

# School of Economics and Finance

# **QUAN 301 ECONOMETRICS**

Trimester Two 2008

# **COURSE OUTLINE**

# **Names and Contact Details**

Dr Kunhong Kim

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Contact with the lecturers is best initiated by e-mail or through making an appointment.

# **Trimester Dates**

The start and end dates for the second trimester in 2008, including the examination period, are Monday 7 July to Saturday 8 November 2008.

# **Class Times and Room Numbers**

Lecture

Monday, Tuesday, Friday 10:30 – 11:20 a.m. GBLT 3

<u>Tutorial</u>

Tutorials will be held in a computer lab (RWW 302). It will be run on Tuesdays beginning in the second week of the trimester.

# Tuesday 11:30 a.m. – 12:20 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 QUAN 201 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 unit roots, cointegration, error-correction models, non-linear least squares, maximum likelihood estimation, models with panel data, qualitative choice models etc. Furthermore:

- 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 understand and critique reports on journal articles using applied regression analysis;
- have covered the foundations for a graduate course in econometrics.

# Course Organization

Theme I: Introduction to Time Series Analysis

- Generalised least squares in matrix notation
- Stationary times series models
- Non-stationary time series
- Time series regression with non-stationarity

#### Mid-Trimester Exam (15 August)

Theme II: Non-linear Regression

- Non-linear least squares and maximum likelihood estimation
- Binary choice models
- Limited dependent variables
- Panel data models

#### **Expected Workload**

QUAN 301 is a 24-point course, and on the basis of VUW having designated one point = 10 hours work, expected work load would total 240 hours. If that workload were spread over 12 weeks, hours expected would average around 20 hours per week. This would involve attending classes, plus reading, studying and completing assignments. The 20 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.

#### Readings

Textbook

Verbeek, M, A Guide to Modern Econometrics, 3rd edition, John Wiley & Sons, 2008.

#### Other References

- Griffiths, W E, R C Hill, and G G Judge, *Learning and Practicing Econometrics*, John Wiley & Sons, 1993.
- Khaled, M, Introduction to Modern Econometrics with Applications, Pearson/Prentice-Hall, 2008.

Wooldridge, J M, *Introductory Econometrics: A Modern Approach*, 3<sup>rd</sup> edition, Thomson/South-Western, 2006.

#### Course Web

Selective course material will be available at the blackboard site.

#### **Assessment Requirements**

| Assignments        | 20% (4 assignments) |
|--------------------|---------------------|
| Mid-trimester test | 40%                 |
| Final examination  | 40%                 |

Assignments may include both problem solving and computer tasks.

2 hour mid-trimester test will be held on 15 August (Friday).

Students with final examinations are obliged to be at university until the end of the examination period. Final examination dates for trimester two are: Friday 17 October to Saturday 8 November 2008. The 2 hour final examination will be held at the place and the time, in the period of 17 October – 8 November, to be announced later by the university authority.

# Penalties

Unapproved late submission of assignments will incur a penalty of 10% per day up to two days. Unauthorised submissions beyond that will not be marked.

#### **Mandatory Course Requirements**

To pass this course, students must 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 on the ground floor (EA005). This counter is the first point of contact for :

- 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 <a href="https://www.victoria.ac.nz/home/about/policy/students.aspx">www.victoria.ac.nz/home/about/policy/students.aspx</a>

For information on the following topics, go to the Faculty's website <u>www.victoria.ac.nz/fca</u> under Important Information for Students:

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

• Student Support

# 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 students or staff.

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

Note: including the work of others will not be considered plagiarism as long as the work 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:

www.victoria.ac.nz/home/studying/plagiarism.html

# 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 <u>manaaki-pihipihinga-programme@vuw.ac.nz</u> or phone (04) 463 6015. To contact the Pacific Support Coordinator, email <u>pacific-support-coord@vuw.ac.nz</u> or phone (04) 463 5842.