Mathematics 113 Fall 2001

Course Description

Time and Place: TuTh 11:30 – 1:00, Science Center 109

Instructor: Matt Baker
Office: 433 Science Center
Email: mbaker@math.harvard.edu
Phone: 495-2482
Course URL: http://www.math.harvard.edu/~mbaker/math113.html
Office Hours: Mon. 4:30 - 5:30 and Wed. 2-3

Textbook: "Complex Analysis" (2nd edition) by Joseph Bak and Donald Newman

Course outline: We will cover chapters 1–11 and 13 of the course text, as well as parts of chapters 17–19. The major topics covered will be:

1. Properties of analytic functions of one complex variable

2. Complex integration and the Cauchy integral formula

3. Techniques for contour integration

4. Conformal mappings

We will cover additional topics as time permits, such as harmonic functions, analytic continuation, and the prime number theorem.

Sections: One hour per week, at times to be arranged.

Exams: There will be a take-home midterm exam and an in-class final exam. The midterm will be handed out in class on Thursday, October 25 and will be due in class on Tuesday, October 29. Late exams will not be accepted. The final exam will be held during exam period at a time to be determined by the university.

Homework: Weekly homework assignments will be handed out on Thursdays, and will be due the following week on Thursday. There will be a course mailbox outside the mathematics department office at 325 Science Center.

You may drop off homework in this mailbox any time before 5PM on Thursday. Late homework will not be accepted, but you may drop your lowest two homework scores.

Prerequisites: Math 23a,b, 25a,b, or 101. Students who received an A in Math 21a,b may consider taking the course but must obtain permission of the instructor.

Grading Policy: Homework will account for 40% of your course grade, the miderm 20%, and the final exam 40%.

Collaboration: On the homework sets, collaboration is not only allowed but encouraged. However, you must write up and understand your own individual homework solutions, and you may not share written solutions. If you learn how to solve a problem by talking to a classmate or looking it up in a book, you should cite the source in your homework write-up, just as you would reference your sources in a literature or history class.
On the take-home midterm exam, collaboration is not permitted and, if detected, will result in a score of zero for that exam.

Miscellany: If at any point during the semester you feel unsatisfied with some aspect of the course, please come talk to me. I *will* make adjustments in the course if it is brought to my attention that something is not being done as well as you think it should.