

City University of Hong Kong

Information on a Course
offered by the Department of Economics and Finance
with effect from Semester A in 2014 / 2015

Part I

Course Title: Derivatives and Risk Management

Course Code: EF5050

Course Duration: 1 semester (39 hours)

Credit Units: 3

Level: P5

Medium of Instruction: English

Prerequisites: Nil

Precursors: EF5042 Corporate Finance and EF5070 Econometrics or EF5370
Mathematics and Statistics for Financial Services

Equivalent Courses: EF5156 Financial Risk Management (From the old curriculum)

Exclusive Courses: Nil

Part II

Course Aims

This course aims to introduce the students to the use, pricing and hedging of basic financial derivatives such as futures, forwards, options and swaps and the principles of financial risk management. Upon completion of this course, students will be able to apply a variety of derivatives models; use options, futures contracts, and swaps to do arbitrage and to form hedging portfolios; and use derivative securities to manage the risk of financial assets.

Course Intended Learning Outcomes (CILOs)

Upon successful completion of this course, students should be able to:

No.	CILOs	Weighting (if applicable)
1.	The students should be able to price basic financial derivative products	35%
2.	The students should be able to use basic financial derivative products to hedge market risk	35%
3.	The students should be able to design strategies that alter the risk exposure of companies or institutions exposed to financial risk	30%

Teaching and Learning Activities (TLAs)

(Indicative of likely activities and tasks designed to facilitate students' achievement of the CILOs. Final details will be provided to students in their first week of attendance in this course)

TLAs	Functions
Lectures	To provide basic concepts and structure. The lecturer encourages students to think critically and logically, to solve the problems by themselves rather than giving away the solutions without engaging students.
Homework Problems	The homework problems consist of short questions and calculation questions, with a focus on the prevailing risk management strategies adopted by companies. Students are expected to apply the risk-management theories and to critically analyse the related issues in the financial market.
Quiz(zes)/ Project(s)	The Quiz(zes)/ project(s) which cover the topics in lectures and coursework will reflect the learning outcomes of students as well as their accomplishments of discovery and innovation.
Final Exam	The final examination which covers the topics in lectures and coursework will reflect the learning outcomes of students as well as their accomplishments of discovery and innovation.

Assessment Tasks/Activities

(Indicative of likely activities and tasks designed to assess how well the students achieve the CILOs. Final details will be provided to students in their first week of attendance in this course)

Constructive Alignment of CILOs and Assessment Methods

Type of Assessment Tasks/Activities	Final Exam	Coursework (homework problems/quiz(zes)/project(s) etc.)	Row Total
Column Total	40% (2 hours exam)	60%	100%

Students are required to pass both coursework and examination components in order to pass the course.

Grading of Student Achievement:

Refer to Grading of Courses in the Academic Regulations for Taught Postgraduate Degrees.

Part III

Keyword Syllabus

Futures, Options, Swaps, Options Pricing, Hedging, Risk Management, Market Risk, Value at Risk, Stochastic Processes.

Recommended Reading

Text(s)

Options, Futures and Other Derivatives, by John Hull, Pearson

Paul Wilmott Introduces Quantitative Finance, by Paul Wilmott, Wiley

A Course in Derivative Securities: Introduction to Theory and Computation, by Kerry Back, Springer

Dynamic Hedging: Managing Vanilla and Exotic Options, by NN Taleb, Wiley

My Life as a Quant: Reflections on Physics and Finance, by Emanuel Derman, Wiley

Online Resources

Use of Blackboard recommended in order to point to up-to-date online resources.