EE 512, Fall 2011
Advanced Electromagnetic Field Theory

Time and Place: 205 Marston, Tuesday & Thursday, 2:10-3:30pm

Instructor: Jiming Song
  • Office: Coover 2130  Phone: 294-8396  Email: jisong@iastate.edu
Office Hours: Coover 2130, Tuesday & Thursday, 1-2pm

Textbooks and Notes
  • Class notes.

Homework: Homework assignments will be given every Thursday and are due exactly a week later for on-campus students. The off-campus students have 5 more days.

Tentative Course Schedule
  1. Introduction and review of vector analysis, Maxwell's, boundary conditions, and constitutive relations.
  2. Wave equation and its solutions in homogeneous medium.
  3. Wave propagation and polarization.
  4. Reflection and transmission in multilayered media.
  5. Waves in plasma, anisotropic media, and waves generated by current sheet.
  8. Waveguides and cavities (rectangular cross sections).
  9. Waveguides and cavities (cylindrical cross sections).
10. Radiation and scattering.

Final Grade Breakdown:
  • Problem Sets --------- 25%  Projects --------------- 25%
  • Mid-term Exam ----- 25%  Final Exam ---------- 25%

http://home.eng.iastate.edu/~jisong/ee512/

Please address any special needs or special accommodations with me at the beginning of the semester or as soon as you become aware. Those seeking accommodations based on disabilities should obtain a Student Academic Accommodation Request (SAAR) from the Disability Resources (DR) office (515-294-6624). DR is located in Room 1076 of the Student Services Building.