

FIN 521

Investments

Module 4, 2015-2016

Course Information

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Classes:

Lectures: Monday-Thursday, 15:30-17:20

Venue: PHBS Building, Room 229

Course Website:

<http://cms.phbs.pku.edu.cn/index.php>

1. Course Description

1.1 Context

Course overview:

This course offers the institutional details, financial theory and quantitative tools necessary for understanding the pricing and use of stock and bond prices. Topics covered include modelling the relation between risk and return, optimal portfolio selection based on mean-variance analysis, and asset pricing. The focus is mainly on common stocks, but fixed income securities (bonds) are also analysed. The course is quantitative and challenging. Rather than delving into the details of current practice, it takes a rigorous and critical view to the investment process. The aim is to provide the students with a lasting conceptual framework in which to view and analyse investment decisions. At the same time, the course will discuss alternative philosophies of investing, and relate the material to current financial news and to problem relevant to practitioners.

Prerequisites:

While there is no formal prerequisite, students are expected to be familiar with basic probability/statistics and econometrics at undergraduate level.

1.2 Textbooks and Reading Materials

Required Textbooks:

- Bodie, Zvi, Alex Kane, and Alan Marcus, "Investments", McGraw Hill, 9th Edition, 2010 (BKM). ISBN-10: 0073530700, ISBN-13: 978-0073530703.
- Hull, J.C., "Options, Futures, and Other Derivatives", Prentice Hall, 9th Edition, 2014 (H). ISBN-10: 0133456315, ISBN-13: 978-0133456318.
- Lengwiler, Y., "Microfoundations of Financial Economics: An Introduction to General Equilibrium Asset Pricing" Princeton University Press, 2004 (L). ISBN-10: 0691113157, ISBN-13: 978-0691113159.
- LeRoy, S. and J. Werner, "Principles of Financial Economics", Cambridge University Press, 2nd edition, 2014 (LW). ISBN-10: 110767302X, ISBN-13: 978-1107673021.
- Ingersoll, Jonathan E., "Theory of Financial Decision Making", Rowman & Littlefield Publishers; F First Edition edition, 1987 (I). ISBN-10: 0847673596, ISBN-13: 978-0847673599

Additional readings and material:

The instructor will post additional material on the course management system (CMS). The course name is "Investments", the code is "INV2016".

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.	X
	1.2. Students are able to professionally present their ideas and also logically explain and defend their argument.	
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.	X
	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.	X
	3.2. Our students will practice ethics in the duration of the program.	
4. Our graduates will have a global perspective.	4.1. Students will have an international exposure.	X
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.	X
	5.2. Our students will be prepared to face problems in various business settings and	

	find solutions.	
	5.3. Our students will demonstrate competency in critical thinking.	

2.2 Course specific objectives

Students will be able to understand the main concepts underlying financial products and investments strategies finance; and apply those concepts and skills to their own research. The course is designed so that they will be able to:

- Analyse the different financial instruments and their markets
- Model how investment choices are made based upon return and risk
- Compute and understand the properties of returns of various financial assets including stocks, bonds, derivatives.
- Implement portfolio management strategies.

2.3 Assessment/Grading Details

Weightings on the various components of the final grade are as follows:

In-class Participation	10%
Problem Sets	20%
Midterm Exam	30%
Final Exam	40%

In-class Participation:

Students must be regular in class attendance. Fully attendance is required and everyone is expected to actively participate in the class discussions.

Problem Sets:

There will be four problem sets. Problem sets should be done in groups of 4 members. Students are responsible for organizing these groups. Plagiarism is strictly punished. Late submission is unacceptable and will not be graded. Problem sets contain computational exercises. Instructions and deadlines about the problem sets will be given later on by instructor and available on the course management system.

Exams:

Midterm and final exam will be closed book. Cell phones are not allowed as calculators. No cheat sheet is allowed in both exams.

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

Week	Topic	Text	Note
Part I	Introduction		
April 28	The investment Environment Asset Classes and Financial Instruments	Chapter 1 (BKM) Chapter 2 (BKM)	
May 2	How securities are traded	Chapter 3 (BKM)	
May 5	Mutual funds and Other Investment Companies	Chapter 4 (BKM)	
Part II	Portfolio Theory and Practice		
May 9	Probability Review Choice Theory and Uncertainty	Chapter 4 (L) Chapter 8 (LW)	
May 12	Risk Aversion	Chapter 4 (L) Chapter 9 (LW) Chapter 10 (LW)	
May 16	The Efficient Frontier	Chapter 7 (BKM) Chapter 12 (L) Chapter 13 (L)	Problem Set 1
Part III	Equilibrium in Capital Markets		
May 19	The Capital Asset Pricing Model	Chapter 8 (BKM) Chapter 9 (BKM)	
May 23	Stochastic Opportunity Sets Arbitrage Pricing Theory and Multifactor Models of Risk and Return	Chapter 10 (BKM) Chapter 10 (I) Chapter 11 (I)	Problem Set 2
Part IV	Fixed-Income Securities		

May 26	Bond Prices and Yields	Chapter 14 (BKM)	
May 30	Midterm Exam		
June 2	The Term Structure of Interest Rates	Chapter 15 (BKM)	
June 6	Managing Bond Portfolios	Chapter 16 (BKM)	Problem Set 3
Part V	Options, Futures and Other Derivatives		
June 8	Futures Markets	Chapter 1 (H) Chapter 2 (H) Chapter 3 (H)	Chapter 6 (AP)
June 13	Forward and Future Valuations.	Chapter 4 (H) Chapter 5 (H)	
June 16	Option Markets	Chapter 20 (BKM)	Chapter 4 (AP) Problem set 4
June 20	Option Valuation	Chapter 22 (BKM)	Chapter 5 (AP)
Part VI	Applied Portfolio Management		
June 23	Portfolio Performance Evaluation	Chapter 11 (BKM) Chapter 24 (BKM)	Problem set 4
June 27	The Theory of Active Portfolio Management	Chapter 27 (BKM)	
June 30	Final Exam		