

Department of Finance
Hong Kong University of Science and Technology

FINA 221: INVESTMENT ANALYSIS AND PORTFOLIO MANAGEMENT

SPRING 2003

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Lecture	Mon, Wed, L1: 2:00—3:20pm, L2: 3:30—4:50pm
Office Hours	Mon, Wed, 5:00—6:00pm, or By Appointment

Course Description

- This course is a formal introduction to modern finance. It equips you with the analytical tools and economic reasoning necessary (i) for understanding how capital markets function, (ii) for making optimal investment decisions, and (iii) for understanding the pricing of various financial securities.
- The course is divided into 2 parts. The first part focuses on the functioning of financial markets and gives you an overview of various participants and their inter-relationships. We will then address a fundamental question in finance: How do you allocate your money among various financial instruments? In other words, we study optimal investment decisions. The issue of risk-return tradeoff will be examined in depth.
- The second part of the course looks at fixed income securities (bonds), options and futures, and other issues such as performance evaluation.
- This course is based on the materials from an undergraduate course in finance for which I served as a teaching fellow at Harvard University. The core material has also been taught to an introductory MBA class at the Graduate School of Business at the University of Chicago.
- Course website: ihome.ust.hk/~ylchan/courses/FINA221.htm. Login is required.

Course Prerequisites

- The basic requirement is FINA 111. Basic knowledge in statistics such as variance and covariances will be very helpful. For those who have not taken a course in statistics but are willing to work hard, do not worry! I will cover in class the technical concepts necessary for understanding the class material.

Course Requirement

- There will be a midterm examination, 3—4 homework assignments, 1 short writing essay and the final examination. Your grade will be based on:
 - 2-page Essay, 5%.
 - 3—4 Homework assignments, 25%
 - Midterm exam, 30%
 - Final exam, 40%
- As you can see from the grade distribution, you have to work hard THROUGHOUT the course in order to receive a good grade.

Homework Assignment

- A total of 3—4 homework assignments will be distributed to you. You are allowed to discuss and work in groups, but you have to turn in your OWN homework solution. Any one found to be copying someone else's solution will be subject to academic disciplinary actions!

Teaching Assistant

- Ms. Xiaohong Zheng, fnzxh@ust.hk. Office hours: to be determined.
- If you have questions regarding the course materials or homework assignments, you can email Ms. Zheng or visit her during her office hours or the tutorial sessions.

Textbooks

- Required textbook: *Essentials of Investments*, by Zvi Bodie, Alex Kane, and Alan Marcus, McGraw-Hill Book Company.
- Other optional readings:
 - *A Random Walk Down Wall Street*, by Burton Malkiel, W.W. Norton & Co.
 - *Stocks for the Long Run*, Jeremy Siegel, Irwin.
 - *Capital Ideas*, Peter Bernstein, Free Press.
 - *Asian Wall Street Journal* and *Financial Times*.

Tentative Course Outline

- Feb 5, 10
 - Introduction
 - The Financial System
 - Reading: Chapter 1—4
- Feb 12, 17
 - Overview of Financial Markets
 - Risk and Return: A Historical Perspective
 - Reading: Chapter 5—6.
- Feb 19, 24
 - Asset Pricing and the Present Value Formula
 - **Hydra Financial Database Demonstration in Library Computer Lab**
 - Reading: Chapter 6 (Ch. 12-13 also have some discussion on macroeconomic variables and the present value formula.)
- Feb 26, March 3
 - Asset Allocation I: One Risky Asset
 - Reading: Chapter 7
- March 5, 10
 - Asset Allocation II: Many Risky Assets
 - Reading: Chapter 7
- March 12, 17
 - Practical Asset Allocation
 - International Investments and Investment Horizons
 - Reading: Chapter 20
- March 19, 24
 - Capital Asset Pricing Model (CAPM)
 - Applications of CAPM
 - Reading: Chapter 8
- March 26, 31
 - **Midterm**
 - Trading Game in FINANCE LAB
- April 2, 7
 - Factor Models of Risk and Return
 - Efficient Markets
 - Reading: Chapter 8, 9
- April 9, 14
 - Efficient Markets (cont'd)
 - The Money Management Industry
 - Reading: Chapter 9
- April 16, 28
 - Fixed Income Securities
 - Bond Portfolio Management

- Reading: Chapter 10—11
- April 30
 - Bond Portfolio Management (cont'd)
- May 5, 7
 - Swaps
 - Forwards and Futures
 - Reading: Chapter 18
- May 12, 14
 - Forwards and Futures (cont'd)
 - Options
 - Reading: Chapter 17, 18