

MATH 4010/6010: Abstract Algebra 2

Spring 2012

Instructor: William Graham

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Office hours: M 4:30-5:30, T 4-5, W 1:30-2:30. Tuesdays and Wednesdays, 4-5 pm (subject to change)

Meeting times and location: Tuesday and Thursday, 12:30-1:45 PM, Boyd Room 303

Final Exam: Thursday, May 3, 12:00-3:00 pm (in our usual meeting place)

Text: Shifrin, *Abstract Algebra: A Geometric Approach*

Grading: There will be 2 midterms, during weeks 5 and 10 (approximately) of the semester, and a final exam. Grades will be computed by:

Homework: 25 %

Midterms: 40 %

Final: 35 %

Homework will be collected approximately weekly. Selected problems will be graded. Homework assignments may be found at

<http://www.math.uga.edu/~wag/Spring2012.Math4000homework.html>

Purpose of the course: This is the second semester of the abstract algebra sequence. We will spend much of the semester studying groups and their applications to geometry and solvability of polynomial equations. We may discuss some other topics such as modules. The goals of this course are to learn more about doing proofs and solving problems in the context of abstract algebra.

Homework is an important part of the course. It is impossible to learn a subject like mathematics without spending a substantial amount of time thinking about it, and that means homework! Because every problem is unique, the solution to something done in class may not directly help you in a homework problem. However, feel free to ask me questions or for hints about the homework problems. You may also discuss homework problems with your fellow students, but you should try the problems on your own before talking about them with anyone else. You must write up solutions on your own, without looking at another solution. Copying another solution is academic dishonesty and violates the UGA Academic Honesty Policy, which is available at

<http://www.uga.edu/honesty>

Homework assignments will consist of three types of problems:

(1) Basic problems, which you are not supposed to hand in,

(2) Core problems, which you must hand in.

(3) Challenge problems: MATH 6000 students must hand in at least one of these per week. If you want to enhance your chances for an A, you should do these regularly as well. Extra credit problems will be graded on a 5 point scale; only scores of 3 and above will be counted for extra credit.

Homework is due no later than 5 pm in my office on the day it is due. Late assignments will generally not be accepted.

This course syllabus provides a general plan for the course; deviations may be necessary.