

Syllabus (1/9/06)
PHYU602 Electricity and Magnetism
Spring 2006 Professor Wu

Text: Engineering Electromagnetics

W. H. Hayt, Jr. and J. A. Buck, 7th Edition, McGraw Hill

Your grade will be based on 20% homework, 30% midterm, and 50% final

My office hours are 1 - 2:30 pm, Mon., Thurs.

I can also be contacted at: fywu@neu.edu and 617-373-2925

- 1st week (1/9 - 1/13):
Vector analysis, Coulomb's law
- 2nd week (1/16 - 1/20, *Monday 1/16 is a holiday*):
Electric field, electric flux
- 3rd week (1/23 - 1/27):
Gauss' law, divergence of a vector
- 4th week (1/30 - 2/3):
Energy and potential (Chapter 4)
- 5th week (2/6 - 2/10):
Current and conductors (Chapter 5)
- 6th week (2/13 - 2/17):
Dielectrics capacitance (Chapter 6)
- 7th week (2/20 - 2/24, *Monday 2/20 is a holiday*):
Poisson and Laplace equations (Chapter 7)
- 8th week (2/27 - 3/3):
Mid-term, Magnetic field, Biot-Savart law
- **Spring Break Week** (3/6 - 3/10)
- 9th week (3/13 - 3/17):
Ampere's law, curl of a vector, Stokes' theorem
- 10th week (3/20 - 3/24):
Magnetic flux and magnetic forces
- 11th week (3/27 - 3/31):
Magnetic material and inductance
- 12th week (4/3 - 4/7):
D. C. and A. C. circuits, phasors (section 11.5)
- 13th week (4/10 - 4/14):
Maxwell equations (Chapter 10)
- 14th week (4/17 - 4/20, *Monday 4/17 is a holiday*):
The plane wave (Chapter 12)
- **Final Examination** (4/21 - 4/28)