BAFI (BAFI)

BAFI 341. Money and Banking. 3 Units.
This course emphasizes the importance of financial markets, the nature and role of the financial system, and the linkages between these—money and banking—and the economy. Emphasis is placed on both theoretical and practical constructs, on major innovations and contemporary changes, and the closely intertwined condition of financial and economic systems with monetary and fiscal policy. Offered as BAFI 341 and ECON 341. Prereq: ECON 102 and ECON 103.

BAFI 342. Public Finance. 3 Units.
Government intervention is a pervasive feature of every modern economy. The goal of this course is to develop the economic tools for understanding and evaluating a wide range of government behaviors such as taxation and redistribution policy, the public provision of goods and services, and the regulation of private markets. ECON 342 begins by considering "market failures" that justify government intervention in a market economy. To respond to such failures, governments must raise revenues through taxation. Using the tools of microeconomic theory, we will develop a framework for thinking about the positive and normative effects of alternative forms of taxation. Particular attention will be paid to the individual income tax in the U.S., allowing students to understand the efficiency, distributional and behavioral implications of recent changes in the tax code. We will then turn to the expenditure side of the public sector. The economic principles used to evaluate public expenditures will be discussed and exemplified through the analysis of significant public programs. Of particular interest will be the effect of public programs on the incentives faced by workers and families. Offered as BAFI 342 and ECON 342. Prereq: ECON 102.

BAFI 355. Corporate Finance. 3 Units.
The basic goals of this course are to familiarize students with the concepts and tools used in financial management at both the corporate and personal levels. They include the notion of present value, securities valuation, risk and return analysis, and other financial analysis techniques. The concepts and techniques are, in turn, used to evaluate and make decisions regarding the firm's investments (capital budgeting) and the cost of capital. Prereq: Minimum sophomore standing; ACCT 101 or ACCT 203.

BAFI 356. Investments. 3 Units.
This course is about investing in securities. It provides a comprehensive introduction to security analysis and portfolio management. Investing is a rational decision-making process in which the investor seeks to select a package or portfolio of securities that meets a predetermined set of objectives. Descriptive, institutional and quantitative decision-making methods are arranged in a cohesive framework of analysis of interest to the informed investor. Topics include modern portfolio theory, the relation between risk and return, efficient markets, bonds, and options, among others. Prereq: BAFI 355.

BAFI 357. Financial Modeling, Analysis and Decision Making. 3 Units.
Firms try to create value. In their day-to-day operations, they are faced with numerous challenges: Should we accept trade credit or borrow? Will an acquisition create or destroy value? Should we introduce a new product line even if it cannibalizes an existing one? In each of these situations they try to quantify the impact on the value of their firm. The goal of this course is to develop your skills in financial modeling and valuation, so you can tackle issues like the ones described above. The course is designed to be "hands-on": You will learn to apply the theory and develop spreadsheet modeling skills through homework, case studies and a group project. By the end of the course you will have a good understanding of both the theory and practice of valuation, and possess a set of cutting-edge financial modeling skills. This course is designed for students who aspire to work in a regular company, a bank or a consulting firm in (i) corporate finance (including mergers and acquisitions); (ii) strategy; or (iii) equity and analysis. Prereq: BAFI 355.

BAFI 358. Intermediate Corporate Finance. 3 Units.
This is a rigorous second course in corporate finance (following BAFI 355) designed to lay the analytic foundation for careers in business. The objective is to strengthen students' theoretical and conceptual understanding of several important topics in finance, and to develop their problem-solving skills. Topics covered include economic cash flows and valuation, Long term financial planning and ratios analysis, Growth and external financing, Short term financial planning and Working capital management, Managerial options and valuation, Derivatives, Agency cost and asymmetric information, Capital structure and payout policy. Prereq: BAFI 355

BAFI 359. Cases in Finance. 3 Units.
This course applies the case study method applied to a variety of business situations that teaches students to think on their feet, develop presentation skills and hone business judgment. The objective of the course is to strengthen students' conceptual understanding and problem-solving skills. It is intended to complement the two course sequence in corporate finance (BAFI 355 and BAFI 358) by applying these concepts to real world problems. Topics covered include cash flow estimation and corporate valuation, financial planning and ratio analysis, financing using internal and external sources, capital budgeting and managerial options, capital structure, payout policy, financial strategy, public equity analysis (including initial public offerings), mergers and acquisitions and leveraged buyouts. The course envisages an extensive use of case studies and simulation exercises. Prereq: BAFI 355.

