

School of Economics and Finance

## **ECON408 ADVANCED ECONOMETRICS A**

Trimester One 2007

### **COURSE OUTLINE**

---

#### **Contact Details**

Course coordinator and lecturer:	Dr. Jin Seo Cho
Room:	RH303
Phone:	(04) 463-6149
Email:	JinSeo.Cho@vuw.ac.nz
Office Hours:	9:00AM to 10:00AM every Thursday

#### **Class Times and Room Numbers**

Class times:	3:40PM to 6:30PM Tuesday
Room:	RWW220
Midterm exam time:	3:40PM to 6:30 Tuesday, 24 April 2007
Final exam time:	Exam day announced by the university authority

#### **Course Objectives**

The main goal of Econ408 is to introduce and analyze the advanced econometric models for microeconomic and/or cross-sectional data. These include the estimation and inference of microeconomic and/or cross-sectional econometric models. In particular, by various economic theories, there can be many econometric models mainly distinguished by whether or not to have linear structure. Each model needs to be analyzed in different ways, and we aim to discuss different analysis tool tailed for each model. We further extend our discussion in a way to move to more complicated models bit by bit, so that in the final stage, a unified econometric theory can be established to cover the most of standard econometric models. As these analysis tools are also forming the basic building blocs for other econometric models such as time-series models, students are highly recommended paying attention to the phase progress of Econ408 before taking further advanced econometric classes.

The goal described above is practically intended to be achieved by the aid of two exams (midterm and final) and four assignments. After completing the discussion of each main content given below, assignment will be distributed. Students' effort level to the course shall be proportional to the outcomes of the exams and assignments.

#### **Course Content**

Econ408 has two basic structures, theory and data examination. For a thorough understanding of econometric models, we contribute the part for data examination to computer lab times. If each three hour class is separated into two parts then the first part will be used to discuss theories, and we will use the remaining part for the practical application of theories. For this,

simulated data sets will be used, which satisfy the regularity conditions in the theories. Otherwise, three hour class will be contributed only to the discussions of theories. Computer lab times will be announced occasionally at the end of each theme.

We proceed our class according to the following schedule.

1 <sup>st</sup> to 3 <sup>rd</sup> Week:	Estimation and Inference of Linear Models by OLS method
4 <sup>th</sup> to 6 <sup>th</sup> Week:	Estimation and Inference of Nonlinear Models by NLS method
7 <sup>th</sup> to 9 <sup>th</sup> Week:	O(N)LS of Irregular Linear and/or Nonlinear Models
10 <sup>th</sup> to 12 <sup>th</sup> Week:	Quasi-Maximum-Likelihood and Generalized Method of Moments Estimation and Inference

### **Expected Workload**

For students who have fulfilled the normal prerequisites at VUW, about 13 hours per week should be weekly average workload, which includes class times. From the prior experiences, students can reduce workloads substantially by participating in class activities vigorously and not by accumulating them at the end of trimester.

### **Group Work**

In principle, group works are not allowed in this course. Nevertheless, if each assignment is thought too hard to complete in time, then the course coordinator can allow for group work. In this case, the total score for each group will be the score for group members.

### **Readings**

The required textbook is as follows:

Greene, W., *Econometric Analysis*, Fifth edition, Prentice Hall.

### **Materials and Equipment**

A calculator may be needed for the midterm and final examinations. For data examination, we use the statistical software called GAUSS, which is available in the computer labs.

### **Assessment Requirements**

Assessment will be made by the following formula:

$$\text{Final Mark} = \max[0.2 \text{ Asgn} + 0.4 \text{ Midterm} + 0.4 \text{ Final}, 0.5 \text{ Midterm} + 0.5 \text{ Final}],$$

where Asgn = Assignment, Midterm = Midterm exam, and Final = Final Exam.

Each assignment will be distributed during the discussion of each topic given above, and students are supposed to have two weeks to complete the assignments otherwise stated in the assignments.

### **Penalties**

Late submission of assignments will be resulting in deduction of points by 10% for each hour.

### **Mandatory Course Requirements**

There is no mandatory requirement in this course.

### **Communication of Additional Information**

Further information on Econ408 will be distributed via the noticeboard in our course web-page. Students are highly recommended checking whether or not be able to approach the Blackboard as soon as possible. In case the course homepage of Econ408 is not available in the Blackboard then students must contact the course coordinator.

### **Faculty of Commerce and Administration Offices**

#### Railway West Wing (RWW) - FCA Student and Academic Services Office

The Faculty's Student and Academic Services Office is located on the ground and first floors of the Railway West Wing. The ground floor counter is the first point of contact for general enquiries and FCA forms. Student Administration Advisers are available to discuss course status and give further advice about FCA qualifications. To check for opening hours call the Student and Academic Services Office on (04) 463 5376.

#### Easterfield (EA) - FCA/Education/Law Kelburn Office

The Kelburn Campus Office for the Faculties of Commerce and Administration, Education and Law is situated in the Easterfield Building - it includes the ground floor reception desk (EA005) and offices 125a to 131 (Level 1). The office is available for the following:

- Duty tutors for student contact and advice.
- Information concerning administrative and academic matters.
- Forms for FCA Student and Academic Services (e.g. application for academic transcripts, requests for degree audit, COP requests).
- Examinations-related information during the examination period.

To check for opening hours call the Student and Academic Services Office on (04) 463 5376.

### **General University Policies and Statutes**

Students should familiarise themselves with the University's policies and statutes, particularly the Assessment Statute, the Personal Courses of Study Statute, the Statute on Student Conduct and any statutes relating to the particular qualifications being studied; see the Victoria University Calendar or go to [www.vuw.ac.nz/policy](http://www.vuw.ac.nz/policy).

For information on the following topics, go to the Faculty's website [www.vuw.ac.nz/fca](http://www.vuw.ac.nz/fca) under Important Information for Students:

- Academic Grievances
- Academic Integrity and Plagiarism
- Student and Staff Conduct
- Meeting the Needs of Students with Impairments
- Student Support

### **Manaaki Pihipihinga Programme**

Manaaki Pihipihinga is an academic mentoring programme for undergraduate Māori and Pacific students in the Faculties of Commerce and Administration, and Humanities and Social Sciences. Sessions are held at the Kelburn and Pipitea Campuses in the Mentoring Rooms, 14 Kelburn Parade (back courtyard), Room 109D, and Room 210, Level 2, Railway West Wing. There is also a Pacific Support Coordinator who assists Pacific students by linking them to the services and support they need while studying at Victoria. Another feature of the programme is a support network for Postgraduate students with links to Postgraduate workshops and activities around Campus.

For further information, or to register with the programme, email [manaaki-pihipihinga-programme@vuw.ac.nz](mailto:manaaki-pihipihinga-programme@vuw.ac.nz) or phone (04) 463 5233 ext. 8977. To contact the Pacific Support Coordinator, email [pacific-support-coord@vuw.ac.nz](mailto:pacific-support-coord@vuw.ac.nz) or phone (04) 463 5842.