



School of Economics and Finance
ECON 408 Advanced Econometrics A
Trimester 1, 2006

COURSE OUTLINE

Contact Details

Dr. Chirok Han (RH 318, Ext. 6143, chirok.han@vuw.ac.nz).

Class Times and Room Numbers

Tuesdays 10:30–13:20 in GB117. (The final exam will be held at a time, in the period of 5–25 June, to be announced later by the University authority.)

Course Objectives

This course is intended to provide a treatment of modern advanced theory and application in econometrics. Topics include generalized method of moments (GMM), maximum likelihood estimation (MLE), panel data models, discrete/limited dependent variable models, and related tests. Programming in R (<http://www.r-project.org/>) will be taught in relevant parts.

Course Content

The following outline gives the topics which we expect to cover.

- Generalized method of moments (GMM)
 - Examples: ordinary least squares, two stage least squares, and others
 - Estimation
 - Inferences
- Topics that do not fit in other categories but are essential
 - More on interpretations (with dummies, interactions, and others) with linear regression models
 - Specification and Pretesting
 - Generalized least squares
 - Hausman's specification tests
- Maximum likelihood estimation (MLE)
 - Estimation
 - Inferences
 - Connection to GMM

- Panel data models
 - Linear panel data models
 - Nonlinear panel data models
 - Dynamic panel data
- Discrete/limited dependent variable models
 - Binary choice models (linear probability model, logit, and probit, maximum score estimation)
 - Censored regression (Tobit)

Textbook

- Greene, W. H. (2003), *Econometric Analysis*, fifth edition, Prentice Hall.
- Wooldridge, J. M. (2002), *Econometric Analysis of Cross Section and Panel Data*, The MIT Press. (Reference)
- Wooldridge, J. M. (2006), *Introductory Econometrics*, South-Western. (Reference)

Students are encouraged to read relevant parts of those books, but the lectures will not heavily depend upon the textbook or the reference book.

Computing

Students will learn basic skill to use R, which is available on VUW labs and also freely downloadable from <http://www.r-project.org/>.

Assessment and Terms

The following weights are a guide: Assignments 20%, Terms test 30%, Final exam 50%. The final course grade will be considered at the Honours meeting where all BCA(Hons)/MCA papers are considered as an integrated programme.

- Several assignments will be given. Answer scripts will be collected at the beginning of class on each due date. Late submission is not allowed. Discussion is allowed. In case you discuss with others, clearly write on the answer script who you discussed with.
- Terms test is a take-home exam. Questions will be posted to the Blackboard on the web (<http://blackboard.vuw.ac.nz/>) in the PDF format, or for those who have no access to the Internet, some hard copies will be available at a place (to be announced later), at **3:30pm, Monday 1 May 2006**. Your answers are to be submitted at the beginning of class at **10:30 a.m. Tuesday 2 May 2006**. *Lately submitted scripts will **not** be accepted.* (In some circumstances, permission may be granted for you to miss the terms test, in which case the weights will change to Assignments 20%, Final exam 80%.)
- Final exam is taken open book. The place and the time (in the period of 5–25 June 2006) will be announced later by the university (<http://www.vuw.ac.nz/timetables/>).
- Discussion is **not** allowed for both exams.

GENERAL UNIVERSITY POLICIES AND STATUTES

Students should familiarise themselves with the University's policies and statutes, particularly those regarding assessment and course of study requirements, and formal academic grievance procedures.

Student Conduct and Staff Conduct

The Statute on Student Conduct together with the Policy on Staff Conduct ensure that members of the University community are able to work, learn, study and participate in the academic and social aspects of the University's life in an atmosphere of safety and respect. The Statute on Student Conduct contains information on what conduct is prohibited and what steps can be taken if there is a complaint. For queries about complaint procedures under the Statute on Student Conduct, contact the Facilitator and Disputes Advisor. This Statute is available in the Faculty Student Administration Office or on the website at:

<http://www.vuw.ac.nz/policy/StudentConduct>

The policy on Staff Conduct can be found on the VUW website at:

<http://www.vuw.ac.nz/policy/StaffConduct>

Academic Grievances

If you have any academic problems with your course you should talk to the tutor or lecturer concerned or, if you are not satisfied with the result of that meeting, see the Head of School or the Associate Dean (Students) of your Faculty. Class representatives are available to assist you with this process. If, after trying the above channels, you are still unsatisfied, formal grievance procedures can be invoked. These are set out in the Academic Grievances Statute which is published on the VUW website:

<http://www.vuw.ac.nz/policy/AcademicGrievances>.

Academic Integrity and Plagiarism

Academic Integrity is about honesty—put simply it means **no cheating**. All members of the University community are responsible for upholding academic integrity, which means staff and students are expected to behave honestly, fairly and with respect for others at all times.

Plagiarism is a form of cheating which undermine academic integrity. Plagiarism is **prohibited** at Victoria.

The university defines plagiarism as follows:

Plagiarism is presenting someone else's work as if it were your own, whether you mean to or not.

'Someone else's work' means anything that is not your own idea, even if it is presented in your own style. It includes material from books, journals or any other printed source, the work of other students or staff, information from the Internet, software programmes and other electronic material, designs and ideas. It also includes the organization or structuring of any such material.

Plagiarism is not worth the risk.

Any enrolled student found guilty of plagiarism will be subject to disciplinary procedures under the Statute on Student Conduct (www.vuw.ac.nz/policy/studentconduct) and may be penalized severely. Consequences of being found guilty of plagiarism can include:

- an oral or written warning
- suspension from class or university
- cancellation of your mark for an assessment or a fail grade for the course.

Find out more about plagiarism and how to avoid it, on the University's website at:
www.vuw.ac.nz/home/studying/plagiarism.html.

Students with Disabilities

The University has a policy of reasonable accommodation of the needs of students with disabilities. The policy aims to give students with disabilities an equal opportunity with all other students to demonstrate their abilities. If you have a disability, impairment or chronic medical condition (temporary, permanent or recurring) that may impact on your ability to participate, learn and/or achieve in lectures and tutorials or in meeting the course requirements, then please contact the Course Coordinator as early in the course as possible. Alternatively you may wish to approach a Student Adviser from Disability Support Services to confidentially discuss your individual needs and the options and support that are available. Disability Support Services are located on Level 1, Robert Stout Building, or phoning 463-6070, email disability@vuw.ac.nz. The name of your School's Disability Liaison Person can be obtained from the Administrative Assistant or the School Prospectus.

Student Support

Staff at Victoria want students' learning experiences at the University to be positive. If your academic progress is causing you concern, please contact the relevant Course Coordinator, or Associate Dean who will either help you directly or put you in contact with someone who can.

The Student Service Group is also available to provide a variety of support and services. Find out more at www.vuw.ac.nz/st_services/ or email student-services@vuw.ac.nz.

VUWSA employs two Education Coordinators who deal with academic problems and provide support, advice and advocacy services, as well as organising class representatives and faculty delegates. The Education Office is located on the ground floor, Student Union Building, phone 463 6983 or 463 6984, email education@vuwsa.org.nz.