

## 333-618 Advanced Derivative Securities

<b>Credit Points:</b>	12.50
<b>Level:</b>	9 (Graduate/Postgraduate)
<b>Dates &amp; Locations:</b>	2009, This subject commences in the following study period/s: Semester 1, - Taught on campus.
<b>Time Commitment:</b>	Contact Hours: Seminars, lectures and tutorials totalling 3 hours per week (Semester 1). Total Time Commitment: Not available
<b>Prerequisites:</b>	333-309 Derivative Securities and one of 333-613 Foundations of Finance or 333-402 Advanced Investments.
<b>Corequisites:</b>	None
<b>Recommended Background Knowledge:</b>	None
<b>Non Allowed Subjects:</b>	None
<b>Core Participation Requirements:</b>	<p>&lt;p&gt;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.&lt;/p&gt;         &lt;p&gt;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: &lt;a href="http://services.unimelb.edu.au/disability"&gt;http://services.unimelb.edu.au/disability&lt;/a&gt;&lt;/p&gt;</p>
<b>Coordinator:</b>	Assoc Prof Christine Brown
<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>Objectives:</b>	<p>On successful completion of this subject students should be able to:</p> <ul style="list-style-type: none"> <li># Explain the role of arbitrage as a basis for determining the prices of financial securities;</li> <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> </ul>
<b>Assessment:</b>	A 3-hour end-of-semester examination (70%) and assignments totalling not more than 3000 words (30%).
<b>Prescribed Texts:</b>	None
<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> </ul>

	<ul style="list-style-type: none"><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>	Master of Commerce - Finance