Course Syllabus

Required:

Class note chapters in pdf file format can be downloaded at www.business.uiuc.edu/gpennacc. Chapters will be posted during the weekend (or earlier) prior to class.

Recommended Texts:


Other Useful References:


Review Articles:

I. Single Period Portfolio Choice and Asset Pricing

1. Expected Utility and Risk Aversion
   “Preferences When Returns are Uncertain”
   *Journal of Economic Perspectives* 1, 121-154. JS
   “Risk Aversion and Risk Premia”
   219-232. JS
   Ingersoll, Chapter 1
   “Risk Aversion and Portfolio Choice”
   Ingersoll, Chapter 3

2. Mean-Variance Analysis
   “Assumptions on Preferences and Asset Returns”
   Ingersoll, Chapter 4
   Cochrane, Chapter 5
   “The Efficient Frontier without and with a Riskless Asset”
   Cochrane, Chapter 5
   “An Application of Mean Variance Analysis: Cross-Hedging”
   89, 1182-1196. JS

3. The Capital Asset Pricing Model, Arbitrage, and Linear Factor Models
   “The Capital Asset Pricing Model”
   Cochrane, Chapter 9.1
   “Arbitrage and Linear Factor Models”
   Ingersoll, Chapter 7
   Cochrane, Chapter 9.4

4. Consumption-Savings Decisions and State Pricing
   Ingersoll, Chapters 2 and 8
   Cochrane, Chapters 1.1-1.4, 2, 3, and 4.1-4.2

II. Multi-Period Consumption, Portfolio Choice, and Asset Pricing

5. The Multi-Period Discrete Time Models
   “Intertemporal Consumption and Portfolio Choice: The Dynamic Programming
   Approach”
   Ingersoll Chapter 11
   Cochrane, Chapter 9.1

6. Multi-Period Market Equilibrium
   “Asset Pricing in the Multi-Period Model and the Lucas Model”
   MIT Press, p.506-12. R
“Rational Speculative Asset Price Bubbles”
Asset price bubbles in O. Blanchard and S. Fischer, 1989, Lectures on Macroeconomics,
Cochrane, Chapters 20.1 and 21.1

III. Contingent Claims Pricing

7. Basics of Derivative Pricing
   “Forward and Option Contracts”
   Ingersoll Chapter 14
   Cochrane, Chapter 17.1
   “Binomial Option Pricing”

8. Diffusion Processes and Itô’s Lemma
   Ingersoll Chapters 12 and 16
   Cochrane, Appendix

   “Black-Scholes Option Pricing”
   Cochrane, Chapter 17.2
   “An Equilibrium Term Structure Model”
   Ingersoll, Chapter 18
   Cochrane, Chapter 19
   “Option Pricing with Random Interest Rates”
   141-143. JS

10. Arbitrage, Martingales, and Pricing Kernels
    Battacharya and G. Constantinides, eds., Theory of Valuation: Frontiers of
    Modern Financial Theory, Rowman & Littlefield, Totowa, NJ. R
    Cochrane, Chapter 1.5 and 4.3

11. Mixing Diffusion and Jump Processes
    “Valuing Contingent Claims When Asset Prices Can Jump”

IV. Asset Pricing in Continuous Time

12. Continuous Time Portfolio Choice
    “The Dynamic Programming Approach”
    Ingersoll Chapter 13
    “The Martingale Approach”
    Returns: An Exact Solution for Complete Markets,” Journal of Financial and
    Quantitative Analysis 37, 63-91. R

13. Asset Pricing in Continuous Time
“An Intertemporal Capital Asset Pricing Model”
Cochrane, Chapter 9.2-9.3, 9.5
Ingersoll Chapter 15
“Breeden’s Consumption CAPM”
“A Cox-Ingersoll, and Ross Production Economy”

14. Time-Inseparable Utility
Cochrane, Chapter 21.2
“Recursive Utility”

15. Behavioral Finance and Asset Pricing

V. Additional Topics in Bond Pricing

16. Term Structure of Interest Rates Models
   “Equilibrium models”
   “Arbitrage-Free Models of the Term Structure”
   “Fixed-Income Derivatives”

17. Models of Credit Risk:
   “Modeling Credit Risk”
Ingersoll Chapter 19

VI. Valuation Under Asymmetric Information

4
18. Equilibrium with Private Information
   “The Grossman Model”
   Have Diverse Information,” Journal of Finance 31, 573-585. JS
   “A Noisy Rational Expectations Equilibrium”

19. Asymmetric Information
   “Market Micro-Structure: The Kyle Model”
   JS
   “Notes on The Allocation of Credit and Financial Collapse”
   Journal of Economics, August, 455-470. JS

Articles marked R are on reserve under Finance 591 at the Business and Economics Library.
Articles marked JS can be downloaded from JSTOR at http://www.jstor.org/browse.

There will be an in-class mid-term examination on Monday, March 7. The final
examination will be as scheduled during the final examination week. Homework problems will
be assigned weekly and students will be randomly selected to present their answers during class.
Plus and minus grades will be used.