

# ECO 375 H1S: Applied Econometrics I

Winter 2017, L0101

Department of Economics, University of Toronto

**Instructor:** Prof. Martin Burda  
**Contact:** Dpt of Economics, 234; Phone: 416-978-4479; E-mail: [martin.burda@utoronto.ca](mailto:martin.burda@utoronto.ca)  
**Lectures:** Thursday 2:00 pm – 4:00 pm, location AH400  
**Office hours:** Thursday 10:00 am – 12:00 pm

**TA:** Remi Daviet  
**Contact:** [remi.daviet@mail.utoronto.ca](mailto:remi.daviet@mail.utoronto.ca)  
**Tutorials:** Friday 11:00 am – 12:00 pm, location MP102  
**Office hours:** Tuesday 4:00 pm – 6:00 pm in GE313

## Course Description

Econometrics combines elements of Economic Theory, Statistics, Probability Theory, and Mathematics. The primary objective of the course is to provide students with a solid theoretical and practical foundation for the interpretation of empirical evidence in economics. The course is built around the statistical foundations, and economic application, of the multiple regression model. Students will gain practical experience working with economic data using statistical software.

## Previous Training

*Prerequisites:* (i) ECO200Y1 or ECO204Y1 or ECO206Y1  
(ii) ECO220Y1 (70%) or ECO227Y1 or STA257H1+STA261H1  
*Recommended:* MAT221H1 or MAT223H1 or MAT240H1  
*Exclusion:* ECO374H1, ECO327Y5

The prerequisites are checked by the administration of the Department of Economics and students will be removed from the course list if the prerequisites are not met.

## Textbook

"Introductory Econometrics" by J. M. Wooldridge, 4<sup>th</sup> or 5<sup>th</sup> or 6<sup>th</sup> edition, South-Western Cengage Learning. The book will be available at the University of Toronto Textbook Store, or can be purchased from various online bookstores.

## Course Website

The course website on **Blackboard** is accessible through: <https://portal.utoronto.ca>  
Lecture outlines will be posted up in the Blackboard Course Materials. Please bring them with you to class, either printed or on a tablet / laptop. The Blackboard site will also be used to distribute problem sets, the accompanying data, manage class communications, etc.

## Software

Stata IC, version 14. Other versions are also admissible, but they may not be supported by the instructor or TA.

## Evaluation

The final grade is based on the following:

Task	Weight	Due date
Midterm	40 %	February 17, 2017
Two graded problem sets	10 % (each 5%)	February 3, 2017 March 24, 2017
Final Exam	50 %	Final Exam Period

The **midterm** will be held during the tutorial time.

- The midterm will have 50 minutes duration, short-answer questions.
- Zero grade will be given to students who do not write the test, unless an appropriate note is received within one week of the missed test explaining why the test was missed.
  - The note must be provided using the University of Toronto medical certificate;
  - The note must state that on the date of the test, the student was too sick to write the test.
  - It is an academic offence to feign illness to avoid a test.
- If a student has been excused from a test on medical grounds, he or she will be permitted to write a **make-up test** to be held on March 2, 2017 at 10 am in GE 234.
  - The make-up test will be worth the value of the midterm.
  - Consistent with university policy, there is no “make-up” test for the make-up test. Grade of zero will be applied if the make-up test is requested but missed.
- If students wish to appeal a grade, they must provide a written explanation of why they believe their grade is mistaken, and submit it to the instructor within one week of the midterm being returned to the class.

**Problem sets** will be distributed throughout the semester, and form the basis of the tutorials. They will consist of both theoretical and computer- (data-) based problems. The additional problems sets will not be graded, but serve to prepare students for the graded exams and graded problem sets.

There will be two **graded problem sets**.

- Graded problem sets must be submitted through the Blackboard in a Portable Document Format (PDF). Neither paper submission nor email submission will be counted. Problem sets are due at 11:59 pm on their due date.
- Both text and STATA log files need to be submitted.
- Late problem sets will not be accepted.
- Students who fail to submit problem sets on time for medical reasons may seek special consideration by submitting a medical note within a week after the problem set is due.

For accessibility accommodation see <http://studentlife.utoronto.ca/accessibility>.

## Tentative Course Schedule

Session	Date		Topic	Material
1	Jan	5	1.Syllabus; 2. Overview of Econometrics; 3. Statistics Review	Ch 1, App A, B, C.1, C.2, C.5, C.6
2		12	4. Simple Regression	Ch 2
3		19	5. Multiple Regression – Estimation	Ch 3
4		26	6. Multiple Regression – Inference	Ch 4
5	Feb	2	7. Multiple Regression – Further Issues	Ch 6
6		9	8. Multiple Regression – Qualitative Information 9. Heteroskedasticity	Ch 7 Ch 8
7		16	10. Specification and Data Problems; Review	Ch 9
		23	<i>Reading Week</i>	
8	Mar	2	11. Instrumental Variables	Ch 15
9		9	12. 2SLS 13. Simultaneous Equations	Ch 15 Ch 16
10		16	14. Endogeneity in Applications	Slides
11		23	15. Asymptotic Analysis	Ch 5, App C.3
12		30	15. Asymptotic Analysis; Review	Ch 5
	<i>Exam period</i>		<i>Final exam</i>	