Carleton University Department of Economics
Fall 2026
ECON 2210B
Introductory Statistics for Economics

The Instructor

Instructor: Rashid Nikzad
Email Address: Rashid.Nikzad@carleton.ca
Office Location: TBD
Office Hours: After the class or by appointment

The Course

Course Location/Delivery: In-person
Course Day and Time: Mondays, 6:05 - 8:55 PM

TAs:
- Mohamed Belarabi (MohamedBelarabi@cmail.carleton.ca)
- Yuwen Zhu (YuwenZhu@cmail.carleton.ca)

Tutorial:
- Mondays, 2:35 - 3:55 PM (starting September 21)
- Mondays, 4:05 - 5:25 PM (starting September 21)

Brightspace Course Page: https://brightspace.carleton.ca/d2l/home/470817

Course Description
This course presents basic statistical methods for the study of economics. Topics include descriptive statistics, elementary probability theory, sampling distributions, estimation and hypothesis testing for one and two population parameters.

Learning Outcomes
By the end of this course, students will:

1) be conversant with and be able to define a range of basic statistical terminology
2) have a general understanding of how data are collected and organized for statistical purposes
3) understand the fundamentals of data visualization, including the construction and interpretation of elementary graphs, charts, and tables

4) be able to describe data using standard numerical measures of central tendency and variation
5) have a grounding in elementary probability theory and the basic rules of probability
6) understand the concept of a probability distribution and be acquainted with some leading examples of both discrete and continuous probability distributions
7) have a clear idea of what is meant by a sampling distribution
8) be familiar with the basics of estimation and hypothesis testing, with particular reference to applications involving the population mean and the population variance
9) understand the key elements of modern spreadsheet software and have had some experience in using this software for statistical purposes

Prerequisites

The prerequisites for this course are ECON 1401 (with a grade of C- or higher) and ECON 1402, (or equivalent department-approved MATH course pair). NOTE: ECON 2210 may be taken concurrently with ECON 1402. Students who believe that they have taken a similar background course or courses from another university must provide appropriate documentation to the Department of Economics Undergraduate Administrator.

Please note that a grade of C- or higher in ECON 2210 is required to qualify for ECON 2900, ECON 3210, and ECON 3900, and that a grade of C+ or higher is required to qualify for ECON 2708, ECON 4002, and ECON 4706. DEF(erred final grade) status at the end of this course precludes (continued) registration in any other course for which the former is a prerequisite.

Also, please note that this course precludes additional credit for BIT 2000, BIT 2009, DATA 1517, ENST 2006, GEOG 2006, STAT 2507, STAT 2601, STAT 2606, and STAT 3502.

Course Content

I: Descriptive Statistics and Basic Probability

Chapter 1: The Where, Why, and How of Data Collection
Chapter 2: Graphs, Charts, and Tables-Describing Your Data
Chapter 3: Describing Data Using Numerical Measures
Chapter 4: Using Probability and Probability Distributions

II: Important Probability Distributions

Chapter 5: Discrete Probability Distributions (except for the discussion of the Hypergeometric Distribution in Section 5.3)
Chapter 6: Introduction to Continuous Probability Distributions

III: Statistical Inference

Chapter 7: Introduction to Sampling Distributions - Sections 7.1 and 7.2
Chapter 8: Estimating Single Population Parameters - Sections 8.1 and 8.2
Chapter 9: Introduction to Hypothesis Testing - Sections 9.1 and 9.3

Chapter 10: Estimation and Hypothesis Testing for Two Population Parameters - Sections 10.1, 10.2, and 10.3

Chapter 11: Hypothesis Testing for One and Two Population Variances - Section 11.1

Lecture notes, announcements, due dates and other information will be posted on Brightspace. Students are responsible for regularly checking Brightspace to ensure that they have access to posted documents and that they are up to date with any announcements.

