

MATH 112: Introduction to Contemporary Mathematics Fall 2016 Syllabus

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Lectures: Monday, Wednesday, Friday 8:00-8:50 (am) in Swenson 3008.

Office Hours: Monday, Wednesday, Friday 10:00 - 11:50 (am) in Swenson 3024

Text: *Exploring Mathematics* (first edition) by Craig M. Johnson. Jones and Bartlett Learning

Course Description: A liberal arts mathematics course presenting mathematics as a tool used by a wide range of professionals in modern society. Real-life examples are used to promote understanding of mathematics and its relationship to other areas of study. Mathematical problem solving is shown to influence everything from the success of savvy entrepreneurs to the fairness of voting practices. Examples such as the Traveling Salesman Problem and Arrow's Impossibility Theorem are taken from management science, statistics, social science and computer science. MATH 095 is recommended.

Course Objectives:

- Students will develop critical thinking skills to use when encountering unfamiliar problems.
- Students will be able to define mathematics as problem solving outside of basic algebra and arithmetic and, consequently, even more relevant to society.
- This course will also address student learning outcomes defined for the Mathematics and Computer Science Core.
- Students will articulate important questions, theories, and creative processes.
- Students will analyze information to answer specific questions.

Attendance: Attendance is expected everyday. Part of your grade will be determined on class participation. This means you need attend class as much as possible.

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

Notes: During lecture you will be expected to take notes. If you miss a day of class be sure to get notes from a fellow classmate.

Homework: The best way to understand mathematical concepts is to practice them. Homework exercises will be assigned on a regular basis. Homework will be due at the start of class (8:00 am). **No late work will be accepted.** The two lowest homeworks will be dropped and will not be calculated into your grade.

Exams: There will be three 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.), appropriate documentation 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:** Friday September 30th, in class.
- **Exam 2:** Friday October 28th, in class.
- **Exam 3:** Wednesday November 30th, in class.
- **Final:** Wednesday December 21th 8:00-10:00.

No Class: Be aware that there will be no class **November 25** due to Fall Break.

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

- **Class Participation** 10%.
- **Homework:** 25%.
- **Exams 1,2,3:** 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 be calculated using the breakdown given above.

Extra Help: The math lab is a source for free mathematics tutoring. They are located in Swenson 1024. For the schedule and details see <http://www.uwsuper.edu/support/services/tutoring.cfm>.

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 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
- 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
September 7	September 28	1 & 3
September 30	September 30	Exam 1
November 3	November 24	5 & 6
October 28	October 28	Exam 2
October 31	November 28	7 & 8
November 30	November 30	Exam 3
December 2	December 16	9
December 21	8:00-10:00	Final Exam