

ECO 2408 F1H (L0101): Econometrics (MA)

Department of Economics, University of Toronto

Fall 2010

Instructor: Prof. Martin Burda
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TA: Nathan Yang
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STATA TA: Sacha Kapoor
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Office hours: Tuesday 9:00 am – 10:00 am

Lectures: Tuesday 1:00 pm – 3:00 pm, Victoria College 215 (91 Charles St)
Thursday 2:00 pm – 3:00 pm, Woodsworth College 126 (119 St. George St)
Tutorials: Thursday 3:00 pm – 4:00 pm, Woodsworth College 126 (119 St. George St)

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. As such there is a dual focus on econometric theory and “hands-on” experience working with economic data. The centerpiece of the course is an empirical term paper on a topic of the student’s choice. At the end of the course, students should be able to conduct their own empirical investigations, and critically evaluate econometric and other statistical evidence.

Textbook

Jeffrey M. Wooldridge, Introductory Econometrics: A Modern Approach, Fourth Edition, 2006, Thomson / South-Western Press. ISBN-10: 0324581629 ISBN-13: 9780324581621

The book available at the University of Toronto Textbook Store, or can be purchased from various online bookstores. If you buy a used version of the text, note that you will have to separately purchase a license to access the website of the textbook. We will make regular use of the online data.

Software

The course involves a considerable amount of computing, and students must learn and use a sophisticated statistical software package. STATA is highly recommended, and is the only package that will be supported by the instructor and TAs. Students should purchase **Intercooled Stata 11.0**, available online at: <http://www.stata.com/order/new/edu/gradplans/cgpcampus-order.html> While orders are placed online, you will pick up your software at the Software Licensing Office in the Information Commons at Robarts Library: <http://www.utoronto.ca/ic/software/detail/stata.html>

Course Website

The course website on Blackboard is accessible through: <https://portal.utoronto.ca>

We will be using Blackboard to manage class communications, distributing problem sets, the accompanying data, outlines of the lectures, etc. It is important that you regularly check the announcements posted there.

A front-cover page containing basic course information and link to the Blackboard course website is at:

<http://www.economics.utoronto.ca/mburda/teaching/ECO2408-10/>

Email Policy

Email is not the appropriate forum for discussing the details of econometrics – the office hours have been scheduled for this purpose. Email can be helpful on occasion, and within limits. Accordingly, I will endeavor to reply to email within 24 hours, except weekends, 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 answer questions concerning STATA or computing. Such questions should be directed towards the STATA TA;
- It is strongly preferable that you use a utoronto email address: my spam filter is set to maximum;
- Please do not send attachments of any kind;
- The TA and STATA TA has allocated weekly time to respond to emails.

Evaluation

The final grade is based on the following:

Task	Weight	Due date
Midterm exam	25%	October 21, 2010
Term Paper	35%	December 7, 2010
Final Exam	40%	Final Exam Period (Dec 10-21)

The **midterm** will take 1 hour, short-answer format.

- A grade of zero 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 state that on the date of the test, the student was too sick to write the test. Only original notes will be accepted. 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 Tuesday, October 26, at 4:30 pm in GE 234. Consistent with university policy, there is no “make-up” test for the make-up test. A 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 me within one week of the midterm being returned to the class.

The **final exam** will take 2 hours, short answer format. The applicable rules and regulations of the Graduate School and the Department of Economics govern its conduct.

Problem sets will be distributed throughout the semester, and form the basis of the tutorials. They will consist of both theoretical and computer- based problems. The problems sets will not be graded, but serve to prepare students for the graded components of the course (midterm and final exam).

Term Paper will be assigned in more detail during the semester. It will entail an empirical investigation of a question in economics and a critical reading of relevant articles related to the question. It must be no longer than 15 pages in length (double-spaced). An outline (statement of topic) is due on October 28. I strongly encourage students to work in pairs. If you wish instead, you can work alone. The maximum group-size, however, is two.

Disclaimer concerning Turnitin.com:

Students agree that by taking this course all required papers will be subject to submission for textual similarity review to Turnitin.com for the detection of plagiarism. All submitted papers will be included as source documents in the Turnitin.com reference database solely for the purpose of detecting plagiarism of such papers. The terms that apply to the University's use of the Turnitin.com service are described on the Turnitin.com web site.

Accessibility Needs: 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>.

Planned Coverage

Week	Day	Date	Topic	Material
1	Tue	Sep 14	Introduction; Review of statistics	App B
	Thu	Sep 16	Review of matrix algebra & STATA	slides
2	Tue	Sep 21	Simple regression	Ch 2
	Thu	Sep 23	Multiple regression: estimation	Ch 3
3	Tue	Sep 28	Multiple regression: estimation	Ch 3
	Thu	Sep 30	Multiple regression: inference	Ch 4
4	Tue	Oct 5	Multiple regression: inference	Ch 4
	Thu	Oct 7	Multiple regression: asymptotics	Ch 5, App C
5	Tue	Oct 12	Multiple regression: further issues	Ch 6
	Thu	Oct 14	Multiple regression: further issues	Ch 6
6	Tue	Oct 19	Multiple regression: binary variables	Ch 7
	Thu	Oct 21	<i>midterm exam</i>	
7	Tue	Oct 26	Multiple regression: heteroskedasticity	Ch 8
	Thu	Oct 28	Multiple regression: heteroskedasticity	Ch 8
8	Tue	Nov 2	Instrumental variables and 2SLS	Ch 15
	Thu	Nov 4	Instrumental variables and 2SLS	Ch 15
	Tue	Nov 9	<i>no classes - Fall break</i>	
9	Thu	Nov 11	Time series	Ch 10
	Tue	Nov 16	Time series	Ch 11
10	Thu	Nov 18	Time series	Ch 12
	Tue	Nov 23	Panel data	Ch 13
11	Thu	Nov 25	Panel data	Ch 14
	Tue	Nov 30	Limited dependent variables	Ch 17
12	Thu	Dec 5	Advanced time series (ARMA)	slides
	Tue	Dec 7	Advanced time series (GARCH)	slides
<i>Final exam period (Dec 10-21)</i>			<i>final exam</i>	