Syllabus for Math 252, Spring, 2006
Complex Analysis

- **Text:** The text for this course is *Basic Complex Analysis* by Marsden and Hoffman.
- **Instructor:** Jesse Ratzkin
  - **Office:** M423
  - **Office Hours:** Mondays 10:00-11:00, Wednesdays 12:00-1:00 and by appointment
  - **phone number:** 486-8391
  - **email:** ratzkin@math.uconn.edu
  - **webpage:** http://www.math.uconn.edu/~ratzkin/teaching/m252
- **Tentative Schedule:** We will cover the following topics in the order listed, but the dates corresponding to a particular topic may change.

Jan. 18–20	algebra and geometry of complex numbers	1.1–1.2
Jan. 23–25	complex functions	1.3–1.4
Jan 27–Feb. 3	derivatives of complex functions	1.5–1.6
Feb. 6–8	a review of line integrals	2.1
Feb. 10–22	Cauchy's theorem and integral formula	2.2–2.4
Feb. 24–27	the maximum modulus theorem and harmonic functions	2.5
March 1–20	power series	3.1–3.2
March 22–27	Laurent series	3.3
April 3–10	calculating residues and the residue theorem	4.1–4.2
April 12–19	evaluating definite integrals	4.3–4.4
April 21–26	conformal mappings and fractional linear transformations	5.1–5.3

  There will be three exams in this course, including the final (which is tentatively **Tuesday, May 2, 3:30–5:30**). The midterm exams will be on **Friday, Feb. 17** and **Friday, March 31**.

  Here is a list of some other dates you might want to keep in mind:
  - Last day to drop: March 27
  - Spring recess: March 6–10
- **Grading:** To assign grades, I will form a weighted sum of all the grades you receive throughout the semester. The weighting will be

midterm exams	20% each
homework	30%
final exam	30% .

  I expect that the median grade in this class will be a B.
- **Homework Policy:** I will assign homework approximately every two weeks, and grade several selected problems from each assignment. You are encouraged to collaborate with others in the classes, but you must write each homework assignment in your own words. I do not accept late homework assignments.
- **Exam Policies:** I do not allow reference materials (e.g. a page or index card of notes) during exams. I do allow calculators which cannot do symbolic computations, but they are not required.

- **ADA Statement:** The Americans with Disabilities Act requires that reasonable accommodations be provided for students with physical, cognitive, systemic, learning and psychiatric disabilities. Please contact me at the beginning of the semester to discuss any such accommodations you may require for this course.

- **General Comments:** Please ask me questions. In general, this is the best way for you to learn the material, and the best way for me to tell how well the class is following the lectures. Asking many questions makes you happier and my job easier. I also encourage you to come to my office hours, or drop by my office outside of office hours. I'm ususally available for questions.

  Please keep in mind that mathematics is not a spectator sport! You can only learn math by doing it, so it is imperative that you do the homework.

  Good luck.