Math 555 Outline
Fall 2002
Tuesday and Thursdays 10:10-11:30 am
232 Dennison

Instructor. Professor J. Rauch

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Office Hours Tuesday and Thursday 11:40-13:00.

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Prerequsite. Advanced Calculus.

Text. Complex Variables and Applications 6th edition by R, Churchill and J. W. Brown, McGraw-Hill Publishers.

Audience. Mathematics, science, and engineering undergraduates and graduate students.

Goals. This course is an introduction to the theory of functions of a complex variable with special attention to applications in science and engineering. In addition to the presentation of the often amazing fundamental principles, the importance and utility of these principles in applications is emphasized. The prerequisite of advanced calculus is essential.

Content. Chapters 1-10 of the text form the core of the course. Additional applications to Fourier Analysis, signal processing, etc. will be presented.

Final exam. Friday December 20, 10:30-12:30 am in 232 Dennison.

Homework. There are weekly graded homework assignments.

Classwork. It is assumed that students will have read and studied the material *before* class. Class time will be devoted to discussion, amplification, work on challenging problems, and other complements to the textual material. Students are expected to come to class prepared with questions. The questions can be wide ranging and need by no means be restricted to the material for that day.

Exams. There will be an in class midterm term exam and a final exam.

Grading. Grades are based on Homework, Midterm, and Final. The weighting is 60%+ 16% +24% or 40%+24%+36%. The weighting is chosen for each student to maximize the score.