

Math 361: Honors Algebra
Fall, 1997

Meeting Time: MWF 10:40–11:30 a.m.

Meeting Place: CCMB 227

Instructor: Matthew Dyer

Office: CCMB 201 (near Math. library)

Office hours: MW 9:00–10:00 or by appointment

Phone: (219) 631-6082

Email: Matthew.J.Dyer.1@nd.edu

Textbook: Abstract Algebra (Third edition) by I. N. Herstein, available in bookstore.

Course Content We will introduce some of the basic notions of algebra, such as groups, rings, fields and homomorphisms. In the text, we will cover approximately Chapters 1–4.

Assessment Your letter grade for the course will be based on your total point score out of 500, determined as follows;

Two in class exams, worth 100 points each.

A cumulative final exam worth 150 points

Graded homework worth 150 points.

Grade cutoffs for the major grades (A,B,C,D,F) will be assigned for each exam so you may judge your exam performance.

Exam dates:

Exam 1; Monday, October 13th.

Exam 2; Monday, November 24th.

Final Exam; In final exam week December 15-19th. Precise date to be announced.

Homework The most effective way of learning mathematics is by solving a range of problems involving the subject matter you are learning. By doing this, you consolidate your understanding of the material, begin to build a useful mathematical intuition for the subject matter, and gain experience in problem solving. For these reasons (as well as its contribution to your assessment) the homework should be regarded as an integral part of the course.

Additionally, your mathematical understanding is of little use if it cannot be imparted to others, and carefully writing homework solutions will develop your skills in mathematical communication. You should make every effort to make your written homework solutions as clear as possible. Some points to consider in doing this are that your solutions should be written in complete sentences, with major portions separated into paragraphs, all symbols you use should be defined carefully and you should provide justifications for all major steps you use. The writing style in the proofs, definitions and examples in the textbook provides a useful model.

Homework Policy Homework problems will be assigned regularly (usually daily) and will be collected weekly on Wednesdays. Selected (but previously unannounced) problems will be chosen from each week's homework for grading. If you are having trouble with a homework problem, you should meet with me to discuss the problem before it is due for collection, and I'll give an extension of time if necessary. Late homework will not otherwise be accepted without a valid (e.g. medical) excuse.

Honor Code This course will be conducted under the Honor Code. Copying another student's work in an exam is of course a violation of the code.

Discussion of homework problems with other classmembers is permitted, as long as your written homework is prepared by you and reflects your own final understanding of the homework problems. I would even encourage you to discuss homework with one another and with me, as it is a good way both to learn the material and gain facility in communicating it to others. However, direct copying of another student's written work is a violation of the Honor Code.