

# FINANCE (FIN)

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**Courses primarily for undergraduates:**

**FIN 301: Principles of Finance**

(3-0) Cr. 3. F.S.SS.

*Prereq: ACCT 284, ECON 101, STAT 226*

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.

**FIN 310: Corporate Finance**

(3-0) Cr. 3. F.S.SS.

*Prereq: FIN 301 and co-requisite of MATH 151 or MATH 160 or MATH 165*

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.

**FIN 320: Investments**

(3-0) Cr. 3. F.S.SS.

*Prereq: FIN 301; and co-requisite of MATH 151 or MATH 160 or MATH 165*

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.

**FIN 330: Financial Markets and Institutions**

(3-0) Cr. 3. F.S.

*Prereq: FIN 301*

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.

**FIN 361: Personal Risk Management and Insurance**

(3-0) Cr. 3. F.S.

*Prereq: FIN 301*

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.

**FIN 371: Real Estate Principles**

(3-0) Cr. 3. SS.

*Prereq: ECON 101*

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.

**FIN 415: Business Financing Decisions**

(3-0) Cr. 3.

*Prereq: FIN 310*

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.

**FIN 424: Financial Futures and Options**

(3-0) Cr. 3.

*Prereq: FIN 320 and STAT 326*

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.

**FIN 425: Security Analysis and Portfolio Management**

(3-0) Cr. 3. F.S.

*Prereq: FIN 320, STAT 326*

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.

**FIN 427: Fixed Income Securities**

Cr. 3.

*Prereq: FIN 320*

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 428: Advanced Fixed Income Analysis and Portfolio Management**

(Dual-listed with FIN 528). (3-0) Cr. 3.

*Prereq: FIN 427*

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 431: Small Business Finance Decisions**

(Cross-listed with ENTSP). Cr. 3. S.

*Prereq: FIN 310 or ENTSP 313 AND FIN 301*

Integrative nature of small business financial decisions, from basic historical financial analysis to financial projections and valuation unique to small business. Utilize planning/valuation to reconcile the optimal exit date for the small business owner. Examination of this integrative approach through case study. Emphasis on practical application with a decision orientation. Group project working with a small business owner and related advisors/bankers to develop a plan that focuses on an optimal exit strategy.

**FIN 435: Venture Capital, Private Equity, and Mergers and Acquisitions**

(3-0) Cr. 3. S.

*Prereq: FIN 310, FIN 320, STAT 326*

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.

**FIN 445: Bank Management Decisions**

(3-0) Cr. 3. F.S.

*Prereq: FIN 310 or FIN 320 or FIN 330 or ECON 353*

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.

**FIN 450: Analytical Methods in Finance**

Cr. 3. F.S.

*Prereq: STAT 326, and ECON 301 or FIN 301*

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.

**FIN 455: Predictive Analytics in Finance**

(3-0) Cr. 3. F.S.

*Prereq: FIN 301, STAT 326*

Introduction to Financial Analytics concepts and tools. Basic statistical/computing skills, analytical thinking, and business acumen. Develop practical data analytic skills based on building real analytic applications on real data.

**FIN 456: Financial Modeling**

(3-0) Cr. 3.

*Prereq: ACCT 285, FIN 301 and STAT 326*

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

**FIN 462: Corporate Risk Management and Insurance**

(3-0) Cr. 3. F.

*Prereq: FIN 310*

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.

**FIN 464: Risk Management Derivatives**

(3-0) Cr. 3.

*Prereq: FIN 424*

Advanced models for options and bond pricing. Geometric Brownian motion, risk-neutral pricing, no-arbitrage pricing models, exotic options, pricing options through simulation, and applications of derivatives to hedging market and credit risk exposure. Risk management tools and how they are applied within financial institutions such as banks, insurance companies, mutual funds, and hedge funds, as well as the corporate enterprise. Topics include the Basel accords, volatility modelling, value-at-risk analysis, extreme value theory, credit default swaps, and portfolio simulation.

**FIN 472: Real Estate Finance**

(3-0) Cr. 3.

*Prereq: FIN 301 and STAT 326*

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

**FIN 474: Real Estate Investment**

(3-0) Cr. 3. F.S.

*Prereq: FIN 371 or FIN 427; AND STAT 326*

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.

**FIN 480: International Finance**

(3-0) Cr. 3. F.S.

*Prereq: FIN 310, FIN 320 or FIN 330*

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.

**FIN 490: Independent Study**

Cr. 1-3. Repeatable.

*Prereq: FIN 301, STAT 326 and permission of instructor***FIN 491: International Study Course in Global Capital Markets**

Cr. 3. S.

*Prereq: FIN 301*

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.

**Courses primarily for graduate students, open to qualified undergraduates:**

**FIN 501: Financial Valuation and Corporate Financial Decisions**

(3-0) Cr. 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 510: Advanced Corporate Finance**

(3-0) Cr. 3.

*Prereq: FIN 501 or instructor permission*

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 515: Case Studies in Financial Decision Making**

(3-0) Cr. 3.

*Prereq: FIN 501 or instructor permission*

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 520: Investments**

(3-0) Cr. 3.

*Prereq: FIN 501 or instructor permission*

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 528: Advanced Fixed Income Analysis and Portfolio Management**

(Dual-listed with FIN 428). (3-0) Cr. 3.

*Prereq: FIN 427*

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 530: Financial Analysis and Valuation**

(3-0) Cr. 3.

*Prereq: FIN 501 or instructor permission*

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 534: Financial Derivatives**

(3-0) Cr. 3. F.

*Prereq: FIN 501 or Graduate classification*

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.

**FIN 535: Venture Capital, Private Equity, and Mergers and Acquisitions**

(3-0) Cr. 3.

*Prereq: FIN 501 or instructor permission*

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 541: Analytics in Finance**

(Cross-listed with MIS). Cr. 3. S.

*Prereq: BUSAD 502 or an advanced undergraduate statistics course recommended*

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.

**FIN 550: Financial Econometrics**

(3-0) Cr. 3.

*Prereq: FIN 501, ECON 571*

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 556: Advanced Financial Modeling**

(3-0) Cr. 3. S.

*Prereq: FIN 501*

Applying computers to business applications, especially using Excel to solve advanced finance related problems.

**FIN 564: Advanced Derivatives and Risk Management**

(3-0) Cr. 3.

*Prereq: FIN 501, FIN 534*

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 572: Real Estate Finance**

(3-0) Cr. 3.

*Prereq: Master of Real Estate Development students only or instructor permission*

Survey of techniques for assessing the value of real estate assets. Introduction to real estate financing instruments, their use and appropriateness.

**FIN 574: Real Estate Investment**

(3-0) Cr. 3.

*Prereq: FIN 501; enrollment in the MRED or instructor permission.*

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 575: Real Estate Securitization and Portfolio Management**

(3-0) Cr. 3.

*Prereq: Enrollment in the MRED or instructor permission.*

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 576: Real Estate Market Analysis**

(3-0) Cr. 3.

*Prereq: Enrollment in the MRED or instructor permission.*

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 578: MRED Capstone Project**

(Cross-listed with C R P). (3-0) Cr. 3.

*Prereq: Enrollment in MRED.*

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 590: Special Topics**

Cr. 1-3. Repeatable. F.S.SS.

*Prereq: Permission of instructor*

For students wishing to do individual research in a particular area of finance.