

Finance Theory
FINN 6043
Spring 2015

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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>. Violators will be sanctioned according to the Academic Integrity Sanctions guidelines as described at <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