## MATH 243 – Algebraic Structures Problem Set Guidelines Fall 2012

Weekly homework assignments will be posted each Friday on the course homepage and collected the following Friday. These assignments will consist of 'A' and 'B' sections, which you should write up *separately*, since they will be graded separately. The 'A' section will concentrate on computational problems, while the 'B' section will concentrate on proofs.

Here are some guidelines and groundrules to follow while doing your assignments:

- Please be neat! Write up the problems *in order*. Use only on *one side of the page* (don't worry about saving paper), and staple your assignment together.
- Leave *lots of space* for us to write comments.
- Copy out the problem statement before giving the solution. (This should help you make sure you have answered everything in the question.)
- Show enough detail so that a confused student in the class could follow your solution. Don't expect that the reader already knows how to solve the problem. Just writing an answer is never sufficient.
- Proofs should be written in complete sentences, although your sentences will often contain mathematical symbols and statements. Proofread what you have said to be sure it makes sense.
- No "and then a miracle occurs" moments during proofs, please! If you are left with a gap in the proof that you just can't bridge, acknowledge it. I will indicate how to fill the gap, if appropriate, in my comments.
- Start the assignment early (i.e. the day it is posted). This will allow you ample time to consult with me or your classmates if you get stuck on some problems. If you start the assignment on the day before it is due, you will be very unhappy!
- Work on making your arguments clear and concise. Make good use of notation and diagrams. As the semester progresses, I will grade your proofs more and more for both accuracy and presentation.
- I encourage you to form study groups and discuss the material for the problems as you are starting to work on them. *However*, you must follow the rules below in doing so. The underlying goal here is to ensure you are all putting in the individual effort needed to master the material for this course *in addition to* the group "brainstorming" that can be a fun and productive way to work on generating ideas. The problem sets are designed to be vehicles for learning; they are not annoyances to be "gotten out of the way" with as little time and effort as possible. *So, ...*

- 1. Do not divide up the problems on an assignment among members of a group and then compile the solutions for the group members to submit by copying work supplied by your group-mates (i.e. even with proper citation of who is in your working group). (Reason: This may seem like a good labor-saving device. But in practice, it means that if you have not really worked through some of the problems yourself, then you may not have really understood what is going on in them. You may also be turning in work that contains errors you have not caught because you have not thought and worked through the solution individually!)
- 2. Do include notes giving credit for office hours help you have received directly (individually or with others).
- 3. Do not delegate members from your group to come to office hours to ask about specific questions, and then compile help I gave to those individuals into solutions that are submitted by all members of the group. Do not credit office hours or incorporate ideas I shared there in your solutions if you have not been there yourself. In other words, collaboration on a problem must cease when some members of a group have been to office hours asking about a problem and others have not been there. (Reason: I try to make office hours as interactive as possible, so that I am pointing you in the right direction to solving a problem rather than showing you the whole solution myself. I try to get you to supply many or most of the key ideas and many technical details. If you copy work that relies on the interaction with me and other students without having been there, you have not gone through that process yourself and you don't have any right to present that work as your own.)
- 4. If anyone asks you to do something that violates these groundrules, *don't comply* with that request. If you have a question about whether something you want to do is OK or violates these groundrules, ask Prof. Little.

I have read and understood these rules and intend to follow them for the duration of MATH 243:

Signed: \_\_\_\_\_