

FINANCE (FIN)

Courses primarily for undergraduates:

FIN 3010: Principles of Finance

Credits: 3. Contact Hours: Lecture 3.

Prereq: ECON 1010 and ACCT 2840 and STAT 2260

Introduction to financial management with emphasis on corporate financing and investment decision making, time value of money, asset valuation, capital budgeting decision methods, cash budgeting, and financial markets. (Typically Offered: Fall, Spring, Summer)

FIN 3100: Corporate Finance

Credits: 3. Contact Hours: Lecture 3.

Prereq: FIN 3010 and (credit or enrollment in MATH 1510 or MATH 1600 or MATH 1650)

Theory used in a firm's investment and financing decisions. Analysis of environment in which financial decisions are made; applications of analytical techniques to financial management problems. (Typically Offered: Fall, Spring, Summer)

FIN 3200: Investments

Credits: 3. Contact Hours: Lecture 3.

Prereq: FIN 3010 and (credit or enrollment in MATH 1510 or MATH 1600 or MATH 1650)

Introduction to securities and markets from the viewpoint of the individual investor. Emphasis on mechanics of trading, measurement of return and risk, behavior of security prices, valuation of stocks and bonds, mutual funds, portfolio selection techniques, and performance evaluation. (Typically Offered: Fall, Spring)

FIN 3300: Financial Markets and Institutions

Credits: 3. Contact Hours: Lecture 3.

Prereq: FIN 3010

Introduction to the structure and operations of the United States financial system and its markets and institutions. Emphasis on developing an integrated understanding of markets and financial service providers including global linkages. (Typically Offered: Fall, Spring)

FIN 3340X: Introduction to Financial Technologies and Cryptocurrencies

Credits: 3. Contact Hours: Lecture 3.

Prereq: FIN 3010

Introduction to the emerging role of financial technologies and cryptocurrencies in the financial services industry and the impact these technologies are having in areas such as payment systems, financial regulation, crowdfunding, robotic investments, and cyber security. Explore the history and origins of crypto coins, markets for trading cryptocurrencies, and role of digital money as a medium of exchange and financial asset, including valuation, risk, and correlation with other investments. (Typically Offered: Fall, Spring)

FIN 3610: Personal Risk Management and Insurance

Credits: 3. Contact Hours: Lecture 3.

Prereq: FIN 3010

Risk concepts and the use of insurance by individuals and families. Emphasis on the insurance mechanism and methods of dealing with income, property, and liability risks. (Typically Offered: Fall, Spring)

FIN 3710: Real Estate Principles

Credits: 3. Contact Hours: Lecture 3.

Prereq: ECON 1010.

Legal, economic, social and financial aspects of real estate, including property rights, contracts, mortgage instruments, tax factors, brokerage, valuation, risk and return analysis, financing techniques, and investments. (Typically Offered: Summer)

FIN 4100X: Corporate Financial Planning and Analysis

Credits: 3. Contact Hours: Lecture 3.

Prereq: FIN 3100

Advanced study of corporate financial planning and cash flow management. Major topics include strategic planning and budgeting, analysis of business performance, forecasting and modeling, and financial reporting. (Typically Offered: Spring)

FIN 4150: Business Financing Decisions

Credits: 3. Contact Hours: Lecture 3.

Prereq: FIN 3100

In depth study of the firm's external financing decision. Emphasis on the development of cash flow statements, projected financing needs and the selection of the appropriate financing instrument. Focus on case studies and application of developed techniques on actual field project. (Typically Offered: Fall, Spring, Summer)

FIN 4240: Financial Futures and Options

Credits: 3. Contact Hours: Lecture 3.

Prereq: FIN 3200 and (STAT 3260 or STAT 3410)

Advanced study of pricing and using derivatives - instruments deriving value from fundamental items such as commodities, currency exchange rates, market indices, equities and bonds. Addresses basic building blocks of derivatives (i.e., forwards, futures, options and swaps) and relevant current topics and issues. (Typically Offered: Fall, Spring)

FIN 4250: Security Analysis and Portfolio Management

Credits: 3. Contact Hours: Lecture 3.

Prereq: FIN 3200 and (STAT 3260 or STAT 3410)

Advanced study of security analysis, security selection techniques and portfolio management. Emphasis on the applications of methods learned via the selection and evaluation of a portfolio of actual securities purchased in securities markets in the U.S. or abroad. Tracking and periodic reporting of the portfolio's performance relative to standard benchmarks is also required. (Typically Offered: Fall, Spring)

FIN 4260X: Quantitative Investment Analysis

Credits: 3. Contact Hours: Lecture 3.

