

**UNIVERSITY OF TORONTO**  
**ECO375H1F**  
**APPLIED ECONOMETRICS I**  
**Fall, 2015**

**L0101: Thursday, 10:10-12:00 pm, SS1069. Friday, 10:10-11:00, MP134.**

**L0201: Thursday, 2:10-4:00 pm, MP134. Friday, 11:10-12:00, MP134.**

**Instructor**

Professor Junichi Suzuki

Office: Max Gluskin House (GE) #306

Telephone: (416) 978-4417

Email: j.suzuki@utoronto.ca

Office hour: Monday 1-2pm

**Teaching Assistants**

Rémi Daviet and Qianli Ma

Office hours: Tuesday 2-3pm at GE213

**Course Website**

The Black Board (<https://portal.utoronto.ca>)

**Course Outline**

This is an introductory course in applied econometrics. The primary objective is to provide a solid theoretical and practical foundation for the interpretation of empirical evidence in economics. Students also learn how to apply these techniques to economic data by using statistical software.

**Prerequisites**

ECO200Y1/ECO204Y1/ECO206Y1, ECO220Y1(70%)/ECO227Y1/(STA257H1,STA261H1)

Prerequisites are strictly checked and enforced and must be completed **BEFORE** taking a course. It is the student's responsibility to check the prerequisites before enrolling in any course. By taking this course you acknowledge that you will be removed from the course at anytime if you

do not meet all requirements set by the Department of Economics. See Faculty of Arts and Science Calendar for details. The instructor does not have any authority of waiving prerequisites.

### **Textbooks**

J. M. Wooldridge, *Introductory Econometrics*, **Fourth/Fifth/Sixth** Edition, South-Western Cengage Learning. (Main Textbook)

J. Angrist and J-S Pischke, *Mastering 'Metrics: The Path from Cause to Effect*, Princeton University Press. (Supplementary Textbook)

### **Required Statistical Software**

STATA14

The course involves a considerable amount of computing, and students must learn and use a sophisticated statistical software package. STATA is the *only* package that is supported by the instructor and the TA. Older versions of STATA such as STATA11/12/13 are likely to suffice. However, all sample programs distributed throughout the course are based on STATA14. Students who have strong preference to use other software should contact the instructor in the first week of the lecture.

Students can purchase STATA14 at discounted prices. While orders are placed online, you will pick up your software at the Software Licensing Office in the Information Commons at Robarts Library. See <http://sites.utoronto.ca/ic/software/detail/stata.html> for details. There are several different types of STATA licenses for students. Buy a **six-month license of Small STATA 14** if you do not plan to take other courses using STATA such as ECO475.

### **Marking Scheme**

The final course mark is based on the following:

Three Problem Sets	9% (3% each)
Term Test	41%
Final Exam	50%

## **Policies on Problem Sets**

- All problem sets **must be submitted through the Blackboard in a Portable Document Format (PDF)**. Students are instructed how to generate a pdf file during a tutorial session. Neither paper submission nor email submission will be counted. All problem sets are due **at 11:59pm on Wednesday**.
- **Both text and STATA log files** need to be submitted.
- Students are allowed, but not required, to work in pairs:
  - The maximum “group size” is two.
  - If students work together, they will receive the same grade.
  - If serious problems arise between partners, the Instructor will sanction “divorce,” if requested by either party. This should be the last resort.
  - Students need to register their pairs by 11:59pm on September 24th through the Blackboard. The direction will be announced at the Blackboard.
- 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. Students working in a pair receive this consideration only when both of the students in a pair have medical reasons. See below for what constitutes an acceptable medical note for a missed problem set.
- Note that requests based on travel, other courses taken, works or personal plans will not be considered.
- Only when the instructor accepts students’ medical notes, their mark of the missed problem sets will be calculated as follows:
  - If you miss a problem set, your mark of the missed problem set is based on the lowest grade of the other two problem sets.
  - If you miss two problem sets, you will get zero for the second missed problem set. Your mark of the first missed problem set is based on the grade of the submitted problem set.
  - Needless to say, you will get zero if you miss all the problem sets for whatever reason.

## **Policies on the Term Test**

- **The term test will be held on October 23<sup>rd</sup> (Fri) from 9:00am to 10:50pm at EX200.**
- Students who have direct academic conflicts with this term test schedule should notify the Instructor by October 9<sup>th</sup>. A direct academic conflict is overlapping times for required

course works. If you have a conflict, send me an e-mail explaining your situation and attach a copy of your ROSI personal timetable.

