

Syllabus for Math 4320, Complex Analysis

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Instructor: Ernie Croot

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Course Webpage: www.math.gatech.edu/~ecroot Click on the Math 4320 link from the main page.

Office: 103 Skiles

Office Hours: Tuesday 2:00 to 3:00, and Wednesday 3:00 to 4:00.

Class Meeting Times: MWF 12:05 to 12:55 in Skiles 268.

Textbook: Saff and Snider's *Fundamentals of Complex Analysis, third edition.*

Grade: 20% for each of the first two midterms, 30% for homework, and 30% for the final. I will also institute a "maximal grading policy", whereby

Final Course Grade := MAX(Final Exam Grade, Course Grade including Final Exam).

Homeworks: Homeworks will be collected about once every two weeks.

Course Material: You will learn the basics of analytic functions on regions of the complex plane. This will include a discussion of the following topics, and maybe more: harmonic functions, analyticity, Gauss's mean value theorem, the Cauchy-Goursat theorem, Cauchy's integral formula, Taylor series, Laurent series, the argument principle, Rouche's theorem, branches of functions, the Picard theorems.