

PHY 4324 E&M2 Schedule, Spring 2021. *Subject to change.*

Chapter 7 Electrodynamics

1. M, 01/11: Introduction.
2. W, 01/13: Start Section 7.1, **Electromotive Force.**
3. F, 01/15: Finish 7.1. Start Section 7.2, **Electromagnetic Induction.**
M, 01/18: *Martin Luther King Day*
4. W, 01/20: Finish Section 7.2.
5. F, 01/22: Start 7.3, **Maxwell's Equations.** HW1 (7.1, 7.2)
6. M, 01/25: Finish Section 7.3.

Chapter 8 Conservation Laws

7. W, 01/27: Section 8.1, **Charge and Energy.**
8. F, 01/29: Section 8.2, **Stress/energy tensor.**
9. M, 02/01: Section 8.2, **Momentum.**

Chapter 9 Electromagnetic Waves

10. W, 02/03: Start Section 9.1, **Waves in One Dimension.** HW2 (7.3, 8.1, 8.2)
11. F, 02/05: Finish Section 9.1. Start 9.2. **Electromagnetic Waves in Vacuum.**
12. M, 02/08: **Exam 1. (Chaps 7 and 8).**
13. W, 02/10: Finish Section 9.2.
14. F, 02/12: Start 9.3, **Electromagnetic Waves in Matter.**
15. M, 02/15: Exam discussion. Continue Section 9.3.
16. W, 02/17: Continue Section 9.3. HW3 (9.1, 9.2)
17. F, 02/19: Finish 9.3.
18. M, 02/22: Start Section 9.4, **Absorption and Dispersion.**
19. W, 02/24: Continue Section 9.4.
20. F, 02/26: Finish Section 9.4.
21. M, 03/01: Start Section 9.5, **Guided Waves.** HW4 (9.3, 9.4)
22. W, 03/03: Continue Section 9.5.
23. F, 03/05: Finish Section 9.5.

Chapter 10 Potentials and Fields

24. M, 03/08: Start Section 10.1, **The Potential Formulation.**
25. W, 03/10: Finish Section 10.1. HW5 (9.4, 9.5)
26. F, 03/12: **Exam 2. (Chap 9, Sections 9.1–9.4)**
27. M, 03/15: Start Section 10.2, **Continuous Distributions.**
28. W, 03/17: Exam discussion, Continue 10.2.
29. F, 03/19: Finish 10.2 Start Section 10.3, **Point Charges**
30. M, 03/22: Continue Section 10.3.
W, 03/24: *Recharge Day.*
31. F, 03/26: Finish Section 10.3.

Chapter 11 Radiation

32. M, 03/29: Start Section 11.1, **Dipole Radiation.** HW6 (10.1, 10.2, 10.3)
33. W, 03/31: Continue Section 11.1.
34. F, 04/02: **Exam 3. (Section 9.4 and Chap 10)**
35. M, 04/05: Continue Section 11.1.
36. W, 04/07: Exam discussion, Continue Section 11.1.
37. F, 04/09: Finish Section 11.1.
38. M, 04/12: Start Section 11.2, **Point Charges.** HW7 (11.1)
39. W, 04/14: Continue 11.2.
40. F, 04/16: Finish Section 11.2.
41. M, 04/19: Review
42. W, 04/21: Review/Classes end. HW8 (11.2)
T, 04/27: **Final Exam. (Ch 7–10 & 11)** 3:00 to 5:00 pm.