



ECON\*3740 .03  
Introduction to Econometrics  
Winter 2025  
0.5 Credits

### General Course Information

<b>Instructor:</b>	Miana Plesca
<i>Email</i>	miplesca@uoguelph.ca
<i>Office Hours</i>	Zoom by appointment
<i>TA:</i>	Mohammad Havaledar mhavaled@uoguelph.ca
<i>Office Hours</i>	TBA
<i>Department/School</i>	Economics and Finance
<b>Class Schedule:</b>	In person lectures Monday and Wednesday Class times: M/W 8:30 AM - 9:50 AM, CRSC 117 Remote synchronous labs: Fri 11:30 Final Exam TBA (always go by Registrar schedule)
<b>Pre-requisites:</b>	ECON*2310, ECON*2410, (ECON*2740 or STAT*2040), (ECON*2770 or MATH*1210)

### Restrictions:

### Course Description

The purpose of this course is to familiarize undergraduate students with basic techniques of econometric analysis. We will learn how to test economic hypotheses using real data sets, and some simple methods of estimating economic models. To help consolidate concepts studied in class, there will be homework assignments you need to hand in individually, as well as on-line quizzes. Lab sessions will be held on a regular basis in addition to the main lectures. Through the labs, you will gain experience with econometric software by examining models applied to real data sets. These sessions will be essential to for the project component of the course, for which you will be working in groups, with one project handed in by each group. Statistical software is mainly Python with some R and Stata.

### Course Learning Outcomes

**Upon successfully completing this course, you will:**

#### LO1 Critical and creative thinking:

Upon successfully completing this course, you will be able to use evidence from a variety of sources to make informed decisions about policies affecting the labour market. You will be able to examine a

situation or a policy from more than one angle and identify immediate effects as well as unintended consequences of a policy.

### LO2 Quantitative literacy:

Upon successfully completing this course you will be able to use a variety of techniques and models to estimate basic econometric models.

### LO3 Communication:

Upon successfully completing this course you will be able to communicate the results of your analytical work to others, and you will be able to comment critically and constructively on others' work.

### Summary of Course Content and Materials

Below is a list of the topics to be covered, with an **approximate** timeline.

1.	The Nature of Econometrics and Economic Data	Ch. 1	Week 1
2.	The Simple Regression Model	Ch. 2	Weeks 1, 2, 3
3.	Multiple Regression analysis: Estimation	Ch. 3	Weeks 4, 5, 6
4.	Multiple Regression Analysis: Inference	Ch. 4	Week 6, 7, 8
5.	Multiple Regression Analysis: Further Issues	Ch. 6	Week 8, 9
6.	Multiple Regression Analysis with Qualitative Information	Ch. 7, 17	Week 10
7.	Panel data methods	Ch. 13, 14	Week 11

### Course Assessment

			Associated Learning Outcomes	Due Date/ location
<b>Assessment I:</b>	10%	<b>Homework MindTap</b> (computer exercises) Each worth 1%	LO 1, 2, 4	<i>Weeks 2, 3, 4, 5, 6, 7, 8, 9, 10, 11.</i> <i>Due by Sunday midnight</i>
<b>Assessment II:</b>	10%	<b>Lab participation</b>	LO 1 – 4	<i>Every Lab</i>
<b>Assessment III:</b>	25%	<b>Empirical Assignment</b>	LO 1 – 4	<i>Week 10</i> <i>Assignment submitted on Monday.</i> <i>Use PEAR. No extensions.</i>

Peer review due by Monday next week.

<b>Assessment IV:</b>	20%	<b>5 Quizzes. Keep top 4.</b> Each worth 5%	LO 1, 2, 4	<b>Weeks 3, 5, 7, 9, 11.</b> Wednesday in class
<b>Assessment VI:</b>	35%	Final exam	LO 1, 2, 4	TBA (always follow the Registrar's schedule).
<b>Total</b>	100%			

### Homework

There will be a weekly computer homework assignment on MindTap, excluding first week (week 1) and last week (week 12). The assignment opens on Monday and will stay open until that Sunday.

