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 Two 2011

COURSE OUTLINE

Names and Contact Details

Dean Hyslop (course coordinator)   RH 310, Tel. 463 6964
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Stefanie Schurer   RH 308, Tel. 463 6708
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Contact with the lecturers is best initiated by e-mail or through making an appointment.

Class Times and Room Numbers

Lectures: Tuesday, Thursday, 11:30am – 12:20pm, RWW413

Tutorials: Tuesday, 10.30 – 11.20am, RWW302

To access the student computer labs, you will need to set up your username and password with the Student Computer Services (SCS).

Trimester Dates

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

Course Learning Objectives
C1   be able to interpret the results from common econometric estimation techniques
C2   articulate 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 Delivery
This course will be delivered by two lectures per week and a computer lab in 8 of the 12 weeks.

Readings

Textbook
There is no required text for this course. However, the following textbook will be used as a reference for the second half of the course:

Greene, William H., *Econometric Methods*, 7th edition, Pearson, 2011.

The following texts are also useful references for the course:

Angrist, Joshua D., and Jorn-Steffen Pischke, *Mostly Harmless Econometrics: An Empiricist's Companion*, Princeton University Press, 2009.
Wooldridge, J M, *Introductory Econometrics: A Modern Approach*, 3rd edition, Thomson/South-Western, 2006.

In addition there will be required journal articles for each topic, which students will be expected to read and study. The data from each study will be analysed in tutorial and problem set exercises.

Course Content
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 modeling and analysis, and so will be the basic building block for this course.

This course will cover a variety of applied econometrics topics. 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 R.

The topics for the 2011 course are as follows:

Weeks 1–6:   (Dean Hyslop)
This section of the course will provide an introduction to programme evaluation issues and methods, focusing on the following methods:

1. Experimental versus Observational methods

Lalonde, Robert J. (1986), "Evaluating the Econometric Evaluations of Training Programs with Experimental Data", *American Economic Review*, Vol. 76 (4), pp. 604-620.
Background text reference: Wooldridge Chapter 7 (especially section 7.2)

2. Difference-in-Differences methods

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*, Vol. 84 (4), pp. 772-793.
Background text reference: Wooldridge Chapter 13 (especially section 13.2)

3. Instrumental Variables approaches

Card, David (1995), "Using Geographic Variation in College Proximity to Estimate the Return to Schooling", in L.N. Christophides, E.K. Grant and R. Swidinsky (eds) *Aspects of Labour Market Behavior: Essays in Honour of John Vanderkamp*, pp. 201-222, University of Toronto Press. (Also available as National Bureau of Economic Research (NBER), Working Paper No. 4483.)
Background text reference: Wooldridge Chapter 15 (especially sections 15.1-3)

Weeks 7–12: (Stefanie Schurer)
This section of the course will survey methods used in microeconometrics. It is the analysis of individual choice that is the focus in this field of econometrics, and that implies modelling discrete outcomes. Rather than using regression methods explained in the first section of the course, we turn to modelling probabilities by using econometric tools to make probabilistic statements about the occurrence of events. The models covered will be applied to both cross-section and panel data.

4. Binary choice models

Carrasco, R. (2001). "Binary Choice With Binary Endogenous Regressors in Panel Data: The Effects of Fertility on Female Labour Force Participation". Journal of Business & Economics Statistics; Vol. 19(4), pp. 385-394.

5. Limited dependent variable models

Melenberg, B., and A. van Soest (1996). "Parametric and Semiparametric Modelling of Vacation Expenditures". Journal of Applied Econometrics, Vol. 11(1). pp. 59-76.

Vella, F. (1998). "Estimating Models with Sample Selection Bias: A Survey", Journal of Human Resources; Vol. 33, pp. 439-454.

6. Count data models

Winkelmann, R. (2004). "Health Care Reform and the Number of Doctor Visits-An Econometric Analysis"; Journal of Applied Econometrics, Vol. 19, pp. 455-472.

Riphahn, R., A. Wambach, and A. Million (2003). "Incentive Effects in the Demand for Health Care: A bivariate Panel Count Data Estimation", Journal of Applied Econometrics; Vol. 18(4), pp. 387-405.

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.

Course Website

Selective course material will be available at the VUW Blackboard website.

Assessment Requirements

(Including the associated learning objectives)

Assignments **25%** (probably 4 at 3 weekly intervals): C1-C4.

Mid-trimester Test **35%** (90 minutes, late in week 6, covering material from weeks 1–6): C1-C4

Final examination **40%** (2 hours, during the examination period): C1-C4.

Assignments will include both problem solving and computer tasks.

Note: 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 audit purposes. The findings may be used to inform changes aimed at improving the quality of FCA programmes. All material used for such processes will be treated as confidential, and the outcome will not affect your grade for the course.

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 period from **Friday 21 October – Saturday 12 November**.

Penalties

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

Mandatory Course Requirements

Mandatory course requirements will be satisfied if all assessment requirements are completed.

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.

Withdrawal from Course

1. Your fees will be refunded if you withdraw from this course on or before 22 July 2011.
2. The standard last date for withdrawal from this course is **Friday 23 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.

For the following important information follow the links provided:

Academic Integrity and Plagiarism
http://www.victoria.ac.nz/home/study/plagiarism.aspx

General University Policies and Statutes
Find key dates, explanations of grades and other useful information
at www.victoria.ac.nz/home/study
Find out about academic progress and restricted enrolment
at http://www.victoria.ac.nz/home/study/academic-progress.aspx
The University's statutes and policies are available at www.victoria.ac.nz/home/about/policy,
except qualification statutes, which are available via the Calendar webpage
at http://www.victoria.ac.nz/home/study/calendar.aspx (See Section C).
Further information about the University's academic processes can be found on the website of
the Assistant Vice-Chancellor (Academic)
at www.victoria.ac.nz/home/about_victoria/avcacademic/default.aspx

AVC (Academic) Website: information including: Conduct, Academic Grievances, Students with Impairments, Student Support
http://www.victoria.ac.nz/home/about_victoria/avcacademic/Publications.aspx

Faculty of Commerce and Administration Offices
http://www.victoria.ac.nz/fca/studenthelp/

Te Putahi Atawhai
Maori and Pacific Mentoring Programme
http://www.victoria.ac.nz/st_services/tpa/index.aspx