# ECO374H1S, Applied Econometrics, Section L0101

Lecture:	Tuesday, 10:00am-noon, Woodsworth College (WW) 126	
Instructor:	Yuanyuan Wan	
Office:	Room 232, Max Gluskin House, 150 St. George St	
Phone:	416-978-4964	
Email:	<u>yuanyuan.wan@utoronto.ca</u>	
Instructor Office Hours:	Tuesday, 3:00pm-5:00pm	
Teaching Assistant:	Mark Rempel	
Teaching Assistant Email:	<u>mark.rempel@mail.utoronto.ca</u>	
Tutorial:	Friday, noon-1:00pm, WW 126	
TA Office Hours:	Thursday, 1:30pm-3:30pm, Room 313, Max Gluskin House.	

# **Course Description**

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 upon the statistical foundations of the multiple regression model and time series analysis, with examples drawn from business and financial economics. Students will gain practical experience working with economic and financial data.

# **Textbook**

"Forecasting, Time Series, and Regression" by Bowerman, O'Connell, and Koehler, 2005, 4th edition, Brooks / Cole (Cengage Learning). ISBN-13: 9780534409777, ISBN-10: 0534409776

The book will be available at University of Toronto Bookstore. Make sure that the book you buy contains a CD with data.

### **Previous Training:**

Prerequisites:	(i) ECO200Y1 or ECO204Y1 or ECO206Y1
	(ii) ECO220Y1(70%) or ECO227Y1 or (STA257H1 plus STA261H1)
Recommended:	MAT223H1 or MAT240H1
Exclusion:	ECO327Y1 or ECO375H1, STA302H1

### **Software**

We will make regular use of statistical functions and add-ins of Excel throughout the course. Excel can perform the same operations as alternative expensive software packages for the material covered in the course and should be generally accessible anywhere.

# **Course Website**

Lecture notes will be posted in the Blackboard Course Materials in advance. The Blackboard site will also be used manage class communications. Check the announcements posted there regularly. The Blackboard is accessible through: <u>https://portal.utoronto.ca</u>.

# **Course Evaluation**

The final score is based on four parts: graded-homework, writing assignment, midterm exam and final exam. The weights are shown in the table below.

### Homework

There are three graded-homework assignments. Assignments may contain both theoretic and computerbased questions. Graded-assignments are due in class on the dates specified in the table. Each of them accounts for 5% of course evaluation.

Group study or collaboration with your classmates on homework is encouraged, but copying others' answers is not allowed and may be considered as plagiarism. A student is also required to list the names of the classmates that he or she collaborated with on the right-upper corner of the answer sheet.

In addition to graded-homework assignments, there will be ungraded homework given after each lecture. TA will go over those assignments during tutorial sessions.

### Writing Assignment

There is one short writing assignment. The topic and detailed requirements will be posted on Portal before reading week. The writing assignment is due by the last lecture of the semester.

- The writing assignment is similar to the textbook computer-problems.
- The assignment is expected to be 4-5 pages, double space, font size 11, including tables (and figures if necessary).
- A late assignment will be penalized by 20% its actual score per day.

**Important**: to detect possible plagiarism, the term paper must be submitted for review through <u>www.turnitin.com</u>, instructions will be provided together with the assignments requirements.

The Department of Economics prosecutes all cases of plagiarism vigorously. This includes "unintentional" plagiarism. Ignorance of the rules of plagiarism is specifically excluded as a defence.

**University disclaimer concerning Turnitin.com**: "Normally, students will be required to submit their course essays to Turnitin.com for a review of textual similarity and detection of possible plagiarism. In doing so, students will allow their essays to be included as source documents in the Turnitin.com reference database, where they will be used solely for the purpose of detecting plagiarism. The terms that apply to the University's use of the Turnitin.com service are described on the Turnitin.com web site."

#### **Exams**

We have a midterm exam and a final exam for this course. Midterm exam will cover the materials of the first five lectures. The final exam will cover the all lectures of the semester. The exams consist multiple choice problems and problems requiring short answers.

Course Evaluation			
Tasks	Weights	Due Dates	
<b>Graded-Homework 1</b>	5%	January 24	
Graded-Homework 2	5%	February 7	
Midterm exam	30%	February 14	
Graded-Homework 3	5%	March 20	
Writing Assignment	15%	April 3	
Final exam	40%	TBA	
Total	100%		

### **Course Evaluation**

### **Planned Course Outline**

The following is the planned course outline (subject to minor changes). Students are recommended to preview the corresponding chapters before lectures.

Week	Course materials	Reference
Week 1, January 10	Introduction and Statistics Review	Chapter 1 and 2
Week 2, January 17	Statistics Review (cont'd)	Chapter 2
Week 3, January 24	Simple Regression	Chapter 3
Week 4, January 31	Multiple Regression	Chapter 4
Week 5, February 7	Model Building and Residual Analysis	Chapter 5
Week 6, February 14	Midterm exam	Chapter 1-5
Week 7, February 28	Time series	Chapter 6
Week 8, March 6	Decomposition methods	Chapter 7
Week 9, March 13	Exponential Smoothing	Chapter 8
Week 10, March 20	Box-Jenkins Methods I	Chapter 9
Week 11, March 27	Box-Jenkins Methods II	Chapter 10
Week 12, April 3	Box-Jenkins Methods III	Chapter 11
Exam period	Final exam	All lectures

### **Course Policy**

#### **University Attendance Policy**

Attendance in all lectures is expected and strongly recommended of all students. Lecture notes serve as lecture outlines and are not substitutions of the lecture themselves.

#### **Make-up Exams**

A grade of zero will be given to students who do not write the test, unless an appropriate and convincing note is received **<u>within one week</u>** of the missed test (explaining why the test was missed).

- o Make-up exams will only be scheduled based on legitimate medical reasons or acute emergencies.
- An email notice must be sent to me <u>on the day of the exam</u>.
- Original legitimate supporting documents of absence are required (within one week). Scanned, copied, or emailed documents will not be accepted.
- When a student missed the exam for medical reasons, he or she shall provide an original copy of a fully completed University of Toronto Medical Certificate. The certificate needs to be completed by a qualified medical doctor whose OHIP number must be provided.
- o It is by the University policy that there are no "make-up exams" for make-up exams.
- A make-up exam will be different from the exam given in class.
- It is an academic offence for a student to use a medical note to avoid a test if he or she is not actually sick.
- The make-up exam will be on **<u>February 17<sup>th</sup>, Friday</u>**.

#### **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 (<u>http://www.governingcouncil.utoronto.ca/policies/behaveac.htm</u>) 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....All suspected cases of academic dishonesty will be investigated following the procedures outlined in the Code of Behaviour on Academic Integrity Handbook, Office of Student Academic Integrity, Faculty of Arts and Science, University of Toronto.

### **Email Policy**

I will reply 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.
- o 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.
- o Always identify yourself, course and section in your email.
- Please do not send attachments of any kind.
- Please do not submit term work by email.
- The teaching assistant has one email-hour per week to reply course related questions.

#### **Off-class Meetings**

I will hold two hours' office hour every week. It is reserved for one-to-one discussion of course materials. Students are welcomed to drop by my office during the office hours.

The teaching assistant will hold two hours' office hour and one hour tutorial session every week.

# **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: <u>disability.services@utoronto.ca</u> or <u>http://studentlife.utoronto.ca/accessibility</u>.