Prereq: FIN 3200 and (STAT 3260 or STAT 3410)

Introduction to the use of advanced statistical and machine learning techniques in the practice of portfolio construction. Topics include regularization and tree-based investment techniques, characteristic-based and trend-following investing, and multivariate GARCH analysis. Provides essential analytics training needed for investment management. (Typically Offered: Spring)

FIN 4270: Fixed Income Securities

Credits: 3. Contact Hours: Lecture 3.

Prereq: FIN 3200

Valuation of fixed income securities, including pricing conventions, term structure of interest rates, default, duration, and hedging of interest rate risk with derivatives. Analysis of bond market sectors, including treasury, agency, corporate, sovereign, municipal, and residential mortgage bonds.

FIN 4280: Advanced Fixed Income Analysis and Portfolio Management
(Dual-listed with FIN 5280).

Credits: 3. Contact Hours: Lecture 3.

Prereq: FIN 4270

Advanced analysis of fixed income markets and securities, including valuation and trading of treasury securities, corporate bonds, mortgage backed securities. Analysis of structured financial securities, including CDO, CMBS, and ABS. Analysis of active and passive investment strategies for managing fixed income portfolios. Students are required to manage a fixed income portfolio for an institutional investor. A top-down approach to portfolio management is assumed, with active bets taken on market direction, duration, yield curve, and credit spreads.

FIN 4310: New Venture Financing

(Cross-listed with ENTSP 4310).

Credits: 3. Contact Hours: Lecture 3.

Prereq: FIN 3100 or [(ENSTP 3130 or MGMT 3130) and FIN 3010]

Exploration of the foundations of financing entrepreneurial companies. Emphasis on the roles of the entrepreneurs, venture capitalists, and limited partners in the full financing cycle of early-stage ventures, including pitching and raising capital, deal sourcing and due diligence, deal structuring, and post-investment management. Extensive use of case studies and interactive presentations to a mock investor-based board of directors to illustrate the key concepts and processes involved in start-up financing. (Typically Offered: Spring)

FIN 4350: Venture Capital, Private Equity, and Mergers and Acquisitions

Credits: 3. Contact Hours: Lecture 3.

Prereq: FIN 3100 and FIN 3200 and (STAT 3260 or STAT 3410)

An advanced investments class that focuses on alternative investments. Topics include techniques for valuing public and private firms, venture capital finance, investment banking, private equity finance, leveraged buyouts, hedge funds, the structure and financing of mergers and acquisitions, and divestitures. (Typically Offered: Spring)

FIN 4450: Bank Management Decisions

Credits: 3. Contact Hours: Lecture 3.

Prereq: FIN 3100 or FIN 3200 or FIN 3300 or ECON 3530

Analysis of operations of depository financial institutions from management viewpoint. Emphasis on evaluating performance, policy formation, asset and liability management, the role of capital, and the operating environment. (Typically Offered: Fall, Spring)

FIN 4500: Analytical Methods in Finance

Credits: 3. Contact Hours: Lecture 3.

Prereq: (STAT 3260 or STAT 3410) and (FIN 3010 or ECON 3010)

Applied empirical methods commonly employed in the analysis of firm and market data. Specific applications to financial and agricultural markets. Experiential learning experience using lectures with frequent in-class computer work sessions. Experience with financial and agricultural data sources. Application and interpretation of empirical techniques. (Typically Offered: Fall, Spring)

FIN 4550: Risk Modeling

Credits: 3. Contact Hours: Lecture 3.

Prereq: (FIN 3010 or MATH 2400); (STAT 3260 or STAT 3410)

Introduction to predictive modeling and business analytics in the finance and insurance industry. Basic statistical/computing skills, analytical thinking, and business acumen. Develop practical data analytic skills based on building real analytic applications on real data. (Typically Offered: Fall, Spring)

FIN 4560: Financial Modeling

Credits: 3. Contact Hours: Lecture 3.

Prereq: ACCT 2850 and FIN 3010 and (STAT 3260 or STAT 3410)

Applying computers to business applications especially using Excel in finance related work.

FIN 4620: Corporate Risk Management and Insurance

Credits: 3. Contact Hours: Lecture 3.

Prereq: FIN 3100

Analysis of an organization's approaches to the management of price, credit, and pure risk. Emphasis on the consideration and selection of risk control and financing treatments and the decision making framework underlying the alternatives selected. Covers commercial insurance, self-insurance, and alternative financing arrangements. (Typically Offered: Fall)

FIN 4720: Real Estate Finance

Credits: 3. Contact Hours: Lecture 3.

