

ECON4840/6180 **Winter 2015** Credit weight: 0.5

General Course Information

Instructor:	Professor Yiguo Sun
Email Office Location Office Hours Department/School	yisun@uoguelph.ca 709 MacKinnon 9:30am-5:00pm on Mondays, otherwise email communications are preferred Economics and Finance
TA's	ТВА
Email Office Location Office Hours	···· ··· ···
Class Schedule:	 Tue & Thursday 8:30pm-9:50pm, <u>ROZH</u> , Room 107
Pre-requisites:	This course follows ECON4640/6050, where students have learned to use the OLS and maximum likelihood method to analyze times series data.
Co-requisites:	The students are expected to understand one of the following software: TSP, STATA, EVIEW, SHAZAMS, R, etc. The STATA software is used in class and is installed in computers at the computer lab.

Course Description

This course aims to teach students the skills to analyze pooled cross sectional data and panel data, and introduce simultaneous equations models, limited dependent variable models and sample selection models. All the models are developed to deal with data with specific features.

Indicative Content

Topics to be covered:

- (1) Modelling pooled cross sectional data
- (2) Modelling panel data
- (3) Simultaneous equations models
- (4) Limited dependent variable models
- (5) Sample selection models

Course Assessment

			Associated Learning Outcomes	Due Date/ location
Assessment 1:	20%	Four Assignments	Econometric theory and Computer skills	In class
Assessment 2:	25%	Mid-term Exam	Econometric methods	Feb. 12, 2015/In class
Assessment 3:	15%	Term Project	Computer skills, econometric methods, and written skills	March 31, 2015
Assessment 4:	5%	Presentation	Communication skills	End of semester/In class
Assessment 5:	35%	Final Exam	Econometric methods	11:30AM - 01:30PM (2015/04/08)
Total	100%			

Teaching and Learning Practices (as appropriate)

Lectures I will provide two lectures per week. I will host a one-day office hour on Mondays and accept email communications on other weekdays.

Labs TBA.

Course Resources

Required Texts:

Wooldridge, J.M., 2012. Introductory Econometrics: a Modern Approach, fifth edition. Thomson: South-Western. (We will cover Part 3 except Chapter 18. *Two early versions of the book are available from the library and one is reserved for a two-hour loan.* Please read Appendices A-E and Chapter 19!)

Other Resources: I will post my lecture notes to the course link.

Course Policies

Grading Policies

- General speaking, I will give students one week to work on each assignment. Any missed assignments without my consent will be marked at zero, and a delayed assignment will be marked down to 4% from 5%.
- I encourage you to take the midterm exam on time. If you miss the midterm exam without letting me know before the exam is taken, I will automatically shift your midterm weight to your final weight. The

makeup exam may be granted with my discretion.

 Each student is expected to independently work on his/her own project. The term project cannot be delayed. A 1% bonus is given for students who inform me his/her idea on the project before March 6, 2015.

Course Policy regarding use of electronic devices and recording of lectures

Electronic recording of classes is expressly forbidden without consent of the instructor. When recordings are permitted they are solely for the use of the authorized student and may not be reproduced, or transmitted to others, without the express written consent of the instructor.

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:

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

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 csd@uoguelph.ca or see the website: http://www.csd.uoguelph.ca/csd/

Course Evaluation Information

Please refer to https://www.uoguelph.ca/economics/course-evaluation

Drop date

The last date to drop one-semester courses, without academic penalty, is **March 6th**, **2015**. For regulations and procedures for Dropping Courses, see the Academic Calendar:

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

Additional Course Information

- A. The term paper is due on **March 31, 2015**, with around TEN pages. It is preferable that the paper has a 1.5-sentence space to balance between easy reading and paper saving.
- B. A general format of the term paper is given as follows, which can be slightly changed with personal discretion:
 - A title followed by your name and the date of submission
 - Abstract: to summarize the paper
 - Introduction: to motivate and explain what the paper is about
 - Data: to give the source of the data and basic summary statistics of the data
 - Model and estimation results: to explain which econometric model is used to analyze the data and what are the empirical findings.
 - Conclusion: to conclude the main results of the paper and summarize the potential pitfalls of the econometric methods used in the paper.
 - Tables and Figures: you can choose to either list all the tables and figures at the end of the paper or insert them in the context where it is required.
 - References: to list relevant articles cited in the paper.
 - Program Code: to insert your computer programming code used to produce all the tables and figures reported in the paper.

Please email your data and program code to <u>yisun@uoguelph.ca</u> when submitting your term paper (a hardcopy or a pdf file). If the data file itself is not clear enough to explain what the data are, please also write a **Readme.txt** file to describe the name of the data variables, etc.

Course Learning Outcomes

Upon successfully completing this course, you will be able to:

- use STATA to analyze pooled cross sectional data, panel data and cross-sectional data with special features;
- numerically explore meaningful economic relations;
- enhance individual research ability;
- communicate and report in writing your research findings.

Knowledge and Understanding:

- 1) **Mathematical Methodology**—basic mathematical skills are required.
- Statistical and Econometric Methodology this course covers data with special features often observed in practice.

Discipline/Professional and Transferable Skills:

- 4) Learn computation skills and data analysis skill;
- 5) Enhance oral communication through in-class presentation and independent thinking via working on a term project.

Attitudes and Values:

6) The four econometrics courses such as Econ2740, 3740, 4640 and 4840 together offer necessary classical econometrics methods for students to handle types of data commonly observed in real life. Students who are able to fully understand these course materials are equipped with sufficient data analysis skills that are highly appreciated in many careers.