Disclaimer: Please note that modifications/additions may be made to the list of readings. Any such modifications will be announced in a timely fashion in class. Please check the updated weekly schedule at Brightspace.

Tutorials In addition to the lecture component, this course includes scheduled tutorials during which the TA will discuss and review assignment and midterm solutions, discuss separately assigned problems, and possibly present material to reinforce or support lecture. For lecture and tutorial locations, please check Carleton Central

Textbooks and Readings

(Required) Groebner, David F., Shannon, Patrick W., and Fry, Phillip C. (2024), Business Statistics: A Decision-Making Approach (11th Edition), Pearson. (cost: $93.48, or $71.99 for six month access from Pearson)

NOTE: You do NOT need MyLab access for this section of the course, although you may find MyLab useful as a supplement to the textbook. (MyLab includes the etext.)

Note: Students may also use older versions of the textbooks.

Students may purchase the textbooks from the CU bookstore. Students may also access the electronic version of the textbook via the textbook publisher's website and Amazon.

Evaluation

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Assignment/Test	Date	Mode of Delivery	Percentage of Grade
Tutorial attendance	Tutorials during the course	In-Person	5%
Assignment 1	Due on October 23, 11:59 pm	Online	10%
Midterm Exam	During Session 6 on November 2	In-Person	35%
Assignment 2	Due on December 4, 11:59 pm	Online	10%

Final Exam	During the exam period as scheduled by the university	In-Person	40%
			Total: 100%

Information About Assignments

There will be two assignments that must be submitted online on Brightspace by the specified due dates.

Any use of generative AI tools to produce assessed content is considered a violation of academic integrity standards as per our statement on Plagiarism.

Late Policies and Extensions for Term Work

Late assignments will not be accepted and will receive a grade of zero unless a compelling reason (Self-Declaration form, doctor's note, etc.) is provided. In this case, the weight of the assignment will be transferred to the final exam.

Midterm Policies

The midterm exam covers the material presented in sessions 1-5. Students will receive a grade of zero if they miss the midterm exam unless they provide a compelling reason by submitting the Self-Declaration form (for short-term incapacitation). If the compelling reason is accepted, the weight of the midterm will be transferred to the final exam. No deferred midterm will be offered. More information about a request for accommodation is available at https://carleton.ca/FASS-FPA-teaching-regulations/accommodation/.

Final Exam

The final exam is cumulative. It will be in-person as scheduled by the University during the exam period. Students are not to make travel plans during the exam period, as that is not a valid reason for missing a final exam.

Satisfactory Performance Criteria

Students must fulfill all of the course requirements, including the final exam, in order to achieve a passing grade (D- or higher).

Deferred Finals

Students who do not write the final examination because of illness or other circumstances beyond their control may apply for to write a deferred final examination by contacting the Registrar's Office no later than three working days after the original final examination was scheduled. In the event that a student writes a deferred examination, the deferred examination will carry the same weight as the final examination in determining the course grade. Any deferred examination will not be identical to the original final examination.

Should you need to defer your **final exam**, the deferred final exam period for this course is December 22 – 23. Please, be aware of this before booking any travel over the holiday period. As always, final exam deferrals are managed and approved by the Registrar's Office.

Deferred finals (which must be applied for at the RO) are only available if the student is in good standing in the course, so if there is a minimum standard a student must meet in order to be in good standing, and entitled to write a deferred final exam, this standard must be stipulated here.

Distance Exams

Students who are living/studying at least 160 km from the university may apply to Scheduling and Exam Services to write the exam at a distance. You can find information about the deadline for applying for a distance exam this term and the application here https://carleton.ca/ses/distance-exams/.

Standing in a course is determined by the course instructor subject to the approval of the Faculty Dean. This means that grades submitted by the instructor may be subject to revision. No grades are final until they have been approved by the Dean.

Plagiarism, Resources and Mental Health, Academic Accommodations

You are responsible for reading and knowing the information about plagiarism, Carleton University resources, and academic accommodations found HERE.