



CALIFORNIA INSTITUTE OF TECHNOLOGY
DEPARTMENT OF ELECTRICAL ENGINEERING

EE 151 Electromagnetic Engineering

Spring 2006

Course Information

Time and Place

Tuesday and Thursday, 10:30 to 11:55 AM, 070 Moore (Building 93)

Instructor

Professor Demetri Psaltis

262 Moore, x4856, psaltis@sunoptics.caltech.edu

Teaching Assistants

TA Lectures: Wednesday 7 to 8 PM, 070 Moore

Office Hours: TBD

Jae-Woo Choi

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Textbook

Engineering Electromagnetics, William H. Hayt, Jr. and Hohn A. Buck, 7th Edition, McGraw Hill.

Homework

Homework due in class every Tuesday. There will be eight homework sets.

Collaboration policy: Collaboration is allowed. You must write your own homework independently.

Late homework policy: 25% off for up to one week late.

Exams and Grading

Midterm: Week 5.

Final: Week 10.

Grading: 33% homework, 33% midterm, 33% final, and some quizzes.

Website

<http://sunoptics.caltech.edu/ee151f06/>

Course Outline

1. Statics (4)
 2. Maxwell's Equations
 3. Plane waves; polarization
 4. Energy; Power flow; Poynting vector
 5. Propagation in lossy and dielectric media (2)
 6. Diffraction (2)
 7. Dispersion
 8. Reflection and refraction at interfaces
 9. Waveguides; transmission lines; fibers (2)
 10. Cavities
 11. Retarded potentials; Radiation; Antennas (2)
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