City University of Hong Kong

Information on a Course
offered by Department of Economics and Finance
with effect from Summer Term 2014

Students who pass this course is exempted from the FP3030 Investment Planning module of Society of Registered Financial Planners. FP3030 is one of the five required subjects needed for obtaining a RFP (Registered Financial Planner) professional qualification.

Part I

Course Title: Investment Analysis and Portfolio Management

Course Code: FB5153

Course Duration: 1 semester (39 hours)

Credit Units: 3

Level: P5

Medium of Instruction: English

Prerequisites: Nil

Precursors: FB5040 Corporate Finance
                FB5731 Business Decision Modelling

Equivalent Courses: EF5052 Investments

Exclusive Courses: Nil

Part II

Course Aims

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.

Course Intended Learning Outcomes (CILOs)

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

No.	CILOs	Weighting (if applicable)
CILO 1	Analyze attitudes towards risky investments, discover the different risk attitude for different investors	10 percent
CILO 2	Apply classical portfolio theory to equity investments, and integrate the investment with risk attitude	40 percent
CILO 3	Evaluate risk and return using standard asset pricing models, form optimal portfolio	20 percent
CILO 4	Analyze bonds and formulate immunization strategy, and discover investment strategy more than merely equity investment	30 percent

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.)

TLA	Functions
TLA 1. Lectures	3 hours lecture each week. - 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. - 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.
TLA 2. In-class exercises and discussion	Exercises on each topic will be distributed to students as homework and the solutions will be illustrated in class.

TLA3. 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.
TLA4. 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. (3) The application of Excel will be illustrated in class and students are encouraged to use the software to solve portfolio optimization problems.

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.)

Final Exam	50%
Group Projects	40%
Class Participation	10%
Total	100%

Note: Final Exam:

The close-book exam will last for 3 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).

Constructive Alignment of CILOs and Assessment Methods

	Final Examination	Group Projects	Class Participation	**Row total**
CILO 1	5%	3%	2%	10%
CILO 2	20%	17%	3%	40%
CILO 3	10%	7%	3%	20%
CILO 4	15%	13%	2%	30%
Column Total	**50%**	**40%**	**10%**	**100%**

Mapping of TLAs to CILOs

CILO No.	TLAs	Hours/week (if applicable)
CILO 1	TLA1: Lecture; TLA2: in-class exercise; TLA3: group project (1); TLA4: group project (2)	3 hours lecture per week
CILO 2	TLA1; TLA2; TLA3; TLA4	3 hours lecture per week
CILO 3	TLA1; TLA2	3 hours lecture per week
CILO 4	TLA1; TLA2	3 hours lecture per week

Summary of how DEC is incorporated in Assessment Tasks, and Teaching and Learning Activities (TLAs)

DEC Elements	Assessment Tasks and TLAs
Developing attitude of students to discover and innovate	Lecture In-class exercise and discussion
Developing abilities of students to discover and innovate	Excel illustration for model application and quotes reading Group Projects
Developing abilities of students to discover and innovate, accomplishments of Discovery and Innovation	Final Exam

Grading of Student Achievement

Letter Grade	Grade Points	Grade Definitions	Remarks
A+ A A-	4.3 4.0 3.7	Excellent	Strong evidence of original thinking; good 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.
B+ B B-	3.3 3.0 2.7	Good	Evidence of knowing how to 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.
C+ C C-	2.3 2.0 1.7	Adequate	Some evidence of knowing how to apply the concepts outlined in CILOs. Students have demonstrated some ability to discover and innovate, and showed satisfactory evidence of accomplishments in discovery.
D	1.0	Marginal	Marginal familiarity with the subject of portfolio investment. Students have demonstrated marginal ability to discover and innovate, and showed marginal evidence of accomplishments in discovery.
F	0.0	Failure	Little evidence of familiarity with the 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.

Part III

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

Recommended Reading
Textbook

Bodie, Kane and Marcus: <u>Investments</u>, 8th Ed., McGraw-Hill, 2009.

Online Resources
Lecture notes, newspaper clippings and articles.

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/