

Syllabus—Math 581

Spring 2006

Professor: Dr. Jim Brown

Office: 630 Math Tower

Office Phone: 688-8733

Email: jimlb@math.ohio-state.edu

Office Hours: M 2:30 - 3:30 pm, W 11:30 - 12:30 pm, Th 11:30 - 12:30 pm,
and by appointment

Course Website: <http://www.math.ohio-state.edu/~jimlb/Math581.html>

Lecture: Lectures are at 9:30 am Monday, Weds, and Friday. I do not take attendance, but it is important for your understanding that you attend class regularly. Class starts at 9:30 promptly; be there on time. If you are going to be late, don't come.

Description: The sequence 580-581-582 is intended to be your first introduction to the vast field of abstract algebra. This branch of mathematics seeks to abstract properties shared by familiar objects such as the integers and polynomials and see what other objects share these properties. A solid understanding of modern abstract algebra is essential for any mathematician. This sequence will introduce you to the concepts of groups, rings, fields, and vector spaces.

In this course we will cover section 3.3, chapters 4 and 5, and possibly chapter 6 depending on the time. A focus of this course will be to improve your proof writing skills. For my expectations of your individual homework assignments please visit the course homepage.

Text: *Abstract Algebra: A Geometric Approach* by Theodore Shifrin ISBN: 0-13-319831-6

Grading:

- Individual Homework: 40% of final grade
- Midterm 1: 15% of final grade
- Midterm 2: 20% of final grade
- Final Exam (Cumulative!!): 25% of final grade

Exam Dates: First Midterm Exam Fri., April 21. 6:00-8:00 pm in JR 139
Second Midterm Exam Fri., May 19 6:00 - 8:00 pm in JR 139
Final Exam Wed., June 7; 9:30 am - 11:18 am

Exam dates are ***absolutely*** firm. All students enrolled must plan to take exams at the scheduled times. Travel plans will ***not*** be considered an excuse to take an examination on a different date.