Course Description

This course provides an introduction to the theory of asset pricing in financial economics. It is intended for doctoral students. The primary textbook for the course that I will follow closely is *Asset Pricing (revised edition)* by John H. Cochrane, Princeton University Press, 2005.

Course Requirements

There will be two or three written assignments and a final exam. The assignments are due before the class on the due date. The final exam will be closed-book. You can bring one standard size (8.5 x 11) cheat-sheet (both sides) for the final exam.

Grading

Your grade will be based on your class participation, assignments, and the final exam. The weights are given below:

- Participation and Assignments: 50%
- Final Exam: 50%

Don’t hesitate letting me know if you think that you were adversely affected by a grading error (you do not have to report any grading errors in your favor).

Attendance

Attendance is expected for every class. However, if you have to miss a class, you do not have to ask for my permission.

Academic Integrity

Students have the responsibility to know and strictly observe the University of Arkansas Academic Integrity regulations as described at [http://provost.uark.edu/245.php](http://provost.uark.edu/245.php). Violators will be sanctioned according to the Academic Integrity Sanctions guidelines as described at [http://provost.uark.edu/246.php](http://provost.uark.edu/246.php).
Preliminary Course Outline

I. Mathematical Stuff (will be covered throughout the course)
   a. Linear spaces, projections, inner products
   b. Optimization and separating hyperplanes
   c. Random variables and probability theory
   d. Conditional probability and conditional expectations
   e. Markov processes and Brownian motion
   f. Utility theory

II. Introduction to Consumption-Based Model and its Implications

III. The Basic Consumption-Based Model and General Equilibrium

IV. Contingent Claims Markets

V. The Discount Factor

VI. Mean-Variance Frontier and Beta Representations

VII. Relation Between Discount Factors, Betas, and Mean-Variance Frontiers

VIII. Implications of Existence and Equivalence Theorems

IX. Conditioning Information

X. Factor Pricing Models

XI. Option Pricing