

UNIVERSITY of MIAMI
Department of Physics

Electromagnetic Theory II
Dr. Thomas Curtright
Fall Semester

PHY 650 (Section F)
325 Knight Physics Building
August 26 - December 2, 1994

In this class we will study *classical* electromagnetic theory.

- Lectures: 1:00 - 1:50 pm, M W F, 203 Knight Physics Bldg.
- Office Hours: Monday, Wednesday, and Friday, 2:00 - 3:00 pm, or by appointment (phone 284 - 2324 ext 4).
- Required Textbook: *Classical Electrodynamics* (2nd Edition), J. D. Jackson, John Wiley & Sons, 1975.
- Other Recommended Material: *Mathematica*, Version 2.2, Wolfram Research Inc., 1993.
The Feynman Lectures on Physics, Volume II, R. P. Feynman, R. B. Leighton, and M. Sands, Addison Wesley, 1964.
Electrodynamics of Continuous Media, L. D. Landau and E. M. Lifschitz, Addison Wesley, 1960.
Static and Dynamic Electricity (3rd Edition), W. R. Smythe, McGraw - Hill, 1968.
Introduction to Electrodynamics (2nd Edition), D. J. Griffiths, Prentice Hall, 1989.
A Treatise on Electricity and Magnetism (2 Volumes), J. C. Maxwell, Dover, 1954. (A reprint of the 3rd edition, 1891.)
- Homework: You are required to read and study chapters 1 - 9 in Jackson.
You are *encouraged* to attempt *all* of the problems in chapters 1 - 9 of Jackson.
You are also encouraged to read selected sections of the supplementary material (such as may be pointed out in class on various occasions) and to become acquainted with the *Mathematica* computational system (hopefully to reduce some of the drudgery of calculation).
- Graded Problems: These will be due as announced in lecture, about one week in advance.
- Midterm Exam: Wednesday, 12 October, 11:00 am - 1:30 pm, in the physics library.
- Final Exam: Wednesday, 7 December, 11:00 am - 1:30 pm, in the physics library.
- Grading Policy: Your grade will be based with equal weight on the complete set of graded problems, the midterm exam, and the final exam.