BAFI 360. Independent Study. 1 - 18 Units.
This course is offered for candidates undertaking reading in a field of special interest. Permission of department chair required.

BAFI 361. Applied Financial Analytics. 3 Units.
This course is developed based on the feedback received from employers who have hired BS Management (finance) graduates in the past and will likely do so in future. The goal is to enable students to use financial econometrics to effectively analyze financial data. The course will draw on theoretical aspects of BAFI 355 but focus on developing financial analytic skills. The applied nature of the course comes from the use of real, rather than theoretical, data. In other words, in a real-world fashion, through the use of statistical methods to analyze real data, the student can address practical questions of high relevance to the Finance industry. The scope of the data as well as the quantitative methods used in such analysis often requires familiarity with computational environments and statistical packages. As such, another goal of the course is to familiarize the student with at least one such environment. Prereq: BAFI 355 and STAT 207 or OPRE 207.
BAFI 372. International Finance. 3 Units.
This course deals with open-economy macroeconomics and international financial markets, covering open-economy national income analysis, international macroeconomic policy coordination, exchange rate determination, foreign portfolio investment, and global financial crises. Offered as BAFI 372 and ECON 372. Prereq: ECON 103.

BAFI 403. Financial Management. 3 Units.
The purpose of this course is to familiarize the student with the theory and application of additional models used in financial decision-making by corporations. Issues relating to efficient markets, dividend policy, capital structure, financing decisions, option pricing, leasing, and risk management are among the topics considered. In addition, special topics may include mergers and acquisitions, pension funds, and international financial management. Prereq: ACCT 401 or MBAC 502 or MBAP 402.

BAFI 404. Financial Modeling. 3 Units.
This is a course about financial modeling. It covers a range of topics in the field of financial economics. Each topic is chosen because it lends itself to financial modeling. The primary focus of the course is to relate the theory of finance to practical and usable spreadsheet models that will assist a financial manager with a firm's investment and financing decisions. Spreadsheet models have been the dominant vehicle for finance professionals to practice their trade. This course will utilize Excel and challenge the student to improve their finance and modeling skills. Students will improve their familiarity with financial data analysis through various exercises that incorporate completed models. In summary, the course is designed to increase your practical understanding of core concepts in finance, help you develop hands-on spreadsheet modeling skills, and strengthen your ability to perform financial data analysis within an Excel model. Prereq: MBAC 504 or MBAP 405.

BAFI 420. Health Finance. 3 Units.
Exploration of economic, medical, financial and payment factors in the U.S. healthcare system sets the framework for the study of decisions by providers, insurers, and purchasers in this course. The mix of students from various programs and professions allows wide discussion from multiple viewpoints. Offered as BAFI 420 and HSMC 420. Prereq: ACCT 401 or ACCT 401H and enrollment in a program other than MSM in Healthcare.

BAFI 427. Green Finance. 3 Units.
Natural systems and resources are being depleted, degraded, and impaired at a rapidly increasing pace. Yet there are very few businesses that are paying adequate attention to the adverse impact of such changes on their future as well as on their survival. How do these changes affect corporate risks? What financial challenges do they create? How can policy changes help move firms in the right direction? What innovative products and strategies can companies use to deal with these challenges? How can companies assess sustainability risk? How can these strategies add sustainable value to firms? These are just a sample of the questions that we will address in this course. This course on Green Finance will provide you with a unique opportunity to understand and explore such questions, especially as they pertain to the role of senior financial managers as well as other members of the senior management team of companies across different industries. It will expose you to cutting edge practices in the area of green finance, providing you with the thought leadership that is essential for success in today's competitive world.

