TE WHARE WĀNANGA O TE ŪPOKO O TE IKA A MĀUI
VICTORIA
UNIVERSITY OF WELLINGTON

School of Economics and Finance

ECON 303 APPLIED ECONOMETRICS

Trimester 2, 2016

COURSE OUTLINE

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.

Trimester Dates

Teaching Period: Monday 11th July – Friday 14th October
Study Period: Monday 17th October – Thursday 20th October
Examination Period: Friday 21st October – Saturday 12th November (inclusive)

Withdrawal from Course

1. Your fees will be refunded if you withdraw from this course on or before Friday 22nd July 2016.

2. The standard last date for withdrawal from this course is Friday 23rd September 2016. 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 or online.

Names and Contact Details

Course coordinator & lecturer:
Yu-Wei Luke Chu Luke.Chu@vuw.ac.nz, in RWW216a, Tel no.463-6855

Administrator:
Alice Fong alice.fong@vuw.ac.nz, in RWW120, Tel no. 463-5353

Class Times and Room Numbers

Lectures
Tuesday and Thursday: **12:40-13:30pm** in **RWW314** (Railway West Wing, Pipitea Campus)

Tutorials
Thursday: **13:40am-14:30pm** in **RWW302 (**Computer Lab in Railway West Wing, Pipitea Campus)

Course Delivery

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

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, J. D., and J.-S. Pischke, *Mastering 'Metrics: The Path from Cause to Effect*, Princeton University Press, 2014
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	*Identifying Causal Effects*	Wooldrige, Chapter 1. Angrist and Pischke, Chapter 1. Angrist, Josha, Jörn-Steffen Piscke. (2010). "The Credibility Revolution in Empirical Economics: How Better Research Design is Taking the Con out of Econometrics," *Journal of Economic Perspectives*, 24(2), 3-30. Lalonde, Robert J. (1986), "Evaluating the Econometric Evaluations of Training Programs with Experimental Data," *American Economic Review*, 76(4), pp. 604-620.
2	*Linear Regression*	Wooldrige, Chapters 2-8. Angrist and Pischke, Chapter 2.
3 - 4	*Instrumental Variable*	Wooldrige, Chapter 15. Angrist and Pischke, Chapter 3. Acemoglu, Daron, Simon Johnson, James A. Robinson. 2001."The Colonial Origins of Comparative Development: An Empirical Investigation," *American Economic Review* 91(5), pp. 1369-1401.
4 - 5	*Weak IV Problem*	Wooldrige, Chapter 15.

		Angrist and Pischke, Chapter 3. Angrist, Joshua, and Alan Krueger. 1991. "Does Compulsory School Attendance Affect Schooling and Earnings?" *Quarterly Journal of Economics*, 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," *Journal of the American Statistical Association*, 90 (430), pp. 443-50.
6	*Simultaneous Equation Model*	Wooldrige, Chapter 16. Graddy, Kathryn. 1995. "Testing for Imperfect Competition at the Fulton Fish Market," *Rand Journal of Economics* 26 (1), pp. 75-92.
7	*Measurement Errors*	Wooldrige, Chapter 9.4. Angrist and Pischke, Chapter 6.2. Bound, John and Gary Solon. 1999. "Double Trouble: On the Value of Twins-based Estimation of the Return to Schooling," *Economics of Education Review* 18(2), pp. 169-182. Solon, Gary. 1992. "Intergenerational Income Mobility in the United States," *The American Economic Review*, 82(3), pp. 393-408.
8 - 10	*Difference-in-Difference and Panel Data*	Wooldrige, Chapter 13-14. Angrist and Pischke, Chapter 5. Card, David, and Alan Krueger.1994. "Minimum Wages and Employment: A Case Study of the Fast-food Industry in New Jersey and Pennsylvania", *American Economic Review* 84(4), pp. 772-793. Dickert-Conlin, Stacy, Elder Todd, and Moore Brian. 2011. "Donorcycles: Motorcycle Helmet Laws and the Supply of Organ Donors." *The Journal of Law & Economics* 54(4), pp. 907-35.
11 - 12	*Limited Dependent Variable & Count Data*	Wooldrige, Chapter 7.5 & 17.

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.

Assessment

The Assessment Handbook will apply to all VUW courses: see http://www.victoria.ac.nz/documents/policy/staff-policy/assessment-handbook.pdf.

Assignments **30%** (3 assignments at roughly 3-week intervals); C1-C4
Mid-trimester test **20%** (**Thursday 15 September, 12:40-13:30pm** in **RWW314**); C1-C4
Final examination **50%** (2 hours, during the examination period); C1-C4

If you cannot complete an assignment or sit a test or examination, refer to
www.victoria.ac.nz/home/study/exams-and-assessments/aegrotat

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 21st October – Saturday 12th November (inclusive)

Penalties
Late submission of assignments without prior approval will not be accepted.

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 software used in this course is Stata which is available at the computer room RWW102 and RWW202. The use of computers will not be required for either the midterm or final examination.

Student feedback
Student feedback on University courses may be found at
www.cad.vuw.ac.nz/feedback/feedback_display.php.

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.

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.

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