Week	Date	Topic	RSNA/AAPM Module	Faculty
FUNDAMENTALS				
1	5-Jan-23	Intro to Radiography (Interactions/X-ray tubes)	Atoms, Radiation and Radioactivity X-Ray Tubes and Spectra	MA
2	12-Jan-23	Intro to Radiography (Interactions/Terminology)	Interactions of Radiation with Tissue Radiation Measurements and Units	MA
3	19-Jan-23	Intro to Radiography (Geometry/Contrast/Technique)	Interactions of Radiation with Tissue Radiation Measurements and Units	MA
4	26-Jan-23	Digital X-Ray Imaging	Radiograhic Systems, Digital X-Ray Imaging, Radiographic Image Receptors	MA
INTRODUCTION TO MODALITIES				
5	2-Feb-23	Intro to CT	CT Systems, Rad Dose in CT	DZ
6	9-Feb-23	**NO CLASS**	**Ski Day!**	
7	16-Feb-23	Intro to Mammography	Mammographic Systems	KK
8	23-Feb-23	Intro to Fluoroscopy	Fluoroscopy Systems	JM
IMAGE PERCEPTION, DISPLAY AND PROCESSING				
9	2-Mar-23	Image Perception & Display	Image Perception and Display	JM
10	9-Mar-23	PACS Image Processing and Reconstruction	Image Processing, Reconstruction & PACS	DZ
11	**16-Mar-23**	**Review Session - Q&A (Assign Take Home Quiz 1)**		**JM**
RADIATION BIOLOGY AND RADIATION RISK				
12	23-Mar-23	Basic Radiation Biology I	Basic Radiation Biology	KK
13	30-Mar-23	Basic Radiation Biology II & Rad Protection	Basic Rad Bio & Fundamentals of Radiation Protection	KK
14	6-Apr-23	**NO CLASS**	**Research Day!**	
15	13-Apr-23	Radiation Effects	Radiation Effects	KK
16	20-Apr-23	Radiation Risks and Estimating Cancer Risk	Radiation Dose and Risk, Estimating Cancer Risk from Imaging Procedures	KK
IMAGING MODALITIES				
17	27-Apr-23	CT Systems	CT Systems	DZ
18	4-May-23	CT Image Quality, Dose and Protocols	CT Image Quality and Protocols Radiation Dose in CT	DZ
19	11-May-23	**NO CLASS**	**Beach Day!**	
20	18-May-23	CT Imaging and Rad Prot of Ped Patient	Image Gently: CT Imaging and Radiation Protection of Pediatric Patient	DZ
21	25-May-23	Basic Ultrasound Imaging and Display	Basic Ultrasound Imaging and Display	JM
22	1-Jun-23	Interaction of US Tissue and Doppler	Interaction of US Tissue and Doppler	JM
23	8-Jun-23	Image Quality & Dose in Rad and Mammo	Image Quality and Dose in Radiography Mammography Image Quality and Dose	DZ
24	15-Jun-23	Fluoroscopy Lab	Radiation Dose and Safety in Interventional Radiology	JM+AW
25	22-Jun-23	Mammo Clinical Lecture		Chen
26	29-Jun-23	Basic Nuclear Physics: Decay and Interactions with Matter	Atoms, Radiation, and Radioactivity Interactions of Radiation and Tissue	JM
Review Self-Study: Take-Home Quiz 2				

Week	Date	Topic	RSNA/AAPM Module	Faculty
		NUCLEAR MEDICINE PHYSICS		
27	6-Jul-23	US Artifacts		**Dighe**
28	13-Jul-23	Radiation Detection Instrumentation and Radiation Safety in NM Practice	Radiation Detection Instrumentation in NM Practice	**RM**
29	20-Jul-23	Radioisotopes, Radiopharmaceutical, and Dosimetry	Radioisotopes and Radiopharmaceuticals Radionuclide Dosimetry and Nuclear Regulations	**MA**
30	27-Jul-23	SPECT and SPECT/CT	SPECT / SPECT-CT / Image Quality	**DV**
31	3-Aug-23	PET and PET/CT	PET/PET-CT/Image Quality	**DV**
32	10-Aug-23	Clinical NM Artifacts		**LT**
33	17-Aug-23	Nuclear Regulations	Radionuclide Dosimetry and Nuclear Regulations	**JJ**
34	24-Aug-23	Radioisotope Safety (RISE Concepts)	Radioisotopes and Radiopharmaceuticals	**JJ**
35	31-Aug-23	**Review Session - Q&A (Assign Take Home quiz 3)**		**MA**
		MAGNETIC RESONANCE IMAGING		
36	7-Sep-23	MRI: Basic Physics I	Basic Principles of Nuclear Magnetic Resonance	**JO**
37	14-Sep-23	MRI: Basic Physics 2 and Hardware	Instrumentation	**JO**
38	21-Sep-23	MRI: Image Formation	Image Formation	**JO**
39	28-Sep-23	MRI: Basic Imaging Sequences	Pulse Sequences	**JO**
40	5-Oct-23	MRI: Advanced Sequences	Special Acquisition Methods/Gadolinium-based Contrast Agents	**JO**
41	12-Oct-23	MRI: Imaging Features and Characteristics	Image Characteristics	**JO**
42	19-Oct-23	MRI: Artifacts	Artifacts	**JO**
43	26-Oct-23	MRI: Quality/Bioeffects/Safety MRI: Siting and Environmental Protection (self-study)	Quality/Bioeffects/Safety Siting and Environmental Protection (self-study)	**JO**
44	2-Nov-23	**Review Session - Q&A (Assign Take Home quiz 4)**		**JO**