

ECON 83a: Statistics for Economic Analysis

Summer - 2023

Instructor: Chen Chen

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Course Session: Session 1 - Monday, June 5 to Friday, July 7, 2023

Days and Times: Tuesday, Wednesday & Thursday 1:50 PM - 4:20 PM

Class Zoom link: <https://brandeis.zoom.us/j/94100859295>

Office hours: TBA

Teaching assistant: Ketian Guan

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Office hours: TBA

Course description: This is the first course in probability and statistics for students in economics and business. Topics to be covered include: descriptive statistics, central tendencies, set notation, bivariate data, probability distributions functions, cumulative distribution functions, expectation, variance, normal and binomial distributions, sampling and sampling distributions, point estimation, properties of estimators, confidence intervals, and hypothesis testing.

Prerequisites: ECON 2a or 10a. You must earn C- or higher in MATH 10a, or otherwise satisfy the calculus requirement, to enroll in this course. Learning goals and outcomes: Upon successful completion of this course you should be able to calculate and interpret basic descriptive statistics; understand probability distributions, cumulative distributions, expected values; calculate confidence intervals and perform hypothesis testing.

Readings: 1. Understandable Statistics by Brase and Brase (TWELFTH EDITION);

2. Jim Pitman: Probability;

3. Anderson, David R., Dennis J. Sweeney, Thomas A. Williams, Jeffrey D. Camm, and James J. Cochran, Statistics for Business Economics (13th ed.)

Note: All textbooks are recommended, not required.

Class attendance: You are expected to attend all classes. If you are in a different time zone, please contact me before the class (if you haven't done so).

Evaluation: There will be one midterm exam and one final exam. No make-up exams will be offered. If you are unable to take an exam for a legitimate reason, you must obtain advance authorization. There will be several problem sets, which you are required to do on your own. No late submissions will be accepted, but the lowest score can be dropped. The final grade will be calculated as:

Class participation — 10% (may change)

Problem sets — 25%

Midterms — 30%

Final — 35%

Special accommodations: If you are a student with a documented disability on record at Brandeis University and wish to have a reasonable accommodation made for you in this class, please see me immediately.

Academic honesty: You are expected to be honest in all of your academic work. Please consult Brandeis University Rights and Responsibilities for all policies and procedures related to academic integrity. Students may be required to submit work to TurnItIn.com software to verify originality. Allegations of alleged academic dishonesty will be forwarded to the Director of Academic Integrity. Sanctions for academic dishonesty can include failing grades and/or suspension from the university. Citation and research assistance can be found in LTS-Library guides.