Statistics for Executives Fall 2023

UT Austin McCombs School of Business

Instructor: David Puelz

Course webpage: https://github.com/dpuelz/StatisticsForExecutives

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Office hours: Wednesday, 2:00p - 3:00p over Zoom every week (link available on canvas). Also, I

am happy to meet with anyone that wants to schedule an appointment.

Class Times:

• 8/23: 8:00a-12:00p (4hrs)

• 8/24: 1:30p-5:30p (4hrs)

• 8/25: 1:30p-5:30p (4hrs)

• 9/21: 3:30p-5:30p (2hrs)

• 9/22: 1:30p-5:30p (4hrs)

• 9/23: 1:00p-5:00p (4hrs)

Course description and objectives

This course focuses on statistical concepts and their applications in business. We will broadly discuss three main topics: (1) Probability, (2) Learning from data via hypothesis testing and uncertainty quantification, and (3) Building and validating predictive models for applications in business and beyond. Statistics is going through a rebrand with the explosion of machine learning and artificial intelligence. Consider this course an entry point into this exciting world!

Required textbooks

There is no course pack. All lecture notes and course materials will be available on the course webpage. *Naked Statistics* by Charles Wheelan is required reading, and the quizzes are based on assigned chapters of the book.

Homework

There will be optional (practice) homework assignments throughout the semester. These will be distributed in advance of our meetings, and we will discuss the solutions in class. Please come prepared to discuss these problems in class, including your attempt at answering them. Participation in these discussions will be beneficial to your engagement grade (covered below).

Quizzes

There will tentatively be three reading quizzes covering assigned chapters of *Naked Statistics*. Their due dates will be determined by our pacing, and the material covered is as follows:

- 1. Quiz 1: Chapters 5, 5.5 and 6.
- 2. Quiz 2: Chapters 8, 9 and 10.
- 3. Quiz 3: Chapters 11 and 13.

Final Project

There will be a final project asking you to apply the tools you've learned to a professional area of interest. The due date will be **October 6**, **2023**. More details will be provided after our August course sessions.

Evaluation

The class grade is comprised of the following:

- Engagement (10%). How often did you participate in class and contribute to class discussion?
- Quizzes (30%)
- Final Project (60%)

Students with disabilities

Upon request, the University of Texas at Austin provides appropriate academic accommodations for qualified students with disabilities. Services for Students with Disabilities (SSD) is housed in the Office of the Dean of Students, located on the fourth floor of the Student Services Building. Information on how to register, downloadable forms, including guidelines for documentation, accommodation request letters, and releases of information are available online at here. Please do not hesitate to contact SSD at (512) 471-6259, VP: (512) 232-2937 or via e-mail if you have any questions.

<u>Harassment reporting requirements</u>

Senate Bill 212 (SB 212), which went into effect as of January 1, 2020, is a Texas State Law that requires all employees (both faculty and staff) at a public or private post-secondary institution to promptly report any knowledge of any incidents of sexual assault, sexual harassment, dating violence, or stalking "committed by or against a person who was a student enrolled at or an employee of the institution at the time of the incident." Please note that both the instructor and the TA for this class are classified by SB 212 as mandatory reporters. That means we MUST share with the Title IX office any information about sexual harassment/assault that is shared with us by a student-whether in-person, via electronic communication, or as part of any class assignment. Note that a report to the Title IX office does not obligate a victim to take any action, but this type of information CANNOT be kept strictly confidential except when shared with designated "confidential employees." A confidential employee is someone a student can go to and talk about a Title IX matter without triggering any obligation by that employee to have to report the situation so that it will be investigated. A list of confidential employees is available on the Title IX website. The professor and TA for this class are NOT designated confidential employees per SB 212.