

School of Economics and Finance

QUAN 301 ECONOMETRICS

Second Trimester 2006

COURSE OUTLINE

Contact Details

Dr. Kunhong Kim (course coordinator)

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RH 318, Tel. 463-6143

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Class Times and Room Numbers

Monday 3:40-5:30 p.m. RHLT 2

Thursday 3:40-4:30 p.m. RHLT 2

The final examination will be held at the place and the time, in the period of 19 October – 11 November, to be announced later by the university authority.

Tutorial Time and Location

Tutorials will be held in a computer lab (RLWY 102). You will be allocated to one of the two tutorial sessions that will be run on Thursdays beginning in the second week of the trimester.

Thursday 4:40-5:30 p.m. or 5:40-6:30 p.m.

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

Course Objectives and Content

Econometrics is concerned with the construction, estimation, testing, and use of economic and financial models. Sound applied econometric work requires that careful attention be paid to econometric theory, as well as to the theory on which the empirical model is based and the construction of data. To understand econometrics, a considerable amount of mathematical reasoning and theory is required. But since the ultimate goal is actual estimation and evaluation, hands-on experience with data and econometric software is also required. For the hands-on econometric work, econometric computer software EVIEWS will be used.

Introductory material covered in QUAN201 will be reviewed and expanded into more advanced level, in terms of both the econometric theory and the level of complexity of the models. Advanced econometric topics include instrumental variable estimations, generalized method of moments estimation, maximum likelihood estimation, unit roots, cointegration, vector autoregressive models, etc. Furthermore:

- Monte-Carlo simulations will be conducted in order to investigate properties of estimators. Simulation exercises will provide very useful insights into sampling distribution.
- Matrix algebra specifications will be used. By using matrix algebra, the fundamental results in econometrics can be presented in an elegant, compact, and uncluttered manner.
- Some computer programming will be done in implementing econometric theory. Programming econometric formulas will enhance students' understanding of formulas. Through programming, theoretical results that have not been incorporated as automatic commands in a software package can be implemented in empirical work.

The course is designed for completing students to:

- be familiar with the main forms of regression models;
- be competent in the use of the econometric package EVIEWS;
- be able to carry out their own applied work to an acceptable standard;
- be able to understand and critique reports on journal articles using applied regression analysis;
- have covered the foundations for a graduate course in econometrics.

Course Organization

Week	Date	Lecture	Tutorial
1	JUL 10 Mo 13 Th	Review on Ordinary Least Squares Inferences with OLS	No tutorial
2	17 Mo 20 Th	Introduction to Matrix Algebra OLS using Matrix Algebra	OLS simulation
3	24 Mo 27 Th	Asymptotics for OLS	OLS with real data
4	31 Mo AUG 3 Th	Instrumental Variable Estimation	IV simulation
5	AUG 7 Mo 10 Th	Instrumental Variable Estimation	IV with real data
6	14 Mo 17 Th	Maximum Likelihood Estimation Inferences with MLE	MLE with real data

21 AUG - 3 SEP Mid-trimester break

7	SEP	4 Mo 7 Th	Heteroskedasticity Mid-trimester Test	Heteroskedasticity
8		11 Mo 14 Th	Autocorrelation	Autocorrelation
9		18 Mo 21 Th	Stationary Time Series Models	ARMA
10		25 Mo 28 Th	Unit Roots	Unit root tests
11	OCT	2 Mo 5 Th	Vector Autoregressive Models	VAR
12		9 Mo 12 Th	Cointegration and Error-Correction Models	Cointegration tests

Expected Workload

Total workload = 240 hours.

Hours expected per week = 19 (over 13 weeks), or 20 (over 12 weeks).

Readings

Textbook

Verbeek, M, *A Guide to Modern Econometrics*, John Wiley & Sons, 2000.

Other References

Griffiths, W E, R C Hill, and G G Judge, *Learning and Practicing Econometrics*, John Wiley & Sons, 1993.

Wooldridge, J M, *Introductory Econometrics: A Modern Approach*, 2nd edition, South-Western College Publishing, 2003.

Course Web

Selective course material will be available at the blackboard.

Assessment Requirements

Assignments 20%

Mid-trimester test 20%

Final examination 60% (1/3 from the first half, 2/3 from the second half)

Assignments will include both problem solving and computer tasks.

Mandatory Course Requirements

Students should attend at least 8 tutorials.

Communication of Additional Information

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

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 available in hard copy or under 'About Victoria' on the VUW home page at www.vuw.ac.nz.

Student 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 are to be taken if there is a complaint. For information about complaint procedures under the Statute on Student Conduct, contact the Facilitator and Disputes Advisor or refer to the statute on the VUW policy website at www.vuw.ac.nz/policy/studentconduct. The Policy on Staff Conduct can be found on the VUW website at 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; class representatives may be able to help you in this. If you are not satisfied with the result of that meeting, see the Head of School or the relevant Associate Dean; VUWSA Education Coordinators are available to assist in 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 Policy which is published on the VUW website at 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 undermines academic integrity. The University defines plagiarism as follows:

The presentation of the work of another person or other persons as if it were one's own, whether intended or not. This includes published or unpublished work, material on the Internet and the work of other student or staff.

It is still plagiarism even if you re-structure the material or present it in your own style or words.

Note: It is however, perfectly acceptable to include the work of others as long as that is acknowledged by appropriate referencing.

Plagiarism is prohibited at Victoria and is not worth the risk. Any enrolled student found guilty of plagiarism will be subject to disciplinary procedures under the Statute on Student Conduct and may be penalised severely. Consequences of being found guilty of plagiarism can include:

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

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 Impairments

The University has a policy of reasonable accommodation of the needs of students with disabilities. The policy aims to give students with disabilities the same opportunity as 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, 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 (DSS) to discuss your individual needs and the available options and support on a confidential basis. DSS are located on Level 1, Robert Stout Building, telephone (04) 463 6070, email disability@vuw.ac.nz. The name of your School's Disability Liaison Person is in the relevant prospectus or can be obtained from the School Office or DSS.

Student Support

Staff at Victoria want students to have positive learning experiences at the University. Each Faculty has a designated staff member who can either help you directly if your academic progress is causing you concern, or quickly put you in contact with someone who can. Assistance for specific groups is also available from the Kaiwawao Māori, Manaaki Pihipihinga or Victoria International.

In addition, the Student Services Group (email student-services@vuw.ac.nz) is available to provide a variety of support and services. Find out more at www.vuw.ac.nz/st_services/.

VUWSA employs 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 (tel. (04) 463 6983 or (04) 463 6984, email education@vuwsa.org.nz) is located on the ground floor, Student Union Building.

Manaaki Pihipihinga - Māori and Pacific Mentoring Programme (Faculty of Commerce and Administration)

This is a mentoring service for Māori and Pacific students studying at all levels. Weekly one hour sessions are held at the Kelburn and Pipitea Campuses in the Mentoring Rooms, 14 Kelburn Parade, and Room 210 and 211, Level 2, Railway West Wing. Sessions cover drafting and discussing assignments, essay writing, and any questions that may arise from tutorials and/or lectures. A computer suite networked to Cyber Commons is available for student use.

To register with Manaaki Pihipihinga, please contact one of the following:

Puawai Wereta
Room 210, Level 2
Railway West Wing
Tel. (04) 463 8997
Email: Puawai.Wereta@vuw.ac.nz

Fa'aoi Seiuli
Room 109 B
14 Kelburn Parade
Tel. (04) 463 5842
Email: Faafoi.Seiuli@vuw.ac.nz