

Algebraic Structures
Mathematics 222 Section 2
Spring Semester 2001
MWF 1:55 – 2:45, 227 CCMB
<http://www.nd.edu/~cholak/math222/222.html>

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Office Hours: MW 10:30-11:30, Th. 10:00-11:00, or by appointment.

Text: Introductory Modern Algebra – a Historical Approach by Saul Stahl.

Our Goals: Along with learning some very nice mathematics, the main goal of this class is continue the process of how to solve complex mathematical problems, how to think abstractly, how to write a “good” solution to a mathematical problem and how to communicate mathematically. These skills have proven to be very valuable in many realms. To this end, it is expected that you *read* the textbook and do the homework. Ideally it would be nice if you read the textbook *before* we discussed the material in class. One resource you should definitely take advantage of are my office hours.

Take-Home Quizzes: Six take-home quizzes will given. Normally the quizzes will be due two class periods after being assigned. Each quiz is worth 20 points. Your best 5 quizzes will count toward your grade. Hence the quizzes are worth 100 points in total. These quizzes will be graded by the Professor.

In-Class Presentations: I will randomly break the class into groups of 2 or 3 depending on the size of the class. Throughout the semester each group will be given a problem or two to solve and present to the class. You may solve these problems as a group and present them as a group but everyone must speak in front of the class at least once. All presentations *must* be approved by me; i.e. you must present a *correct* written solution and a presentation to me in my office *before* giving a presentation to the class. There will be about one presentation a week. The presentations are not worth any points, but if you do not complete them well you will *fail* the course.

Exams and the Final: The dates of the exams and final are below. The exams will be given in class and will take the whole class period.

EXAM 1: Wednesday, February 28

EXAM 2: Wednesday, April 25.

FINAL: Monday, May 7, 1:45 p.m. – 3:45 p.m. (location will be announced later).

The exams are worth 100 points and the final 150 points. The grades for the exams will be curved into the letter grades A, B, C, D and F. The quizzes, exams and final will be

graded by the Professor.

Homework: Homework will be assigned after each class period and due *two* class periods later. This is done to allow you the time to ask questions about the homework. You might have more time to complete the assignments depending on the material covered in class. The assignments can be found on the web¹. It is your *responsibility* to find out the homework assignment and complete it on time. The policy on late homework is as follows. There is no penalty for the first three times that it is late. After that, if it is one class period late we will deduct 5 points; if it is two class periods late we will deduct 10 points; and after that, no credit will be given – you can still turn it in for the grader to look at and record that you did the work, but it will not be carefully graded and a score of zero points will be recorded.

In total the homework is worth 50 points. The homework will not be graded by me but by a corrector. As a general rule unless you do exceptionally well or poorly on the homework, your homework grade will have little effect on your course grade. However, in order to do well in any mathematics class it is very important to keep up with the homework!

Grading: The course grade will be determined by curving the total number of earned points out of the possible 500 points. The previous curves will help determine the final curve. The possible letter grades are: A, A-, B+, B, B-, C+, C, C-, D, F.

Makeups: You can make up the exams only if you have a university approved excuse (i.e. ill at the infirmary, a participant at an away game, etc) and have an official note or letter to this effect. You may *not* make up any of the quizzes (after all they are take-home and you can drop one), homework (after all in most cases this will have little effect on your final grade) or the final (you'd better be there!).

The Honor Code and working together: As always you are bound by the *Honor Code*²! The in-class exam and final are “closed book” and no books or notes are allowed. You may use a simple calculator but it will not be of much help. You may work together on the homework, quizzes and your in-class presentation. While you can talk with others in this class about the homework and quiz problems you *must* each individually write up the solutions and you may not copy them from anywhere. You may *not* talk to others who have had this class in years past nor can you look at the answers from past years. Such actions will be considered to be violations of the Honor Code and will be treated as such.

¹The web page will be continually updated during the semester. Please look at it regularly.

²If you are unclear how this code will affect you in this class, please see me.