Finance 7100
ASSET PRICING


Additional material may be made available, either with class handouts, reserve at the library or for purchase at the book store. It is also strongly suggested that the student read a standard MBA level corporate finance textbook as the class proceeds.

Grades: Course grades will be determined by class participation and homework problem performance (40%) and a final exam (60%).

This course considers asset pricing proceeding from the most general to more specific cases. Therefore the traditional CAPM and mean-variance efficiency are considered as special cases in the context of more robust models. Option pricing is considered as special case of the more general arbitrage models.

OUTLINE and REQUIRED READING

0. Preview: Finance Steve Ross New Palgrave Entry.
   Ingersoll Chapter 1, LeRoy and Werner Chapters 8 & 9.
I. Pricing and Arbitrage Ingersoll Chapter 2, LeRoy and Werner Chapters 1-6.
   "Arbitrage" Steve Ross and Phil Dybvig an entry in the New Palgrave.
II. The General Portfolio Problem: Ingersoll Chapter 3, Merton Chapter 2
   LeRoy and Werner Chapters 11 - 13
   Grossman, "On the Efficiency of Competitive Stock Markets Where Traders Have Diverse Information."
III. The Mean Variance Portfolio Problem Ingersoll Chapter 4, LeRoy and Werner Chapter 19
   Brennan, "Capital Asset Pricing Model" New Palgrave Entry.
IV. Generalized Risk Ingersoll Ch 5, Merton Ch 2, LeRoy and Werner Ch 10


V.

K-Fund Separation

Ingersoll Chapter 6


VI.

Arbitrage Pricing Theory.

Ingersoll Chapter 6, Cochrane Sections 9.4 and 9.5

Leroy and Werner Chapter 20


VII.

Stochastic Discount Factors

The “Modern” presentation of asset pricing

Cochrane Chapters 1 through 4.

VIII. Introduction to Option Pricing

Cochrane Chapters 17 and 18, Ingersoll Chapter 14


IX. Multi-period Models

Pricing by Arbitrage

Ingersoll Chs 10 and 11, LeRoy and Werner Chs 21-26.


X. Introduction to Continuous-Time Models

Ingersoll Chapters 12 and 16, Cochrane's Appendix

Ito Processes and Ito’s Lemma

The Black-Scholes Model

The course website has a schedule and lecture notes are posted. Notes are posted so that you will spend more time in class thinking, and discussing, and less time writing. I'd like to make the class as interactive as possible since I believe that discussion is often the best way to learn. These notes are not original material and draw heavily from the readings.