

MATH 410A

Advanced Statistical Methods

Course Philosophy

In this course, we will study mathematical modeling from a statistical point of view. In particular, we will examine single and multiple linear regression models.

Student Outcomes

Students successfully completing Math 410A will be able to correctly employ single and multiple regression techniques to model real world situations and communicate their analyses orally and in writing.

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Office Hours

Course Content

Week 1 Central
Limit Theorem

Week 2 Inference
Review

Week 3 Inference
Review

Week 4 Simple
Linear
Regression

Week 5 Simple
Linear
Regression

Exam: (In class)

Week 6 Multiple
Regression

Week 7 Multiple
Regression

Week 8 Multiple
Regression

Week 9 Multiple
Linear
Regression
Models

Week 10 Multiple
Linear
Regression
Models

**Final Exam:
Friday (Take
Home); due
Wednesday,
March 10 at**

Course Requirements

Project

You will design a statistical study, collect data, and write up your results in report form by the end of Week 8 of the class. Your report will include references and should be written according to American Psychological Association (APA) style. Guidelines for the write-up will be presented to you. This project will count as 20% of your final grade.

Homework

Homework will be assigned throughout the week and collected on Monday. You will be encouraged to work in teams. Your homework will count as 20% of your final grade.

Exams

There will be a mid-term exam and a final exam. Each exam counts as 30% of your final grade. Generally, the previous week's worth of homework will be handed in Mondays.

Special Accommodations

Please talk to me if you need special accommodations due to a disability.

MTWThF 1:00-2:00

March 12 at
12:00)

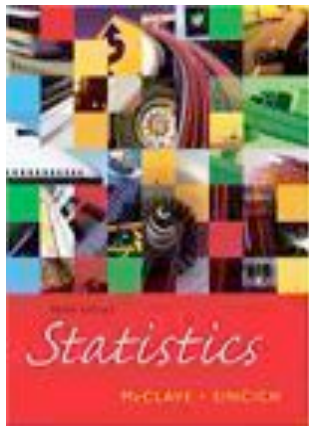
If you cannot meet
during this time, we
can make
arrangements to
meet at another time.

TEXT

Statistics

by

McClave and Sincich



Assessments	Percent of Final Grade	Final Point Distribution	Final Grade
Written Homework	20%	93-100%	A
Project	20%	90-92%	A-
Midterm Exam	30%	87-90%	B+
Final Exam	30%	83-86%	B
		80-82%	B-
		77-79%	C+
		73-76%	C
		70-72%	C-
		67-69%	D+
		63-66%	D
60-62%	D-		
Below 60%	F		

