

EEE 351 Engineering Electromagnetics

Spring Semester 2009

Textbook:

D. K. Cheng, *Fundamentals of Engineering Electromagnetics*, Addison Wesley, New York, 1993.

References:

- D. K. Cheng, *Field and Wave Electromagnetics*, Addison Wesley, New York, 1983, Second Edition.
- U. S. Inan, A. S. Inan, *Engineering Electromagnetics*, Addison Wesley, 1999.
- J. D. Kraus, *Electromagnetics*, McGraw-Hill, 1984.
- U. S. Inan, A. S. Inan, *Electromagnetic Waves*, Prentice Hall, 2000.

Instructors:

- Section I: Ayhan Altıntaş, (EE 402) (altintas@ee.bilkent.edu.tr)
- Section II: Vakur B. Ertürk, (EE 401) (vakur@ee.bilkent.edu.tr).

Teaching Assistant:

- Özgür Salih Ergül (EE 206) (ergul@ee.bilkent.edu.tr)

Time/Place:

- Section I: Tuesday 10:40-12:30 (EE04); Friday 08:40-10:30 (EE04)
- Section II: Tuesday 15:40-17:30 (EE04); Friday 13:40-15:30 (EE04)

Web Page: <http://www.ee.bilkent.edu.tr/~eee351/>

Goals: To introduce fundamentals of Electrostatics, Magnetostatics and Time-Harmonic Electromagnetics.

Prerequisites by Topics: Vector calculus, complex numbers and differential equations

Topics:

1. Vector Analysis.
2. Static Electric Fields.
3. Steady Electric Currents.
4. Static magnetic Fields.
5. Time-Varying Fields and Maxwell's Equations.
6. Introduction to Plane Electromagnetic Waves.

Grading Policy (Tentative):

- Midterm Exam: 25%
- Quiz: 35%.
- Final Exam: 40%