

#### YEAR 1: FALL

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This course covers basic consumer and producer theory and the theory of general equilibrium. Also covered are applications of simple game theory such as oligopolies, contests, and public good provision problems.

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The first part of this course deals with topics in probability theory, including random variables, conditional distributions, expectation, and multivariate distributions. The second part presents topics in mathematical statistics, including moment estimation, hypothesis testing, asymptotic theory, and maximum likelihood estimation.

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This course focuses on continuous time models in capital market theory. Topics covered include capital market equilibrium, option pricing, and the term structure of interest rates. The mathematics necessary to analyze these problems are also presented, including stochastic (Ito) calculus, stochastic di erential equations, and optimal control.

### YEAR 1: SPRING

<sup>1</sup> This course comprises four modules. The first treats social choice theory and the second covers decision under risk and uncertainty (altogether, one third of the course). The third is an introduction to non-cooperative game theory while the fourth covers topics in information economics.

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This course is divided into three sections. Part I covers consumption and asset pricing. Part II introduces business-cycle theory with flexible prices. Part III covers monetary models, including business-cycle theory with nominal rigidities and the role of monetary policy.

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This course provides an understanding of the econometric theory that underlies common econometric models. The focus is on regression models and their many extensions. Topics include finite and asymptotic properties of estimators, consistency and limiting distributions, specification issues, heteroskedasticity, autocorrelation, endogeneity and simultaneity, and nonlinear model estimators including maximum likelihood and the generalized method of moments.

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The primary purpose of this course is to expose doctoral students to recent developments in the theory of corporate finance. The course will focus on theory and evidence in corporate finance. Possible topics include new theoretical frameworks, signaling theory, the economics of information, agency theory, new issues of securities, recapitalizations, stock repurchases, and the market for corporate control.

### YEAR 2: FALL

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#### A.A

The course covers a variety of asset pricing topics and models. The first part of the course deals with representative agent models in economies with a single risky asset. The second part of the course

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The course is intended to generate enthusiastic, high quality intellectual activity around the course material. Focuses on the development of skills that will help students become conversant enough with basic theory and the current literature on asset pricing that would permit them to read critically and analyze papers in this area, develop enough expertise in selected empirical methods in finance that they will be able to use these techniques in their research, and to find potential thesis topics.

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