City University of Hong Kong Course Syllabus

offered by Department of Economics and Finance with effect from Semester A 2017/18

Part I Course Over	view
Course Title:	Security Analysis and Portfolio Management
Course Code:	EF3320
Course Duration:	1 Semester
Credit Units:	3
Level:	B3
Proposed Area: (for GE courses only)	☐ Arts and Humanities ☐ Study of Societies, Social and Business Organisations ☐ Science and Technology
Medium of Instruction:	English
Medium of Assessment:	English
Prerequisites: (Course Code and Title)	CB3410 Financial Management or FB3410 Financial Management
Precursors: (Course Code and Title)	Nil
Equivalent Courses : (Course Code and Title)	EF3320A Security Analysis and Portfolio Management
Exclusive Courses: (Course Code and Title)	Nil

Part II **Course Details**

1. **Abstract**

This course studies classical portfolio theory and standard asset pricing models at an introductory level. After completing the course, students are expected to be able to apply the fundamental principles to analyze stocks and bonds investment problems, formulate trading strategies, and manage financial portfolios. In particular, students will apply the theories and models of portfolio management and act as financial advisors. They will come up with portfolios for their clients and calculate and interpret the risks and returns. This is an introduction to a client-facing career and will encourage students to apply their knowledge in an innovative manner.

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

(CILOs state what the student is expected to be able to do at the end of the course according to a given standard of performance.)

No.	CILOs#	Weighting* (if applicable)	curricu learnin (please approp	Discovery-enriched curriculum related learning outcomes (please tick where appropriate)			
1.	Analyze attitudes towards risky investments,	10%	AI	$\frac{A2}{}$	A3		
	discover the different risk attitude for different investors						
2.	1	40%	V	V			
2.	Apply classical portfolio theory to equity investments, and integrate the investment with risk attitude	1070	,	,	,		
3.	Evaluate risk and return using standard asset pricing models, form optimal portfolio	30%	V	V	V		
4.	Analyze bonds and formulate immunization	20%	1	V	$\sqrt{}$		
	strategy, and discover investment strategy more						
	than merely equity investment						
* If we	eighting is assigned to CILOs, they should add up to 100%.	100%		•	'		

^{*} If weighting is assigned to CILOs, they should add up to 100%.

A1:

Develop an attitude of discovery/innovation/creativity, as demonstrated by students possessing a strong sense of curiosity, asking questions actively, challenging assumptions or engaging in inquiry together with teachers.

A2: Ability

Develop the ability/skill needed to discover/innovate/create, as demonstrated by students possessing critical thinking skills to assess ideas, acquiring research skills, synthesizing knowledge across disciplines or applying academic knowledge to self-life problems.

A3: Accomplishments

Demonstrate accomplishment of discovery/innovation/creativity through producing /constructing creative works/new artefacts, effective solutions to real-life problems or new processes.

[#] Please specify the alignment of CILOs to the Gateway Education Programme Intended Learning outcomes (PILOs) in Section A of Annex.

3.

Teaching and Learning Activities (TLAs) (TLAs designed to facilitate students' achievement of the CILOs.)

TLA	Brief Description	CILO No.				Hours/week	
		1 2 2 4				(if applicable)	
Lectures	 Excel illustration in portfolio optimization, with data retrieved from web resources, such as "Yahoo!.com". Students will also learn to read the stock quotes. Before a theory is introduced, the assumptions and proving process will be explained and illustrated in details. This will help students understand the theories and discover the underlying rationale. 		2 \	3	4 \(\)	3 hours lecture each week	
	 In-class games will be conducted (e.g. St Petersburg Paradox) to provoke students' interests and help them understand some of the theories. Through the lectures, students will acquire the necessary tools to trading and investing, based on their understanding of the investment theories and application of the valuation models. 						
In-class exercises and in-class quiz	Exercises on each topic will be distributed to students as homework and the solutions will be illustrated in class. Students are also required to take an in-class quiz.	√	1	1	V		
Group Project (1) Private banking wealth manager	Students are required to act as wealth manager to manage the wealth of high-end customers, form portfolios and calculate the risks and returns. Students are also required to interpret the results and rationale of their advice to the clients. Students could form a group of 4-5 and act as a team of wealth manager. (1) design questionnaire to analyse the client's risk attitude and their financial planning goal (2) analyse the current situation of client's financial status and cash flows (3) design an investment portfolio for the client to achieve his/her financial planning goal considering risk attitude.	V	V	V	V		
Group project (2) Fund manager	(1) Investment Policy Statement (IPS) for managing a fund: objective, risk and return, fund strategy etc.(2) Equity analysis and fixed-income security analysis will be included and applied to the fund management.	1	√ 	1	V		
	(3) The application of Excel will be illustrated in class and students are encouraged to use the software to solve portfolio optimization problems.						