Prereq: FIN 3010 *and* (STAT 3260 *or* STAT 3410)

Introduction to the techniques of assessing the value of real estate and real estate financing instruments.

FIN 4740: Real Estate Investment

Credits: 3. Contact Hours: Lecture 3.

Prereq: (FIN 3710 *or* FIN 4270 *or* FIN 4720) *and* (STAT 3260 *or* STAT 3410)

Introduction to theories and methods of investment analysis applied to real estate. Studies cash flow analysis, alternative measures of investment performance, the impact of the financing decision on real estate investment risks and return, and various real estate financing techniques. Covers cases involving more complex financing and capital markets tools used in real estate. (Typically Offered: Fall, Spring)

FIN 4800: International Finance

Credits: 3. Contact Hours: Lecture 3.

Prereq: FIN 3100, FIN 3200 *or* FIN 3300

Advanced study of currency market equilibrium, use and analysis of currency derivatives, hedging currency risk, and additional topics, which could include multinational capital budgeting, taxation, raising capital internationally, international portfolio diversification, international capital market equilibrium, political and country risk, financing international trade, multinational corporate treasury management, and current issues. (Typically Offered: Fall, Spring)

FIN 4900: Independent Study

Credits: 1-3. Repeatable.

Prereq: Instructor Permission for Course

FIN 4910: International Study Course in Global Capital Markets

Credits: 3.

European capital markets and multinational corporate finance with focus on banking, capital markets, and corporate finance in a particular European country. Exposure to European capital markets, the European Monetary Union and the banking system. Current and historical banking practices within the EU and how they changed since the EMU implementation. Understand financial decisions faced by firms located in the EU. Study banks, institutions, and companies in Europe to gain specific knowledge of their practices. Learn about the culture and general economy of Europe during the in country visit. (Typically Offered: Spring)

FIN 4920X: Case Studies in Strategic Financial Decision-Making

Credits: 1. Contact Hours: Lecture 1.

Prereq: FIN 3100 *and* FIN 3200

Case based study of situations where companies need to strategically use equity financing. Focus on equity financing decisions at the different phases of a company's lifecycle, from raising private equity, to going public, to making significant acquisitions. Will also consider issues such as investor activism, governance, regulatory and valuation impact. Multiple guest speakers who are actively engaged in private equity and investment banking. (Typically Offered: Fall)

Courses primarily for graduate students, open to qualified undergraduates:

FIN 5010: Financial Valuation and Corporate Financial Decisions

Credits: 3. Contact Hours: Lecture 3.

Prereq: Enrollment in MBA program *or* departmental permission.

Shareholder wealth maximization as the goal of the firm within a social responsibility context, financial Math, valuation of securities, the global financial market place as the test of value, estimation of cost of capital, global capital investment decisions, capital structure policy, working capital management.

FIN 5100: Advanced Corporate Finance

Credits: 3. Contact Hours: Lecture 3.

Prereq: FIN 5010 *or* Permission of Instructor

Examines corporate financial decisions, including theory and associated empirical evidence. Topics include agency conflicts, corporate governance, executive compensation, becoming publicly traded, raising capital through public and private offerings, capital structure, financial distress and bankruptcy, leasing, dividend policy, corporate control, restructuring, and risk management.

FIN 5150: Case Studies in Financial Decision Making

Credits: 3. Contact Hours: Lecture 3.

Prereq: FIN 5010 or Permission of Instructor

This course focuses on case studies to develop an integrated set of financial decisions. Topic areas include fixed asset, working capital, capital structure, dividend and merger/acquisition decisions. The objective of the course is to examine different firm settings and establish a framework within which to apply financial tools.

FIN 5200: Investments

Credits: 3. Contact Hours: Lecture 3.

Prereq: FIN 5010 or Permission of Instructor

Analysis of risk and return for individual securities and portfolios of securities. Topics include the market environment, mechanics of trading, measurement of return and risk, valuation of stocks and bonds, mutual funds, optimal asset allocation, market efficiency, portfolio performance evaluation, and risk management.

FIN 5260X: Advanced Quantitative Investment Analysis

Credits: 3. Contact Hours: Lecture 3.

Study of the use of advanced statistical and machine learning techniques in the practice of portfolio construction. Topics include regularization and tree-based investment techniques, characteristic-based and trend-following investing, and multivariate GARCH analysis. Provides essential analytics training needed for quantitative investment management.

FIN 5280: Advanced Fixed Income Analysis and Portfolio Management

(Dual-listed with FIN 4280).

