

Math 308
MATHEMATICS FOR THE PHYSICAL SCIENCES
SPRING 2007

Instructor: Dr. Jae-Hyouk Lee, Cupples I (207A), 5-4208, email: jhlee@math.wustl.edu

Time and Location: Cupples I 215, M-W-F– 2:00PM 3:00PM

Office Hours: M-W- 3:00PM-4:00PM

Text book: Mathematical Methods in the Physical Sciences by Mary L. Boas (third edition, Wiley).

Material:

1. Vector calculus (div, grad, curl); Green's, Stokes' and the divergence theorems (chapter 6);
2. Elements of complex numbers and the basic functions of a complex variable (chapter 2);
3. Linear systems of equations and matrix algebra (chapter 3);
4. Fourier series (chapter 7);
5. Ordinary differential equations (chapter 8);
5. Legendre function and series (chapter 12);
6. Partial differential equations (chapter 13).

Grading: There will be about 10 assignments, three midterm exams and a final. They will count toward the grade as follows.

Assignments	25%
Midterms	45%
Final	30%.

Exams and Homework: The midterm exams will be on Friday, February 9th, Friday, March 2nd and Friday, April 13th. The final exam is a take-home test on Wednesday, May 2. Each written homework assignment will be due Friday except above three days with exams, and no late homework is acceptable.