

2025 – 2026 Physics Lecture Course Schedule (Virtual)

Date	Topic
9/3/2025	1. Intro and Fundamentals, Atomic Structure
9/10/2025	2. Charged Particle Interactions
9/17/2025	3. Photons Interactions, Dose, Kerma
9/24/2025	4. Photons Interactions, Dose, Kerma
	No class for the WEEK OF ASTRO
10/8/2025	5. Radioactive Decay
10/15/2025	6. Radiation Generators and Accelerators
10/31/2025	7. Radiation Generators and Accelerators
10/29/2025	8. Radiation Measurements, Detections, and Calibrations
11/5/2025	9. Radiation Measurements, Detections, and Calibrations
11/12/2025	10. Imaging for Radiation Therapy
11/19/2025	11. Imaging for Radiation Therapy
12/3/2025	12. First 30min Q&A
12/10/2025	13. Patient Setup, Simulation, and Segmentation
12/17/2025	14. Patient Setup, Simulation, and Segmentation
	No class for WINTER BREAK
1/7/2026	15. Treatment Planning: Classical, 3DCRT
1/14/2026	16. Treatment Planning: Classical, 3DCRT
1/21/2026	17. Dose Ratios and MU Calculations
1/28/2026	18. Electron Therapy
2/4/2026	19. Electron Therapy
2/11/2026	20. Dose Calculation Algorithms
2/18/2026	21. IMRT and Optimization
2/25/2026	22. SRS, SBRT & Special Procedures (e.g. TBI, IORT, BetaCath)
3/4/2026	23. SRS, SBRT & Special Procedures (e.g. TBI, IORT, BetaCath)
3/18/2026	24. Second 30min Q&A
4/7/2026	25. Rad Protection/Shielding/Safety/Regulation
4/1/2026	26. Brachytherapy
4/8/2026	27. Brachytherapy
4/15/2026	28. Brachytherapy
4/22/2026	29. Proton, Heavy Ion, and Neutron Therapy
4/29/2026	30. Proton, Heavy Ion, and Neutron Therapy
5/6/2026	31. Hyperthermia physics
5/13/2026	32. Artificial Intelligence and Machine Learning
5/20/2026	33. Medical error and failure mode analysis
6/3/2026	34. Final 30min Q&A