

## **ENEE 380 ELECTROMAGNETIC THEORY**

**Spring Semester 2003. Lecture Times: TuTh 12:30 - 1:45, CHE 2110**

Index Numbers: Section 0101 – 23198; Section 0102 – 23199

**Discussion Sections:** 0101: M 1:00pm- 1:50pm (EGR 3102) 0102: M 4:00pm- 4:50pm (EGR 3102)

**Instructor: Professor Christopher C. Davis**, davis@eng.umd.edu,  
<http://www.ee.umd.edu/~davis>

**Office:** 2401 A.V. Williams Building, 405-3637

**Office Hours:** TuTh 9:20 - 10:50 am, and by appointment. I am generally available to talk with students when I am in my office.

**T.A.:** Iswari Natarajan, iswari@glue.umd.edu. Attend your first discussion section for further details.

If you have a documented disability and wish to discuss academic accommodations with me, please contact me as soon as possible.

This course provides an overview of the basic electromagnetic theory of electrostatics and magnetostatics needed for an understanding of fundamentals and devices, and as a foundation for further study of electromagnetic waves.

Many homeworks in the class will require computer analysis. and graphical results presentation. I encourage the use of software such as Mathcad, Mathematica, or Matlab.

### **Examinations and Projects**

There will be two mid-semester examinations on dates to be decided later.

The final examination is in class on Wednesday, May 21, from 1:30-3:30.

Students in the class are required to honor the University of Maryland Code of Academic Integrity. Details of this code are available at the University's web site.

Anyone who misses an examination for a valid reason will be permitted to take a cumulative makeup examination just before the final examination.

### **Grading**

Mid-semester examinations 25% each, Final examination 40%, Homework 10%. Performance in homeworks will be the deciding factor in borderline cases. In addition, selected homework problems will appear on examinations. If you do not attempt the homework problems conscientiously, you will not do well in the class. I encourage team work in understanding the class material, but *you must submit a final version of your own homework, worked out by you*. Submission of an identical homework to that of another student is plagiarism, and will cause a subtraction of 5 percentage points from your final score for a first occurrence, and a greater reduction for a second offense.

When a homework is due, if it is handed in one day late, your score on that homework will be reduced by 25%, two days late 50%, three days late 75%. After three days it will not be graded.

### **Book**

*Field and Wave Electromagnetics*, by David K. Cheng, 2nd. Edition 1989, Addison-Wesley, Reading, Mass.

I will provide a brief review of some basic concepts, and then will cover most of Chapters 1-6, and the beginning of Chapter 7 (if time permits). You should already have covered most of the material from Chapters 1 and 2 in your earlier courses.