BAFI 428. Financial Strategy and Value Creation. 3 Units.
The intersection between the theory of perfect markets and the reality of market imperfections provides the basis for the exploration of value creation in this course. Opportunities in both product and financial markets are explored using case studies to develop a framework for strategic financial decisions.

BAFI 429. Investment Management. 3 Units.
This course explores the characteristics of financial investments and markets and develops modern techniques of investment analysis and management. The goal is to help students develop a level of analytical skill and institutional knowledge sufficient to make sensible investment decisions. Topics include: an overview of stock, debt and derivative asset markets, practical applications of modern portfolio theory, equilibrium and arbitrage-based approaches to capital market pricing, the debate over market efficiency, the term structure of interest rates, bond portfolio management, and uses of derivative assets in investment portfolios. Prereq or Coreq: BAFI 403 or MBAC 504 or MBAP 405 or GMBA 401A.

BAFI 430. Derivatives and Risk Management. 3 Units.
This course is intended to give students an understanding of options and futures markets both in theory and practice. The emphasis is on arbitrage and hedging. The course concentrates on listed common stock and index contracts as well as commodity markets. Various theories for trading strategies are studied. Prereq or Coreq: BAFI 403 or MBAC 504 or MBAP 405 or GMBA 401A or student in the Accelerated Global MBA program.

BAFI 431. Fixed Income Markets and Their Derivatives. 3 Units.
This class is concerned with fixed income securities, interest rate risk management, and credit risk. Fixed income securities account for about two thirds of the market value of all outstanding securities, and hence this topic is important. The course covers the basic products of fixed income markets including treasury and LIBOR products, such as interest rate swaps. Risk management and hedging strategies are covered as well as selected topics in credit risk models and mortgage-backed securities. Prereq: BAFI 430.

BAFI 432. Corporate Risk Management. 3 Units.
This is a unique strategic risk management course aimed at participants who wish to enhance their understanding of the risks faced by corporate firms, both financial and non-financial, learn techniques to identify and measure these risks, and understand how derivatives and risk management solutions can be used to manage these risks, create value, and advance the strategic goals of the firm. The course is designed in a manner such that it would be of use to executives of all corporations, financial and nonfinancial, across all functional areas. Prereq: BAFI 403 or MBAC 504 or MBAP 405 or GMBA 505.

BAFI 433. Quantitative Risk Modeling. 3 Units.
This course is designed to help students learn quantitative models for estimating risk in various financial settings for different types of financial institutions (banks, hedge funds, and others). It is a very hands-on course where students will become familiar with several state-of-the-art quantitative risk models as well as their detailed implementation procedure in the real world. The course uses several in-class Excel exercises to illustrate the models as well as their practical implementation using real financial data. Offered as BAFI 433 and MSFI 433.
BAFI 440. Financial Decisions, Contracting & Value. 3 Units.
The firm is a nexus of contracts among its various stakeholders (managers, shareholders, debt holders etc.). In this course, we will examine how value is created, and how real world conflicts between the various stakeholders of a firm lead to deviations from "perfect world" solutions. For instance, you may have learned in basic corporate finance courses that it is optimal to invest in positive NPV projects. Real-world conflicts can make it sub-optimal for shareholders do so. We will examine such issues and ways to mitigate them. In particular, we will examine Valuation, Asymmetric Information, Agency Cost, Incentive Contracts and Performance Metrics, and, time permitting, also discuss Regulation, Reputation and the role of certifiers and the economic crises. The takeaway learnings from this course are: (a) Understanding how Value can be created or destroyed, (b) Measuring Value, (c) Understanding the links between capital structure and: asymmetric information, market reactions and signaling, agency and management incentives, taxes, shareholder-bondholder conflicts etc., (d) Understanding the links between payout policy and: informational content, market reaction, stock returns and signaling, clientele effects etc., and (e) Understanding the need for and the design of incentive mechanisms. Case studies will be used to reinforce learning. We will emphasize on links to real-world events.

