

School of Economics and Finance

ECON 303

APPLIED ECONOMETRICS

Trimester 2, 2014

COURSE OUTLINE

Names and Contact Details

Course Coordinator: and Lecturer	Yu-Wei Luke Chu	room RH 304, Tel. 463 6855 email: Luke.Chu@vuw.ac.nz
Office hours		Thursdays: 10-12 (or by appointment)
Administrator:	Alice Fong	room RH 318, Tel. 463 5353 email: alice.fong@vuw.ac.nz

Trimester Dates

Teaching Period: Monday 14th July – Friday 17th October
Study Period: Monday 20th October – Thursday 23rd October
Examination Period: Friday 24th October – Saturday 15th November (inclusive)

Withdrawal from Course

1. Your fees will be refunded if you withdraw from this course on or before Friday 25th July 2014.
2. The standard last date for withdrawal from this course is Friday 26th September. After this date, students forced to withdraw by circumstances beyond their control must apply for permission on an '*Application for Associate Dean's Permission to Withdraw Late*' including supporting documentation. The application form is available from either of the Faculty's Student Customer Service Desks.

Class Times and Room Numbers

Lectures

Monday: **15.40-16.30pm** in RWW315 (Railway West Wing, Pipitea)
Thursday: **14.40-15.30pm** in RWW315 (Railway West Wing, Pipitea)

Tutorials

Approximately weekly tutorials (8 in total) will be held in RWW 302 (computer lab). The tutorial time is scheduled for **Thursday 15:40 – 16:30pm**: if this time is unsuitable, an attempt to find a suitable alternative will be made in the first lecture.

Course Delivery

23 lectures of 50 min each, plus eight 50 min tutorials.

Expected Workload

ECON 303 is a 15-point course, and on the basis of VUW having designated one point = 10 hours work, expected work load would total 150 hours. If that workload were spread over 15 weeks, hours expected would average around 10 hours per week. This would involve attending classes, plus reading, studying and completing assignments. The 10 hours would of course vary for individual students, depending on the student's previous knowledge and understanding, and the final grade to which the student aspires.

Prescription

This course focuses on important classical and contemporary econometric techniques and their empirical applications. Empirical applications may relate to topics from labour or health economics, industrial organisation, macroeconomics or international trade.

Course Learning Objectives

By the end of this course, students should be able to:

- C1 interpret the results from common econometric estimation techniques
- C2 summarise the main lines of argument in a number of contemporary published econometric studies
- C3 use econometric software to conduct applied econometric analysis
- C4 recognise and address some common problems with economic data sets

Course Content

This course will cover a variety of applied econometrics topics from the program evaluation and empirical microeconomics literature. Special emphasis will be given to the identification of causal effects. Applied econometrics involves how to do econometrics and how to evaluate the econometric research. Sound applied econometric work can involve the selection and use of suitable data to analyse a question; designing and constructing an econometric model for the particular purpose at hand; and/or the estimation, testing and use of econometric models for description, hypothesis testing and/or prediction purposes. Regression models provide the basis for most econometric modelling and analysis, and so will be the basic building block for this course.

Readings

Textbook

There is no assigned text for this course. However, the following textbooks will be used as a reference for all topics taught in the course:

Jeffery Wooldridge, *Introductory econometrics: a modern approach*, 5th edition, Cengage Learning, 2013

Angrist, Joshua D., and Jorn-Steffen Pischke, *Mostly Harmless Econometrics: An Empiricist's Companion*, Princeton University Press, 2009.

Journal Article

Students will be expected to read and study some journal articles for each topic.

Week	Topic	Reading
1	<i>Identifying Causal Effects</i>	Wooldrige, Chapter 1 Angrist and Pischke, Chapter 3.1-3.2 Angrist, Joshua, Jörn-Steffen Pischke. (2010). "The Credibility Revolution in Empirical Economics: How Better Research Design is Taking the Con out of Econometrics," <i>Journal of Economic Perspectives</i> , 24(2), 3-30. Lalonde, Robert J. (1986), "Evaluating the Econometric Evaluations of Training Programs with Experimental Data," <i>American Economic Review</i> , 76(4), pp. 604-620.
2	<i>Linear Regression</i>	Wooldrige, Chapters 2-8 Angrist and Pischke, Chapter 3.1-3.4
		Tutorial 1
3	<i>Instrumental Variable</i>	Wooldrige, Chapter 15 Angrist and Pischke, Chapter 4.1-4.2 Acemoglu, Daron, Simon Johnson, James A. Robinson. 2001. "The Colonial Origins of Comparative Development: An Empirical Investigation," <i>American Economic Review</i> 91(5), pp. 1369-1401.
		Tutorial 2
4	<i>Weak IV Problem</i>	Wooldrige, Chapter 15 Angrist and Pischke, Chapter 4.4-4.6 Angrist, Joshua, and Alan Krueger. 1991. "Does Compulsory School Attendance Affect Schooling and Earnings?" <i>Quarterly Journal of Economics</i> , 106(4), pp. 979-1014 John Bound, David A. Jaeger, and Regina M. Baker. 1995. "Problems with Instrumental Variables Estimation When the Correlation between the Instruments and the Endogenous Explanatory Variable Is Weak," <i>Journal of the American Statistical Association</i> , 90 (430), pp. 443-50.
		Tutorial 3
5	<i>Simultaneous Equation Model</i>	Wooldrige, Chapter 16 Heckman, James J. 1974. "Shadow Prices, Market Wages, and Labor Supply," <i>Econometrica</i> 42 (4), pp. 679-94. Graddy, Kathryn. 1995. "Testing for Imperfect Competition at the Fulton Fish Market," <i>Rand Journal of Economics</i> 26 (1), pp. 75-92
		Tutorial 4
6	<i>Measurement Errors</i>	Wooldrige, Chapter 9.4 Bound, John and Gary Solon. 1999. "Double Trouble: On the Value of Twins-based Estimation of the Return to Schooling," <i>Economics of Education Review</i> 18(2), pp. 169-182
		Tutorial 5
7	<i>Difference-in-Difference (Panel Data)</i>	Wooldrige, Chapter 13-14 Angrist and Pischke, Chapter 5
		Mid-trimester Test on 11 September

