Course Description

This course offers a unified theoretical treatment of some fundamental topics in the area of asset pricing theory. The topics include: Optimal Portfolio choice, Market Equilibrium and Fundamental Theorems of Asset Pricing.

Course Objective

This first year PhD course mainly emphasizes the fundamental ideas, mathematical techniques and main results in the area of asset pricing theory. It provides solid background to more advanced topics of financial economics.

Textbook

**Course Assessment**

The course requirements consist on two problem sets (the questions are chosen from the textbook), one presentation on assigned relevant topic, and a final exam.

**Grading**

Problems sets, presentation and final exam will count 30%, 30%, 40%.

**Honor Code**

All students are required to read and abide by the Code of Student Academic Integrity. Violations of the Code of Student Academic Integrity, including plagiarism, will result in disciplinary action as provided in the Code.

**Academic Diversity**

*The Belk College of Business strives to create an inclusive academic climate in which the dignity of all individual is respected and maintained. Therefore, we celebrate diversity that includes, but is not limited to ability/disability, age, culture, ethnicity, gender, language, race, religion, sexual orientation, and socio-economic status.*

**Important Date**

- August 19, First day of class
- September 2, Labor Day (no class)
- October 7-8, Student Recess
- November 27-30, Thanksgiving Break (no class)
- December 4, Last day of class
Other Reading References

The following textbooks are closely related to Part I – Part II of *Theory of Asset Pricing*:


We assume standard knowledge of linear algebra when we discuss discrete-time asset pricing model. Please feel free to check any available undergraduate-level textbook on linear algebra.

The following textbooks are helpful to better understand Part III – Part V of *Theory of Asset Pricing*:


For more mathematics reading regard to Part III – Part V of *Theory of Asset Pricing*, we recommend the following:


Recommended Reading Articles

Part I. Single-Period Portfolio Choice and Asset Pricing

Expected Utility and Risk Aversion


Mean-Variance Analysis


No-Arbitrage Approach


Equilibrium and Arbitrage


Part II. Multiperiod Consumption, Portfolio Choice, and Asset Pricing

A Multiperiod Discrete Time Asset Pricing: No-arbitrage


Multiperiod Market Equilibrium


Part III. Contingent Claims Pricing


Part IV. Asset Pricing in Continuous Time

Continuous-Time Consumption and Portfolio Choice


Equilibrium Asset Returns


