

## FNCE90005 Advanced Derivative Securities

<b>Credit Points:</b>	12.50									
<b>Level:</b>	9 (Graduate/Postgraduate)									
<b>Dates &amp; Locations:</b>	This subject is not offered in 2014.									
<b>Time Commitment:</b>	Contact Hours: Seminars, lectures and tutorials totalling 3 hours per week Total Time Commitment: Estimated total time commitment of 120 hours per semester									
<b>Prerequisites:</b>	<p>Either FNCE30007 Derivative Securities and FNCE40002 Advanced Investments or admission into the Master of Commerce – Finance.</p> <table border="1"> <thead> <tr> <th>Subject</th> <th>Study Period Commencement:</th> <th>Credit Points:</th> </tr> </thead> <tbody> <tr> <td>FNCE30007 Derivative Securities</td> <td>Semester 1, Semester 2</td> <td>12.50</td> </tr> <tr> <td>FNCE40002 Advanced Investments</td> <td>Semester 1</td> <td>12.50</td> </tr> </tbody> </table>	Subject	Study Period Commencement:	Credit Points:	FNCE30007 Derivative Securities	Semester 1, Semester 2	12.50	FNCE40002 Advanced Investments	Semester 1	12.50
Subject	Study Period Commencement:	Credit Points:								
FNCE30007 Derivative Securities	Semester 1, Semester 2	12.50								
FNCE40002 Advanced Investments	Semester 1	12.50								
<b>Corequisites:</b>	None									
<b>Recommended Background Knowledge:</b>	None									
<b>Non Allowed Subjects:</b>	None									
<b>Core Participation Requirements:</b>	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: <a href="http://www.services.unimelb.edu.au/disability/">http://www.services.unimelb.edu.au/disability/</a>									
<b>Contact:</b>	<p>Melbourne Business School @ Berkeley Street  Level 4, 198 Berkeley Street  Telephone: +61 3 8344 1670  Email: <a href="mailto:mbs-enquiries@unimelb.edu.au">mbs-enquiries@unimelb.edu.au</a> (<a href="mailto:mbs-enquiries@unimelb.edu.au">mailto:mbs-enquiries@unimelb.edu.au</a>)  Web: <a href="http://mbs.unimelb.edu.au/">http://mbs.unimelb.edu.au/</a> (<a href="http://mbs.unimelb.edu.au/">http://mbs.unimelb.edu.au/</a>)</p>									
<b>Subject Overview:</b>	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.									
<b>Learning Outcomes:</b>	<p>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;</p> <ul style="list-style-type: none"> <li># Compare the various dynamics of stock price and interest rate models;</li> <li># Explain the derivation of key option pricing models including the Cox-Ross-Rubinstein Binomial model and the Black-Scholes model;</li> <li># Analyse the use of arbitrage pricing techniques to value other classes of derivative securities including forwards, futures, swaps and interest rate derivatives;</li> <li># Analyse the theoretical limitations of key pricing models and on practical difficulties which arise in their implementation.</li> <li># Use statistical software to compute prices of financial instruments according to key pricing models such as the Black-Scholes model.</li> <li># Interpret and analyse market data using statistical software to generate inputs for pricing models and to value derivative portfolios.</li> </ul>									

<b>Assessment:</b>	3-hour end-of-semester examination (70%) 3000 word assignment, or equivalent, due in Weeks 10-12 (30%)
<b>Prescribed Texts:</b>	You will be advised of prescribed texts by your lecturer.
<b>Breadth Options:</b>	This subject is not available as a breadth subject.
<b>Fees Information:</b>	Subject EFTSL, Level, Discipline & Census Date, <a href="http://enrolment.unimelb.edu.au/fees">http://enrolment.unimelb.edu.au/fees</a>
<b>Generic Skills:</b>	<p>On successful completion of this subject, students should have improved the following generic skills:</p> <ul style="list-style-type: none"> <li># Oral communication</li> <li># Written communication</li> <li># Collaborative learning</li> <li># Problem solving</li> <li># Team work</li> <li># Statistical reasoning</li> <li># Application of theory to practice</li> <li># Interpretation and analysis</li> <li># Critical thinking</li> <li># Synthesis of data and other information</li> <li># Evaluation of data and other information</li> <li># Using computer software</li> </ul>
<b>Related Course(s):</b>	Doctor of Philosophy - Business and Economics Master of Commerce (Finance)