| Week                                     | Date      | Торіс  | RSNA/AAPM Module  | Faculty |
|--|-----------|--|---|---------|
| week                                     | Date      | FUNDAMENTAL  | · · · · · · · · · · · · · · · · · · ·                                       | racuity |
| Atoms Radiation and Radioactivity        |           |  |   |         |
| 1  | 6-Jan-22  | Intro to Radiography (Interactions/X-ray tubes)                                      | X-Ray Tubes and Spectra   | MA      |
| 2  | 13-Jan-22 | Intro to Radiography (Interactions/Terminology)                                      | Interactions of Radiation with Tissue<br>Radiation Measurements and Units   | СВ      |
| 3  | 20-Jan-22 | Intro to Radiography (Geometry/Contrast/Technique)                                   | Interactions of Radiation with Tissue<br>Radiation Measurements and Units   | MA      |
| 4  | 27-Jan-22 | Digital X-Ray Imaging  | Radiograhic Systems, Digital X-Ray Imaging, Radiographic Image<br>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  | СВ      |
| 12                                       | 24-Mar-22 | Image Processing and Reconstruction  | Image Processing and Reconstruction   | СВ      |
| 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   | СВ      |
| 15                                       | 14-Apr-22 | MRI: Image Formation I   | Image Formation   | СВ      |
| 16                                       | 21-Apr-22 | MRI: Image Formation II  | Image Formation   | СВ      |
| 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   | СВ      |
| 21                                       | 26-May-22 | MRI: Artifacts   | Artifacts   | СВ      |
| 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)                                 | СВ      |
| 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<br>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<br>Patient   | DZ      |
| 26                                       | 30-Jun-22 | Basic Ultrasound Imaging and Display   | Basic Ultrasound Imaging and Display  | JM      |