

# FINANCE (FNCE)

## Courses

### **FNCE 2000 (3) Introduction to Investing**

There's never been a better time to study the captivating world of finance. With this course, you'll unlock the secrets of finance and discover its extraordinary influence on our lives. Introduction to Investing is a comprehensive introduction, equipping you with the skills and knowledge to assess the financial health of companies, projects, and investments. By making astute financial judgments, you'll be well-prepared to enhance your career prospects and achieve your financial aspirations. Counts as a business elective for Business students.

### **FNCE 2010 (3) Quantitative Methods for Finance**

Study of quantitative approaches to finance. Covers mathematical and statistical topics required for such analysis, including derivatives, optimization, integration, probability, inference, and regression. Students will become proficient in using the tools and applying them to various financial contexts using analytics Excel.

**Requisites:** Requires prerequisite or corequisite course of BCOR 2002 or BCOR 2203 and BCOR 2204 (minimum grade D-). Restricted to Business (BUSN) majors with 26-180 units completed.

### **FNCE 2070 (3) Trading and Markets: An Introduction to Investing**

Provides an introduction to the world of investing, specifically focusing on trading and markets. Students will gain a solid understanding of how the stock market works, the principles of trading, and the various investment products and strategies available. The course begins by introducing students to the basics of the stock market, including the different types of securities, the roles of various market participants, and how the market functions as a whole. Counts as a business elective for Business students.

### **FNCE 2280 (3) Investing in Sustainability**

This course will provide students with a core understanding of sustainable systems and the application of sustainability to businesses and investments. As part of the class, students will learn basic fundamentals of economic systems, business models, and investment principles both from a traditional and sustainability lens. With this primary comprehension of sustainable finance, students will gain valuable frameworks and insights that can be broadly applied towards the growing sustainability practices among a variety of industries. Counts as a business elective for Business students.

### **FNCE 2820 (3) Introduction to Personal Financial Planning**

Introduces the concepts, tools, and applications of personal financial planning. Provides the students with tools and techniques for managing their personal finances. With these skills, students gain the ability to effectively deal with their ever-changing financial environment.

**Requisites:** Restricted to business majors with 26-150 credits.

### **FNCE 2830 (3) Personal Investment Management**

This course examines concepts of personal investment management. Topics include the structure and regulations of securities markets, market participants and their roles, the characteristics, uses and taxation of investment vehicles, personal trading accounts, risk and return, time value of money, quantitative investment concepts, asset allocation and diversification, portfolio development and analysis, investment strategies, characteristics and valuation of fixed income and equities, alternative investments, and behavioral finance.

**Requisites:** Restricted to students with minimum 26 units completed. Leeds School of Business (BUSN) majors only.

### **FNCE 3000 (3) Financial Modeling**

Prepares students for the use of Excel for financial analysis. There will be projects focused on investments, corporate finance, and real estate. The course will look to improve the Excel skills of the student by teaching and practicing useful shortcuts for working in Excel. As much as possible the course will teach the student to ditch the mouse. In addition, it prepares the students to take the two Microsoft Office Specialist Excel Exams, Associate and Expert.

**Requisites:** Requires prerequisite course of BCOR 2203 and BCOR 2204 (minimum grade D-). Restricted to Business (BUSN) majors with 26-180 units completed.

### **FNCE 3005 (3) Programming for Finance**

Data science has now become a critical part of the finance and banking industries. This course is designed to equip finance students with the essential programming skills through a series of finance applications for data analysis in finance. The programming language of choice for the course is Python. Through a combination of theoretical programming concepts and hands-on programming exercises, students will develop a solid foundation of finance knowledge and build practically useful applications in the finance and banking industries.

**Requisites:** Requires prerequisite course of BCOR 2203 and BCOR 2204 (minimum grade D-). Restricted to Business (BUSN) majors with 26-180 units completed.

### **FNCE 3010 (3) Corporate Finance**

Covers the theory and practices governing the management of capital in a business firm. Examines the determinants of capital requirements, methods of obtaining capital, problems of internal financial management, implications of risk, and methods of financial analysis and valuations.

**Requisites:** Requires a prerequisite or corequisite course of BASE 2104 (minimum grade D-). Restricted to Business majors with 36-180 units completed.

### **FNCE 3030 (3) Investment and Portfolio Management**

Develops modern portfolio theory and applies it to pricing both individual assets and portfolios of assets. Topics include Markowitz portfolio selection model, capital asset pricing model, arbitrage pricing theory, bonds, portfolio performance measurement, and issues of market efficiency. Formerly FNCE 4030.