BAFI 444. Entrepreneurial Finance. 3 Units.
The objective of this course is to introduce students to the issues of financial management and capital formation in new ventures. The course will address issues of estimation of cash requirements, development of pro forma financial plans, firm valuation and the process and tools used in raising debt and equity financing. Bootstrapping, angel investing, venture capital, strategic alliances and initial public offerings will be covered. The emphasis is on the entrepreneur and how he/she can assess financial needs and develop a sensible plan for acquiring financial resources in a manner that is consistent with their financial needs and other strategic goals. Offered as BAFI 444 and MSFI 444. Prereq: MBAC 504 or MBAP 405 or BAFI 402 or MSFI 403 or GMBA 401A or MEM students.

BAFI 450. Mergers and Acquisitions. 3 Units.
This course examines the economic rationale and motivation for the different merger and acquisition and recapitalization activities undertaken by firms and individuals in the U.S. market. Emphasis is on the comparable publicly traded proxy company, comparable “change of control” transaction, and discounted cash flow methods of valuing a firm. The class will also review the different types of debt and equity capital employed to fund mergers and acquisitions and recapitalizations, how senior lenders and equity investors structure their loans and/or investments, and how investors realize the gains through different exit strategies. The legal and tax ramifications of various forms of M&A activity are also discussed. The course gives the student an excellent understanding of the role that senior commercial banks, insurance companies, pension funds, LBO funds, investment banking firms, and venture/growth capital investors play in mergers and acquisitions and will strengthen the students’ ability to value a business enterprise. Prereq: BAFI 403 or MBAC 504 or MBAP 405 or GMBA 401A or student in the Accelerated Global MBA program.

BAFI 460. Investment Strategies. 3 Units.
This course provides a broad survey of some of the main strategies used by hedge funds today. Through exercises and projects, the hedge fund strategies will be presented using real data. Students will learn to use a methodology referred to as “back testing” in order to evaluate hedge fund strategies. The course will also cover institutional details related to short selling, liquidity, margin requirements, risk management, and performance measurement. Since hedge funds today use advanced modeling techniques, the course will require students to analyze and manipulate real data using mathematical modeling. The objective of the course is for students to gain practical knowledge about creating, back-testing, and implementing hedge fund trading strategies. Offered as BAFI 460 and MSFI 460. Prereq: BAFI 429 or MSFI 429.

BAFI 480. Global Banking & Capital Markets. 3 Units.
This course will expose students to Banking and Capital Market Structure, Practices, and Regulations in North America, Europe, as well as Asia. Students will learn about structure of the financial services industry in different parts of the world, the history and evolution of the regulatory frameworks in this industry, and its consequent impact on financial and economic development as well as risk. Several case studies are used to expose students to different issues and questions that arise in the day-to-day jobs of financial managers in this industry. Offered as BAFI 480 and MSFI 480. Prereq: MBAC 505 or MBAP 405 or BAFI 403 or MSFI 403 or GMBA 401A.

BAFI 492. Scientific Python Programming with Applications. 0 Unit.
Python is a popular programming language and is used by all sorts of companies. It has many advantages: it is free, easy to learn, fast to learn and very versatile. This course will teach you how to read, write and understand Python scripts. You will learn good coding conventions, and be introduced to relevant resources and tools. We will move past the basics of procedural programming and explore how we can use the Python built-in data structures such as lists, dictionaries, and tuples to perform increasingly complex data analysis and we will utilize many libraries to do advanced scientific analysis, as well as data structuring and data analysis. Offered as MSOR 492 and BAFI 492.

BAFI 501. Special Problems and Topics. 1 - 18 Units.
This course is offered, with permission, to students undertaking reading in a field of special interest.