Math 67 Cheryl Grood
Sections 1 & 2 Fall 2017
Text: A First Course in Abstract Algebra, 7th ed., Fraleigh
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I will post homework assignments there, along with other useful information. There is also a feature on my website which allows you to give me feedback anonymously. You are encouraged to use it!

Office Hours: Tuesdays and Fridays, from 2:30 - 4:00 pm. I am also very happy to schedule appointments with you!

Tentative Syllabus: I plan to cover the following sections: 0 - 11, 13 - 15, 34, 18 - 20, 22 - 23, 26, 27. I will cover more topics as time permits.

Exams: There will be one midterm exam from 8:00 - 9:30 pm on Tuesday, October 24 in Sci 199. If you have a conflict with this exam time, you must let me know by Friday, September 15. The final exam will be scheduled by the registrar. Math is often unlucky in that we get late exam slots, so don’t buy a ticket home until the exam is scheduled!

Homework: Homework will usually be due in class on Wednesday. Late homework will not be accepted, but the lowest homework score will be dropped. Your homework papers will be judged on both the correctness of the mathematics and the clarity of your write-ups. I strongly encourage you to work together (after all, algebraists love groups!), but obviously the work you hand in should be your own.

Problem Sessions: What is the point of these extra problem sessions? I see these sessions as an opportunity to talk about how to write mathematics well, to improve your presentation skills, to delve a little more deeply into the material of the class, and to discuss the art/skill of coming up with a mathematical proof. I’ll start off each session asking for any general questions about the concepts that may have arisen as a result of reading over lecture notes and trying to do the homework assignment. Then we’ll segue into taking turns presenting selected homework solutions to the class. In preparation for this, each week I would like you to fill out a “problem session survey” that will indicate to me the problems that you would be willing to present and those problems you’d like to see presented. The link to this form will be on my Math 67 website with the assignment itself; please fill out and return this form to me by noon on the day of problem session. In the time between class and problem session, I will work out a scheme for who will present which problems in each session. Here are my expectations of you for problem session:

• You will submit this google form to me by Monday at noon. (Tardiness is occasionally acceptable here, but please do try to meet the deadline.)

• You will come to session having attempted most, if not all, of the assigned homework that week.

• You will be willing/able to present at least half of the homework assignment, including at least one or two proofs.

• You should ask any question you may have, even if you believe everyone else in the class already knows the answer. Most likely, there is at least one other person who doesn’t, but if not, so what? You paid to take this class too! And, really, who gets annoyed at someone who is trying to learn? (Besides total jerks, that is.) If I ever feel that your questions are too elementary and/or are holding the class back, I will tell you–politely, and privately.

• In particular, you will ask questions about other students’ presentations in order to help them improve their ability both to explain difficult concepts and to tailor a presentation to a given audience.

Writing Component: Math 67 is a W course. From the College website: “W courses focus on the process of writing in addition to the written product by requiring multiple assignments and opportunities for revision. W courses ... introduce you to the writing conventions particular to a discipline.” The heart of mathematical writing is the ability to write a clear, thorough proof, and the conventions we will adopt for writing are those that are standardly used for writing in mathematical textbooks and journal articles. Thus, the writing component of this class will consist of you writing up all proofs in what I will refer to as “textbook style”: clear, complete
sentences (with subjects! verbs! punctuation!), no abbreviations, minimal use of symbols. Please consult the writing guidelines, found on my website, for more details about this. [Be forewarned: if your homework contains proofs that do not follow those guidelines, you will be given the “opportunity” to rewrite them in that you will not receive credit for the assignment until the proofs are rewritten so as to conform to the guidelines.] Also, pay close attention to how the proofs of theorems in your textbook are written up, and use them as a template to help with your own writing.

The revision paradigm typically utilized in this class is to generalize the (often copious) comments on your past writing to “revise” your future writing. It should be very rare that you find yourself rewriting a particular proof.

Typesetting your homework (either using \LaTeX or a word processor) is not required. However, I encourage you to take this opportunity to start to learn \LaTeX, a wonderful formatting program for producing scientific text, especially if you plan on doing graduate work in a scientific field. I have some useful links on my Math 67 class website, and I am happy to help you more with this! WARNING: I do not claim to be an expert \LaTeX user, and I will not be surprised (and refuse to be ashamed) when some of you end up more adept with \LaTeX than I by the end of the course!

Grading policy: Here is how I will compute your final grade:

• Homework: 30%
• Problem Session: 15%
• Midterm Exam: 25%
• Final Exam: 30%

Academic Dishonesty: Academic dishonesty is a serious offense that is not tolerated. Be aware that copying portions of graded homework assignments from the internet, another student, or a solution manual and giving your own assignment to another student to be copied are all examples of academic dishonesty. Please (informally) cite your sources for the help you have received with the exception of problem sessions, math clinic, and office hours. You are encouraged to work together, but you should write up your answers separately. Any student engaging in academic dishonesty in this course will receive a zero on the exam/assignment in question. In more severe cases, the case may be also brought to the College Judiciary Committee.

Personal Pronouns: This course affirms people of all gender expressions and gender identities. I encourage you to inform me of your preferred name and gender pronouns so that I may appropriately address you. If you have any questions or concerns, please do not hesitate to contact me.

Special Accommodations: If you believe that you need accommodations for a disability, please contact the Office of Student Disability Services (Parrish 113W) or email studentdisabilityservices@swarthmore.edu to arrange an appointment to discuss your needs. As appropriate, the Office will issue students with documented disabilities a formal Accommodations Letter. Since accommodations require early planning and are not retroactive, please contact the Office of Student Disability Services as soon as possible. For details about the accommodations process, visit the Student Disability Service Website at http://www.swarthmore.edu/academic-advising-support/welcome-to-student-disability-service.

You are also welcome to contact me privately to discuss your academic needs. However, all disability-related accommodations must be arranged through the Office of Student Disability Services.