**Equivalent - Duplicate Degree Credit Not Granted:** FNCE 3035

**Requisites:** Requires a prerequisite course of FNCE 2010 and a prerequisite or corequisite course of BASE 2104 (minimum grade D-). Restricted to Business (BUSN) majors with 36-180 units completed.

### **FNCE 3035 (3) Investments - PFP Track**

Develops modern portfolio theory and applies it to pricing both individual assets and portfolios of assets. Topics include Markowitz portfolio selection model, capital asset pricing model, arbitrage pricing theory, bonds, portfolio performance measurement and issues of market efficiency. Additionally, course content has been customized to cover investment planning topics as required by the CFP Board of Standards and content tested on FINRA's Security Industry Essentials Exam, including capital markets, products and risks, trading and customer accounts, prohibited activities and the regulatory framework.

**Equivalent - Duplicate Degree Credit Not Granted:** FNCE 3030

**Requisites:** Requires a prerequisite course of BASE 2104 (minimum grade D-). Restricted to students in the Personal Financial Planning (PFP) track with 52-180 units completed.

**FNCE 3040 (3) Retirement Planning**

Examines concepts related to retirement savings and income planning. Specific topics include retirement need, Social Security benefits, qualified employer plans, other tax-advantaged retirement plans, distribution options, taxation of benefits, plan selection and administration, eldercare, special needs planning, non-qualified retirement plans and employee benefits.

**Requisites:** Requires a prerequisite or corequisite course of BASE 2104 (minimum grade D-). Restricted to Business (BUSN) majors with 52-180 units completed.

**FNCE 3060 (3) Estate Planning**

Basic estate planning principles and skills are presented that are necessary for the financial planner to successfully counsel clients and provide relevant advice as part of a comprehensive financial plan. Topics include wealth distribution strategies, transfer document, tax code, unified transfer tax system and the determination of an individual's estate tax liability.

**Requisites:** Requires a prerequisite or corequisite course of BASE 2104 (minimum grade D-). Restricted to Business (BUSN) majors with 52-180 units completed.

**FNCE 3820 (3) Principles of Personal Financial Planning and Insurance**

You will examine general principles of personal financial planning, including the strategic financial planning process, personal financial statements, cash and debt management, financing strategies, education funding, and client communication and counseling. In the second part of the course, you will study risk management and insurance, including analysis of risk exposures and types of insurance, including health, disability, long-term care, annuities, life, and property & casualty.

**Requisites:** Requires prerequisite courses of BASE 2104 (minimum grade D-). Restricted to Business (BUSN) majors with 52-180 units completed.

**FNCE 4000 (3) Financial Institutions Management**

Analyzes the structure, markets, and regulations of financial institutions. Studies problems and policies of internal management of funds, loan practices and procedures, investment behavior, deposit and capital adequacy, liquidity, and solvency.

**Requisites:** Requires a prerequisite course of FNCE 3010 and BASE 2104 (minimum grade D-). Restricted to Business majors with 52-180 units completed.

**FNCE 4040 (3) Derivative Securities**

Develops the modern theory of contingent claims in a mathematical framework oriented toward applications. Examines how to use derivatives for risk management and to tailor portfolio payoffs. Provides an in-depth analysis of the properties of options.

**Requisites:** Requires a prerequisite course of FNCE 3010 and BASE 2104 (minimum grade D-). Restricted to Business majors with 52-180 units completed.

**FNCE 4050 (3) Capital Investment Analysis**

Focuses on capital budgeting and investment issues. Emphasizes issues relating to cash flows, capital rationing, the investment versus financing decision, leasing, fluctuating rates of output, investment timing, capital budgeting under uncertainty and investment decisions with additional information.

**Requisites:** Requires prerequisite courses of FNCE 3010 and FNCE 3030 (all minimum grade D-). Restricted to Business majors with 52-180 units completed.

**FNCE 4060 (1-6) Special Topics in Finance**

Presents new subject matter in finance. The summer offering is the London Seminar in International Finance and Business. Department enforced prereq.: varies, see advising office.

**Repeatable:** Repeatable for up to 9.00 total credit hours.

**Requisites:** Requires a prerequisite course of FNCE 3010 (minimum grade D-). Restricted to Business majors with 52-180 units completed.

**FNCE 4070 (3) Financial Markets and Institutions**

Examines the economics of financial markets and the management of financial institutions, both domestic and international. Topics include an overview of U.S. and international financial markets, pricing and risk factors, interest rates, markets for securities and financial services and markets for derivative financial instruments. For students planning to take FNCE 4000 and FNCE 4070, it is recommended that FNCE 4070 precede rather than follow FNCE 4000.

