

## MATH 371: Statistics Fall 2016 Syllabus

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**Course Website:** [mcs-web.uwsuper.edu/jtotushe/teaching/fl16/stats](http://mcs-web.uwsuper.edu/jtotushe/teaching/fl16/stats)

**Lectures:** Monday, Tuesday, Wednesday, Friday 1:00 - 1:50 (pm) in Swenson 3008.

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

**Text:** *Probability and Statistics* (fourth edition) by Degroot and Schervish. Addison Wesley

**Course Description:** Calculus based statistics emphasizing applications intended for students in applied mathematics, economics, and the sciences. Topics include estimation and prediction; hypothesis testing; linear and multiple regression; F and t tests; analysis of variance; and non-parametric statistics. Prerequisite: MATH 241 and MATH 310. MATH 242 and MATH 370 are recommended.

**Course Objectives:** Students will be able to choose a parametric model appropriate for a given experiment or data set, to estimate the values of the parameters of the model with quantitative statements of confidence, and to make predictions based on the model. Students will be able to formulate and test hypotheses about the parameters of a model, as well as test whether a given model fits a given data set. They will be able to do this work both with and without technological aids to computation. Students will be able to derive and explain the basic methods and formulas of statistics covered in this course.

**Attendance:** Attendance is expected everyday.

**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.

**Calculator Policy:** Calculators are *not* allowed on 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 from probability (Homework 0). This assignment will be worth 10% of your final grade. After the due date, you will have **one** opportunity to make any corrections for full credit (this only applies to Homework 0). After Homework 0, there will be weekly assignments. Homework will be assigned Tuesday and will be due the following Tuesday. The two lowest homeworks will be dropped and will not be calculated into your final grade (this does not apply to homework 0). You may work together on homeworks. However, make sure to write up your **own** solutions.

**L<sup>A</sup>T<sub>E</sub>X:** Everybody is encouraged (but not required) to type their homework assignments in L<sup>A</sup>T<sub>E</sub>X. Anybody who is interested in learning L<sup>A</sup>T<sub>E</sub>X, please see me.

**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.), 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:** Wednesday October 5<sup>th</sup>, in class.
- **Exam 2:** Wednesday November 9<sup>th</sup>, in class.
- **Final:** Monday December 19<sup>th</sup>.

**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 0:** 10%.
- **Homework:** 40%.
- **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.

**No Class:** Be aware that there will be no class **November 25**.

**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 6	October 4	1 - 7
October 5	October 5	<b>Exam 1</b>
October 7	November 8	8 - 9
November 9	November 9	<b>Exam 2</b>
November 11	December 16	10 - 11
December 19	1:00 - 3:00	<b>Final Exam</b>