

STA 552: Introduction to Mathematical Statistics, 3 Credits

Pre-requisite: STA 551 or permission of instructor

Textbook

Required: John Freund's Mathematical Statistics with Applications by Miller & Miller, Prentice Hall

Topics to be covered

It is a calculus based course and is the second course in a two-course sequence. In this course, we will cover most of the topics from Chapters 8- 16 in the required text. Specific topics to be covered include:

Point estimation, hypothesis testing, confidence intervals, correlation and regression, small sample distributions

Course Objectives

After completing this course, you should be able to

- Learn some of the data organization and data cleaning tools.
- Learn various data analysis techniques such as point estimation, hypothesis testing, confidence intervals, correlation and regression, and analysis of variance.
- Understand the mathematical foundation for various statistical procedures.
- Learn how to make valid inferences.
- Understand the significance of verifying the assumptions behind various statistical procedures.

Grades

Grades will be based on the following components.

Homework Assignments, Two Midterm Exams, Final Exam.

Grading Scale

90 and above	A- or A or A+
80 – 89	B-, B or B+
70 – 79	C-, C or C+
60-69	D-, D or D+
Below 60	F

Not all of these grade options are available for graduate students. A slight variation to this rule may be possible based on class averages.

Attendance Policy

You are expected to attend all classes but there is no formal attendance policy. You will be responsible for knowing the material covered during any lecture you happen to miss. Also, you will be responsible for knowing any announcements that may be made in class regarding exam schedules etc.

Use of Blackboard

Assignments and all major announcements will be posted on the blackboard site for the course.

Academic Integrity

Students are encouraged to discuss solutions to assignments, but each student is expected to write-up his or her solutions independently. Copying other people's work is plagiarism and is an Honor Code violation. You are responsible for knowing and abiding by the university academic integrity policy.

Disabilities

If you have a documented disability and wish to discuss academic accommodations, please contact me as soon as possible