**FNCE 4080 (3) Blockchain and Cryptocurrencies - Speculation or Innovation?**

Recent years have been major ones for cryptocurrencies, but the typical investor's understanding of cryptocurrencies' distinctions is limited. In addition to blockchain and cryptocurrencies, this course introduces students to fundraising mechanisms like ICOs and NFTs, the stance of cryptocurrency regulators, and promising blockchain business applications. Given the growing salience and market capitalization of cryptocurrencies, better understanding these digital units of account and their underlying technology is an increasingly valuable skillset for many private sector roles.

**Requisites:** Requires prerequisite courses BASE 2104 and FNCE 3010 (all minimum grade D-). Restricted to Business majors with 52-180 units completed.

**FNCE 4340 (3) Security Analysis**

**Requisites:** Requires prerequisite courses of FNCE 3010 and FNCE 3030 (minimum grade D-). Restricted to Business majors with 52-180 units completed.

**FNCE 4820 (3) Topics in Finance**

Offered irregularly to provide opportunity for investigation into new frontiers in finance.

**Repeatable:** Repeatable for up to 6.00 total credit hours. Allows multiple enrollment in term.

**Requisites:** Requires prerequisite courses of FNCE 3010 and FNCE 3030, and APPM 2350 or MATH 2400, and MATH 2130 or 2135 or APPM 2360, and CSCI 1300 (minimum grade D-). Restricted to Business majors with 52-180 units completed.

**FNCE 4825 (3) Experimental Seminar**

Offered irregularly to provide opportunity for investigation of new frontiers in Finance.

**Requisites:** Requires prerequisite courses of FNCE 3010 and FNCE 3030 (minimum grade D-). Restricted to Business majors with 52-180 units completed.

**FNCE 4826 (3) Experimental Seminar: Corporate Governance**

What is the objective of corporate managers? Do they only think about their own benefit? Are they concerned about their shareholders? Are corporate managers concerned about their other stakeholders like employees, customers, and people that live in towns and cities they operate in? Corporate governance addresses the above questions. The objective of the course is to provide the student with a state-of-the-art understanding of corporate governance as it relates to: Corporate board structure, Executive and board compensation, Entrepreneurship and private equity, Corporate social responsibility.

**Requisites:** Requires prerequisite courses of FNCE 3010 and FNCE 3030 (minimum grade D-). Restricted to Business majors with 52-180 units completed.

**FNCE 4827 (3) Experimental Seminar: Topics in Derivatives**

This is a markets-oriented survey of derivatives usage. The two major markets covered are equities and commodities. In the equity markets the focus will be on the S&P 500 options market and the VIX. The commodity focus will be on the energy markets of crude oil, its refined products and natural gas. The course will end with a focus on risk management.

**Requisites:** Requires prerequisite course of FNCE 4040 (minimum grade D-). Restricted to BUSN majors and 52-180 credit hours.

**FNCE 4828 (3) Experimental Seminar: Social Institutions: Theory, History and Methods**

Introduces students to the cornerstone institutions of modern developed societies: (i) property rights; (ii) organizations, both public and private; (iii) monetary and financial systems; (iv) political systems; (v) legal systems; and (vi) the cultural underpinnings of economic development. By focusing on how societies agree upon rules to facilitate mutually beneficial outcomes, the course provides a deeper understanding of the economic and legal foundations of democratic market economies. Given this focus on the rules of the game, the course also serves as a great preparation to law school, as well as an introduction to the type of thinking needed to succeed therein.

**Requisites:** Requires prerequisite course of BCOR 1015 (minimum grade D-). Restricted to Business majors.

**FNCE 4830 (3) Seminar in Investment Banking**

Introduces the student to a career in investment banking and provides specific modeling skills necessary and important during the first phase of such a career.

**Requisites:** Requires prerequisite courses of FNCE 3010 and FNCE 3030 (minimum grade D-). Restricted to Business majors with 52-180 units completed.

**FNCE 4831 (3) Seminar in Investment Management**

The purpose of this course is for students to understand the investment management profession. The course is designed to be a blend of theory and practice. Extends the basic principles of security analysis, asset pricing theory, portfolio construction, and portfolio performance evaluation. Students will apply these principles in determining, over the semester, how to manage the CU investment fund.

**Equivalent - Duplicate Degree Credit Not Granted:** MSBX 5225

**Requisites:** Requires prerequisite course of FNCE 3010, and prerequisite or corequisite of FNCE 3030 (minimum grade D-). Restricted to Business majors with 52-180 units completed.

**FNCE 4835 (3) Fixed Income Securities**

Provides a working knowledge of fixed income securities, primary and secondary fixed income and interest rate markets, bond credit analysis, credit default swaps and bond portfolio management strategies. The institutional details of government, corporate and municipal fixed income securities and markets will be covered. Also covered will be corporate credit analysis and credit default swaps and, finally, bond portfolio management strategies.

