

PHY 4324 E&M2 Schedule, Fall 2020. Subject to change.

Chapter 7 Electrodynamics

1. M, 08/31: Introduction.
2. W, 09/02: Start Section 7.1, **Electromotive Force.**
3. F, 09/04: Finish 7.1. Start Section 7.2, **Electromagnetic Induction.**
M, 09/07: *Labor Day*
4. W, 09/09: Finish Section 7.2.
5. F, 09/11: Start 7.3, **Maxwell's Equations.**
6. M, 09/14: Finish Section 7.3. **HW1 (7.1, 7.2)**

Chapter 8 Conservation Laws

7. W, 09/16 Section 8.1, **Charge and Energy.**
8. F, 09/18: Section 8.2, **Stress/energy tensor.**
9. M, 09/21: Section 8.2, **Momentum. HW2 (7.3, 8.1)**
10. W, 09/23: Start Section 9.1, **Waves in One Dimension.**

Chapter 9 Electromagnetic Waves

11. F, 09/25: **Exam 1. (Chaps 7 and 8)**
12. M, 09/28: Finish Section 9.1. Start 9.2. **Electromagnetic Waves in Vacuum.**
13. W, 09/30: Continue Section 9.2.
14. F, 10/02: Finish Section 9.2.
15. M, 10/05: Start 9.3, **Electromagnetic Waves in Matter.**
16. W, 10/07: Continue Section 9.3. **HW3 (8.2, 9.1, 9.2)**
17. F, 10/09: Finish 9.3.
18. M, 10/12: Start Section 9.4, **Absorption and Dispersion.**
19. W, 10/14: Continue Section 9.4.
20. F, 10/16: Finish Section 9.4.
21. M, 10/19: Start Section 9.5, **Guided Waves.**
22. W, 10/21: Continue Section 9.5. **HW4 (9.3, 9.4)**
23. F, 10/23: Finish Section 9.5..

Chapter 10 Potentials and Fields

24. M, 10/26: Start Section 10.1, **The Potential Formulation.**
25. W, 10/28: **Exam 2. (Chap 9)**
26. F, 10/30: Finish Section 10.1.
27. M, 11/02: Exam discussion, Start Section 10.2, **Continuous Distributions.**
28. W, 11/04: Continue 10.2. **HW5 (9.5, 10.1)**
29. F, 11/06: Finish 10.2 Start Section 10.3, **Point Charges**
30. M, 11/09: Continue Section 10.3.
W, 11/11: *Veterans' Day.*
31. F, 11/13: Finish Section 10.3. **HW6 (10.2, 10.3)**

Chapter 11 Radiation

32. M, 11/16: Start Section 11.1, **Dipole Radiation.**
33. W, 11/18: **Exam 3. (Chap 10)**
34. F, 11/20: Continue Section 11.1.
35. M, 11/23: Exam discussion, Continue Section 11.1.
W, 11/25--F, 11/27 *Thanksgiving holiday.*
36. M, 11/30: Finish Section 11.1. **HW7 (11.1)**
37. W, 12/02: Start Section 11.2, **Point Charges.**
38. F, 12/04: Continue 11.2.
39. M, 12/07: Finish Section 11.2.
40. W, 12/09: Review for Final /Classes end. **HW8 (11.2)**
F, 12/18: **Final Exam. (Ch 7-10 & 11)**