- Students are expected to write their term tests with an inerasable pen. Neither the Instructor nor the TAs accept a regrading request if a test is written with pencils or erasable pens.
- Students who miss **the term test** for medical reasons may seek special consideration by submitting an **acceptable** medical note within one week after the term test. See below for what constitutes an acceptable medical note for the missed term test.
- Note that requests based on travel, other courses taken, employment or personal plans will not be considered.
- When the instructor accepts students' medical notes, their mark of the missed term test will be based on their marks of the makeup term test.
  - The makeup term test will be held on **November 13<sup>th</sup>, 3:30-5:20pm**.
  - Consistent with university policy, there will be no "make-up" test for the make-up test. No medical excuses will be accepted, and grade of zero will be applied if students fail to write the make-up test.
  - The make-up test covers the topics asked by the regular term test **as well as the materials covered by the lecture on October 29<sup>th</sup> and November 5<sup>th</sup> (but not November 12<sup>th</sup>)**.
  - Note also that the make-up test is AFTER the "drop date" (November 8th).
- Students who miss **the final exam** for reasonable reasons may initiate petitions to the Faculty of the Art and Science. See the website of the Faculty of Arts and Science for more information.

### **Acceptable Medical Notes**

- The only accepted note is a fully completed Verification of Student Illness or Injury form. You can find a copy of the form here: <http://www.illnessverification.utoronto.ca>.
- The note must be **original** and completed by a qualified medical doctor (See FAQ section of the link above for more information).
- When you miss a **problem set**, the note must clearly state that either on the due date of the problem set or one day before the due date, the student was too sick to work on the problem set.
- When you miss the **term test**, the note must clearly state that on the date of the term test, the student was too sick to write the test. Illness before the test is not sufficient grounds

for missing the test. Nor will I accept notes that indicate that the student would have performed “sub-optimally.”

### **Requests for Regrading**

Students may submit to the TAs a **typed** request for regrading problem sets and/or the term test **within one month** from the day of the tutorial in which the TA returns the graded problem sets/the term test. As noted above, the TAs will not regrade the term test when it is written with pencils or erasable pens. In a request, students need to clearly explain why their answers deserve additional points. Regrading may result in a decrease in final marks. Picking up materials late is not considered as a reason to extend this deadline.

### **Piazza**

I have arranged a Q&A platform for this course on Piazza. I will spend at least one hour per week to provide feedbacks. To use this service, you need to sign up. Although the service is "free", it requires your university email address to sign up. If you prefer to use a non-university address, because of privacy concern, please send me an email from your *university* email address. In this email please include a non-university email address you want to use for this service so that I can do a necessary arrangement to accommodate you.

### **Email Policy**

For questions, please consider to use Piazza. Emails should be considered as a means to send some feedback, concerns, or questions that you think are inappropriate to share with other students. Each email should contain name, student number and course number and **be sent from utoronto address**. The TAs are NOT expected to reply to emails from students. If you have questions that require individual feedback, please come to my office hours or talk to me after lectures.

### **Academic Misconduct**

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 U of T 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 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 document. Potential offences include, but are not limited to:

In papers and assignments:

- Using someone else's ideas or words without appropriate acknowledgement.
- Submitting your own work in more than one course without the permission of the instructor.
- Making up sources or facts.
- Obtaining or providing unauthorized assistance on any assignment (this includes working in groups on assignments that are supposed to be individual work).

On tests and exams:

- Using or possessing any unauthorized aid, including a cell phone.
- Looking at someone else's answers.
- Misrepresenting your identity.
- Submitting an altered test for regarding.

Misrepresentation:

- Falsifying institutional documents or grades.
- Falsifying or altering any documentation required by the University, including (but not limited to) doctor's notes.

All suspected cases of academic dishonesty will be investigated following the procedures outlined in the Code of Behaviour on Academic Matters. If you have any questions about what is or is not permitted in this course, please do not hesitate to contact me. If you have questions about appropriate research and citation methods, you are expected to seek out additional information from me or other available campus resources like the College Writing Centers or the Academic Success Centre.

### **Important Dates**

September 30 <sup>th</sup>	Last date to register your problem set team
October 7 <sup>th</sup>	Problem Set 1 due

October 23 <sup>rd</sup>	Term Test (9:00am-10:50am at EX200)
November 8 <sup>th</sup>	Last date to drop the course without penalty
November 11 <sup>th</sup>	Problem Set 2 due
November 13 <sup>th</sup>	Make-up Term Test (3:30pm-5:20pm)
November 25 <sup>th</sup>	Problem Set 3 due

### Tentative Course Schedule

Date	Lecture	Wooldridge Chapters
9/17	Course Overview	Ch 1, Ch 2
9/24	Simple OLS: Mechanical Property	Ch 2
10/1	Simple OLS: Statistical Property	Ch 2
10/8	Multiple Regression: Mechanical Property	Ch 3, Ch 6
10/15	Multiple Regression: Statistical Property	Ch 3, Ch 6, Ch9.4
10/22	Term Test Review	
10/29	Statistical Inference I: t test	Ch 4
11/5	Statistical Inference II: F test	Ch 4
11/12	Consistency, Asymptotic normality, HRSE, Dummy Variables	Ch 5, 7, 8
11/19	Instrumental Variables Estimation I	Ch 15
11/26	Instrumental Variables Estimation II	Ch 15
12/3	Simultaneous Equation Model	Ch 16