



## Course information 2011–12

### FN2029 Financial intermediation

This is a dynamic subject which aims to provide insights into and understanding of theories and practices relating to financial intermediation and the risk management techniques currently being used in major banks throughout the world.

#### Prerequisite

If taken as part of a BSc degree, courses which must be passed before this course may be attempted:

FN1024 Principles of banking and finance

#### Aims and objectives

The objectives specifically include:

- to develop understanding of the theories of financial intermediation
- to develop understanding of concepts and practices relating to the risk management process and techniques applied within major financial intermediaries
- to develop understanding of recent developments in financial risk management and regulation, including credit risk models, securitisation, derivative instruments and capital adequacy.

#### Essential reading

For full details please refer to the reading list.

Bessis, J. *Risk Management in Banking*. (Chichester: Wiley)

Matthews, K. and J. Thompson *The Economics of Banking*. (Chichester: Wiley)

Saunders, A. and M.M. Cornett *Financial Institutions Management: A Risk Management Approach*. (New York: McGraw Hill, )

Students are also expected to read journal articles which are available in the Online Library.

#### Learning outcomes

At the end of the course and having completed the essential reading and activities students should be able to:

- ✓ discuss and evaluate key theories relating to the role of banks as financial intermediaries
- ✓ discuss and evaluate the risks which banks face and explain how these risks are managed, with particular focus on techniques of asset and liability management, and credit risk measurement and management
- ✓ discuss the importance of capital in bank management and the role of securitisation, and explain the importance of capital adequacy within banking regulation
- ✓ describe and analyse the various means of analysing bank performance
- ✓ explain the principles and techniques involved in the use of derivative instruments for hedging credit, interest rate and exchange rate risk.

#### Assessment

This course is assessed by a three hour unseen written examination.

Students should consult the *Programme Regulations for degrees and diplomas in Economics, Management, Finance and the Social Sciences* that are reviewed annually. The Prerequisites, Exclusions, and Syllabus are subject to confirmation in the *Regulations*. Notice is also given in the *Regulations* of any courses which are being phased out and students are advised to check course availability.

## Syllabus

This is a description of the material to be examined, as published in the *Regulations*. On registration, students will receive a detailed subject guide which provides a framework for covering the topics in the syllabus and directions to the essential reading

The course addresses both theoretical and practical aspects of financial intermediation and financial risk management. The syllabus brings together the upstream issues of risk measurement and management with the downstream issues of the process of risk management and the implementation of hedging programmes. Whereas traditional risk management focused on a bank's banking book (i.e. on-balance sheet assets and liabilities), modern risk management is concerned with both the banking book and the trading book, which mainly consists of off-balance sheet financial instruments.

### **Section 1: Theories of financial intermediation:**

Types and characteristics of financial intermediaries; Financial intermediation as delegated monitoring; Liquidity transformation, bank runs and maturity transformation; Financing sources and borrower characteristics; Introduction to market microstructure.

**Section 2: Risks in banking:** Investigation of the principal risks in banking, including credit risk, liquidity risk, interest rate risk, market risk, sovereign risk, solvency risk, and operational risk; The risk management process; Risk measurement; Value at Risk techniques.

**Section 3: Credit risk:** Default risk, exposure risk and recovery risk; Internal and external credit ratings and the uses of rating systems; Principles of credit risk management; Credit risk models.

**Section 4: Balance sheet management, liquidity risk and interest rate risk:** Asset and liability management; Techniques for managing assets and liabilities; The liquidity gap; Interest rate gaps.

**Section 5: Capital requirements and securitisation:** Capital adequacy and regulation of financial intermediaries; Economic capital; Securitisation for capital management; The mechanics of securitisation.

### **Section 6: Analysing bank performance:**

Accounting and market value based performance measures; Risk-adjusted performance. Risk-adjusted return on capital; Economic value added.

**Section 7: Risk Management:** Derivatives pricing and hedging: linkages between the state preference model and arbitrage pricing, between option pricing models and delta hedging, and between forward pricing and hedging. Hedge ratios; Managing credit risk with derivatives, including forwards, options, swaps, credit linked notes, and collateralized debt obligations; Managing interest rate risk with swaps; Managing foreign exchange risk with the forward hedge, money market hedge, and currency swaps.