

DBS SCHOOL OF BUSINESS

LJMU DEGREE PROGRAMMES

MODULE PROFORMA

Module Title: Derivative Theory & Practice

Level: 3

Assessment: Continuous Assessment: 30%

Examination: 70%

Prerequisites: Finance 1, Financial Institutions & Regulatory Environment

Credits:12

Objectives:

- To identify the properties of derivatives – options, futures and swaps.
- To examine the major derivative exchanges and understand the operation of their trading systems.
- To provide in-depth knowledge of the mechanisms and operations of the derivatives markets.
- To identify the theory and practice of trading strategies involving derivatives.
- To examine the techniques in the pricing and valuing of derivatives.
- To examine the role and mechanics of hedging derivatives.

Learning Outcomes

On completion of this module students will be able to:

- Apply their knowledge of derivative theory in a practical environment.
- Display a strong understanding of the workings of derivative markets.
- Understand techniques involved in valuing and pricing derivatives.
- Implement effective trading strategies involving derivatives.

Syllabus:

Introduction to Derivatives

- Types of Derivatives; Participants in the Derivatives World; Uses of Derivatives

Mechanics of Option Markets

- Introduction to the history of options markets, identifying and examining the mechanics of options exchanges, identifying option contracts, understanding how options are traded, option premiums, profits and losses

Trading Strategies Involving Options

- Identifying strategies involving a single option and a stock, analysing option spreads and combinations.

Option Pricing

- Arbitrage and Option Pricing, Put/Call Parity model, Binomial Option Pricing Model, examining the factors affecting option prices, upper and lower bounds for option prices, Black-Scholes Option Pricing Model, examining the role of volatility in the pricing of options

Hedging Positions in Options

- Identifying the options offered by financial Institutions, analysing naked and covered positions, hedging strategies using options, exotic options

Mechanics of the Futures Market

- Understanding futures Contracts, how the market operates, participants, principles of futures contract Pricing

Types of Futures

- Stock Index Futures, Foreign Exchange Futures - foreign exchange risk, forward rates , dealing with risk, Interest Rate Futures, Futures Contracts and Portfolio Management

Swaps

- Interest Rate Swaps, Foreign Currency Swaps, Currency Swap, Interest Rate Options

Swap Pricing

- Swap Pricing, valuing an Off-Market Swap, hedging the Swap, pricing a Currency Swap