

Math 210

syllabus

Fall 2013

Professor: Matthew Neal (nealm@denison.edu)
Office and phone: Olin 202 (6288)
Office Hours: M 2:30 - 3:30, 4:30 - 5:30, T 1:30 - 5:30, R 9-11:30, 1:30-3:30 or by appointment
Web site: <http://personal.denison.edu/~nealm/>

Course

This course concerns the creation and communication of precise mathematical proofs. It is also an introduction to many cool ideas in higher mathematics.

Book

Mathematical Proofs: A Transition to Advanced Mathematics by Chartland, 3rd edition

Grades and Expectations

The grade will be entirely calculated based on homework, quizzes, and a final exam as follows

- 30 % for homework problems done jointly with a partner
- 30 % for individually completed problems
- 20 % for the reading quizzes
- 20 % for the final exam

Every Friday you will be assigned a homework partner. You will be assigned four types of problems to complete:

- 2 problems assigned each Friday to be completed with your partner concerning the material taught on Friday, Monday and Tuesday. You must bring these to class the next Wednesday. I will float around and help you correct these problems in class. You will be graded on effort only. On Wednesdays I will also provide aid for other problems.
- 4 problems assigned each Friday to be completed with your partner concerning the material taught on Friday, Monday and Tuesday. These are due the following Friday. I will return these to you graded on the next Monday. You will be given a chance to rewrite these individually Monday night to be turned in Tuesday. These must be rewritten without help from your partner. Hence your final grade on these 4 problems may be different from your partner. I will return the final graded assignment by Wednesday.
- 2 problems assigned each Friday to be solved individually over the weekend that concern the previous week's material. These are due the following Monday.
- Each Friday you will be assigned reading in the text. Each Friday there will be a quiz on the Theorems, proofs, and definitions from this reading.

The final exam is on Monday, December 16th at 9 a.m. in our classroom.

Week(s)	Topic(s)
1	Introduction, L ^A T _E X, and Chapter 1: Sets
2	Chapter 2: Logic
3	Chapter 3,4,5: Direct Proof and Proof by Contrapositive, Existence and Proof by Contradiction
4	Chapter 6: Induction
5	Chapter 8: Equivalence Relations, modular arithmetic
6	Chapter 9: Functions
7	Chapter 10: Cardinalities of Sets
8-10	Chapter 11: Number Theory
11-12	Chapter 11 - 12: Calculus
13-15	Group Theory

Office Hours

Monday through Friday from 1:30 to 3:30 I will be in my office for help with Math or other issues. Please come to office hours so I can get to know you better!

Late Work

Late tests will receive a 20 % point penalty per day late unless there is a written note (such as a note from Whistler) that verifies a VERY strong excuse (such as illness or important sports team events). Late quizzes are not accepted at all without a written excuse as above.

Academic Integrity

The students and faculty of Denison University and the Department of Mathematics and Computer Science are committed to academic integrity and will not tolerate any violation of this principle. Academic honesty, the cornerstone of teaching and learning, lays the foundation for lifelong integrity.

Academic dishonesty is, in most cases, intellectual theft. It includes, but is not limited to, providing or receiving assistance in a manner not authorized by the instructor in the creation of work to be submitted for evaluation. This standard applies to all work ranging from daily homework assignments to major exams. Students must clearly cite any sources consulted, not only for quoted phrases but also for ideas and information that are not common knowledge. Neither ignorance nor carelessness is an acceptable defense in cases of plagiarism. It is the students responsibility to follow the appropriate format for citations.

Proposed and developed by Denison students, passed unanimously by DCGA and Denisons faculty, the Code of Academic Integrity requires that instructors notify the Associate Provost of cases of academic dishonesty, and it requires that cases be heard by the Academic Integrity Board. Further, the code makes students responsible for promoting a culture of integrity on campus and acting in instances in which integrity is violated.

For further information about the Code of Academic Integrity see <http://www.denison.edu/about/integrity.html>

Disabilities

Any student who feels he or she may need an accommodation based on the impact of a disability should contact me privately as soon as possible to discuss his or her specific needs. I rely on the Academic Support and Enrichment Center in 102 Doane to verify the need for reasonable accommodations based on documentation on file in that office.