

Finance Electives

308 - Capital Markets and Investment Strategy

Capital Markets and Investment Strategies is a course that covers the fundamentals of making sound investment decisions using modern finance theory. The course focuses primarily on equity securities. Our ultimate goal in the class is constructing a portfolio of equities that delivers the best possible expected return given the risk inherent in holding the portfolio. To that end, we will discuss ideas about how to find investment opportunities, how to assess the rewards and risks of these opportunities, how best to hold these assets in a portfolio, and how to gauge the difference in returns we should expect to receive from this portfolio from those we actually earn.

309 - Fixed Income Securities and Markets

This course provides a comprehensive overview of the essentials of fixed income securities. In particular, the course introduces the principal classes of fixed income securities; money market instruments, Treasury securities, agency securities, corporate debentures, and mortgage-related instruments. In particular, we focus on the institutions, pricing, risks, and hedging of these securities. The course begins with Treasuries, securities affected primarily by interest rate risk. We discuss the mechanisms by which Treasuries are sold, how they are priced, quantifying their interest rate risk, and pricing of securities to manage risk. We examine the pricing of corporate bonds and derivatives that enable investors to hedge credit risk. Finally, the course addresses securitizations in the form of mortgage-backed securities and collateralized mortgage obligations.

322 - Real Estate Finance and Investment

This course takes the perspective of the investor in real estate deals who may be an individual or financial manager of a real estate firm, and develops concepts and techniques for valuing and financing residential and income-producing property, i.e., for structuring real estate deals. We consider how the characteristics of the property, the local market, the participants, and the institutional environment influence real estate decisions. This course will provide you with:

- the fundamental skills for analyzing and structuring mortgages and real estate deals
- intuition for identifying investment opportunities and avoiding the pitfalls in real estate decisions

352 - Macroeconomic Analysis of Capital Markets

This course develops a unified framework suitable to study economic crisis. The central questions addressed are: What causes economic crisis? What is the impact of economic crisis on capital markets? What can we do in terms of economic policies to alleviate crisis in the future? The course aims to build a solid foundation for understanding the cyclical behavior of central economic and financial variables such as GDP, employment, inflation, expected returns, and stock prices. The course will cover market-clearing and traditional and new Keynesian theories of business cycles. The analysis will be applied to current events, highlighting their implications for global capital markets. The teaching will be done through lectures, cases, and discussions of major economic crisis in the history of global economies.

418 - Advanced Derivative Securities

This course covers advanced topics on derivative securities. We will develop the Black-Scholes model and more general option pricing relations. We will also explore how these pricing concepts can be applied to other assets, including exotic derivatives, interest rate options, warrants, corporate bonds and credit derivatives. We will also discuss applications of these derivative securities in various settings, such as hedging and risk management, portfolio insurance, index arbitrage, and corporate finance. This course is highly quantitative and requires backgrounds in calculus, probability, and statistics. Therefore, it is suitable for students who are willing to take up the challenges in understanding the financial theories behind derivative securities. The teaching will be done through lectures, case presentations, and discussions of current market conditions in different derivatives markets.

450 - Alternative Investment

This course is designed to provide basic understanding of the sources and uses of capital managed by hedge funds. The course will cover the steps to organize and create a hedge fund, various strategies employed by funds to generate returns, risk management theory and the performance measurement techniques used by funds. The course will also discuss current media reports and events related to the sector and attempt to analyze successes and failures.

This course is designed for action-based learning. All instructions will be done in the Tozzi center. Students will be required to use Bloomberg, FactSet, and Barra to obtain data and test various hedge fund strategies. Student-groups will be responsible for coming up with a business plan of establishing a hedge fund. The plan should contain discussions of investment philosophy/strategy, operations, and marketing/client relationship issues. Each group will present their plan in front of potential investors at the end of class.

650 - Alternative Investments

This course is designed to provide basic understanding of the sources and uses of capital managed by hedge funds. The course will cover the steps to organize and create a hedge fund, various strategies employed by funds to generate returns, risk management theory and the performance measurement techniques used by funds. The course will also discuss current media reports and events related to the sector and attempt to analyze successes and failures.

652 - Macroeconomic Analysis of Capital Markets

The course develops a solid framework for understanding the cyclical behavior of central economic and financial variables such as GDP, unemployment, inflation, expected returns, and asset prices. The central questions addressed are: What causes economic crisis? What is the impact of economic crisis on global capital markets? What are the policy implications of economic crisis? The course will cover market-clearing and traditional and new Keynesian theories of business cycle. The course will be organized around several case presentations that cover major economic (and financial) crisis in the history of global economies. Lectures on the underlying economic theories will be provided only to the extent of understanding the historical and current events in global capital markets.