# **FINANCE (FIN)**

### FIN 203. Applied Quantitative Analysis for Finance. (3 h)

Provides the basic mathematical and statistical tools needed for the study of applied finance. Topics: mulitple regression, analysis of residuals and F-tests; analysis of time-series data; risk, preference and utility theory; stochastic processes; and applied optimization. P-BEM 201 and FIN 231 with a C or better; C-FIN 232; or POI.

#### FIN 231. Principles of Finance. (3 h)

Survey course examining the fundamentals of financial decision-making and including topics such as the time value of money, security valuation (corporate debt and equity pricing), risk and return, financial statement analysis, capital budgeting, and the cost of capital. Financial decision-making is developed within the context of domestic and international institutions and markets. P-ACC 111, and ECN 150.

#### FIN 232. Intermediate Finance. (3 h)

Required for all finance majors and is intended as preparation for upper level electives. It provides an examination of financial decision-making under uncertainty stressing practical applications of technology. Topics include yield curves and interest rate risk; the uses and risks of derivative securites; capital structure and the impact of leverage; statistical estimation of the cost of capital for the firm and its projects; financial statement forecasting (pro forma); and discounted cash flow valuation of the firm. The course incorporates electronic spreadsheet applications (Excel) in problem solving, statistics and financial modeling. P-BEM 201 and FIN 231 with C or better; C-FIN 203; or POI.

#### FIN 233. Equity Investments. (3 h)

The Equity Investments course exposes students to equity research, portfolio formation and analysis, equity security valuation, and stock selection for portfolio construction. The course uses accounting, fundamental analysis and a discounted cash flow framework to value equity securities. P-FIN 203 and FIN 232 with a C or better. May be taken as a co-requisite with FIN 203 and/or FIN 232 with POI.

## FIN 234. International Finance. (3 h)

The course examines the impact of international financial economics on markets and the management of both domestic and multinational firms. Emphasis is placed upon institutional and environmental factors influencing trade, foreign exchange, and capital acquisition and allocation. P-FIN 203 and FIN 232 with a C or better; or POI.

#### FIN 235. Selected Topics in Finance. (3 h)

Identifies the most current topics and practices in the dynamic global financial industry and covers them in detail; may also explore a more narrow finance topic in depth. Focuses on the application of leading-edge concepts and ideas in the financial services and/or banking industries. A seminar approach requires active student participation in the identification, elaboration and discussion of course materials. Oral and written skills are emphasized. P - FIN 203 and FIN 232 with a C or better. May be taken as co-requisite with FIN 203 and/or FIN 232 with POI.

#### FIN 236. Private Equity. (3 h)

Covers the full life cycle of private equity. The course covers buyout, venture capital and growth capital investing, both from an investing and managerial point of view. While being relevant to students interested in becoming private equity professionals, the course is also applicable to those who might interact with private equity firms from the view of being an investment banker, a funding source, a participant in acquisitions or divestitures (such as a seller or management partner) or as an institutional investor in private equity funds. P - FIN 203 and FIN 232 with a C or better; or POI.

## FIN 237. Financial Markets and Institutions. (3 h)

The course provides students with an understanding of the structure and functioning of US and international financial markets. Topics covered in the class: banking theory, the roles of traditional and non-traditional financial intermediaries, the impact of securitization, international financial competition, financial system stability and financial regulation. P-FIN 203 and FIN 232 with a C or better; or POI.

#### FIN 238. Financial Modeling. (3 h)

This course is intended to strengthen your knowledge in Finance and provide you with practical skills for implementing financial models in a spreadsheet. While the specific tool used in this class is Microsoft Excel, the techniques can be generalized and applied to various implementation tools. The subject matter is a blend of Corporate Finance and Investments with a heavier weighting placed on Corporate Finance.

#### FIN 239. Financial Data Analytics. (3 h)

This course serves as an introduction to many aspects of financial technology and data. Topics include machine learning, data visualization, Excel pivot tables and dashboards, monte carlo simulation, encryption, safety and ethics when working with financial data, Python, and introductions to traditional programming languages. Students will become familiar with and use Bloomberg terminals, Excel, Python, Morningstar, and Crystal Ball to analyze, visualize, and manipulate data. Students will apply these skills to work with real world financial data solving problems they are likely to see outside of the classroom. P-FIN 203 and 232 with a C or better; or POI.

#### FIN 333. Advanced Finance. (3 h)

Focuses on maximizing the firm's market value in a dynamic environment by exploring the interplay between (a) its operating and strategic decisions, (b) the evaluation of the firm and its strategies by the investment community, and (c) the functioning of capital markets and economies within which the firm operates. The course integrates results from relevant research with the effective practice of financial management by business professionals. P —FIN 203 and FIN 232 with a C or better, or POI.

## FIN 334. Blockchain and Cryptoassets. (3 h)

This course provides an introduction to blockchain and cryptoassets. We begin by discussing Bitcoin, clarifying the innovation that it provided but also highlighting why it performs poorly as a payment system. We then discuss Ethereum and smart contracts. We clarify both new opportunities and new difficulties that arise when a blockchain allows for processing of smart contracts. We conclude by discussing more recently launched blockchains such as Cardano and Algorand. P-FIN 203 with a C or better and FIN 232 with a C or better.

#### FIN 335. Financial Derivatives. (3 h)

Explores the pricing and uses of derivatives; the role of market participants; how market structures and practices facilitate risk transfer; and the uses of derivatives for hedging. Covers futures/forwards, options, and swaps, the three most important types of financial derivatives. P-FIN 203 and 232 with a C or better; or POI.

## FIN 336. Fixed Income and Financial Engineering. (3 h)

Provides an introduction to interest rate risk management, the nature of fixed income markets, the structure and underlying economic rationale for various structured products including collateralized debt obligations, and the role of financial engineering in fixed income markets and risk management. P-FIN 203 and 232 with a C or better; or POI.

## FIN 338. Real Estate Finance. (3 h)

Focuses on concepts and techniques used to value and finance income-producing property investments. Provides students a critical perspective for making financial decisions about real estate. The nature of real estate risk, at both the level of the individual project and the investment portfolio. Class sessions will rely on case discussions as we consider how economic characteristics of the property and the local market, motives of different actors, and institutional arrangements interact to shape decision-making in real estate. P-FIN 203 and 232 with a C or better; or POI.

## FIN 381. Individualized Reading and Research. (1-3 h)

Directed study in specialized areas of finance. P-POI.