

# EEE 241, Fundamentals of Electromagnetics, Fall 2010

Time and Place of Lectures: 7:30-8:45am TuTh, ECGG 347

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Course Website: <http://chaos1.la.asu.edu/~yclai/EEE241.html>

Office Hours: 3:00-5:00pm Monday and by appointment, GWC610

## Prerequisites

University Physics, Complex Numbers, Partial Differentiation, Multiple Integrals, Vector Analysis, Fourier Series [EEE 202, MAT 267, MAT 274 (or 275), PHY 131, PHY 132]

## Text

Cheng, *Field and Wave Electromagnetics*.

## Course Objective and Topics

The Course Objective is that students can apply fundamental electromagnetic theory to the solution of practical problems. In particular, students should understand and master the following topics: (1) application of vector differential and integral operators to electromagnetic theory, (2) fundamentals of electrostatics, (3) fundamentals of magnetostatics, (4) characteristics of materials and their interactions with electric and magnetic fields, and (5) Maxwell's equations.

## Student responsibilities

1. Attending classes;
2. Reading textbook;
3. Completing and turning in homework assignments in time: 10 times (out of 12) - 20%.
4. Exam 1 (20%): 7:30-8:45am, Thursday, September 23, in ECGG 347.
5. Exam 2 (20%): 7:30-8:45am, Thursday, October 28, in ECGG 347.
6. Final exam (40%): 7:30-9:20am, Tuesday, December 14, in ECGG 347.