

**COURSE SPECIFICATION DOCUMENT**

<b>Academic School/Department:</b>	Business and Economics
<b>Programme:</b>	BA (Hons) Business Administration with Combined Studies BA (Hons) Financial Economics with Combined Studies
<b>FHEQ Level:</b>	6
<b>Course Title:</b>	Derivatives
<b>Course Code:</b>	FNN 6400
<b>Course Leader:</b>	Ivan K. Cohen
<b>Student Engagement Hours:</b>	120
Lectures:	30
Seminar / Tutorials:	15
Independent / Guided Learning:	75
<b>Semester:</b>	Fall/Spring
<b>Credits:</b>	12 UK CATS credits 6 ECTS credits 3 US credits

**Course Description**

This course provides an analysis of financial economics of exchange-traded futures and options and selected over-the-counter derivatives. The course covers areas which include the market structures of the futures and options markets, the valuation of futures and options contracts, as well as their use in global risk management strategies.

**Prerequisites:** FNN 5200, FNN 5205

**Aims and Objectives:**

This Course critically analyses the nature and role of exchange-traded and over-the-counter derivatives. While there is some coverage of the market structures of the futures and options markets, the main focus is on valuation techniques, especially for futures and options contracts, and the use of derivatives in global risk management strategies.

**Programme Outcomes**

A1, A3, A4, A5

B1, B2, B3, B4

C1, C2  
D1-D5

A detailed list of the programme outcomes is found in the Programme Specification. This is maintained by Registry and located at:

<https://www.richmond.ac.uk/programme-and-course-specifications/>

### **Learning Outcomes:**

Upon completion of this course, a successful student should be able to

### **Knowledge and Understanding**

1. Develop a robust understanding of the nature and role of financial and non-financial derivatives.
2. Develop the skills to apply basic valuation techniques to the pricing of derivatives.
3. Understand the strengths and weaknesses of derivatives as a risk-management tool.
4. Understand how to identify and measure derivative risk.
5. Critically analyse a broad range of trading strategies in the derivatives markets.

### **Cognitive Skills**

1. Understanding the language and jargon of derivatives.
2. Understanding clearly the nature and role of derivatives in risk management.
3. Understanding the various tools and techniques employed in the valuation of derivatives.
4. To compare and contrast the use of different forms of derivative, including what can go wrong and why.

### **Practical and/or Professional Skills**

1. Quantitative and IT skills including the use of highly technical valuation techniques.
2. The ability to use Excel and a financial calculator for derivatives valuation
3. To be able to compare and contrast the use of different derivatives as hedging tools, and to offer recommendations.

### **Key Skills**

1. Effective communication skills via a range of media.
2. Ability to develop strong analytical skills through listening, discussion and reflection.

### **Indicative Content:**

1. Introduction to the nature and role of derivatives.
2. Forward contracts and futures contracts, including valuation techniques and hedging strategies.
3. Interest rate derivatives, including zero rates and the term structure of interest rates.
4. Options: basic trading strategies and valuation (Black-Scholes, Binomial).
5. Options: stock index options, options on futures, etc.
6. Risk and volatility: "Greeks".
7. Value at Risk (VAR).

8. Should derivatives be regulated?

**Assessment:**

This course conforms to the University Assessment Norms approved at Academic Board.

**Teaching Methodology:**

Semi-formal bi-weekly presentation of material in lecture format interspersed with discussion and in-course calculations. Supplemented with a rigorous set of readings and some audio-visual material. Full use of IT, particularly Excel, but also including social media and podcasts, is encouraged and supported.

**Bibliography:**

Ivan K. Cohen (2005) *Focus on Financial Management*. Imperial College Press

David A. Dubofsky and Thomas W. Miller, Jr. (2003) *Derivatives: Valuation and Risk Management*, Oxford University Press

Roger C. Gibson (2008) *Asset Allocation: Balancing Financial Risk*, fourth edition. McGraw-Hill

John C. Hull (2010) *Options, Futures, and Other Derivative Securities* (seventh edition), Pearson

Nicholas Taleb Nassim (2007), *Fooled by Randomness: The Hidden Role of Chance in Life and in the Markets*. Penguin Books

George Soros (2008) *The New Paradigm for Financial Markets: The Credit Crisis of 2008 and What It Means*. Public Affairs

**Journals**

*Derivatives Quarterly*

*Derivatives: Use, Trading and*

*Regulation Euromoney*

*Futures & Options World*

*International Journal of Financial Markets and*

*Derivatives Institutional Investor*

*Journal of Derivatives*

**Web Sites**

*The Economist*

([www.economist.com](http://www.economist.com)) *The*

*Financial Times* ([www.ft.com](http://www.ft.com)) *The*

*Wall Street Journal* ([wsj.com](http://wsj.com))

*Briefing Notes in Economics* ([www.richmond.ac.uk/bne](http://www.richmond.ac.uk/bne))

Yahoo!'s Listings

([dir.yahoo.com/Business\\_and\\_Economy/Finance\\_and\\_Investment/Futures\\_and\\_Options](http://dir.yahoo.com/Business_and_Economy/Finance_and_Investment/Futures_and_Options)) Specialised Derivatives Journals

([www.bus.lsu.edu/academics/finance/faculty/dchance/Research/ReadingList.htm](http://www.bus.lsu.edu/academics/finance/faculty/dchance/Research/ReadingList.htm))

The International Monetary Fund (IMF) ([www.imf.org](http://www.imf.org))

The Bank for International Settlements (BIS)

([www.bis.org](http://www.bis.org)) Google Finance

([www.google.co.uk/finance?tab=we](http://www.google.co.uk/finance?tab=we))

