image Quality, Dose and Protocols	CT Image Quality and Protocols Radiation Dose in CT	DZ
25	23-Jun-22	CT Imaging and Rad Prot of Ped Patient	Image Gently: CT Imaging and Radiation Protection of Pediatric Patient	DZ
26	30-Jun-22	Basic Ultrasound Imaging and Display	Basic Ultrasound Imaging and Display	JM

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IMAGING MODALITIES (CONTD)				
27	7-Jul-22	Interaction of US Tissue and Doppler	Interaction of US Tissue and Doppler	JM
28	14-Jul-22	US Artifacts		Dighe
29	21-Jul-22	Image Quality & Dose in Rad and Mammo	Image Quality and Dose in Radiography Mammography Image Quality and Dose	DZ
30	28-Jul-22	Mammo Clinical Lecture		Eby
31	4-Aug-22	Fluoroscopy Lab	Radiation Dose and Safety in Interventional Radiology	JM+AW
RADIATION BIOLOGY AND RADIATION RISK				
32	11-Aug-22	Basic Radiation Biology I	Basic Radiation Biology	KK
33	18-Aug-22	Basic Radiation Biology II	Basic Radiation Biology	KK
34	25-Aug-22	Radiation Effects	Radiation Effects	KK
35	1-Sep-22	Radiation Risks and Estimating Cancer Risk	Radiation Dose and Risk, Estimating Cancer Risk from Imaging Procedures	KK
36	8-Sep-22	Radiation Protection	Fundamentals of Radiation Protection	MA
37	15-Sep-22	Review Session - Q&A (Assign Take Home quiz 3)		DPS
NUCLEAR MEDICINE PHYSICS				
38	22-Sep-22	Basic Nuclear Physics: Decay and Interactions with Matter	Atoms, Radiation, and Radioactivity	JM
			Interactions of Radiation and Tissue	
39	29-Sep-22	Radiation Detection Instrumentation and Radiation Safety in NM Practice	Radiation Detection Instrumentation in NM Practice	RM
40	6-Oct-22	Gamma Cameras	Gamma Cameras / Image Quality	MA
41	13-Oct-22	Radioisotopes, Radiopharmaceutical, and Dosimetry	Radioisotopes and Radiopharmaceuticals	MA
			Radionuclide Dosimetry and Nuclear Regulations	
42	20-Oct-22	SPECT and SPECT/CT	SPECT / SPECT-CT / Image Quality	DM
43	27-Oct-22	PET and PET/CT	PET/PET-CT/Image Quality	DM
44	3-Nov-22	Nuclear Regulations	Radionuclide Dosimetry and Nuclear Regulations	JJ
45	10-Nov-22	Radioisotope Safety (RISE Concepts)	Radioisotopes and Radiopharmaceuticals	JJ
46	17-Nov-22	Clinical NM Artifacts		LT
47	24-Nov-22	NO CLASS	Thanksgiving Holiday!	
48	1-Dec-22	NO CLASS	RSNA	
49	8-Dec-22	Review Session - Q&A (Assign Take Home quiz 4)		DPS