COURSE DESCRIPTION
This course is an introductory PhD level course on the basic theories of asset pricing. It consists of four parts. The first part deals with individual choices under uncertainty, including expected utility theory, risk aversion, stochastic dominance, and two-period consumption portfolio problems. The second part deals with equilibrium pricing theories, including implications of no arbitrage and stochastic discount factor, risk sharing, aggregation, and consumption-based pricing in complete markets, mean-variance efficiency and the Capital Asset Pricing Model, and the Arbitrage Pricing Theory. We also explore the relation between these various pricing theories and extend the treatment of individual consumption/portfolio problems and equilibrium pricing to a multi-period setting. In the third part, we review recent developments in asset pricing by introducing some stylized facts and new theories. The fourth part provides a brief introduction to asymmetric information in financial markets.

PREREQUISITES
Although there is no prerequisite for this course, a good background in economics and mathematics can be very helpful.

COURSE GRADES
Course grades are based on four problem sets (40%) and a final exam (60%). Assignments are handed out approximately every two weeks and are due at the start of the class. Late assignments are not accepted.
TEXTBOOK AND SUPPLEMENTARY READINGS

The required textbook:


This book provides a nice, intuitive, and up-to-date treatment of some of the central ideas in asset pricing.

Recommended reference books:


Although standard text for this course for many years, this book has become somewhat obsolete. While it has reasonable coverage of many of the topics that we discuss in the early part of the course, it does not cover much of recent developments in asset pricing.


Another classic introductory text, but like Huang and Litzenberger, this book is also somewhat outdated in its perspective. However, its well-organized and detailed treatment of the covered topics makes it a useful reference.


A great book for an empirical course, and includes summaries of several theoretical topics as well.

The following three books are useful for continuous-time models:


A great, up-to-date book for asymmetric information in financial markets is:

TOPICS AND READING LIST:

Below is a rough outline of topics covered in the course, as well as some of the relevant readings from the various texts. (Readings that are labeled with “*” are recommended but not required.)

Introduction
   A. JC, Preface

   A. H&L, Chapters 1-2
   B*. JI, 1 and 5

II. Two-Period Consumption/Portfolio Problems
   JC, Chapter 1: Sections 1.1-1.3
   B*. JI, Chapter 3: pages 65-71

III. Law of One Price, No Arbitrage, and Stochastic Discount Factor (SDF)
   A. JC, Chapter 4

IV. Equilibrium in a Complete Market: Pareto Optimality, Aggregation, and Consumption-Based Pricing Models
   A. JC, Chapters 2, 3
   B. H&L, Sections 5.1-5.11, 5.12-5.15*, 5.21-5.26

V. Mean-Variance Efficiency and the Capital Asset Pricing Model (CAPM)
   A. JC, Chapter 5
   B. H&L, Chapter 3, 4.1-4.17

VI. The Arbitrage Pricing Theory (APT)
   A. JC, Section 9.4
   B. H&L, Sections 4.18-4.25

VII. Relation between Consumption-Based Pricing Models, Stochastic Discount Factors, Betas, and Mean-Variance Frontiers
   A. JC, Chapters 6, 7, 9.0-9.1 (stop at page 155)

VIII. Asset Pricing in Multi-Period Securities Markets: Intertemporal Consumption/Portfolio Problems and the Intertemporal Capital Asset Pricing Model (ICAPM)
   A. JC, Chapters 6, 7, 9.1 (page 155)-9.3, 9.5
   B. JI, Chapter 11
   C*. H&L, Chapters 7, 8
IX. Asymmetric Information in Financial Markets: An Introduction


