This course is the second semester of electricity and magnetism at the undergraduate physics level. Time enters our theory of electromagnetic fields and we arrive at Maxwell’s equations — the complete classical theory of electromagnetism. The arrival happens pretty early in the term, and the bulk of our work will be to study electromagnetic waves and radiation.

The text is the book by Griffiths: *Introduction to Electrodynamics*, (Fourth Edition). We will attempt to cover Chapters 7–11 and perhaps part of 12. See below for a detailed schedule. (Also available separately on the web page.)

Methods by which students will be evaluated and their grade determined: There will be homework (30%). There will be two exams and a final. The lowest grade on these three will be dropped and the other two will each make up 35% of your grade. Current UF grading policies for assigning grade points may be found at: https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx.

Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found at: https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx

Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565, www.dso.ufl.edu/drc/) by providing appropriate documentation. Once registered, students will receive an accommodation letter which must be presented to the instructor when requesting accommodation. Students with disabilities should follow this procedure as early as possible in the semester.

Students are expected to provide feedback on the quality of instruction in this course by completing online evaluations at https://evaluations.ufl.edu. Evaluations are typically open during the last two or three weeks of the semester, but students will be given specific times when they are open. Summary results of these assessments are available to students at https://evaluations.ufl.edu/results/.

UF students are bound by The Honor Pledge which states, “We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: On my honor, I have neither given nor received unauthorized aid in doing this assignment.” The Honor Code (http://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/) specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor.
Contact information for the Counseling and Wellness Center: http://www.counseling.ufl.edu/cwc/Default.aspx, 392-1575.

Details:

Course number: PHY 4324  
Section number: 3911  
Credits: 3  
Time & Place: MWF 5th period (11:45–12:35) in NPB 1002  
Web site: http://www.phys.ufl.edu/~tanner/Phy4324.html  
Instructor: David Tanner  
Office & phone: 2372 NPB — 392-4718  
Email: tanner@phys.ufl.edu  
Office hours: Monday 1–2 p.m. and Thursday, 1–2 p.m.  
Grader: Omer Haq <omerhaq1@ufl.edu>
Schedule for Fall 2016. Subject to change.

Chapter 7 Electrodynamics
5. W, 09/01: Finish section 7.2.
6. F, 09/02: Some problems. Problem set 1 due (Guest lecturer)
7. M, 09/05: Labor Day
9. F, 09/09: Finish Section 7.3, some problems

Chapter 8 Conservation Laws
9. M, 09/12 Section 8.1, Charge and Energy.
10. W, 09/14: Section 8.2, Momentum.
11. F, 09/16: Some problems. Problem set 2 due

Chapter 9 Electromagnetic Waves
14. F, 09/23: Review for exam 1
16. W, 09/28: some problems
   Wednesday 09/28 Exam 1 (covers Chapters 7 and 8)
18. M, 10/03: Finish 9.3
19. W, 10/05: Section 9.4, Absorption and Dispersion.
20. F, 10/07: Finish section 9.4
21. M, 10/10: Some problems
22. W, 10/12: Start Section 9.5, Guided Waves.
   F, 10/14: Homecoming
23. M, 10/17: Finish section 9.5. Possible guest lecturer

Chapter 10 Potentials and Fields
25. F, 10/21: Finish section 10.1
27. W, 10/26: Finish section 10.2
28. F, 10/28: Some problems
29. M, 10/31: Section 10.3, Point Charges.
30. W, 11/02: Some problems
31. F, 11/04: Review for Exam #2
Chapter 11 **Radiation**

32. **M, 11/07:** Start section 11.1, **Dipole Radiation.**
33. **W, 11/09:** *no class*
   
   **W, 11/09 Exam 2 (Covers Chapters 9 and 10)**
34. **F, 11/11:** *Veterans’ Day*
35. **M, 11/14:** Finish section 11.1
36. **W, 11/16:** Start section 11.2, **Point Charges**
37. **F, 11/18:** Finish section 11.2
38. **M, 11/21:** Some problems
   
   **W, 11/23 -- F, 11/25:** *Thanksgiving holiday*

**Things not in the book**

38. **M, 11/28:** **Something not in the book**
39. **W, 11/30:** Continue
40. **F, 12/02:** Continue
41. **M, 12/05:** Some problems
42. **W, 12/07:** Review for Final /Classes end

**W, 12/14:** **Final Exam** 3-5 pm (Covers everything, stresses Chap. 11 and TNIB)