

Math 113: Abstract Algebra

Fall 2015

Instructor: Kathryn Mann

Office: 793 Evans. Office hours: Tuesdays 2-3; Thursdays 9:45-10:45.

E-mail: kpmann@math.berkeley.edu

Course website: math.berkeley.edu/~kpmann/113algebra2015

GSI: Shelly Manber is the GSI for 113. She has office hours in 1047 Evans every day, open to everyone. (Tentative schedule: Mon, 2-4, Tues 3-5, Wed 10am-noon, Thurs 1-3, Fri. 8:30-10:30. See course website for updates). We also have a reader to grade homework.

Lectures: This section meets Tu/Th 12:30 - 2 pm in 9 Evans I expect you to attend and participate in lectures.

Text: *Abstract Algebra* by Dummit and Foote, 3rd ed. We will cover most of the material from chapters 1-5, 7-9, and 13. A week-by-week rough guide is on the back. I strongly recommend that you obtain a physical, not electronic, copy of the book.

Other resources: You are encouraged to work together with other students in the class, and make use of instructor and GSI office hours.

Homework and exams:

We have two scheduled quizzes, one in-class exam, and a final exam. Problem sets (homework) are assigned weekly. These will be posted on the course webpage by midnight on Tuesday and due immediately at the *beginning* of class on the following Tuesday.

Occasionally, during a Tuesday lecture I will assign a very short exercise or computation to be handed in at the beginning of class on Thursday.

Late homework will *not be accepted under any circumstances*. If you are late to class on Tuesday, your homework is late and will not be graded. In case of extended illness, you must contact me as soon as possible. Info on what happens if you miss a quiz due to illness is on the course website.

You are encouraged to discuss homework together, but you must write up your own solutions. Plagiarism, copying (from classmates, notes, the internet etc.) are not tolerated.

Grading scheme:

Homework: 10%

30-minute tests: 10% each

Midterm exam: 30%

Final Exam: 40%

Important dates:

- 30-minute test: Tuesday, Sept. 22, in class.
- Deadline to drop this class: September 25
- Midterm exam: Tuesday, October 13, in class.
- 30-minute test: Tuesday, November 17, in class.
- Final exam: Friday, December 18, 8-11 am.

General policies: If you are a DSP student requiring special accommodations, or if you have extracurricular activities that may conflict with this course, *read the guidelines on the course webpage* and contact me ASAP (now or early next week).

How to get an A in my class:

See the attached sheet for instructions and advice

Approximate week by week schedule of readings (all are sections from Dummit and Foote)

1. Introduction. No reading.
2. 0.3, 1.1
3. 1.2, 1.3, 1.6
4. 2.1-2.4
5. 1.7, 4.1
6. 3.1
7. 3.2-3.3
8. 7. 4.4, 4.5 (parts),
9. 7.1-7.3
10. 7.4-7.6
11. 7.6, 8.1-8.2
12. 8.3
13. 9.2, 9.4
14. 9.3, 9.4
15. 13.1, 13.3