FNCE40009 Advanced Derivative Securities

Credit Points:	12.50
Level:	4 (Undergraduate)
Dates & Locations:	This subject is not offered in 2014.
Time Commitment:	Contact Hours: Three hours of lectures and seminars per week Total Time Commitment: 120 hours
Prerequisites:	Admission to BH-COM and **Subject** / **Study Period Commencement:** / **Credit Points:** FNCE30007 Derivative Securities / Semester 1, Semester 2 / 12.50
Corequisites:	None
Recommended Background Knowledge:	None
Non Allowed Subjects:	Students may not gain credit for both FNCE40009 Advanced Derivative Securities and **Subject** / **Study Period Commencement:** / **Credit Points:** ACTL40004 Advanced Financial Mathematics I / Semester 1 / 12.50
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. It is University policy to take all reasonable steps to minimise the impact of disability upon academic study, and reasonable adjustments will be made to enhance a student's participation in the University's programs. Students who feel their disability may impact on meeting the requirements of this subject are encouraged to discuss this matter with a Faculty Student Adviser and Student Equity and Disability Support: http://services.unimelb.edu.au/disability
Contact:	**thijsv@unimelb.edu.au (mailto:thijsv@unimelb.edu.au)**
Subject Overview:	Arbitrage bounds, stock price dynamics, geometric Brownian motion and Itos Lemma, Cox-Ross-Rubinstein binomial model, Black-Scholes model, risk neutral valuation, forwards and futures, currency, stock index, futures and exotic options, Interest rate derivative securities.
Learning Outcomes:	On successful completion of this subject students should be able to: # Explain the role of arbitrage as a basis for determining the prices of financial securities; # Compare the various dynamics of stock price and interest rate models; # Explain the derivation of key option pricing models including the Cox-Ross-Rubinstein Binomial model and the Black-Scholes model; # Analyse the use of arbitrage pricing techniques to value other classes of derivative securities including forwards, futures, swaps and interest rate derivatives; # Analyse the theoretical limitations of key pricing models and on practical difficulties which arise in their implementation.
Assessment:	A three-hour end-of-semester examination (70%) Assignments totalling 3000 words, or equivalent, due in weeks 10 - 12 (30%)
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: # Oral communication # Written communication # Collaborative learning # Problem solving # Team work # Statistical reasoning # Application of theory to practice # Interpretation and analysis # Critical thinking # Synthesis of data and other information # Evaluation of data and other information # Using computer software