

ECON90053 Mathematics for Economists

Credit Points:	12.50
Level:	9 (Graduate/Postgraduate)
Dates & Locations:	2011, Parkville This subject commences in the following study period/s: Semester 2, Parkville - Taught on campus.
Time Commitment:	Contact Hours: One 90 minute lecture and one 90 minute workshop per week Total Time Commitment: Not available
Prerequisites:	Approval of Department of Economics Graduate Programs Director.
Corequisites:	None
Recommended Background Knowledge:	Please refer to Prerequisites and Corequisites
Non Allowed Subjects:	None
Core Participation Requirements:	For the purposes of considering requests for Reasonable Adjustments under the Disability Standards for Education (Cwth 2005), and Students Experiencing Academic Disadvantage Policy, academic requirements for this subject are articulated in the Subject Description, Subject Objectives, Generic Skills and Assessment Requirements for this entry. The University is dedicated to provide support to those with special requirements. Further details on the disability support scheme can be found at the Disability Liaison Unit website: http://www.services.unimelb.edu.au/disability/
Coordinator:	Prof Peter Bardsley
Contact:	Graduate School of Business and Economics Level 4, 198 Berkeley Street Telephone: +61 3 8344 1670 Online Enquiries (https://nexus.unimelb.edu.au/OnlineEnquiryForm.aspx?campaigncode=CMP-01311-VZ8293&cssurl=https://nexus.unimelb.edu.au/cssfiles/gsbe.css&redirecturl=http://www.gsbe.unimelb.edu.au/contactus/nexus/gsbe.html) Web: www.gsbe.unimelb.edu.au (http://www.gsbe.unimelb.edu.au)
Subject Overview:	This subject introduces students to mathematical concepts and techniques that are used in advanced economics.
Objectives:	On successful completion of this subject students should be able to understand the definitions and fundamental concepts of linear algebra, vector calculus, and real analysis as they relate to studies in advanced economics. They should be able to use these tools to: <ul style="list-style-type: none"> # prove relevant optimisation theorems; # set up and solve optimal control problems; # set up and solve dynamic programming problems.
Assessment:	Assignments consisting of problems and exercises at regular intervals during the semester (80%) and a two-hour final examination worth 20%.
Prescribed Texts:	You will be advised of prescribed texts by your lecturer.
Breadth Options:	This subject is not available as a breadth subject.
Fees Information:	Subject EFTSL, Level, Discipline & Census Date, http://enrolment.unimelb.edu.au/fees
Generic Skills:	High level of development: <ul style="list-style-type: none"> # problem solving;

- # interpretation and analysis;
- # critical thinking.

Moderate level of development:

- # oral communication;
- # written communication;
- # collaborative learning;
- # team work;
- # application of theory to practice;
- # receptiveness to alternative ideas.

Some level of development:

- # synthesis of data and other information;
- # evaluation of data and other information;
- # use of computer software;
- # accessing data and other information from a range of sources.