

FIN

Finance

FIN 524: Asset Pricing

This course will give students an overview of asset pricing theory, estimating asset pricing models, pricing options and other derivatives. Topics covered will include Consumption-Based Pricing Model and Discount Factors; Mean-Variance Frontier and Beta Presentations; Factor Pricing Models (Capital Asset pricing Models and Arbitrage Pricing Theory); Specification and testing of linear factor models; Hansen-Jagannathan bounds; Option pricing and Black-Scholes Formula; Term Structure of Interest Rate; Numerical methods for derivative pricing.

3 credits, Letter graded (A, A-, B+, etc.)

FIN 525: Portfolio Management

This course will give students an overview of the basics of investing, portfolio management, and risk management, from the perspective of efficient markets theory. Topics covered will include the institutions of the modern financial system and the types of assets available for investment; models of risk, the risk-return tradeoff and utility; optimal portfolio choice; the Capital Asset Pricing Model; multifactor models of return; portfolio evaluation metrics; basic dynamic portfolio management strategies; the efficient markets hypothesis, and possible departures from market efficiency.

3 credits, Letter graded (A, A-, B+, etc.)

FIN 536: Financial Management

How managers should interface with accounting and finance departments and how firms meet their financial objectives. Financial tools and techniques, which can be used to help firms maximize value by improving decisions relating to capital budgeting, capital structure, and working capital management are explained. Related topics include multinational financial management, risk management, and mergers and acquisitions.

3 credits, Letter graded (A, A-, B+, etc.)

FIN 539: Investment Analysis

Modern investment and traditional approaches to investment valuation, selection and management. Modern investment theory, including asset pricing models and efficient market hypotheses are explained. Traditional approaches to stock and bond selection, including fundamental analysis and technical analysis, will be explained in detail. Investment management strategies for both

individual and institutional investors will be developed and discussed.

3 credits, Letter graded (A, A-, B+, etc.)

FIN 540: Probability and Statistics for Finance

A survey of probability theory and statistical techniques with applications to finance situations. Topics covered include regression; binomial, Poisson, normal, exponential, and chi square random variables; tests of hypotheses; confidence intervals; tests; and analysis of risk, variance, regression, and contingency tables. Offered in Fall.

*3 credits, Letter graded (A, A-, B+, etc.)
May be repeated 1 times FOR credit.*

FIN 541: Bank Management

The goal of the course is to introduce students to the banking industry, and develop skills necessary to effectively manage a financial institution. We will start with an overview of the banking industry and its regulatory environment. Then we will learn how to analyze bank performance, how to measure and manage various risks associated with financial intermediation, and how to maximize bank market value.

3 credits, Letter graded (A, A-, B+, etc.)

FIN 545: Capital Markets and Financial Institutions

Financial institutions and capital markets form the basis of the financial system in our global economy. Capital markets are the conduits in which capital flows through financial institutions to a network of organized and over the counter markets. Students will learn how many of these markets work in tandem to propel our economy forward. Topics include money markets, foreign exchange markets, derivative markets, the banking industry and the business of banking. The role of money in the capital markets and a variety of financial products offered by financial institutions will be explained.

3 credits, Letter graded (A, A-, B+, etc.)

FIN 547: Fundamentals of Fixed Income Analysis

A concrete understanding of the fundamentals of fixed income security analysis. Study of the basics of bond analysis, such as the relationship between the price and yield of a bond, the sensitivity of a bond's price to changes in yield, and measuring the total return on a bond. We will analyze the determinants of interest rates and how different market participants interact. Trading strategies, evaluate their risk, and perform ex-post analyses will be discussed.

3 credits, Letter graded (A, A-, B+, etc.)

FIN 549: Risk Management

This course introduces students to risk management primarily from the perspective on non-financial corporations. Focus will be placed on why firms should or should not manage risk, while demonstrating how risk management can be used to reduce the probability that a firm will encounter financial distress or earnings volatility, and whether such activities can enhance shareholder value. The course offers an integrated approach to risk management by combining concepts, tools, and techniques which derive from the financial risk management and insurance disciplines. The course texts focus on pure risk, or the use of insurance products to reduce risk and financial risk management, including commodity price, exchange rate, interest rate, and credit risk management. Financial derivative products will be used extensively; however, the focus will be more on the appreciation of derivative products to hedge risk, rather than the valuation of derivatives.

3 credits, Letter graded (A, A-, B+, etc.)

FIN 552: Mergers and Acquisitions

The focus of this course is on buying a controlling stakes in firms. The main topics to be covered are: Growth through acquisitions, Critical Steps in the M&A Process, financial valuation of mergers and friendly acquisitions, hostile takeovers and buyouts. The course should be of interest to students interested in pursuing careers as private equity investors, advisors in investment banking and corporate managers.

Prerequisite: MBA 502, MBA 504

Fall, 3 credits, Letter graded (A, A-, B+, etc.)

FIN 562: Data Analysis for Finance

Recent innovation of information technology along with the fast growth of applications on the Internet have resulted in an explosion of financial data, new ways of data collection and storage, as well as additional opportunities for business and research based on the data. This course enables students to analyze financial data based on traditional financial models. The major topics include asset pricing, capital budgeting, risk management, pension fund management, portfolio analysis, and stock hedging. Students will learn (review) the models with a focus on their implementation using Microsoft Excel, Matlab, or other programming languages. In addition, the basic statistical models, such as regression, time series models and probability models will be used. Big Data (data mining) technology will be introduced with a focus on financial

data analysis. The main topics include classification, clustering, association analysis and anomaly detection. The key objectives of this course are: (1) to review the classical financial models and statistical models; (2) to teach the concepts of data mining with a focus on financial applications; (3) to provide students extensive hands-on experience in applying the concepts in financial data applications.

3 credits, Letter graded (A, A-, B+, etc.)

FIN 576: Real Estate Finance

This course is not a lesson on how to get rich quick in real estate with no money down. It will be a study of the major aspects of real estate finance, user decision making and investment from the perspective of corporate, private, and public owners; investors; and users. Commercial properties will be emphasized. The course begins with an overview of the fundamentals of commercial real estate and builds on these concepts as we consider the forces that influence the cyclical, fragmented, and inherently local business of real estate. These foundation concepts are further considered in detail in a series of four case studies that will be completed by the students and discussed in class by the instructor. The course will expose students to current (real world) real estate finance, user decision making and investment situations. The course is case-based, and students will be challenged to think on their feet in class. Students will have the opportunity to develop their business presentation skills through case discussions and project presentations.

3 credits, Letter graded (A, A-, B+, etc.)

FIN 578: Behavioral Finance

Behavioral Finance examines how individuals' attitudes and behavior affect their financial decisions. This course reviews recent research on possible mispricing in financial markets due to the nature of psychological biases. Moreover the course deals with behavioral finance models explaining investor-behavior or market anomalies when rational models provide no sufficient explanations. Topics will include among others overconfidence, prospect-theory, heuristic-driven biases and frame dependence.

3 credits, Letter graded (A, A-, B+, etc.)

FIN 580: Finance Research Practicum

The Finance Research Practicum is a graduate-level finance capstone course in which students work in teams on projects proposed by external sponsors. A goal of this course is to provide students with an outstanding opportunity to work with leading industry practitioners on important business problems,

while helping students bridge the gap between theory and practice, and introducing them to the broader financial community. This course is only for Master of Science Finance students.

3 credits, Letter graded (A, A-, B+, etc.)