



**UNIVERSITI TEKNOLOGI MARA**

**ASC713: FINANCE AND RISK MODELLING**

<b>Course Name (English)</b>	FINANCE AND RISK MODELLING <b>APPROVED</b>
<b>Course Code</b>	ASC713
<b>MQF Credit</b>	3
<b>Course Description</b>	In today's global markets, many companies are exposed to a variety of financial risks. The subject matter of this course will provide students an exposure to the various techniques that practitioners use for evaluating and managing financial risks. The use of financial derivatives for managing risks in the increasing volatile markets is emphasized. The course also covers the Regulatory and Reporting aspects of financial risk management. Throughout, the use of quantitative analysis and methods in problem solving is given emphasis.
<b>Transferable Skills</b>	Problem solving skills developed through tests, assignments and project"
<b>Teaching Methodologies</b>	Lectures, Case Study, Tutorial
<b>CLO</b>	CLO1 discuss financial risks and its management. CLO2 apply and measure the financial risks. CLO3 apply the various methods that can be used for managing financial risks. CLO4 discuss the financial derivatives pricing theories and methods. CLO5 summarise articles from journals in related areas.
<b>Pre-Requisite Courses</b>	No course recommendations
<b>Topics</b>	
<b>1. Risk Management Products</b> 1.1) Evolution 1.2) Financial Derivatives (Forwards, Futures, Swaps, Options and Hybrid Securities) 1.3) Regulatory and Reporting Aspects of Risk Management 1.4) Liabilities and Assets risk, Off Balance Sheet and On Balance Sheet Financing 1.5) Advantages of Risk Management	
<b>2. Managing Financial Risks</b> 2.1) Measuring a Firm's Exposure to Financial Risk 2.2) Application of Forward and Futures Contracts, Swaps and Options to Manage Financial Risk 2.3) Risk Exposure and Hedging 2.4) Risk Profile and Portfolio Management	
<b>3. Financial Engineering</b> 3.1) The Basics 3.2) Combining Derivatives 3.3) Creation of Hybrid Securities	
<b>4. The Evaluation and Measurement of Financial Risk</b> 4.1) The Risk underlying Financial Instruments 4.2) Portfolio risk 4.3) VAR Techniques	
<b>5. Financial Derivatives Pricing Theories</b> 5.1) Asset-Price Modelling 5.2) The Binomial Option Pricing Model 5.3) Black-Scholes Option Pricing Model 5.4) Cox-Rose Rubenstein Model 5.5) The Application of Monte-Carlo Simulation Techniques in Derivatives Pricing	

Assessment Breakdown	%
Continuous Assessment	100.00%

Details of Continuous Assessment	Assessment Type	Assessment Description	% of Total Mark	CLO
	Assignment	Class Assignment	15%	CLO1 , CLO2 , CLO3 , CLO4
	Final Test	n/a	30%	CLO4 , CLO5
	Group Project	Group assignment	15%	CLO1 , CLO2 , CLO3
	Individual Project	research paper on contemporary issues	15%	CLO1 , CLO2 , CLO3 , CLO4 , CLO5
	Journal/Article Critique	Summary and review of journal articles	5%	CLO1 , CLO2 , CLO3 , CLO4 , CLO5
	Test	Mid Term Exam	20%	CLO1 , CLO2 , CLO3

Reading List	Recommended Text	• John C. Hull 2014, <i>Options, Futures, and Other Derivatives</i> , 8 Ed., Pearson Higher Ed [ISBN: 132777428]
	Reference Book Resources	<ul style="list-style-type: none"> <li>• Bessis, J 2002, <i>Risk Management in Banking</i>, 2 Ed., , John Wiley &amp; Sons [ISBN: ]</li> <li>• Hull 2015, <i>Risk Management and Financial Institutions</i>, John Wiley &amp; Sons [ISBN: 1118955943]</li> <li>• Moorad Choudhry 2013, <i>An Introduction to Value-at-Risk</i>, Wiley [ISBN: 111831672X]</li> <li>• Robert Kosowski,Salih N. Neftci, <i>Principles of Financial Engineering</i> [ISBN: 0123869684]</li> </ul>
Article/Paper List	This Course does not have any article/paper resources	
Other References	This Course does not have any other resources	