Syllabus for Electromagnetic Applications ECE 3065 – Spring 2011

Class Description:

Course	Title	Cr Hrs	Instructor	Days	Time	Location
ECE-3065	Electromagnetic Applications	3	Greg Durgin	T Th	3:05 PM 4:25 PM	Van Leer 341

ECE 3065 Electromagnetic Applications
In this course, we apply Maxwell's equations to a number of interesting and useful applications. Subjects include advanced transmission line theory, radio wave propagation, waveguides, fiber optics, resonators, two-port analysis, and antenna theory.

Instructor: Greg Durgin Office: 507 Van Leer Office Hours: TBD

> E-mail: <u>durgin@ece.gatech.edu</u> Office Phone: (404) 894-2951 Class Web Page: <u>http://www.propagation.gatech.edu/ECE3065</u>

Textbook: Field and Wave Electromagnetics, 2th edition, David K. Cheng. Pearson, 1989.



Prerequisites: Students must have taken ECE 3025 and received a C or higher.

Grading:

- 15% Homework Expect *approximately* 8 homework assignments over the course of the semester.
- 65% 2 Midterms and a Final Examination There will be 3 in-class examinations (2 midterms and 1 final). The two highest examination scores will count 25% each toward the final class grade; the lowest score will only count 15% toward the final class grade.

20% Project – A class project will be assigned later in the semester and turned in the last week of class.

Test Dates:

see website

Computer Usage: The web will be used extensively in this class to disseminate homework assignments, lecture materials, and class announcements.

Some homework assignments may involve the use of Matlabtm software. Most students should have access to this software through a university computer lab or their own personal computing packages. If not, please inform the instructor.

Tentative Lecture Topics:

see website

Honor Code: The Honor Code applies to every aspect of this class, with only one noteworthy exception: student discussion of concepts and techniques for solving homework problems is permitted and even encouraged outside the classroom. However, *all submitted work must be original*.