

MTHSC 851, Abstract Algebra
Spring Semester 2009
T Th 12:30-1:45 Martin E005

General information

Instructor: Dr. Matthew Macauley
Email: macaule@clermson.edu
Web: <http://www.math.clemson.edu/~macaule/>
Phone: (864) 656-1838
Office: Martin O-325
Office hours: (subject to change!) MWF 2:30-3:20, Th 2:50-3:30, and by appointment
Text: *Abstract Algebra*, by David S. Dummit and Richard M. Foote.
(though any graduate algebra text should suffice)
Web: I will post course material on my website and/or Blackboard.

Objectives

This course will cover the basic concepts of abstract algebra, including groups and rings at the graduate level. Topics that will be covered include homomorphisms and isomorphisms, isomorphism theorems, group actions, Sylow theorems, permutations groups, finite abelian groups, free groups, ideals, unique factorization domains, and polynomial rings. A special effort will be made to cast these concepts in a more general setting than would be done in an undergraduate class, with a particular focus on universal properties.

Grading

Final grades will be determined by the following rubrik:

Homework	15%
Midterm 1	20%
Midterm 2	20%
Quizzes	5%
Final exam	40%

- ▶ Make-up exams will be given ONLY with an official written excuse in advance, and will not necessarily be the same as the regular exam.
- ▶ If you get an A on the final exam, then you get an A in the course.

Letter grades will then be assigned by:

$$A \geq 90\% > B \geq 80\% > C \geq 70\% > D \geq 60\% > F$$

I reserve the right to adjust the grading scale in your favor. For example, a final grade of 90% will be an A regardless, but I may lower the A line to e.g., 88% if I deem appropriate.

Homework assignments will accumulate from lecture to lecture and will be due once a week I will post the problems on my website (so it's convenient if you have an older edition of the textbook, or choose to use another one). Late homework will *not* be accepted. If you cannot attend a class period for which homework is due, please make arrangements to have the homework delivered to me before the start of the class in which the homework is due. Also, if you miss a class, assume that some homework relevant to the missed class was assigned, and ask around or check online.

Midterm dates

Midterm 1: Thursday, February 5th (in class)
Midterm 2: Thursday, April 9th (in class)
Final: Monday, April 27th, 3:00-5:30.

Attendance

Attendance on test days is mandatory. Class attendance at other times is not mandatory, but is strongly recommended. I will give regular in-class quizzes, about one a week. Spotty attendance almost always results in a lower grade. Students may leave after 10 minutes if the professor or a guest lecturer does not arrive in that time.

Laptops, cell phones, PDAs

All use of cell phones, and typing on laptops is prohibited during lecture. Calculators, cell phones, laptops, and PDAs will not allowed during exams.

Academic integrity

As members of the Clemson University community, we have inherited Thomas Green Clemson's vision of this institution as a high seminary of learning. Fundamental to this vision is a mutual commitment to truthfulness, honor and responsibility, As members of the Clemson University community, we have inherited Thomas Green Clemson's vision of this institution as a high seminary of learning. Fundamental to this vision is a mutual commitment to truthfulness, honor and responsibility, without which we cannot earn the trust and respect of others. Furthermore, we recognize that academic dishonesty detracts from the value of a Clemson degree. Therefore, we shall not tolerate lying, cheating, or stealing in any form."