

APPM 4360/5360

Introduction to complex analysis

MWF 2-2:50 - Spring 2004

1. Overview

This course is an introduction to the theory of complex valued functions, with equal emphasis given to the rigorous mathematical development of the subject as to practical applications of the theory. Among the topics to be covered will be the complex number system, elementary complex valued functions, complex mappings, continuity, differentiability, analytic functions, singularities, and integration. Applications will include the computation of real integrals, Fourier and Laplace transforms, and the solution of Laplace's equation in the plane.

2. Instructor :

- Dr. Jamison Moeser
- Email : moeser@colorado.edu
- Phone : 303-492-7569
- Office : ECOT 234
- Office hours : MW 3-4 and by appointment

3. Textbook :

- *Complex Variables - Introduction and Applications* - Mark J. Ablowitz and Athanassios S. Fokas - 2003 (Cambridge)

The book is available in the bookstore.

4. Attendance :

Class will start promptly at 2 PM in ECCR 1B55.
Please do not arrive late.

5. Grading:

- Homework - 20%

Homework will be collected approximately every two weeks. A random sample of problems will be graded, and solutions will be posted by the grader on the course webpage,

<http://amath.colorado.edu/courses/4360/2004Spring>

Late homework will not be accepted under any circumstance.

The homework will reinforce the material from class and is an essential part of the course. Group work is encouraged, but each person must hand in his/her own assignment.

- Two midterm exams - 25% each

The exam dates will be announced at least two weeks in advance. There are no make-up exams. If you miss one exam, your other midterm score will count twice.

- Final exam - 30%

The final exam will be cumulative and will take place during the time allotted in the finals period.