

University of Massachusetts  
School of Management  
SOM 871: Introduction to Financial Economics  
Professor Kazemi, Fall 2019  
Mondays 4:00-6:00, Room 219  
Office Hours: Tuesdays 11:30-1:00, Thursdays 2:00-4:00

1. Description

This course is an introductory course in the modern theory of finance for first year Ph.D. students in finance, accounting, and economics. The course presents and develops the theoretical models and empirical evidence of financial economics from the first principles. No prior knowledge of finance is required. However, students are expected to have strong backgrounds in microeconomics, probability and statistics, and calculus.

2. Reading Materials:

There are no required textbooks. I will provide students with required reading materials as we go through the course. Some of them will be available on Blackboard.

3. There are a few introductory books that I recommend.

- (a) Copeland and Weston, "Financial Theory and Corporate Finance." 4th or 5th ed. The book is poorly written and covers too many topics, but it is still a useful reference
- (b) Back, "Asset Pricing and Portfolio Choice Theory,"
- (c) Campbell, "Financial Decisions and Markets: A Course in Asset Pricing."
- (d) Danthine and Donaldson, "Intermediate Financial Theory."
- (e) Leroy and Werner, "Principles of Financial Economics."
- (f) James Bradfield, "Introduction to the Economics of Financial Markets." Basic introduction to asset pricing
- (g) Hens and Rieger, "Financial Economics: A Concise Introduction to Classical and Behavioral Finance." Coverage is similar to ours. No coverage of corporate finance

These advanced books provide more in-depth discussions of the topics covered in this course:

- (a) Cochrane, "Asset Pricing".
- (b) Pennachi, "Theory Asset Pricing."
- (c) Ingersoll, "Theory of Decision Making Under Uncertainty".
- (d) Smith, "The Modern Theory of Corporate Finance".
- (e) Tirole, "The Theory of Corporate Finance".

4. Grading:

- (a) 4 Problem Sets (each 20%). Problem sets will be available 1 week before due dates.
- (b) Final exam (20%).

5. Outline

(a) Theory of Finance Under Certainty

i. Allocation of Wealth by Individuals:

Here we will discuss some basic ideas from microeconomics. We will learn about utility maximization, investment-consumption decision, and Fisher Separation results.

ii. The Theory of the Firm

We extend the results of the previous part to business firms. We will learn about profit maximization and capital budgeting.

(b) Theory of Finance Under Uncertainty

i. Expected Utility Approach

We discuss the most important paradigm of modern finance: the expected utility hypothesis. We will learn about risk aversion, decision making under uncertainty, and stochastic dominance.

ii. Behavioral Finance

We will discuss the prospect theory and its implications for decision making under uncertainty

iii. Arrow-Debreu Model

The most basic and most fundamental model in finance was jointly developed more than 40 years ago by Arrow and Debreu, and after so many years, it is still the most complete and elegant model in all of economics and finance.

iv. Mean-Variance Approach

Here we discuss the foundations of modern portfolio theory.

v. CAPM, APT & Factor Models

Here we discuss the most famous of all financial models. It is based upon unrealistic assumptions, but because of its simplicity and transparent results, it is widely discussed and used.

vi. Options and Futures

The most important recent development in finance has been in the area of contingent claims valuations. These models not only are rigorous and elegant, but also are used widely by traders and market makers.

vii. Information Economics, Efficient Markets and Behavioral Finance

Economics of information provides the foundation for the efficient market hypothesis.

(c) Corporate Finance and Governance

i. Foundations of Corporate Finance and Corporate Financial Strategy

Discuss corporate governance and issues related to separation of ownership and management in modern corporations.

ii. Corporate Investment & Payout Policy

Discuss corporate investment and dividend policy and their impact on valuation of corporations.