THE EDUCATION UNIVERSITY OF HONG KONG

Course Outline

Part I

Programme Title	**:**	**Bachelor of Arts in Personal Finance; all undergraduate programmes**
Programme QF Level	**:**	**5**
Course Title	**:**	**Risk Management for Investment**
Course Code	**:**	**BUS4060**
Department	**:**	**Department of Social Sciences and Policy Studies**
Credit Points	**:**	**3**
Contact Hours	**:**	**39**
Pre-requisite(s)	**:**	**Nil**
Medium of Instruction	**:**	**English**
Course Level	**:**	**4**

Part II

The University's Graduate Attributes and seven Generic Intended Learning Outcomes (GILOs) represent the attributes of ideal EdUHK graduates and their expected qualities respectively. Learning outcomes work coherently at the University (GILOs), programme (Programme Intended Learning Outcomes) and course (Course Intended Learning Outcomes) levels to achieve the goal of nurturing students with important graduate attributes.

In gist, the Graduate Attributes for Sub-degree, Undergraduate, Taught Postgraduate, Professional Doctorate and Research Postgraduate students consist of the following three domains (i.e. in short "PEER & I"):

- **P**rofessional **E**xcellence;
- **E**thical **R**esponsibility; **&**
- **I**nnovation.

The descriptors under these three domains are different for the three groups of students in order to reflect the respective level of Graduate Attributes.

The seven GILOs are:

1. Problem Solving Skills
2. Critical Thinking Skills
3. Creative Thinking Skills

4a. Oral Communication Skills

4b. Written Communication Skills

5. Social Interaction Skills
6. Ethical Decision Making
7. Global Perspectives

1. **Course Synopsis**

The undergraduate course is designed to provide students with a comprehensive understanding of risk management principles and practices in the context of investment decision-making, with a specific focus on the use of derivatives. The course aims to equip students with the knowledge and skills necessary to identify, analyze, and mitigate various types of risks associated with investment portfolios using derivative instruments.

The course will cover a range of topics related to risk management and derivatives, including the characteristics and valuation of derivative instruments, hedging strategies, risk measurement techniques, and the application of derivatives in portfolio management. Throughout the course, students will develop critical thinking and analytical skills through the analysis of real-world case studies and the application of risk management techniques using derivatives to investment scenarios. They will also learn how to use quantitative tools and models to evaluate risk and make informed investment decisions incorporating derivatives.

2. **Course Intended Learning Outcomes** (CILOs)

Upon completion of this course, students will be able to:

$CILO_1$ demonstrate an advanced comprehension and critical analysis of the role that derivatives play in effectively managing risks associated with complex investment portfolios;

$CILO_2$ analyze and evaluate the intricate characteristics and valuation methods of various derivative instruments (e.g., options, futures, forward contracts) and demonstrate advanced proficiency in utilizing them to hedge intricate financial risks;

$CILO_3$ critically apply and adapt advanced derivative strategies in complex real-world investment scenarios to effectively manage intricate and multifaceted risks;

$CILO_4$ "construct" and "execute" advanced derivative strategies in real-world investment scenarios to proactively manage risks, taking into consideration factors such as market volatility, liquidity constraints, and regulatory requirements.

3. **Content, CILOs and Teaching & Learning Activities**

Course Content	CILOs	Suggested Teaching & Learning Activities
– Distinguish between the price of a derivative security and the value of a position in the derivative security	$CILO_{1,2}$	Lecture; Workshop; Interactive discussion
– Identify the financial risk facing investors	$CILO_{1,2,3}$	Lecture; Case studies and real-world examples
– Identify the instruments that can be employed to hedge the financial risks faced by investors – Discuss the relative merits of alternative hedging instruments	$CILO_{2,3,4}$	Lecture; Workshop; Interactive discussion
– Implement risk management strategies – Determine the number (and position of) derivative contacts that must be employed to hedge a given exposure	$CILO_{2,3,4}$	Lecture; Group project and presentation
– Calculate the theoretical prices of forward, futures and swap contracts	$CILO_{1,2,3,4}$	Lecture; Workshop;

		Interactive discussion

4. Assessment

Assessment Tasks	Weighting (%)	CILO
(a) Group Risk Management Project Report Students will form small groups to study on a topic related to risk management in investment. Each group has to submit a project report (2,000-3,000 words) and conduct a presentation by all group members, in which instructor will ask questions to individual participants for individual evaluation.	50%	$CILO_{1,2,3}$
(b) Quiz A 2-hour quiz will be conducted at the end of the semester.	50%	$CILO_{1,2,3}$

5. Use of Generative AI in Course Assessments

☐ ***Not Permitted***: In this course, the use of generative AI tools is not allowed for any assessment tasks.

☑***Permitted***: In this course, generative AI tools may be used in some or all assessment tasks. Instructors will provide specific instructions, including any restrictions or additional requirements (e.g., proper acknowledgement, reflective reports), during the first lesson and in relevant assessment briefs.

6. Required Text(s)

Chance, D. M., & Brooks, R. (2021). *An introduction to derivatives and risk management*. South-Western, Cengage Learning.

Larcher, G. (2023). *The Art of Quantitative Finance Vol. 1: Trading, Derivatives and Basic Concepts*. Springer Nature.

Schofield, N. C. (2021). *Commodity derivatives: Markets and applications*. John Wiley & Sons.

7. Recommended Readings

Ahnouch, M., Elaachak, L., & Ghadi, A. (2023, October). Model risk in financial derivatives and the transformative impact of deep learning: A systematic review. In *The Proceedings of the International Conference on Smart City Applications* (pp. 155-165). Cham: Springer Nature Switzerland.

Appadurai, A. (2020). *Banking on words: The failure of language in the age of derivative finance*. University of Chicago Press.

Carbonneau, A. (2021). Deep hedging of long-term financial derivatives. *Insurance: Mathematics and Economics, 99*, 327-340.

Emm, E. E., Gay, G. D., Ma, H., & Ren, H. (2022). Effects of the Covid-19 pandemic on derivatives markets: Evidence from global futures and options exchanges. *Journal of Futures Markets, 42*(5), 823-851.

Hammoudeh, S., & McAleer, M. (2013). Risk management and financial derivatives: An overview. *The North American Journal of Economics and Finance, 25*, 109-115.

8. Related Web Resources

Global Association of Risk Professionals	https://www.garp.org/
Professional Risk Managers' International Association	https://prmia.org/
CFA Institute	https://www.cfainstitute.org/
The Balance - Hedging and How it Works with Examples	https://www.thebalance.com/hedge-what-it-is-how-it-works-with-examples-3305933

9. Related Journals

The Journal of Financial and Quantitative Analysis
Quantitative Finance
Mathematical Finance
Journal of Finance
The Review of Financial Studies
Journal of Personal Finance
Journal of Consumer Affairs
International Journal of Consumer Studies

10. Academic Honesty

The University upholds the principles of honesty in all areas of academic work. We expect our students to carry out all academic activities honestly and in good faith. Please refer to the *Policy on Academic Honesty, Responsibility and Integrity* (https://www.eduhk.hk/re/uploads/docs/00000000001633679892454 8BbN5). Students should familiarize themselves with the Policy.

11. Others

Nil

Last updated on 22 July 2025