## 316-633 Quantitative Analysis of Finance II

Credit Points:	12.50
Level:	9 (Graduate/Postgraduate)
Dates & Locations:	2009, This subject commences in the following study period/s: Semester 1, - Taught on campus.
Time Commitment:	Contact Hours: Three hours per week of lectures and tutorials (Semester 1). Total Time Commitment: Not available
Prerequisites:	316-806 Quantitative Analysis of Financial Markets I or equivalent.
Corequisites:	None
Recommended Background Knowledge:	None
Non Allowed Subjects:	None
Core Participation Requirements:	For the purposes of considering request for Reasonable Adjustments under the Disability Standards for Education (Cwth 2005), and Student Support and Engagement Policy, academic requirements for this subject are articulated in the Subject Overview, Learning Outcomes, Assessment and Generic Skills sections of this entry.
Coordinator:	Prof Vance Lindsay Martin
Subject Overview:	The focus of the subject is on the application of more advanced quantitative techniques to analyse and model financial data. Special emphasis is given to maximum-likelihood estimation and testing procedures under alternative distributional assumptions. Topics will include: nonspherical and nonlinear models, generalised method of moments and recent advances in Monte Carlo estimation methods. A number of applications in financial econometrics are discussed: including multivariate GARCH, the estimation of latent factor models of the term structure of interest rates with levels effects and estimating stochastic differential equations.
Objectives:	<ul> <li>On successful completion of this subject students should be able to: <ul> <li># Identify and apply recent advances in quantitative methods to solve a range of problems in finance;</li> <li># Describe how quantitative procedures can be applied in financial decision making;</li> <li># Demonstrate a sophisticated understanding of quantitative methods by reproducing existing results. This will involve using both mathematical and computer skills. The computer program used is EViews;</li> <li># Develop alternative frameworks for exploring new ideas in building alternative financial models;</li> <li># Evaluate the strengths and importance of research in applied finance and the implications of research for solving financial problems.</li> </ul> </li> </ul>
Assessment:	Assignments not exceeding 2000 words (20%), a mid-semester test (10%) and a final examination (70%).
Prescribed Texts:	None
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:	On successful completion of this subject, students should have improved the following generic skills: # Evaluation of ideas, views and evidence # Synthesis of ideas, views and evidence # Strategic thinking # Critical thinking # Application of theory to economic policy and business decision making # Accessing economic and other information # Summary and interpretation of information # Application of windows software # Using computer programs # Statistical reasoning # Problem solving skills # Negotiation and bargaining # Written communication # Oral communication
Notes:	This subject is only available to students enrolled in the second year of the Master of Financial Management.
Related Course(s):	Master of Finance Master of Financial Management