1 Description

This course will focus on models that have been constructed to jointly explain the dynamics of asset prices and macroeconomic quantities. It will also include a basic introduction to stochastic calculus, to help students feel comfortable working with models formulated both in discrete time and continuous time.

2 Evaluation

There will be weekly problem sets, which will be graded for completion. Students may work together, but must turn in individual solutions. There will be a take-home final exam, which will involve replicating the results of an academic paper. Problem sets and class participation will make up 25% of the final grade, and the exam will make up the remaining 75%.

3 Readings

There is not a main reference for this course. However, some readings will come from textbooks. In the list below, all required readings are marked with an asterisk. The rest are included as useful references for further study. Note: these readings are preliminary and subject to revision.
3.1 Stochastic Modeling in Continuous Time


3.2 Equilibrium with Complete Markets

3.3 Habit Formation


3.4 Long-Run Risks


3.5 Disaster Risk


3.6 Limited Participation