**Requisites:** Requires prerequisite courses of FNCE 3010 and FNCE 3030 (all minimum grade D-). Restricted to Business (BUSN) majors with 52-180 units completed.

**FNCE 4840 (3) Personal Financial Plan Development Capstone**

Reviews, integrates and applies personal financial planning concepts and skills. It builds on the previous PFP courses taken in the program. Students will prepare written financial plans based on comprehensive and integrative cases. The case method is a primary instructional tool. Individual and team written reports, as well as class presentations of cases, are required.

**Requisites:** Requires prerequisite courses of ACCT 3440 and FNCE 3820 and FNCE 3040; and FNCE 3030 or FNCE 2830 (all minimum grade D-). Restricted to Business (BUSN) majors with 102-180 units completed.

**FNCE 4850 (3) Business Senior Seminar in Finance**

Develops analytical and decision making skills necessary to address real-world business finance situations. Topics include financial analysis and forecasting, capital budgeting, valuation, capital structure policy, international finance, and financial ethics. Uses a combination of lecture and cases; team and individual work.

**Requisites:** Requires prerequisite courses of BASE 2104, FNCE 3010, FNCE 3030 and ACCT 3220 (all minimum grade D-). Restricted to senior Finance (FNCE) majors with 90 to 180 units completed.

**FNCE 4900 (1-6) Independent Study**

Intended only for exceptionally well qualified business seniors. Prior consent of dean and instructor under whose direction study is taken is required and departmental form.

**FNCE 6820 (1-3) Graduate Seminar**

Experimental seminar offered irregularly to provide opportunity for investigation of new frontiers in finance.

**Repeatable:** Repeatable for up to 12.00 total credit hours. Allows multiple enrollment in term.

**FNCE 6900 (1-6) Independent Study**

Requires consent of instructor under whose direction study is taken. Departmental form required.

**Repeatable:** Repeatable for up to 6.00 total credit hours.

**FNCE 6940 (1) Master's Candidate for Degree**

Registration intended for students preparing for a thesis defense, final examination, culminating activity, or completion of degree.

**Repeatable:** Repeatable for up to 3.00 total credit hours.

**FNCE 6950 (1-6) Master's Thesis**

**Repeatable:** Repeatable for up to 6.00 total credit hours.

**FNCE 7020 (3) Financial Economics and Research**

Studies both theoretical models at the intersection of information economics and finance, as well as natural language processing techniques, focused on financial and accounting documents.

**FNCE 7100 (3) Doctoral Seminar: Finance Theory**

Develops the foundations for the study of modern financial economics by analyzing individuals' consumption and portfolio decisions in the context of risk and then traces the implications to market valuation of traded securities. Topics include the meaning and measurement of risk, portfolio theory, the Capital Asset Pricing Model, and arbitrage pricing arguments like those employed in Modigliani and Miller's capital structure theory and the Black-Scholes option pricing model.

**Requisites:** Restricted to Business Administration (BUAD) graduate students only.

**FNCE 7200 (3) Doctoral Seminar: Empirical Research Methods in Finance**

Develops an understanding of current empirical methods used to examine research issues related to corporate finance and the capital markets.

**FNCE 7330 (3) Doctoral Seminar: Empirical Asset Pricing**

Develops and examines theories and issues in corporate finance. Topics may include corporate control, capital structure, financial signaling, and payout policy.

**FNCE 7550 (3) Doctoral Seminar: Special Topics in Finance**

Closely examines areas of specific interest to academic research in finance. Subjects vary and may include game theory, stochastic processes in finance, continuous-time modeling, derivative security pricing, the microstructure of securities markets and financial institutions, innovation, and engineering.

**FNCE 7800 (3) Doctoral Pre-Seminar: Finance**

Provides finance doctoral students with an orientation to the finance field; introduces contemporary research perspectives and priorities. Students discuss papers that illustrate academic researchers' use of various disciplinary theoretical and empirical tools to address finance problems.

**FNCE 7830 (1) Doctoral Seminar: Dissertation Research**

Assists doctoral students in integrating courses and fields of study in order to apply their knowledge and skills to problems in finance. Gives special attention to development of thesis topics. Continuous enrollment required of all finance doctoral students while doing course work.

**FNCE 8820 (3) Dynamic Corporate**

Experimental seminar offered irregularly to provide opportunity for investigation of new frontiers in finance.

**FNCE 8900 (1-3) Independent Study**

Instructor consent required and departmental form required.

**Repeatable:** Repeatable for up to 3.00 total credit hours.

**FNCE 8990 (1-10) Doctoral Dissertation**