### Labs

There will be a very short quiz (one or two multiple choice questions) every lab. You do not need to prepare in advance, following the lab material that day will suffice. There will be 12 labs, and you keep the top 10 marks. In case there is a lab cancellation, you get assigned the maximum mark for that lab.

### Quizzes

There will be **five quizzes**; the **top four** marks count. The quizzes are multiple-choice and numerical answers format, on-line using the Quiz tool on Courselink. Quizzes test new material since the previous quiz. They take place during class on specified days as above. If you cannot bring a laptop to class to answer the quiz, I will provide you with a paper copy. In preparation for the quiz I will open analytical homework questions on MindTap; those are optional and only serve preparation purposes.

### Assignment

There will be one large assignment to be submitted on PEAR, project-style. With the assignment you will also have to complete three peer reviews. Out of the total 25 points, the assignment marks are as follows: 10 points will be for solving the questions assigned by me, 5 points will be for a proposal-like component which will ask you to extend the Assignment by adding a new topic of your choice, and 10 points are for the peer review on PEAR. While the students you review will give you a mark and comments for your review, I will assign the review marks based on your analytical effort.

### Final exam

The final exam is cumulative, on Courselink. It is scheduled by the Registrar.

If you have any SAS accommodations they will be entered automatically on Courselink in the Quiz tool for Quizzes and Final exam. Make sure to book your quizzes and final exam with SAS in advance.

## Lectures

The course is in-person, and lectures are not recorded. Follow Courselink for announcements; we will use WebEx (Bongo) on Virtual classroom in emergency cases where there needs recording/remote meeting during class time. Labs are remote.

## Course Resources

### Required Text:

Wooldridge 7<sup>th</sup> edition. **MindTap is mandatory.** Cost in previous years was \$99, the Bookstore cannot yet commit on this year's price.

Statistical software:

- Python in labs, computer homework and assignment (we can discuss R as an option, but only if you absolutely must).
- Python, R and possibly Stata in class.

Python is free, and so is R. You do not need to purchase Stata, I might just show you a few examples. You will use Python to create Jupyter Notebooks in Google Colab (Google Colab + Python is free – and can also run R code, though I do not recommend it).

## Course Policies

### Course Grading Policies

**Assessments going on PEAR (the one large assignment) have absolutely no extension possible because they get distributed right away to classmates for review, including an answer key.** For instance, a Monday deadline on PEAR means Monday by 23:59, but I will set up the system so that PEAR also accepts submissions overnight until next morning by 9 AM. Any submission between midnight and next morning will appear marked as “late” by PEAR but it has no grade penalty consequence (the only thing is, being “late” on PEAR while the system still accept submissions means that after 23:59 and before 9 AM you can only submit once, not multiple times).

### College Grading Policies

Unless you have discussed an extension well ahead of the due date with the instructor, late penalties of 5% of the total grade earned per day (including weekends) will be assigned to any assessment (i.e. deducted from the total mark). Extensions will only be granted on the basis of valid medical or personal reasons, and need to be requested via email to the instructor as soon as possible. Late assignments will not be accepted once graded assignments have been returned officially to the class at large, unless circumstances permit and alternative arrangements have been made.

Students who find themselves unable to meet course requirements by the deadlines or the criteria expected because of medical or personal reasons, should review the regulations on academic

consideration in the Academic Calendar and discuss their situation with the instructor, program counselor or other academic counselor as appropriate.

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

Missed Assignments:

A grade of zero will be assigned if you fail to submit an assignment, unless you are ill or have other compassionate reasons. Please read your Undergraduate Calendar for the regulations regarding illness and compassionate grounds. Please note, vacation travel, moving house, or outside work commitments will not be accepted as valid reasons for missing deadlines.

If you have religious observances which conflict with the course schedule or if you are registered with Student Accessibility Services, please contact the course instructor in order to make arrangements for your assessment if appropriate.

## 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](mailto:sas@uoguelph.ca) or see the website: <https://wellness.uoguelph.ca/accessibility/>

### **Course Evaluation Information**

Please refer to the [Course and Instructor Evaluation Website](#)

### **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>