ECON*2740 Economic Statistics
Sections 0101
W2025
0.5 credits

General Course Information

Instructor: Henry Thille

Email   hthille@uoguelph.ca
Office Location   *MacKinnon 702*
Office Hours   TBA
Department   Economics and Finance

Class schedule   T/Th 2:30 PM – 3:50 PM

Lab schedule   F 10:30 AM – 11:20 AM

Pre-requisites: ECON*1100, (ECON*1050, or FARE*1040), (1 of MATH*1000, MATH*1030, MATH*1050, MATH*1080, MATH*1200)

Note: You may not register in this course if you have a final exam conflict.

Course Description

This goal of this course is to introduce students to both probability theory and statistics, as they are used in business and economics. If we think about most of the important decisions we make in real life, they almost all involve planning for an uncertain future. Probability theory provides an intuitive and powerful tool for thinking about such decisions and consequently plays an important role in fields such as business, finance, economics, and insurance. It also forms the basis for statistics, which offers a meaningful ways to analyse the massive amounts of data available to businesses, governments, and researchers. Statistics is used to inform important decisions in areas as diverse as business marketing, financial asset allocation, pharmaceutical drug testing, monetary policy, and the pricing of insurance premiums, to name just a few examples. This course will prepare students both to conduct and understand the type of statistical analysis that is often critical to successful decision making in business and government.

Textbook

Required Texts: Gerald Keller, Statistics for Management and Economics, 12th Edition. Cengage. $211.50 (Fall 2024 price)

Topics

The topics to be covered, along with the associated textbook chapters are as follows. Lecture time devoted to each topic will vary. The Courselink calendar for this course will be used to indicate the specific topics in each lecture.

Introduction, Ch.1

Describing Data, Ch. 2-4

Data Collection and Sampling, Ch. 5

Probability, Ch. 6

Random Variables and Discrete Probability Distributions, Ch. 7

Continuous Probability Distributions, Ch. 8

Sampling Distributions, Ch. 9

Introduction to Estimation, Ch. 10

Introduction to Hypothesis Testing, Ch. 11

Inference About a Population, Ch. 12

Inference About Comparing Two Populations, Ch. 13

Simple Linear Regression and Correlation, Ch. 16

Course Assessment

			Due Date/ location
Quizzes:	15%	Five quizzes (worth 3% each) conducted via Courselink.	
Midterm exam:	35%		Thurs. Feb. 6 In class
Final exam:	50%		*T 8:30 AM - 10:30 AM* 4/8/2025 - 4/8/2025

Lectures and Labs

Lectures   Lecture topics will be communicated ahead of time so students can read the relevant material in the textbook prior to lectures. As this is very much a problem-based course, much of the lecture will consist of "blackboard" work. As such, lecture slides will not be made available. However, the specific content covered in each lecture will be posted on the Courselink calendar.

Labs   The labs will focus on sets of problems associated with the material currently or recently covered. At times topics not covered in lectures may be covered in the labs.

Course Policies

Quizzes

Quizzes will be periodically be made available in Courselink. There will be a fixed time limit to complete the quiz, but can be done any time after they become available. Students will be able to re-take quizzes as often as they like and the maximum grade obtained from all attempts at that quiz will be the assigned grade for that quiz. Quizzes will remain available until the conclusion of lectures.

Midterm

The midterm exam covers all aspects of the course, including the lectures, sections, assignments, and reading. However, some sections of the textbook will be emphasized more heavily than others. The best way to gauge which topics are emphasized is through regular attendance in lecture and lab.

A make up exam will be scheduled for students that miss the exam with a legitimate reason or who have notified their instructor by e-mail of a legitimate conflict prior to the exam. For students who miss both the midterm and the make up midterm exam, the course assessment will be re-weighted so that the midterm weight is moved to that for the final exam.

Final Exam

The final exam is a cumulative exam. It covers the entire semester and all aspects of the course. All students must write the final exam on the specified date.

Calculators in exams

Basic calculators are allowed, but you may not use phone apps or any other device capable of storing and displaying text.

University grading procedures

http://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-grds.shtml

University Policies

Academic Consideration

When you find yourself unable to meet an in-course requirement because of illness or compassionate reasons, please advise the course instructor in writing, with your name, id#, and e-mail contact. See the academic calendar for information on regulations and procedures for

Academic Consideration:

http://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-ac.shtml

Academic Misconduct

The University of Guelph is committed to upholding the highest standards of academic integrity and it is the responsibility of all members of the University community, faculty, staff, and students to be aware of what constitutes academic misconduct and to do as much as possible to prevent academic offences from occurring.

University of Guelph students have the responsibility of abiding by the University's policy on

academic misconduct regardless of their location of study; faculty, staff and students have the responsibility of supporting an environment that discourages misconduct. Students need to remain aware that instructors have access to and the right to use electronic and other means of detection. Please note: Whether or not a student intended to commit academic misconduct is not relevant for a finding of guilt. Hurried or careless submission of assignments does not excuse students from responsibility for verifying the academic integrity of their work before submitting it. Students who are in any doubt as to whether an action on their part could be construed as an academic offence should consult with a faculty member or faculty advisor.

The Academic Misconduct Policy is detailed in the Undergraduate Calendar:

https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-amisconduct.shtml

Accessibility

The University of Guelph is committed to creating a barrier-free environment. Providing services for students is a shared responsibility among students, faculty and administrators. This relationship is based on respect of individual rights, the dignity of the individual and the University community's shared commitment to an open and supportive learning environment. Students requiring service or accommodation, whether due to an identified, ongoing disability or a short-term disability should contact Student Accessibility Services as soon as possible.

For more information, contact SAS at 519-824-4120 ext. 56208 or email sas@uoguelph.ca or see the website: https://wellness.uoguelph.ca/accessibility/

Course Evaluation Information

Please refer to the Blue by Explorance system.

Recording of Materials

Presentations which are made in relation to course work—including lectures—cannot be recorded or copied without the permission of the presenter, whether the instructor, a classmate or guest lecturer. Material recorded with permission is restricted to use for that course unless further permission is granted.

Drop date

The last date to drop one-semester courses, without academic penalty, is **Friday, April 4, 2025.** For regulations and procedures for Dropping Courses, see the Academic Calendar:

https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-drop.shtml