

## Liverpool John Moores University

Title: DERIVATIVE SECURITIES  
Status: Definitive  
Code: **7009BUSAE** (100190)  
Version Start Date: 01-08-2011

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

Team	Leader
Jason Laws	Y

**Academic Level:** FHEQ7  
**Credit Value:** 15.00  
**Total Delivered Hours:** 41.00  
**Total Learning Hours:** 150  
**Private Study:** 109

### Delivery Options

Course typically offered: Semester 2

Component	Contact Hours
Lecture	26.000
Tutorial	13.000

**Grading Basis:** 40 %

### Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Exam	AS1	Exam	100.0	2.00

### Aims

1. To provide an appreciation of the use and pricing of a variety of financial options.
2. To enable students to use Excel to value financial options.

### Learning Outcomes

After completing the module the student should be able to:

- 1 Evaluate the principles of option pricing.

- 2 Apply an appropriate pricing model to a variety of contingent claim securities.
- 3 Recognise the trading strategy appropriate to expected future market conditions.
- 4 Appraise the biases in option pricing models.

### Learning Outcomes of Assessments

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

EXAM	1	2	3	4
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### Outline Syllabus

- The structure of options markets.*
- The vocabulary and conventions of option trading.*
- The principles of options pricing.*
- The binomial option pricing model.*
- The Black and Scholes and Merton Option Pricing Models.*
- The 'Greeks'*
- Using VBA in Excel to create option pricing functions.*
- Biases in option pricing models.*
- Trading Strategies.*
- Options on stock indices, currencies and interest rates.*
- Exotic options.*
- Structured products.*

### Learning Activities

10 x 2 hour lectures, 10 x 1 hour tutorials/IT workshops

### References

<b>Course Material</b>	Book
<b>Author</b>	Kolb R
<b>Publishing Year</b>	2002
<b>Title</b>	Futures, Options and Swaps
<b>Subtitle</b>	
<b>Edition</b>	
<b>Publisher</b>	Blackwell Publishers
<b>ISBN</b>	0631232400

<b>Course Material</b>	Book
<b>Author</b>	Hull JC
<b>Publishing Year</b>	2002
<b>Title</b>	Options, Futures and Other Derivative Securities
<b>Subtitle</b>	

<b>Edition</b>	
<b>Publisher</b>	Prentice Hall (PHIPE)
<b>ISBN</b>	0631232400

<b>Course Material</b>	Book
<b>Author</b>	
<b>Publishing Year</b>	0
<b>Title</b>	In addition each topic is supported by both classic and contemporary journal articles. The majority of these are available electronically via the various databases that the University subscribes to.
<b>Subtitle</b>	
<b>Edition</b>	
<b>Publisher</b>	
<b>ISBN</b>	

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### Notes

This module offers a detailed analysis of option pricing and trading.

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