4. Assessment Tasks/Activities (ATs)

(ATs are designed to assess how well the students achieve the CILOs.)

Assessment Tasks/Activities	CILO No.		Weighting*	Remarks		
	1	2	3	4		
Continuous Assessment: 40%						
Group projects, in-class					40%	
exercise, in-class quiz, and						
classroom participation						
Examination: 60% (duration: 2 hou	Examination: 60% (duration: 2 hours, if applicable)					
Final Exam	1	V	V	1	60%	The closed-book exam will last for 2 hours. Students may bring a piece of A4 paper and decide what to put on it. Students will be examined on all the topics covered in the course. In particular, investment problems similar to, but not easier than, the ones in the Appendices (the context and specifics may differ).
* The weightings should add up to 100%.			100%			

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

5. Assessment Rubrics

(Grading of student achievements is based on student performance in assessment tasks/activities with the following rubrics.)

Assessment	Criterion	Excellent	Good	Fair	Marginal	Failure
Task		(A+, A, A-)	(B+, B, B-)	(C+, C, C-)	(D)	(F)
Final	Demonstrate the ability/ skill needed to discover/ innovate/	Strong evidence of original thinking; good	Evidence of knowing how to	Some evidence of knowing how to	Marginal familiarity with the subject of	Little evidence of familiarity with the
Examination	create. Demonstrate the accomplishment of discovery/innovation/creativity.	organization, capacity to analyse and synthesize; superior grasp of the subject of portfolio investment; evidence of extensive knowledge base as outlined in CILOs. Students have demonstrated very strong overall ability to discover and innovate, and showed very strong evidence of accomplishments in discovery.	apply the related concepts outlined in CILOs. Students have demonstrated strong overall ability to discover and innovate, and showed strong evidence of accomplishments in discovery.	apply the concepts outlined in CILOs. Students have demonstrated some ability to discover and innovate, and showed satisfactory evidence of accomplishments in discovery.	portfolio investment. Students have demonstrated marginal ability to discover and innovate, and showed marginal evidence of accomplishments in discovery.	subject of portfolio; or no show and no excuse in final exam. Students have demonstrated little evidence of ability to discover and innovate, and showed little evidence of accomplishments in discovery.
Group	Demonstrate an attitude of	Strong evidence of	Evidence of	Some evidence of	Marginal familiarity	Little evidence of
projects,	discovery/ innovation/ creativity.	original thinking; good organization, capacity to	knowing how to apply the related	knowing how to apply the concepts	with the subject of portfolio investment.	familiarity with the subject of portfolio; or
in-class	Develop the ability/skill needed to discover/innovate/create.	analyse and synthesize; superior grasp of the	concepts outlined in CILOs. Students	outlined in CILOs. Students have	Students have demonstrated marginal	no show and no excuse in final exam. Students
exercise,		subject of portfolio	have demonstrated	demonstrated some	ability to discover and	have demonstrated
in-class quiz,		investment; evidence of extensive knowledge	strong overall ability to discover	ability to discover and innovate, and	innovate, and showed marginal evidence of	little evidence of ability to discover and
and		base as outlined in	and innovate, and	showed satisfactory	accomplishments in	innovate, and showed
classroom		CILOs. Students have demonstrated very strong	showed strong evidence of	evidence of accomplishments in	discovery.	little evidence of accomplishments in
participation		overall ability to discover and innovate, and	accomplishments in discovery.	discovery.		discovery.
		showed very strong evidence of accomplishments in discovery.				

Part III Other Information (more details can be provided separately in the teaching plan)

1. Keyword Syllabus

Risk aversion, utility function

Random returns, expectation, variance, covariance

Portfolio, diversification, investment choice set, efficient frontier, CAL

Capital Asset Pricing Model (CAPM), beta, SML, CML

Factor models, Arbitrage Pricing Theory (APT)

Bond valuation, term structure of interest rate

Interest rate risk, duration, convexity, immunization strategy

2. Reading List

2.1 Compulsory Readings

(Compulsory readings can include books, book chapters, or journal/magazine articles. There are also collections of e-books, e-journals available from the CityU Library.)

1. Z. Bodie, A. Kane, A.J. Marcus, and J. Ravi, Investment: Asia Global Edition, McGraw-Hill, Latest edition

2.2 Additional Readings

(Additional references for students to learn to expand their knowledge about the subject.)

1.	Articles of finance topics.
2.	Lecture notes, newspaper clippings and articles.
3.	Websites from:
	Online Learning Center: http://highered.mcgraw-hill.com/sites/0072339160/student_view0/ and this
	is under http://www.mhhe.com/business/finance/bkm/