8	<i>Difference-in-Difference (Panel Data)</i>	Card, David, and Alan Krueger.1994. "Minimum Wages and Employment: A Case Study of the Fast-food Industry in New Jersey and Pennsylvania", <i>American Economic Review</i> 84(4), pp. 772-793. Ashenfelter, Orley, and David Card. 1985. "Using the Longitudinal Structure of Earnings to Estimate the Effect of Training Programs," <i>Review of Economics and Statistics</i> 67(4), pp. 648-660.
		Tutorial 6
9	<i>Regression Discontinuity</i>	Angrist and Pischke, Chapter 6 Todd E. Elder. 2010. "The Importance of Relative Standards in ADHD Diagnoses: Evidence Based on Exact Birth Dates," <i>Journal of Health Economics</i> 29(5), pp. 641-656
		Tutorial 7
10	<i>Limited Dependent Variable & Count Data</i>	Wooldridge, Chapter 7.5 & 17
		Tutorial 8
11	<i>Limited Dependent Variable & Count Data</i>	Taber, Christopher. 2001. "The Rising College Premium in the Eighties: Return to College or Return to Ability?" <i>Review of Economic Studies</i> , 68(3), pp. 665-691
12	<i>Quantile Regression</i>	Angrist and Pischke, Chapter 7 Neal, Derek. 2004. "The Measured Black-White Wage Gap among Women Is Too Small," <i>Journal of Political Economy</i> , 112(1), pp. S1-28

Materials and Equipment

Since the ultimate goal is to provide actual estimation and evaluation experience, a significant component of the class and assignment material will involve econometric analysis of data using computer software. The recommend software is R which is a free software and you can download from <http://cran.r-project.org/>. You are free to choose other software such as Stata or Matlab.

Assessment

From Trimester 1, 2014, a revised Assessment Handbook will apply to all VUW courses: see <http://www.victoria.ac.nz/documents/policy/staff-policy/assessment-handbook.pdf>.

In particular, there will be a new grade scheme, in which the A+ range will be 90-100% and 50-54% will be a C-.

Assignments	25% (4 at roughly 3 weekly intervals)
Mid-trimester test	25% (50 minutes to be held during lecture, 11 September 2014, 14.40-15.30pm RWW315)
Final examination	50% (2 hours, during the examination period)

Penalties

Late submission of assignments will not be accepted unless a deadline is explicitly discussed with and approved by the course coordinator.

Examinations

Students who enrol in courses with examinations are obliged to attend an examination at the University at any time during the formal examination period. The final examination for this course will be scheduled at some time during the following period:

Friday 24th October – Saturday 15th November (inclusive)

Mandatory Course Requirements

There are no mandatory course requirements.

If you cannot complete an assignment or sit a test or examination, refer to

www.victoria.ac.nz/home/study/exams-and-assessments/aegrotat

Class Representative

A class representative will be elected in the first class, and that person's name and contact details made available to VUWSA, the course coordinator and the class. The class representative provides a communication channel to liaise with the course coordinator on behalf of students.

Communication of Additional Information

Additional information or information on changes will be conveyed to students through the VUW Blackboard website.

Student feedback

Student feedback on University courses may be found at

www.cad.vuw.ac.nz/feedback/feedback_display.php

Link to general information

For general information about course-related matters, go to

<http://www.victoria.ac.nz/vbs/studenthelp/general-course-information>

Note to Students

Your assessed work may also be used for quality assurance purposes, such as to assess the level of achievement of learning objectives as required for accreditation and academic audit. The findings may be used to inform changes aimed at improving the quality of VBS programmes. All material used for such processes will be treated as confidential, and the outcome will not affect your grade for the course.
