

**SDS 380D Statistical Methods II**  
**UTC 4.110 • TTH 12:30- 2:00 • Spring 2022**  
<https://utexas.zoom.us/j/94806609028>

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Professor:

Matt Hersh

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Office Hours: On Zoom F 11:00 – 12:00  
and by appointment

Teaching Assistant:

Kai Feng

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<https://utexas.zoom.us/j/94672337264>

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There will not be a textbook for this course. There will be classnotes posted on Canvas. The book below is a great resource.

Kutner, Nachtsheim, Neter, and Li, Applied Linear Statistical Models, 5<sup>th</sup> Edition.

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**The first two weeks will be on Zoom at the link below.**

<https://utexas.zoom.us/j/94806609028>

**CLASS RECORDINGS** Class recordings are reserved only for students in this class for educational purposes and are protected under FERPA. The recordings should not be shared outside the class in any form. Violation of this restriction by a student could lead to Student Misconduct proceedings.

**Course Description:** This is a graduate level applied statistics course. It will focus on teaching the concepts behind key statistical methods and their applications to real data. Some of the topics covered will include multiple regression, logistic regression, survival analysis, time series, and mixed models. We will probably spend about two weeks on each of these topics.

**Software:** We will be using the software package SAS. You could access SAS from your home or office on the SDS application server. For more information, see:

<https://stat.utexas.edu/training/stat-apps-server>

**Grading:** There will be no “pluses” or “minuses” assigned in this course.

Homework	25%
Exam 1	30%
Exam 2	30%
In-Class Labs	15%

**Canvas:** Announcements, problem sets, and handouts will be posted on the SDS 380D site (<http://courses.utexas.edu>).

**Homework:** There will be problem sets assigned throughout the semester. The homeworks count for 25% of your grade. You may work with others on homework assignments.

**Exams:**

There will be 2 exams. They will each count for 30% of your grade. The exams will be taken home. You may not work with others on these exams. They must be your own work.

**In-class Labs:** Throughout the semester, we will have in-class labs. These will be problems to be worked on during class. They will count for 15% of your grade.

**Attendance:**

A student who misses classes or other required activities, including examinations, for the observance of a **religious holy day** should inform the instructor as far in advance of the absence as possible, so that arrangements can be made to complete an assignment within a reasonable time after the absence.

**Academic honesty:** We expect students to behave with integrity. Students found cheating on exams or homework will receive a score of zero for that exam or assignment, and may be subject to additional disciplinary action. For more information on the University of Texas scholastic dishonesty policy, see the 2006-2007 General Information Catalog, Appendix C.

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Tentative Due Dates:

If for any reason you need an extension on these dates, let me know.

Homework 1 due Feb 15 (Simple regression SAS)

Homework 2 due March 1 (Multiple regression SAS)

Homework 3 due March 10 (Multiple regression concepts)

Exam 1 will be posted March 29 and due April 5 (week to take)

Homework 4 due a few weeks after we complete GLMs

Exam 2 May 5

Tentative Schedule:

Simple Regression:  
Review

Multiple Regression:  
Model  
Dummy coding  
ANCOVA  
Interaction  
Adjusted R squared  
Multicollinearity

GLMS:  
Poisson Regression  
Logistic Regression

Mixed Models

Time Series