Statistics 102: Introduction to Business Statistics

Classes:	Section 001, Mon/Wed 12:00–1:20 p.m., in F85 JMHH
	Section 002, Mon/Wed 1:30–2:50 p.m., in F85 JMHH
	Section 003, Mon/Wed 3:00–4:20 p.m., in F85 JMHH

Instructor:	Zongming Ma
Email:	zongming@wharton.upenn.edu
Office hours:	Thu 10:30 a.m.–1:30 p.m. or by appointment
Office:	468 JMHH

Teaching Assistant:	Colman Humphrey
Email:	chump@wharton.upenn.edu
Office hours:	Mon 10:30 a.m.–12 p.m., Thu 9–10:30 a.m.
Location:	SHDH 105

Teaching Assistant:	Mateo Wirth
Email:	mwirth@wharton.upenn.edu
Office hours:	Tue 4:30–6 p.m., Fri 10:30 a.m.–12 p.m.
Location:	JMHH F92 (Tue) & F96 (Fri)

Questions about the homeworks should be addressed to the TAs. Administrative issues and exam related questions should be addressed to the Professor. Students are encouraged to use the discussion board on Canvas to interact with the TAs.

Course Website

The course website uses the **Canvas** platform. Please check the course website for announcements, handouts, assignments, solutions, and other materials, etc.

Course Overview

This course takes the foundational ideas introduced in STAT 101 and extends them into the realm of statistical modeling. In particular, the major goal of the course is to develop competency in regression modeling. This form of modeling is ubiquitous in business settings and provides the basis for activities that involve predictive analytics. Predictive analytics can be used for wide ranging tasks such as predicting how much you will like a movie, predicting your lifetime value as a customer to your insurance company or predicting the price of a stock at the end of next year.

We will be using JMP software to implement the regression models. If you master both the JMP software and regression modeling you will have developed a well-defined and in demand skill set by the end of the semester.

The structure of the course will be to review the key ideas from STAT 101, move on to the simple regression model, then learn about the multiple regression model and then as time permits to cover some logistic regression.

Prerequisite

STAT 101.

Textbook

Statistics for Business: Decision Making and Analysis, by Stine and Foster, Second Edition. The Third Edition also works.

Software

JMP 13, available for purchase from `http://upenn.onthehub.com` or available on public Wharton computers. Earlier versions also work.

Homework

- There will be six assignments in total. Each assignment will be graded. The lowest score will be dropped. *No late homework will be accepted for any reason.* Homework assignments will be posted on the course website. After the due dates, solutions will be posted.
- Students can help each other on solving the problems, but are expected to prepare the final writeup individually with acknowledgment of the help received.

Quizzes

There will be four in-class quizzes. Quizzes last ten minutes and have four multiple choice questions. They will start at the beginning of the class period. They are closed book. *There will be no make-ups for missed quizzes for any reason.* The lowest quiz score will be dropped.

Exams

- Midterm exam: Thursday, March 16, 6–8 p.m., location TBA.
- Final exam: Tuesday, May 9, 6–8 p.m., location TBA.
- Both exams will be semi-closed book, with a certain number of pages of notes allowed.

Grading Policy

- Homework assignments: 20% (with the lowest score dropped)
  Quizzes: 10% (with the lowest score dropped)
  Midterm exam: 30%
  Final exam: 40%
- Regrading of homework assignments are administrated by the TAs. Regrading of quizzes and exams are administrated by the Professor. Any request will result in regrading the whole assignment/quiz/exam.