

ECO375, Applied Econometrics, Summer 2023

Lecture:	Online Synchronously, Monday and Tuesday, 2-4pm
Instructor:	Yuanyuan Wan
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Email:	yuanyuan.wan@utoronto.ca
Instructor Office Hours:	By appointment
TA:	Quinlan Lee
Tutorial:	Online, Wednesday, noon-2pm
Teaching Assistant Email:	qt.lee@mail.utoronto.ca
TA Office Hours:	By appointment

Course Description

This course is an introduction to econometrics. The course will cover both statistical foundations and the application of multiple regression models, with an emphasis on cross-sectional data. Econometric methods will be illustrated using application of regressions to a wide variety of economic questions and data sources, including the use of statistical software. Some advanced topics in causal inference will also be discussed.

Course Delivery Method

Lectures are delivered online synchronously. TA tutorials are also delivered online. Students need access a computer with functional microphone and be able to use Bb Collaborate (integrated in Quercus) to communicate with the instructor and TA. Students also need to be able to scan, or photo, or type in their homework and upload the documents to Quercus.

Textbook

“Introductory econometrics: a modern approach”, Jeffrey M. Wooldridge, ISBN: 9781337558860. Version 5 or newer.

Previous Training:

Prerequisites:	(i) ECO200Y1/ECO204Y1/ECO206Y1+ECO220Y1 (70%) / (STA237H1 (70%) +STA238H1 (70%)) / ECO227Y1 / (STA257H1+STA261H1)
Recommended:	MAT223H1 or MAT240H1
Exclusion:	ECO327Y5, ECO375H5

Software

Stata IC, version 15 is recommended. Earlier versions are also admissible. Students can purchase Stata at discounted prices. See <https://mdl.library.utoronto.ca/technology/statistical-software> for details.

Course Website

The Quercus site will also be used to manage class communications. Course materials will be uploaded to the Quercus. Check the announcements posted there regularly.

Score Policy

The final mark of this course is based on four parts: graded homework, the final assessment, Quizzes, and an essay. The weights are shown in the table below (**due dates are based on estimated session start date, and are subject to change when the actual dates are announced**).

Graded homework (20%)

There will be four graded homework, each count for 5% of the course grades. Homework must be submitted to Quercus in PDF file format. If the homework involves empirical work, Stata log files should be submitted too.

Late homework receives zero grades unless I receive an email notification before the due date. If a student indeed misses the due date of the homework with legitimate reasons, he or she must submit the homework within **72 hours** of the original due date to get a mark. Otherwise, the student receives zero grade.

Final Exam (50%)

We have a final exam for this course. The final exam will be conducted in person.

Essay (10%)

The essay is based on students' general understanding of the course content. The specific topic will be given at the end of the course (by mid-June). Students will have one week to complete the essay (**due on June 21st**).

Quizzes (20%)

We will have four quizzes. A student can earn up to 5 points for each quiz. Students will be given a 48-hours window to access each quiz. But once a student clicks the quiz, he/she must finish it within a certain amount of time (details will be given in advance). The questions are randomly assigned, so two students will likely get different questions (but at the similar difficulty levels).

Course Evaluation

Tasks	Weights	Due Dates
Homework 1	5%	May 20
Homework 2	5%	May 27
Homework 3	5%	June 3
Homework 4	5%	June 10

Quizzes 1-4	20%	TBA
Essay	10%	June 21
Final Exam	50%	TBA
Total	100%	

Planned Course Outline

The following is the planned course outline (subject to minor changes).

Lectures	Course materials	Reference
Lecture 1	Syllabus, Introduction, Statistics Review	Chapter 1, Appendix A,B,C
Lecture 2	Statistics Review Simple Regression	Chapter 2
Lecture 3	Simple Regression	Chapter 2
Lecture 4	Multiple Regression I	Chapter 3
Lecture 5	Multiple Regression II	Chapter 4
Lecture 6	Multiple Regression Further Issues I	Chapter 5-7
Lecture 7	Multiple Regression Further Issues II	Chapter 7-9
Lecture 8	Instrumental Variable and 2SLS	Chapter 15-16
Lecture 9	Instrumental Variable and 2SLS	Chapter 15-16
Lecture 10	Linear Panel Data	Chapter 13
Lecture 11	Linear Panel Data and Maximum Likelihood Estimation	Chapter 13, 17A
Lecture 12	Maximum Likelihood Estimation	Chapter 17A
Exam period	Final exam	All lectures

Course Policy

Grade Dispute

Requests for re-grading homework and/or exams must be submitted to instructor in writing within one week that the exam and/or homework are returned. The instructor will re-grade the whole problem set and/or exam instead of a single question to ensure the consistency.

Academic Honesty

“Academic integrity is a fundamental value essential to the pursuit of learning and scholarship at the University of Toronto. Participating honestly, respectfully, responsibly, and fairly in this academic community ensures that the UofT degree that you earn will continue to be valued and respected as a true signifier of a student’s individual work and academic achievement. As a result, the University treats cases of academic misconduct very seriously. The University of Toronto’s Code of Behaviour on Academic Matters (<http://www.governingcouncil.utoronto.ca/policies/behaveac.htm>) outlines the behaviours that constitute academic misconduct, the processes for addressing academic offences, and the penalties that may be imposed. You are expected to be familiar with the contents of this documentAll suspected cases of academic dishonesty will be investigated following the procedures outlined in the Code of Behaviour on Academic Matters.” — Academic Integrity Handbook, Office of Student Academic Integrity, Faculty of Arts and Science, University of Toronto.

Email Policy

I will reply to emails within 24 hours, except on weekends and holidays, with the following provisions:

- The question should require a one (or two) sentence response (maximum). If it takes more, office hours are the more appropriate venue.
- I will not reply to emails concerning grading. For such matters, office hours are more appropriate.
- It is also (strongly) preferable that you use the University of Toronto email addresses: my spam filter is set to maximum. Moreover, university policy stipulates a preference for these email addresses.
- Always identify yourself, course, and section in your email.
- Please do not submit term work by email.
- The teaching assistant has two email-hours per week to reply course related questions.

Accessibility Needs

The University of Toronto is committed to accessibility. If you require accommodations for a disability, or have any accessibility concerns about the course, the classroom or course materials, please contact Accessibility Services as soon as possible: disability.services@utoronto.ca or <http://studentlife.utoronto.ca/accessibility>.