

Liverpool John Moores University

Title: THE THEORY OF FINANCE
Status: Definitive
Code: **7507AE** (103466)
Version Start Date: 01-08-2011

Owning School/Faculty: Liverpool Business School
Teaching School/Faculty: Dublin Business School

Team	Leader
Graham Padgett	Y

Academic Level: FHEQ7
Credit Value: 15.00
Total Delivered Hours: 32.00
Total Learning Hours: 150
Private Study: 118

Delivery Options

Course typically offered: Runs Twice - S1 & S2

Component	Contact Hours
Lecture	20.000
Tutorial	10.000

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Exam	AS1	Examination	70.0	2.00
Essay	AS2	assignment	30.0	

Aims

To introduce students to the fundamental theories of finance which will allow them to put into context the more practically oriented material covered in the second semester modules

To provide students with the ability to apply financial models to practical problems

To provide students with an understanding and role of derivative products and their modelling in portfolio management

Learning Outcomes

After completing the module the student should be able to:

- 1 Describe the theoretical framework underpinning classical finance theory
- 2 Evaluate how classical finance theories have developed since their inception
- 3 Synthesise and appraise differing finance theories
- 4 Demonstrate, where appropriate, classical finance theories mathematically and /or computationally
- 5 Apply derivative products and their modelling to portfolio management
- 6 Interpret and apply appropriate current and new models and theories of finance when dealing with real world practical applications

Learning Outcomes of Assessments

The assessment item list is assessed via the learning outcomes listed:

EXAM	1	2	3	4	5	6
essay	1	2	3	4	5	6

Outline Syllabus

Mean variance framework approach to portfolio theory. Portfolio return; mean, variance and the effect of diversification; efficient frontier; minimum variance portfolio; correlation structures. Mean variance frontier of risky assets. Mean variance frontier of risk free and risky assets. Utility analysis; preference and utility functions, derivation of expected utility theorem; risk aversion.

The inputs to a mean variance analysis. Single index models and market models. Single index model to determine the efficient frontier. Estimating betas and estimating expected return. Risk measures; dispersion measure, downside and upside risk. Portfolio choice with mean variance utility. Beta representation of expected return. Equilibrium models; derivation and properties of the CAPM and related equilibrium models; empirical evidence and implications. Derivation and properties of Arbitrage Pricing Theory; empirical testing and implications. Diversification advantages; derivation and implications of the international CAPM. Evaluating portfolio performance; risk adjusted measures.

Asset prices, random walk, technical analysis and the efficient market hypothesis. Testing the efficient market hypothesis using statistical testing, event situations and calendar anomalies. Technical analysis and local trends. The single and two period dividend growth model. Trading strategies. Bond rating agencies versus stock analysts. Bond pricing and bond portfolio management. Bond price formula; sensitivity of bond prices; time, yield and coupon rate; zero coupon bond prices. Bond yield measures; gross redemption yield, current yield, yield to maturity, realised compound yield. Bond price volatility, duration and convexity; Macauley Duration. Term structure of interest rates.

The foreign exchange market and euro markets – spot rates, cross rates, triangular arbitrage, covered interest arbitrage, exchange rate determination. Derivates market/foreign exchange/Eurocurrencies/International bonds; hedging portfolios using financial derivatives.

Learning Activities

10x2hr lectures, 10x1hr tutorials/IT workshops

References

Course Material	Book
Author	Elton, E., Gruber, M., Brown, S. & Goetzmann, W.
Publishing Year	2006
Title	Modern Portfolio Theory and Investment Analysis'
Subtitle	
Edition	
Publisher	Wiley
ISBN	0470050829

Course Material	Book
Author	Cuthbertson, K. & Nitzsche, D.
Publishing Year	2008
Title	Investments: Spot and Derivatives Markets;
Subtitle	
Edition	
Publisher	Wiley
ISBN	0470519568

Course Material	Book
Author	Dunis, C., Laws, J. & Niam, P. (eds)
Publishing Year	2003
Title	Applied Quantitative Methods for Trading and Investment
Subtitle	
Edition	
Publisher	Wiley
ISBN	0470848855

Course Material	Book
Author	Fabozzi, F
Publishing Year	2000
Title	Bond Market Analysis and Strategies'
Subtitle	
Edition	

Publisher	Prentice Hall
ISBN	

Notes

To introduce the students to the fundamental theories of finance which will allow them to put into context the more practical oriented material covered in the second semester modules.

Formative assessment is provided throughout the module through the use of weekly on-line multiple choice questions. The examination is the summative assessment.