Credits: 3. Contact Hours: Lecture 3.

Prereq: FIN 4270

Advanced analysis of fixed income markets and securities, including valuation and trading of treasury securities, corporate bonds, mortgage backed securities. Analysis of structured financial securities, including CDO, CMBS, and ABS. Analysis of active and passive investment strategies for managing fixed income portfolios. Students are required to manage a fixed income portfolio for an institutional investor. A top-down approach to portfolio management is assumed, with active bets taken on market direction, duration, yield curve, and credit spreads.

FIN 5300: Financial Analysis and Valuation

Credits: 3. Contact Hours: Lecture 3.

Prereq: FIN 5010 or Permission of Instructor

Valuation of public and private firms through analysis of financial statements and other information. Study of drivers of value creation, industry analysis, patterns of growth, models for forecasting and analyzing firm cash flows, estimating and adjusting cost of capital, alternative methods of cash flow valuation, the calculation and use of valuation multiples, and valuing mergers and acquisitions.

FIN 5320X: Financial Markets and the Economy

Credits: 3. Contact Hours: Lecture 3.

Exploration of the structure and integration of financial and product markets in the United States. Focus on the operation and function of U.S. debt and equity markets, and the linkages between financial markets and the real economy. Topics include inflation, interest rates, the banking system, the conduct and impact of monetary policy, the development and function of stock markets, and the impact of changes in the cost and availability of external finance on corporate decision-making.

FIN 5340: Financial Derivatives

Credits: 3. Contact Hours: Lecture 3.

Prereq: FIN 5010 or Permission of Instructor

An applied course in derivative markets. Topics covered include futures and options markets, option pricing, swaps, use and rating of insurance products, and alternative forms of reinsurance. Emphasis will be placed on agricultural commodity markets, but energy, interest, currency and stock index contracts will also be covered. (Typically Offered: Fall)

FIN 5350: Venture Capital, Private Equity, and Mergers and Acquisitions

Credits: 3. Contact Hours: Lecture 3.

Repeatable.

Prereq: FIN 5010 or Permission of Instructor

Advanced investments class focusing on alternative investments. Topics include the nature and scope of investment banking, techniques for valuing public and private firms, venture capital finance, private equity finance, leveraged buyouts, hedge funds, the structure and financing of mergers and acquisitions, and divestitures.

FIN 5410: Analytics in Finance

(Cross-listed with MIS 5410).

Credits: 3. Contact Hours: Lecture 3.

Prereq: BUSAD 5020

Introduction to Business Analytics (BA) in finance and the insurance industry. The concepts and tools discussed in this course, to be followed and complemented by more advanced courses in the area. Basic analytical thinking and business acumen focusing on applications from finance and insurance. Practical data analytic skills based on building real analytic applications on real data. (Typically Offered: Spring)

FIN 5500: Financial Econometrics

Credits: 3. Contact Hours: Lecture 3.

Prereq: ECON 5710; FIN 5010

Analysis, modeling, and forecasting of time series data, volatility modeling and forecasting, maximum likelihood estimation, robust standard error computation, specification testing, estimation under alternative distributional assumptions, and Monte Carlo simulation. Applications include tests of asset pricing models, analysis of asset volatility, corporate event studies, and value at risk analysis.

FIN 5560: Advanced Financial Modeling

Credits: 3. Contact Hours: Lecture 3.

Prereq: FIN 5010

Applying computers to business applications, especially using Excel to solve advanced finance related problems. (Typically Offered: Spring)

FIN 5640: Advanced Derivatives and Risk Management

Credits: 3. Contact Hours: Lecture 3.

Prereq: FIN 5010; FIN 5340

Risk management tools and how they are applied within financial institutions and the corporate enterprise. Focus on measuring exposure to stock market risk, interest rate risk, currency risk, and credit risk and how these exposures may be managed. Topics include bank risk management regulations, volatility modeling, value at risk analysis, extreme value theory, credit default swaps, and portfolio simulation.

FIN 5720: Real Estate Finance

Credits: 3. Contact Hours: Lecture 3.

Prereq: Master of Real Estate Development or Permission of Instructor

Survey of techniques for assessing the value of real estate assets.

Introduction to real estate financing instruments, their use and appropriateness.

FIN 5740: Real Estate Investment

Credits: 3. Contact Hours: Lecture 3.

Prereq: FIN 5010; (enrollment in Master of Real Estate Development or Permission of Instructor)

Introduction to theories and methods of investment analysis applied to real estate. Designed as second course in the sequence of real estate finance and investments. Basics of income-producing properties, the valuations of those properties using pro-forma, risk management and various other issues about the finance and investment of income-producing properties. Study of analysis of sustainable real estate development from capital budgeting perspective. Discussion of the financing practices in real estate and land development.

