Quantitative Skills Workshop for Honours and PhD Students

1. Introduction
A 4-day quantitative skills workshop for will be organized postgraduate students during the orientation week of the first semester.

The workshops are designed specifically for Honours and PhD students.
Masters students who intend to do a PhD in the future are also encouraged to attend the workshop. To facilitate the preparation of handouts, students who want to attend the workshop (other than Honours and PhD students) should notify the coordinator through email at least one week before the workshop.

2. Objectives
A main objective of the workshop is to introduce to students the basic but essential mathematical techniques for a number of postgraduate courses such as:

- ECON6010/ECON8010 Microeconomic Theory (compulsory for honours students)
- ECON6020/ECON8020 Macroeconomic Theory (compulsory for honours students)
- ECON6200 Advanced Monetary Economics
- ECON6710/ECON7730 Natural Resource Economics

Lecturers will not repeat teaching those mathematical techniques during these courses in great details, especially ECON6010/8010 and ECON6020/8020. Therefore, students are advised to make serious efforts to acquire those techniques in the workshop.

3. Content
The workshop will mainly cover the following topics:

a. Algebra: matrix, series, lag and lead operator, quadratic forms and definiteness of matrices.
b. Set theory: basic logic (necessity and sufficiency), convexity, compactness and existence.
c. Calculus: total and partial differentiation, chain rules, static and dynamic optimisation.
d. Others: recursive methods.

Exercises will be given to students for practice and discussed in tutorials.

4. Venue, Time and Date
Venue: 39A-201 (St Lucia campus)
Time: 10am-12:30pm (lecture), 1:30pm-4pm (tutorial).
Date: 21-24 February 2005.

5. Instructor and Enquiry
The lecturers who are in charge of ECON6010 and ECON6020 will be the workshop instructors.
Any enquiry should be forwarded to Mr. Leopoldo Yanes, who can be reached at
Email: l.yanes@economics.uq.edu.au
Phone: 3365 6619
Office: Colin Clark 510.