



ECON 2210 A – Introductory Statistics for Economics Fall, 2026

The Instructor

Instructor: Dr. Michelle G. Laing

Office Hours: After the class or by appointment (please send an email to schedule)

Office Location: TBA

Email: michellelaing@cmail.carleton.ca

The Course

Course Day and Time: Wednesdays, 6:05pm – 8:55pm

Course Location (/Delivery): In-person, see Brightspace for more details

TA: TBA

TA Office Hours / Tutorials: TBA

I: Course Description

In today's workplace, knowing how to apply statistical analysis skills to real-world decision-making problems can lead to a competitive edge. This course explores 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.

II: Learning Outcomes:

By the end of this course, students will understand:

- 1) some basic statistical terminology
- 2) the collection and organization of data for statistical purposes
- 3) the fundamentals of data visualization, including the construction and interpretation of elementary graphs, charts, and tables
- 4) how to describe data using standard numerical measures of central tendency and variation
- 5) elementary probability theory and the basic rules of probability
- 6) the concept of a probability distribution and some leading examples of both discrete and continuous probability distributions
- 7) the meaning of a sampling distribution
- 8) the basics of estimation and hypothesis testing

III: 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(ered 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.

IV: Course Outline:

The outline below indicates the schedule for the course:

Date	Topic	Deadlines and Other Important Dates
Section 1: Descriptive Statistics and Basic Probability		
Sept. 9	Chapter 1: The Where, Why, and How of Data Collection	
Sept. 16	Chapter 2: Graphs, Charts, and Tables - Describing Your Data	Tutorials begin.
Sept. 23	Chapter 3: Describing Data Using Numerical Measures	<i>*Last day for registration and course changes in full fall courses. (September 22)</i>
Sept. 30	Chapter 4: Using Probability and Probability Distributions	<i>*Last day to withdraw from full fall courses with a full fee adjustment. (September 30)</i>
Section 2: Important Probability Distributions		
Oct. 7	Chapter 5: Discrete Probability Distributions (except for the discussion of the Hypergeometric Distribution in Section 5.3)	<i>*December examination schedule available online. (October 9)</i>
Oct. 14	Chapter 6: Introduction to Continuous Probability Distributions	
Section 3: Statistical Inferences Based on Single Samples		
Oct. 21	Chapter 7: Introduction to Sampling Distributions - Sections 7.1 and 7.2 only	Assignment 1 due Oct. 20 @ 11:59pm

Oct. 28		<i>*Fall break, no classes.</i>
Nov. 4	Midterm Exam on Chapters 1 to 7 from 6:05pm to 7:35pm	• No tutorial
Nov. 11	Chapter 8: Estimating Single Population Parameters - Sections 8.1 and 8.2 only	<i>*Last day for academic withdrawal from full fall courses; and last day to submit Formal Examination Accommodation Forms to the PMC for December exams. (November 15)</i>
Nov. 18	Chapter 9: Introduction to Hypothesis Testing - Sections 9.1 and 9.3 only	
Nov. 25	Chapter 10: Estimation and Hypothesis Testing for Two Population Parameters - Sections 10.1, 10.2, and 10.3 only	<i>*Last day of for summative tests or exams worth +15% of course grade. (November 27)</i>
Dec. 2	Chapter 11: Hypothesis Testing for Population Variances - Section 11.1 only	• Assignment 2 due Dec. 1 @ 11:59pm
Dec. 9	Review	<i>*Last day of full fall classes. (December 11)</i>

* Please note that the instructor reserves the right to make modifications to the list of topics as the term proceeds. If a modification is made, an advance warning will be provided through Brightspace.

Textbooks, Readings and Resources

The **required** textbook for this course is *Business Statistics: A Decision-Making Approach* by David F. Groebner, Patrick W. Shannon, and Phillip C. Fry, 11th edition, Pearson (ISBN-10: 0-13-783532-9; ISBN-13: 978-0-13-783532-4).

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.). Also, students may also use older versions of the textbooks. The textbook may be purchased from the CU bookstore for \$71.99 + tax. Students may also access the electronic version of the textbook via the textbook publisher's website and Amazon.

In addition to the textbook, students are **required** to have a non-programmable scientific calculator. These can be purchased from the CU bookstore for a minimum of \$20.50 + tax.

Evaluation

The final % grade for this course will be calculated as follows:

Component	Weight
Tutorial Attendance	5%
Assignments	20%
Midterm Exam	35%
Final Exam – 3 hours (To be scheduled by the University)	40%
Total	100%

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.

Tutorials:

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. Attendance will be recorded at tutorials and make up 5% of the final grade.

Assignments, Late Policies and Extensions:

The purpose of the assignments is to help solidify concepts and test understanding frequently as we move through the course. There will be two assignments (20% of final grade) that must be submitted online on Brightspace by the specified due dates – email submissions will not be accepted. Students should make sure that their file functions properly prior to upload and submission: file corruption is something that happens at the user's end before upload to Brightspace. Files that are unreadable are not grounds for an extension and will be deemed late.

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.

Any use of generative AI tools to produce assessed content is considered a violation of academic integrity standards as per the university's statement on Plagiarism. Plagiarism is a serious offence that cannot be resolved directly by the course instructor. Any form of cheating and plagiarism is inadmissible and will be dealt with according to university policies and guidelines, see <https://carleton.ca/registrar/academic-integrity/>.

Midterm Exam:

The midterm exam (35% of final grade) will last 90 minutes and cover the material presented in lectures 1 to 7. 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 (40% of final grade) will be cumulative and cover the entirety of the course material (lectures 1 to 11). It will last 3 hours and be in-person as scheduled by the University during the official final examination period. Students are not to make travel plans during the exam period, as that is not a valid reason for missing a final exam. An appeal to write the deferred final exam must be submitted to the Registrar's Office. No course grades are final until approved by the Dean of the Faculty of Public Affairs.

Satisfactory Performance Criteria:

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

Deferred Final Exams:

Students who do not write the final examination because of illness or other circumstances beyond their control may apply 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. If 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.

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/>.

Communication:

Students are strongly advised to access Brightspace at regular intervals to check for new information, lecture slides and supplemental materials.

In general, emails should only be used for quick questions or to book an office hour appointment. Students can contact the Instructor directly using the Carleton email given above (details for the TA will also be provided). Emails must be from valid Carleton University email addresses; and they should be signed with a student's full name and student number.

Note that to access Brightspace and the Carleton email system, students require a MyCarletonOne account. For questions about MyCarletonOne accounts, students should access <http://carleton.ca/ccs/get-started/> (and then click on either New Students or New Grad Students, as appropriate) or contact the ITS Service Desk (4th Floor, MacOdrum Library, telephone: 613-520-3700).

Plagiarism, Resources and Mental Health, Academic Accommodations

Students are responsible for reading and knowing the information about plagiarism, Carleton University resources, and academic accommodations found [HERE](#).

Note that The Centre for Student Academic Support (CSAS) offers peer-led learning assistance designed to help students achieve their goals and improve their learning both inside and outside the classroom: <https://carleton.ca/csas/>

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