

Module Details				
Module Title:	: Asset Pricing and Financial Markets			
Module Code:	AFE7503-B			
Academic Year: 2019-20				
Credit Rating:	20			
School:	School of Management			
Subject Area:	Accounting, Finance and Economics			
FHEQ Level:	FHEQ Level 7 (Masters)			
Pre-requisites:				
Co-requisites:				

Contact Hours				
Туре	Hours			
Lectures	24			
Tutorials	12			
Directed Study	164			

Availability		
Occurrence	Location / Period	
BDA	University of Bradford / Semester 1 (Sep - Jan)	

### **Module Aims**

This module provides students with (i) the knowledge and understanding of the fundamentals of the modern financial system relating to the interplay between financial markets, financial institutions, various managers and agents, financial instruments and the role of regulation, and (ii) the knowledge and critical skills that are essential for analysing the characteristics and structure of financial institutions and markets, (iii) a detailed understanding of the theoretical frameworks that lie behind the main asset pricing models in financial economics, and (iv) empirical evidence that evaluates the ability of these models to reflect real-world financial market prices.

Students will be able to (i) critically evaluate the role and impact of financial markets and institutions on both corporate financial operations and managerial decision making, (ii) understand the strengths and limitations of the models that they will use in their future financial careers.

## **Outline Syllabus**

The syllabus of this module consists of two main components:

### 1- Financial markets and institution:

Fundamentals of international financial systems and the institutional architecture that underpins them; Operations of financial markets and institutions; Role of agents and intermediaries with the financial system; Managerial decision making within the context of international financial systems and institutions; Interlinkages between international financial systems; Causes and consequences of financial crises; Regulation and other remedies; Institutional design and outcomes of regulatory processes.

## 2- Asset pricing:

Introduction to Utility Theory; Risk aversion; Mean-Variance Decision Making; The CAPM and Empirical Tests of the CAPM; The Consumption CAPM;; Factor models (Fama and French, 1993 and Carhart et al. 1997); Estimation of factor models with the two-step Fama-MacBeth (1973) procedure for identifying risk premia in asset prices; Rolling betas as risk factors; Estimating robust, one way and two-way clustered adjusted standard errors (Petersen, 2009); Market Anomalies; Event Study Methodology; Environmental Valuation. Use of Bloomberg for downloading relevant data and STATA/R software to estimate relevant asset pricing models.

Learning Outcomes				
10	Demonstrate an understanding of the key components of the financial system, especially within the context of decision making by finance managers operating within the financial and non-financial firm.			
11	Demonstrate an understanding of the fundamentals of the modern financial system relating to the interplay between financial markets, financial institutions, various managers and agents, financial instruments and the role of regulation.			
20	Develop a rigorous understanding of the fundamental principles of modern financial markets, including institutions, instruments and agents operating within the financial system.			
21	Evaluate a range of tools that are available for managerial decision-making, consider the interplay between various participants within financial markets, and the causes and consequences of financial crises.			
22	Gain an understanding of relevant current issues of significance for the operation of financial markets and the financial system. Be able to follow financial news and critically assess reports.			
30	Critically evaluate the role and impact of financial markets and institutions on both corporate financial operations and managerial decision making.			
40	Critically discuss the relationship between investor preferences, risk aversion and equilibrium models of asset pricing.			
41	Critically discuss the relationship between Markowitz portfolio theory and the Capital Asset Pricing Model (CAPM).			
42	Compare and contrast the fundamental asset pricing models, CAPM, CCAPM, SDF, FF three-factor model and factor models.			

43	Apply skills developed using STATA/R software for estimation of multiple regressions, panel data regressions and two-step Fama-MacBeth cross-sectional regressions.		
50	Undertake empirical tests of the CAPM/SML, critically evaluate the results, and explain the theoretical difficulties that underlie tests of the CAPM/SML framework.		
51	Undertake Event Studies to assess the existence and statistical significance of market anomalies and critically evaluate your results.		
52	Explain the Consumption CAPM and the macro-financial puzzles that arise from this framework.		
53	Estimation of the asset pricing models with real data and critically analyses any biases in the estimated models.		
60	Work constructively within groups.		
61	Organise and structure their work in a professional way and produce accurately written work to a deadline.		
62	Apply advanced mathematical skills in a financial context; particularly matrix algebra, differentiation and optimisation, and continuous-time mathematical finance. Apply skills developed using STATA/R software for estimation of multiple regressions, panel data regressions and two-step Fama-MacBeth cross-sectional regressions.		
63	Apply advanced spreadsheet/ R techniques in a finance context.		

## Learning, Teaching and Assessment Strategy

There will be staff-led lectures followed by both seminars and practical lab sessions using Bloomberg professional.

For the "Financial Markets and Institutions" part of the module, lectures will be used to provide students with a rigorous understanding of the fundamental principles of modern financial markets, including institutions, instruments and agents operating within the financial system (1a, 2a), the operation of modern financial systems as well as national and international linkages between financial systems (1b). It will also evaluate a range of tools that are available for managerial decision-making, and it considers the interplay between various participants within financial markets (2b), as well as the causes and consequences of financial crises (2b,2c). For the "Asset Pricing" part of the module, lectures will be used to present the key theoretical arguments and proofs (4a,4b,4c,5c), to ensure that students understand the main mathematical techniques that are applied in financial theory (6c), and to demonstrate the application of spreadsheet techniques within a financial theory context (4d,5a,5b,6d).

Directed Study will be based around weekly question sheets that will be covered in the following week's tutorials, background reading of both the textbook and relevant academic literature, writing a 1,500-word group assignment, and revision time of one-hour for the closed-book examination.

Seminars/tutorials will be used to reinforce the taught component and formative assessments will allow for monitoring progress. These will be supplemented by web-based learning and self-directed learning to support each topic will take place within the directed study time. Formative feedback is provided both in the lectures and seminars.

The tutorial questions, and their coverage in the tutorials themselves, will provide formative assessment of students understanding of the key theoretical arguments and proofs (3a,4a,4b,4c,5c, 5d), their ability to apply mathematical and spreadsheet skills (5a, 5b, 6c, 6d) and their ability to apply their knowledge within a practical setting through discussion (6a). Background reading will be used to help student understanding in all areas.

The group assignment will be used to summative assess spreadsheet skills in a financial context

(5a, 5b, 6d), the ability to apply quantitative results to practice, group-working (6a) and writing-to-deadline skills (6b).

The examination will be used primarily to summative assess students understanding of the key components of the financial system including financial markets, institutions and instruments (1a, 1b, 2a, 2b, 2c, 3a), financial theories (4a,4b,4c, 5c) and the relevant mathematics (6c).

Mode of Assessment							
Туре	Method	Description	Length	Weighting			
Summative	Examination - closed book	Closed book exam	1.5 hours	50%			
Summative	Coursework	Group coursework	-1500 words	50%			
Formative	Classroom test	Interactive tutorials/seminars	During tutorials	%			

# Reading List

To access the reading list for this module, please visit <a href="https://bradford.rl.talis.com/index.html">https://bradford.rl.talis.com/index.html</a>.

### Please note:

This module descriptor has been published in advance of the academic year to which it applies. Every effort has been made to ensure that the information is accurate at the time of publication, but minor changes may occur given the interval between publishing and commencement of teaching. Upon commencement of the module, students will receive a handbook with further detail about the module and any changes will be discussed and/or communicated at this point.