

# Syllabus for Math 4107, Abstract Algebra

January 7, 2008

**Instructor:** Ernie Croot

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Please resist the urge to email me unless it is absolutely necessary.

**Course Webpage:** [www.math.gatech.edu/~ecroot](http://www.math.gatech.edu/~ecroot) Click on the Math 4107 link from the main page.

**Office:** 103 Skiles

**Office Hours:** Tuesday and Wednesday 2:00 to 3:00.

**Class Meeting Times:** MWF 1:05 to 1:55 in Skiles 243.

**Textbook:** Herstein's *Topics in Algebra*

**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 once every two weeks.

**Course Material:** In this course you will learn about the basic structures of higher mathematics, such as groups, rings, and fields. Much of what you will learn will be language, although there are a few very important theorems which we will encounter and prove, such as Lagrange's theorem, isomorphism theorems, unique factorization of the integers, Euclidean algorithm, PID implies UFD, fundamental theorem of finitely generated abelian groups, and so on.

The material in this course is significantly more abstract than what you are used to dealing with, and for many of you it will pose a serious challenge. Thus, I encourage you to keep up with homeworks, attend office hours, and read the text carefully.