

## MATH 310: Introduction to Abstract Mathematics Fall 2015 Syllabus

**Instructor:** Jonathan Totushek, Office: Swenson 3024,

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**Lectures:** Monday, Wednesday, Friday 11:00 - 11:50 (am) in Swenson 3008

**Office Hours:** Monday, Wednesday, Friday 9:00 - 10:50 (am) in Swenson 3024

**Text:** *Mathematical Proofs* (third edition) by Gary Chartmand, Albert D. Polimeni, & Ping Zhang. Pearson

**Course Description:** Fundamentals of formal mathematics emphasizing mathematical writing and types of formal proof. Includes significant coverage of topics in logic, set theory and number theory.

**Course Objectives:** The primary goal of this course is for you to know how to read and write proofs. You will become familiar with basic mathematical concepts and structures such as sets, logic, formal proof methods, and equivalence relations.

**Attendance:** Attendance is expected everyday. If you miss a day of class, you are responsible for obtaining notes and materials from that day.

**Calculator Policy:** Calculators are *not* allowed on quizzes or exams.

**Notes:** During lecture you will be expected to take notes. I will not be using slide presentations or posting my notes online. If you miss a day of class be sure to get notes from a fellow classmate.

**Homework:** There will be one homework assignment each week (with the exception of exam weeks). Each assignment will be assigned on Friday and will be due the following Friday. You are encouraged to work in groups. However, everyone must turn in their own solutions.

**L<sup>A</sup>T<sub>E</sub>X:** Modern mathematics is typed up using software called T<sub>E</sub>X or L<sup>A</sup>T<sub>E</sub>X. You are not required to type your homework solutions with L<sup>A</sup>T<sub>E</sub>X, but I do encourage you to learn and experiment with L<sup>A</sup>T<sub>E</sub>X. If anyone is interested in learning L<sup>A</sup>T<sub>E</sub>X, please talk to me.

**Quizzes** There will be at least one quiz per week covering recent material. They will be closed book and closed notes. Two quizzes will be dropped at the end of the semester and will not affect your final grade. *There will be NO make-up quizzes allowed.*

**Exams:** There will be two exams and one final exam. They will be closed book and closed notes. Make up exams will only be given in exceptional circumstances and will require prior approval of the instructor. In emergency situations (medical, etc.), a note from a physician will be required. If absences at exams are not adequately documented, the student will receive 0 points. *There will be NO make-up final exam.*

### Exam Dates:

- **Exam 1:** Wednesday October 7<sup>th</sup>, in class.
- **Exam 2:** Friday November 11<sup>th</sup>, in class.
- **Final:** Friday December 16<sup>th</sup> (10:30-12:30).

**Holidays:** There will be two days during the semester where there is no class. The first is Labor day on September 7th. The second is during Thanksgiving break on November 27. Also be aware that Daylight savings will occur on November 1st.

**Grading:** The overall course grade will be determined from homework assignments, two in class exams and a comprehensive final exam. Grades will be determined in the following way:

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|-------------------------------|----------------------|
| • <b>Homework:</b> 25%.       | <b>A:</b> 90% - 100% |
| • <b>Quizzes:</b> 10%.        | <b>B:</b> 80% - 89%  |
| • <b>Exams 1,2:</b> 20% each. | <b>C:</b> 70% - 79%  |
| • <b>Final Exam:</b> 25%.     | <b>D:</b> 60% - 69%  |
|                               | <b>F:</b> 0% - 59%   |

Plus and minus grades will be awarded to students within two percentage points of a grade.

**Learn @UW-Superior:** I will *not* be using Learn @UW-Superior. Your grade can be calculated using the breakdown given above.

**Disabilities Accommodation:** Students with documented medical disabilities, as covered under the 1990 ADA, will be reasonably accommodated once the student has provided the instructor a signed copy of the FAF (Faculty Accommodation Form) provided by Disabilities Support Services (DSS). Since accommodations are not retroactive, students must identify themselves and their reasonable accommodation needs (via FAF) to the instructor at the beginning of each semester accommodations will be needed, or within a reasonable period of time before the accommodations will be required. The DSS office is located in 1024 Swenson Hall. Questions related to DSS accommodation-related needs may be made by calling 394-8515 or e-mailing [disability@uwsuper.edu](mailto:disability@uwsuper.edu)

**University Policies:** The University of Wisconsin-Superior is dedicated to a safe, supportive and nondiscriminatory learning environment. It is the responsibility of all undergraduate and graduate students to familiarize themselves with University policies regarding special accommodations, academic misconduct, religious beliefs accommodation, discrimination and absence for University sponsored events. For details of the Student Disciplinary Procedures:

- Academic Misconduct Disciplinary Process (Chapter 14) can be found at [http://docs.legis.wisconsin.gov/code/admin\\_code/uws/14.pdf](http://docs.legis.wisconsin.gov/code/admin_code/uws/14.pdf)
- Student Nonacademic Disciplinary Procedures (UWS Chapter 17) can be found at [http://docs.legis.wisconsin.gov/code/admin\\_code/uws/17.pdf](http://docs.legis.wisconsin.gov/code/admin_code/uws/17.pdf)

**Tentative Schedule for the Semester:** The instructor reserves the right to make any reasonable changes to the schedule.

<b>Date</b>	<b>Through</b>	<b>Chapters</b>
September 2	October 2	1-2
October 7	October 7	<b>Exam 1</b>
October 9	November 6	3-7
November 11	November 11	<b>Exam 2</b>
November 13	December 9	8-10
December 11	December 15	Review
December 16	December 16	<b>FINAL EXAM</b>