

MATH 3350: ABSTRACT ALGEBRA

UVa-Wise. Department of Mathematics and Computer Science. Spring 2015.

BASIC INFORMATION

Class meetings: Tuesday and Thursday, 2:00–3:15 in Darden 114.

Instructor: Dr. Matthew Harvey

Office: Darden Hall 235

Office phone: 276-376-4571

Office hours:

- Monday 9:00–10:00, 11:00–12:00
- Tuesday 9:30–12:00
- Wednesday 11:00–12:00
- Thursday 9:30–12:00
- Friday 9:00–10:00, 11:00–12:00

Email: msh3e@uvawise.edu

Web: www.mcs.uvawise.edu/msh3e/

COURSE DESCRIPTION

The prerequisite for this course is successful completion of Math 3100, Introduction to Mathematical Proofs, with a grade of C or better. Most of this course will be proofs-oriented.

In this class we will introduce the elementary concepts of modern group theory and a little bit of ring theory. In more detail, course topics will include:

- modular arithmetic
- groups
- subgroups
- cyclic and permutation groups
- isomorphisms
- Lagrange's theorem
- direct products
- normal subgroups
- homomorphisms
- the fundamental theorem of finite abelian groups

- rings

The textbook for this course is *Contemporary Abstract Algebra*, 8th ed., by Joseph A. Gallian. We will cover the material in chapters 0 through 12.

THE EVERYDAY CLASS

Your presence in class is expected. In class, you are expected to pay attention and contribute. At the very least, you must not be a distraction to your fellow classmates. Please turn off electronic devices, including cell phones, MP3 players, and the like. Disruptive behavior will not be tolerated. If I feel that you are a distraction to the rest of the class, I will ask you to leave.

GRADES

Homework will be assigned and collected approximately once a week. You are allowed to collaborate with classmates on the homework, but you must turn in your own work. Collaboration means working together to solve the problems. Copying will not be accepted. Your work should be neat, well-organized, and stapled. Answers should be clear and well-reasoned.

I intend to give three tests over the course of the semester. They are tentatively scheduled for the following dates: February 5, March 5, and April 9. Those dates are subject to change, though, particularly if bad weather interferes. No make-up exams will be given unless you can present a valid documented excuse. In this case, you will either take a make-up exam or be given a grade based on other assignments, whichever I feel is more appropriate.

We will end the semester with a comprehensive final exam. If your final exam grade is higher than your lowest test grade, I will replace that lowest test grade with the final exam grade.

- No make-up exams will be given unless you can present a valid documented excuse. In this case, you will either take a make-up exam or be given a grade based on other assignments, whichever I feel is more appropriate.
- Your final exam grade may be used to replace your lowest test grade.
- At the end of the semester you will have a comprehensive final exam.
- Course grades will be assigned according to these percentages:
 - homework and quizzes: 32%
 - tests: 48%
 - final exam: 20%

If you need course adaptations or academic adjustments because of a documented disability, if you have emergency medical information to share with me, or if you need special arrangements in case the building must be evacuated, please make an appointment to talk with me as soon as possible.

CHEATING

Cheating will not be tolerated. Any student caught cheating will receive a zero on the

assignment, will be reported to the Honor Court, and if found guilty may receive an F for the course.

SEXUAL MISCONDUCT

The University of Virginia's College at Wise strives to provide a working and educational environment for all faculty, staff and students that is free from sexual misconduct/harassment. Sexual harassment, sexual assault and other acts of sexual misconduct are forms of sex discrimination prohibited by Title IX. The College reaffirms its commitment to maintain a campus environment emphasizing the dignity and worth of all members of the college community. To view the college's sexual misconduct and harassment policy, please visit www.uvawise.edu/compliance/TitleIX. If you have questions or concerns, please immediately contact Tabitha Smith, the Title IX Coordinator. Her office is located on the first floor of Cantrell Hall.

Tabitha Smith, Title IX Coordinator
Office of Compliance and Conduct
1 College Avenue
Wise, VA 24293
Office: 276-328-0131
Cell: 276-870-5065
Email: tabitha.smith@uvawise.edu