BF3314 – DERIVATIVES

Module Number: BF3314

Module Title: Derivatives

Number of Aston Credits: 10

Total Number of ECTS Credits: 5
(European Credit Transfer)

Staff Member Responsible for the Module:

Dr Amedeo De Cesari
Finance and Accounting Group

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Availability: Students can book appointments with the tutor at the following web address:
https://wass.aston.ac.uk/wass/pages/makeappt.page.php

Other Staff Contributing to the Module: None

Pre-Requisite(s) for the Module: BF2244 Strategic Finance

Module Learning Outcomes:

This module focuses on derivatives and how companies manage their financial risks. It examines the main types of derivative contracts: forward contracts, futures, swaps and options, and how these instruments are used in managing and modifying financial risks. No technical knowledge of derivatives is required but the material in this module is such that numerical computations are unavoidable. Although challenging, I think you will enjoy it.

Upon successful completion of the module students will be able to:

- Understand and explain the nature of derivatives and describe the trading mechanisms and the key variables that determine their market values.
- Classify and compare the different types of derivative instruments.
- Understand and explain the financial risks facing large multinational companies.
- Identify and critically evaluate the nature and extent of a company's exposure to stock price risk, commodity price risk, currency risk, interest rate risk and credit risk.

- Explain and demonstrate the application of various hedging strategies and assess their suitability in relation to the identified risk.

- Discuss and debate the links between credit derivatives and the financial crisis and critically evaluate the validity of some hypotheses explaining the existence of such links.

Module Content:

Week	**Lecture**
Week 1	Introduction to Derivatives. Hedgers, Speculators and Arbitrageurs
Week 2	Mechanics of Forward and Futures Contracts
Week 3	Hedging Using Futures
Week 4	Interest Rate Futures
Week 5	Swaps
Week 6	Mechanics of Options Markets
Week 7	Options Pricing
Week 8	Greek Letters
Week 9	Credit Derivatives
Week 10	The Credit Crisis of 2007
Week 11	Revision Lecture

The module provides a comprehensive overview of what risks firms face and how firms can use derivatives to manage and modify these risks. It also covers topical issues such as credit derivatives and the credit crisis of 2007. Hence, over the 11 weeks of the module the students will have the opportunity to successfully achieve the learning outcomes.

The outline above is intended to be a general guide for the module and is not an all-encompassing description of the topics or expected learning outcomes.

Note: topics may not necessarily be covered in the order given, and there may be additions, deletions and alterations of emphasis.

International Dimensions:

Financial risk is one of the many business risks faced by companies (both domestic and international) and its management has become one of the key

factors in overall financial management. Whether the objectives of the company is to minimise (maximise) foreign exchange losses (gains) or minimise (maximise) interest rate losses (gains), they need to understand the extent of exposure they face and manage it to an acceptable level. The study of Derivatives and Financial Risk Management therefore transcends domestic boundaries.

Corporate Connections:

There is a strong emphasis on the corporate use of derivatives in managing financial risk in this module.

Links with research:

Dr. Amedeo De Cesari's research primarily focuses on the financial policies of corporations. Within this research strand, he is interested in investigating how risk affects corporate policies and what instruments and techniques corporations use to manage risk. Further, he is currently involved in a research project on manipulative behaviours in the Credit Default Swap market.

Learning and Teaching Rationale and Methods:

a) A two-hour lecture is presented in each week to provide the basis of the application skills and theoretical understanding that the students require. In addition tutorial questions are set so that students are able to consolidate their understanding. The tutorials provide an opportunity for discussion on issues raised by both the lectures and the tutorial questions. Active participation in tutorials is important and this will be monitored by tutor/lecturer. Tutorials will begin in week 2.

At all times students are expected to supplement their learning by reading the prescribed textbook(s) and the relevant articles assigned from time to time.

b) Contact and direct Learning

Lectures	22 hours
Tutorials	10 hours
Examination	2 hours
Indirect Learning	
Exam revision	28 hours
Reading	38 hours
Total	**100 hours**

Ethical Approval:

This module does not require any primary research and no ethical approval will be necessary.

Assessment and Feedback Rationale and Methods:

Assessment is via a two-hour closed-book examination (100%) in January.

The assessment examines theoretical understanding of derivatives and financial risk management and the ability to apply this to a given problem.

In the examination the paper will consist of a mix of essays, numerical and analytical questions that cover the entire syllabus and from which a certain number must be selected.

Students are encouraged to make the most of their contact hours with their tutor in order to receive useful formative feedback and accurately evaluate whether they are on the right track to achieve the learning outcomes of the module. First, the tutorials provide students with opportunities to receive feedback. In particular, students should independently attempt to solve the questions assigned for the tutorials in advance. They should then compare their solutions with those suggested by the tutor during the tutorial and, if necessary, ask questions. Second, students are encouraged to attempt the end-of-chapter questions from the textbook. After each lecture, the tutor will provide answers to the end-of-chapter questions that are related to the content of the lecture. Finally, students that have questions, doubts or remarks on some of the issues covered in the module should not hesitate to discuss them with their tutor preferably during his office hours.