BUSI 521: Asset Pricing Theory
ECON 505: Financial Economics I
Spring 2022

Meeting Details

MW 2:00-3:15
Room 317, McNair Hall
https://jgsb.zoom.us/j/96260714073?pwd=N3lvREVjYOtKUlhuSlg5SmVsVmhMZz09

Instructor

Kerry Back
J. Howard Creekmore Professor of Finance and Professor of Economics
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Textbook

Asset Pricing and Portfolio Choice Theory, Oxford University Press, 2nd Edition, 2017.

Course Description

This course is an introduction to asset pricing and portfolio choice theory with a little on empirics. This is the foundation for the 'investments' branch of finance. Understanding how assets are priced is also important for issuing entities, like corporations, so asset pricing is also part of the foundation for corporate finance. Of course, prices are determined by supply and demand. We take supply (a topic in corporate finance) as given in this course and study demand (portfolio choice). Mostly, we'll work in the neoclassical framework, but we'll also touch on models of asymmetric information and heterogeneous beliefs.

Uncertainty and time are the two key elements of portfolio choice. We will start with single-period models and then move to dynamic models in both discrete and continuous time. We'll develop the theory of dynamic programming in continuous time and use it to study portfolio choice and some corporate investment decisions. Dynamic programming and other aspects of the mathematics of uncertainty in continuous time are useful in other areas of economics and finance as well.

Schedule

1. Utility and risk aversion
2. Portfolio choice
3. Stochastic discount factors
4. More stochastic discount factors
5. Mean-variance analysis
6. More mean-variance analysis
7. Factor models
8. More factor models
9. Extracting factors empirically
10. Testing factor models
11. General equilibrium
12. Representative investors and the equity premium puzzle
13. MIDTERM EXAM (February 23)
14. Rational expectations and informational efficiency
15. Heterogeneous beliefs
16. Dynamic models
17. Futures
18. Brownian motion and stochastic calculus
19. Stochastic discount factors in continuous-time models
20. Dynamic programming in continuous time
21. Portfolio choice and ICAPM
22. Options
23. Fundamental PDE
24. Real options
25. REVIEW

Grading

Grades will be based 20% on biweekly individual homework assignments, 30% on the midterm exam, and 50% on the final exam.

Honor Code

The Rice University Honor Code applies to all work in this course. The intent of the Honor Code in general and specifically in this course is to ensure that each student claims and receives credit for their own efforts. The intent is not to limit the valuable exchange of ideas through discussion among fellow students. The atmosphere at Rice University must be one of academic and personal integrity. Any suspected violations of the Honor Code are submitted to the Rice University Honor Council.

Disability Accommodations

Any student with a disability requiring accommodations in this class should contact me after contacting the Disabled Student Services office.