

Modern Algebra I

MATH 103A, Fall 2010

MWF 11:00–11:50am

Center Hall 222

Instructor: Alina Bucur

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Office hours: TBA

Sections: Tu 5:00–5:50pm

Tu 6:00–6:50pm

Location: Center Hall 201

Description: This is the first undergraduate course in abstract algebra. Our main topic will be group theory. Compared to Math 100A, this course goes more slowly, is somewhat less proof-oriented, and spends more time on applications of the theory. For most variations of the math major which require a course in algebra, 103A suffices. If you are considering graduate study in mathematics, however, you should take Math 100A instead.

Text: *Contemporary Abstract Algebra, 7th ed.*, by Joseph A. Gallian; published by Brookes Cole. We will cover parts of chapters 0–11 and, time permitting, parts of chapter 29.

Course material on the web: <http://www.math.ucsd.edu/~abucur/103a>

Please check this webpage often. All the relevant information, including any changes to the schedule or policy will be posted here. *You are responsible for keeping up to date with the information posted.*

Homework: Homework will be assigned on the course homework webpage

<http://math.ucsd.edu/~abucur/103a/homework.html> and should be handed in by 5pm on the indicated due date. Reading the sections of the textbook corresponding to the assigned homework exercises is considered part of the homework assignment; you are responsible for material in the assigned reading *whether or not it is discussed in the lecture*. **Your lowest homework grade will be dropped.**

Do your homework as it is assigned, and not at the last minute. You are only done with a problem when you understand **why** the methods you used have worked. If all you are doing is blindly applying formulas and mimicking examples, get extra help. The assigned problems are those you hand in; you are expected to do additional problems on your own until you understand the material.

Submitting the homework. Please prepare your homework according to the following rules:

1. Write your name clearly at the top of every page.
2. Put the problems in order, indicating clearly what you have skipped.

3. **Staple** your homework. Paper clips, folded corners, etc. are not acceptable.
4. Turn in assignments on time. **No late homework will be accepted.**
5. Write clearly. If your homework is too messy, a grader may choose not to grade it.

Collaboration: You can talk each other about any of homework problems, but when you write up the problems to be handed in, *you must work alone.*

Exams: There are two midterm exams, tentatively scheduled in class for **Wednesday, October 20th and Friday, November 12.** The final exam is **Tuesday, December 7th 2010, 11:30am-2:30pm, location TBD.**

There will be no makeup exams.

Please note that by signing up for this course, you are agreeing to sit for the final examination at this date and time. It is your responsibility to ensure that you do not have a schedule conflict involving the final examination; you should not enroll in this class if you cannot take the final examination at its scheduled time.

Students with disabilities requiring accommodations for exams must submit to the instructor a "letter of accommodation" from the relevant office at least two weeks in advance.

Grading Breakdown: 20% Homework, 20% each Midterm, 40% Final

In addition you must pass the final in order to pass the class. Your lowest midterm grade will be replaced by the final exam grade if it is higher. Finally, the final course grade will be decided on a curve.

I reserve the right to lower your grade by up to 5% if you habitually disrupt the learning of other students during lecture (i.e. talking, arriving late). If you must occasionally arrive late, simply see me after class to give an explanation, and it will not count against you.

Resources: If you don't understand something, there are plenty of ways to go: questions are welcome in class. For a longer conversation, the TA and myself have regular office hours. If you cannot make those, make an appointment.

Courseload: Come to every class. Work at a steady pace throughout the semester. I expect you to read the relevant portions of the textbook **before and after** the corresponding lecture. You are responsible for material presented in the lecture *whether or not it is discussed in the textbook.* You should expect questions on the exams that will test your understanding of concepts discussed in the lecture. The discussion section is your opportunity to ask questions regarding the homework, reading, and lecture.

I expect you to work the problems gradually as the material is covered, not at the last minute. If you are confused about the material, do not avoid the issue. It's normal to be temporarily bewildered sometimes while learning mathematics. Seek help!

And remember: office hours are not replacements for missing classes.