FIN 5750: Real Estate Securitization and Portfolio Management

Credits: 3. Contact Hours: Lecture 3.

Prereq: FIN 5010; (enrollment in Master of Real Estate Development or Permission of Instructor)

Mechanics, incentives and importance of securitization in firms' efforts to raise capital with application to residential and commercial real estate. Design and implementation of portfolio management strategies of private-market real estate investments. Additional topics include devising alpha strategies, approaches to diversification, creating investment plans to achieve different risk profiles and performance measurement and analysis.

FIN 5760: Real Estate Market Analysis

Credits: 3. Contact Hours: Lecture 3.

Prereq: FIN 5010; (enrollment in Master of Real Estate Development or Permission of Instructor)

Introduction to the structure of real estate markets. Topics include determinants of supply and demand in space and capital markets, house price dynamics and causes and consequences of market cycles. Discussion of likely behavior of U.S. real estate markets and comparisons with markets in other countries.

FIN 5780: MRED Capstone Project

(Cross-listed with CRP 5780).

Credits: 3. Contact Hours: Lecture 3.

Prereq: Master of Real Estate Development

Refinement of students' problem-solving, communication and negotiation skills. Students work on an actual case. Teams will apply knowledge acquired in the classroom to some aspect of a current development on-the-ground and in-process project.

FIN 5900: Special Topics

Credits: 1-3. Repeatable.

Prereq: Instructor Permission for Course

For students wishing to do individual research in a particular area of finance. (Typically Offered: Fall)

Courses for graduate students:**FIN 6050X: Advanced Regression Analysis for Business PhD Students**

Credits: 3. Contact Hours: Lecture 3.

Understand how to apply regression analysis, with applications in business research. Focus on applying the theory to analyze data that suffer from problems which make classical Ordinary Least Squares (OLS) regression inappropriate. Emphasis on analyzing market and firm level data to test hypotheses in business research. Required analysis of business data that are characterized by violations of the ideal conditions behind OLS, including data with autocorrelated or heteroskedastic errors, multicollinearity, endogeneity, qualitative (dummy) variables, seemingly unrelated regressions, and panel data. (Typically Offered: Fall)

FIN 6100X: Corporate Finance

Credits: 3. Contact Hours: Lecture 3.

Empirical aspects of corporate finance research as well as the underlying theory. Topics include agency theory, corporate governance, raising capital, capital structure theory and evidence, dividend theory and signaling models, financial distress, and corporate control. (Typically Offered: Fall)

FIN 6150X: Empirical Corporate Finance Research

Credits: 3. Contact Hours: Lecture 3.

Focus on understanding major paradigms in the corporate finance literature, and applying the methodologies used in empirical corporate finance research. Students will be exposed to the most impactful papers in empirical corporate finance, with a focus on recent publications in the top finance journals. Students will also master the various econometric techniques that are used to analyze corporate finance data. Topics include capital structure decisions, investment policy, liquidity management, corporate governance, mergers and acquisitions, and innovation.

FIN 6250X: Empirical Asset Pricing Research

Credits: 3. Contact Hours: Lecture 3.

Focus on understanding the major paradigms in the asset pricing literature, and applying the methodologies used in empirical asset pricing research. Students will be exposed to the most impactful papers published over the years, as well as more recent work. Students will also master various currently used econometric techniques for analyzing financial data. Topics include tests of market efficiency and return predictability that reveal the numerous asset pricing anomalies, behavioral finance, how information is diffused into asset prices, limits of arbitrage, and market microstructure issues. (Typically Offered: Fall)

FIN 6500X: Seminar in Empirical Finance

Credits: 3. Contact Hours: Lecture 3.

Issues in empirical financial economics including Identification of causal effects, evolution of research streams, development of new research questions, critical usage of archival data and replication of published results. (Typically Offered: Spring)

FIN 6600X: Research Practicum I

Credits: 1.

Preparation of a research manuscript to be submitted to a peer-reviewed academic journal. Students will work with a faculty mentor on a research project. Offered on a satisfactory-fail basis only. (Typically Offered: Summer)

FIN 6610X: Research Practicum II

Credits: 1.

Prereq: Instructor Permission for Course

Preparation of a second research manuscript to be submitted to a peer-reviewed academic journal. Although students work under the supervision of a faculty mentor, the students will take independent responsibility for the research project. Offered on a satisfactory-fail basis only. (Typically Offered: Summer)