Syllabus for Math 4107, Abstract Algebra

August 18, 2009

Instructor: Ernie Croot

email: ecroot@math.gatech.edu/∼ecroot

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

Course Webpage: www.math.gatech.edu/∼ecroot Click on the Math 4107 link from the main page.

Office: 103 Skiles

Office Hours: Monday 2:00 to 3:00, Wednesday 3:00-4:00.

Class Meeting Times and Place: TR 4:35-5:55 in Skiles 169.

Textbook: Herstein's *Topics in Algebra*

Grade: 20% for each of the first two midterms, 30% for homework, and 30% for the final.

Homeworks: Homeworks will be collected once every two weeks.

Course Material: In this couse 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.