Course Description

This course is the first of the two-course sequence in financial theory for Ph.D. and MQF students. The course surveys the fundamental assumptions and the analytical techniques of the modern finance theory. It builds a foundation for the study of higher-level courses in investment theory and corporate finance. Topics include capital market equilibrium models, risk analysis using utility theory, state preference theory, portfolio selection, market efficiency, and empirical tests of asset pricing models.

Main References


Grading Policy

For Ph.D. students
1. Exam I, Wednesday, March 7, 2006, 27.5%.
2. Exam II, Wednesday, April 25, 2006, 27.5%.
3. Problem sets, 10%.
4. Term paper with presentation, 25%. Each student will have to submit a term paper by April 25, 2006. The term paper can be a short literature survey of a topic that is of interest to you but is not covered in class, an application of some techniques discussed in the course to a specific area, or an empirical study using current data.
After choosing a paper topic, each student should see me to discuss the feasibility of the project. Each student will present his/her research paper in class.

5. Active class participation, 10%.

For MQF students
   1. Exam I, Wednesday, March 7, 2006, 27.5%.
   2. Exam II, Wednesday, April 25, 2006, 27.5%.
   3. Problem sets, 10%
   4. Computer-related assignments, 25%.
   5. Active class participation, 10%.

Topics Covered

I. Expected Utility Theory and Portfolio Decision Problem

Huang-Litzernberger Chapter 1
Copeland-Weston Chapter 3


II. Generalized Risk and Asset Pricing

Huang-Litzernberger Chapter 2
Copeland-Weston Chapter 3


III. The Mean-Variance Frontier

Huang-Litzernberger Chapter 3
Copeland-Weston Chapter 5
Cochrane Chapter 5


IV. Market Equilibrium and the CAPM

Huang-Litzernberger Chapter 4
Copeland-Weston Chapter 6


V. **Linear Valuation and Factor Models**

Huang-Litzemberger Chapter 4
Copeland-Weston Chapter 6
Cochrane Chapter 9


VI. **State Preference Theory and Equilibrium under Complete Markets**

Huang-Litzemberger Chapter 5
Copeland-Weston Chapter 4


VII. **Empirical Tests of Asset Pricing Models**

Campbell, Lo and MacKinlay, Chapters 5, 6
Huang-Litzemberger Chapter 10
Cochrane Chapters 12, 15
Copeland-Weston Chapter 6


Additional readings


**VIII. Consumption-Based Asset Pricing**

Cochrane Chapter 1
Campbell, Lo and MacKinlay, Chapter 8


Additional readings

Constantinides George M., Habit Formation: A resolution of the equity premium puzzle, *Journal of Political Economy* 98, 519-543


IX. Other Asset Pricing Models


X. Market Efficiency and Market Anomalies


Additional readings


