SYLLABUS – MATH 621
Spring 2011

Dr. J. Shapiro

Office: Science & Tech. I, Room 201C
Hours: TR 3:00 - 4:00 and by appointment
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Text: "Abstract Algebra", Third Edition by D. Dummit and R. Foote
Home Page http://math.gmu.edu/ jshapiro/621/index.html

Prerequisite: The main prerequisite for this course is mathematical maturity (i.e., familiarity with mathematical proofs). It is also assumed that you have had a course in modern algebra.

Material to be covered: Preliminaries, Chapters 1 - 5 (maybe 6), and 7 - 9. The first approximately two thirds of the course will be group theory including subgroups, quotient groups, homomorphisms, group actions and some of the Sylow Theorems. The latter part of the course will be in Ring Theory including ideals, factor rings, principal ideal domains and polynomial rings, and if time permits, some module theory.

Grading: There will be an in class midterm (100pts) and comprehensive final (150pts). You will also have approximately five or six homework assignments to turn in, each worth approximately 25pts. The final is scheduled for:

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Wednesday – May 11, 4:30 pm 7:15 pm.

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Homework assignments and announcements about the mid term will be posted on the course web page.

Your homework assignments will in general consist of two parts; hand-in and additional work. The latter willed not be graded, but it is still very important that you do this work.