北京大学 汇丰商学院
Peking University HSBC Business School

FIN-520
Financial Economics
Module 2, 2015-2016

Course Information

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Classes:
Lectures: 15:30-17:20 Monday & Thursday
Venue: PHBS Building, Room 229

1. Course Description

1.1 Context

Course overview:

This course is tailored for master students with economics/finance background. The goal of this course is to provide students with an understanding of the fundamental and central theories and techniques of financial economics at the Master's level. After successful completion of the course students should:

1. Have a complete understanding of the fundamentals of financial economics: utility theory, mean-variance portfolio analysis, Capital Asset Pricing Model and other linear factor models, no arbitrage and state pricing.
2. Understand how to extend these fundamental models to multi-period cases.
3. Have a basic understanding of derivative pricing.

Prerequisites: Mathematics (GEN 500)

1.2 Textbooks and Reading Materials

1: Theory of Asset Pricing, by George Pennacchi, 2007, Princeton University Press, Pearson.
2: Foundations for Financial Economics, by Huang, C. & Litzenberger, R., 1988, Elsevier Science.

Recommended papers will be mentioned in lecture notes. Lecture notes will be photocopied and brought to you before class.

2. Learning Outcomes

2.1 Intended Learning Outcomes

Learning Goals	Objectives	Assessment
1. Our graduates will be effective communicators.	1.1. Our students will produce quality business and research-oriented documents.	
	1.2. Students are able to professionally present their ideas and also logically explain and defend their argument.	Y
2. Our graduates will be skilled in team work and leadership.	2.1. Students will be able to lead and participate in group for projects, discussion, and presentation.	
	2.2. Students will be able to apply leadership theories and related skills.	
3. Our graduates will be trained in ethics.	3.1. In a case setting, students will use appropriate techniques to analyze business problems and identify the ethical aspects, provide a solution and defend it.	Y
	3.2. Our students will practice ethics in the duration of the program.	Y
4. Our graduates will have a global perspective.	4.1. Students will have an international exposure.	Y
5. Our graduates will be skilled in problem-solving and critical thinking.	5.1. Our students will have a good understanding of fundamental theories in their fields.	Y
	5.2. Our students will be prepared to face problems in various business settings and find solutions.	Y
	5.3. Our students will demonstrate competency in critical thinking.	Y

2.2 Course specific objectives

2.3 Assessment/Grading Details

Assessment task	Weighting
Midterm Exam	30%
Final Exam	70%
Total	100%

Midterm Exam: 30%
It will be held at the first lecture in week 5 (the 9th lecture in all), lasting for 90 minutes. The scope of the exam includes all the material taught by the end of week 4. It is a closed-book, closed-notes exam. You are allowed to bring your calculator with you.

Final Exam: 70%
It will be held at the end of this module, lasting for 2 hours. It covers all the academic contents in this course (60%), plus 10% practical financial knowledge. A typical question in practical financial knowledge part will look like:
-What's the full name of 'ST' in Chinese stock market?
Still, it is a closed-book, and closed-notes exam. You are allowed to bring your calculator with you.

If you anticipate any conflicts with the exam dates, please inform me as early as possible **before the exam**. I do not accept travel plans, job/internship interviews as a legitimate reason. For other conflicts with sufficient evidence, we can discuss them case by case. A general solution is a make-up exam.

The overall mark will be aligned with other courses, specifically a similar mean but normally a high standard deviation. (Pay attention to the tail risk)

2.4 Academic Honesty and Plagiarism

It is important for a student's effort and credit to be recognized through class assessment. Credits earned for a student work due to efforts done by others are clearly unfair. Deliberate dishonesty is considered academic misconducts, which include plagiarism; cheating on assignments or examinations; engaging in unauthorized collaboration on academic work; taking, acquiring, or using test materials without faculty permission; submitting false or incomplete records of academic achievement; acting alone or in cooperation with another to falsify records or to obtain dishonestly grades, honors, awards, or professional endorsement; or altering, forging, or misusing a University academic record; or fabricating or falsifying of data, research procedures, or data analysis.

All assessments are subject to academic misconduct check. Misconduct check may include reproducing the assessment, providing a copy to another member of faculty, and/or communicate a copy of this assignment to the PHBS Discipline Committee. A suspected plagiarized document/assignment submitted to a plagiarism checking service may be kept in its database for future reference purpose.

Where violation is suspected, penalties will be implemented. The penalties for academic misconduct may include: deduction of honour points, a mark of zero on the assessment, a fail grade for the whole course, and reference of the matter to the Peking University Registrar.

For more information of plagiarism, please refer to *PHBS Student Handbook*.

3. Topics, Teaching and Assessment Schedule

Schedule	**Topics**
Lecture 1-3	Expected Utility and Risk Aversion: St. Petersburg Paradox, Utility Function, Jensen's Inequality, Risk Premium, and Absolute/Relative Risk Aversion.
Lecture 4-6	Mean Variance Analysis: Efficient Frontier, Two/N Assets Examples, Portfolio Separation, Zero-Covariance Portfolio, and the Case with Riskless Asset.
Lecture 7-8	Linear Factor Models: CAPM, Arbitrage, APT, Asymptotic Arbitrage, and Fama and French 3-Factor Model.
Lecture 10-12	Consumption-Saving Decision, Stochastic Discount Factor and State Pricing: EIS, Stochastic Discount Factor, Equity Premium Puzzle, Arrow-Debreu Securities, Fundamental Theorem of Asset Pricing, Risk Neutral Probabilities, and Complete Markets.
Lecture 13-15	A Multiperiod Discrete-Time Model of Consumption and Portfolio Choice: the Bellman Equation, Multiperiod Market Equilibrium, the Lucas Model of Asset Pricing, and Bubbles.
Lecture 16-18	Derivatives: Forward Contracts, European/American Options, Put-Call Parity, Option Bounds, Binomial Tree Method, and Early Exercise Provision.