MATH 310: Introduction to Abstract Mathematics
Spring 2017 Syllabus

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Course Website: `http://mcs-web.uwsuper.edu/jtotushe/teaching/sp17/abs-math/`

Lectures: Monday, Wednesday, Friday 10:00 - 10:50 (am) in Swenson 3008
Office Hours: Monday, Wednesday, Friday 1:00 - 2:00 and Tuesday 10:00 - 11:00 in Swenson 3024
Text: *Book of Proof* (second edition) by Richard Hammack. A free pdf copy of this book can be found at `http://www.people.vcu.edu/~rhammack/BookOfProof/`

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.
Reading: In addition to attending lectures, it is important to read your text book. I also recommend you read the article "How to Read a Math Book" by Stan Brown. `https://brownmath.com/stfa/read.htm`.
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.
Piazza I have created a Piazza page for our class. Piazza is an online Q&A platform where you can ask questions anonymously to anybody in our class.

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.
LaTeX: Modern mathematics is typed up using software called TeX or LaTeX. You are not required to type your homework solutions with LaTeX. However, you will be required to type your class project in LaTeX.
Mathematical Dictionary: An important part of understanding mathematics is understanding definitions and theorems. You will be required to construct and maintain a working dictionary and theorem notebook. You are required to submit these during each of the midterm exams and the final exam.

Project: You will be required to study a mathematical topic and a proof and type it up in your own words. Papers **must** be typed in LaTeX. More information will be provided at mid semester.

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 March 1st, in class.
- **Exam 2:** Wednesday April 19th, in class.
- **Final:** Wednesday May 17th (10:00 - 12:00).

Notable Dates: Be aware that there will be no class **March 20 - 24** due to Spring Break and no class on **April 14**. Also note that daylight savings is Sunday March 12.

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:

- **Homework:** 25%.
- **Dictionary:** 5%.
- **Project:** 10%.
- **Quizzes:** 10%.
- **Exams 1,2:** 15% each.
- **Final Exam:** 20%.

A: 90% - 100%
B: 80% - 89%
C: 70% - 79%
D: 60% - 69%
F: 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 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

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 accommoda- tions, 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
- Student Nonacademic Disciplinary Procedures (UWS Chapter 17) can be found at
  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.

Date	Through	Chapters
January 23	February 27	1-2
March 1	March 1	**Exam 1**
March 3	April 17	4-10
April 19	April 19	**Exam 2**
April 21	May 12	11-12
May 17	10:00-12:00	**FINAL EXAM**