

COURSE CATALOG

2018-2019



JOHNS HOPKINS
CAREY BUSINESS SCHOOL

COURSE DESCRIPTIONS

The following courses may be offered during the 2018-2019 academic year. Updates to the following course information may take place before the course is offered.

BU.001.351

Professional Development for Career Success

This experiential course is designed to help first-year GMBA students develop the skills needed to accomplish their personal and professional goals. Active participation is essential so that students develop these skills in sequence and receive feedback from instructors and peers. Students are expected to interact and engage with career coaches, external speakers, alumni, and employers throughout the course.

Credits: 0.00

BU.001.611

Business English for Graduates I

This course is designed to polish students' communicative competence for academic and professional success through analysis of texts, discussion, in-class writing, group work, and reflection activities. This course is the prerequisite for Business English for Graduates II. It meets for 3 hours a week for 8 weeks.

Credits: 0.00

BU.001.612

Business English for Graduates II

This course is a continuation of Business English for Graduates I. This course is designed to polish students' communicative competence for academic and professional success through analysis of texts, discussion, in-class writing, group work, and reflection activities. It meets for 3 hours a week for 8 weeks.

Credits: 0.00

BU.001.614

Business English for Graduates III

This course is a continuation of Business English for Graduates II. This course is designed to polish students' communicative competence for academic and professional success through analysis of texts, discussion, in-class writing, group work, and reflection activities. It meets for 3 hours a week for 8 weeks.

Credits: 0.00

BU.001.615

Business English for Graduates IV

This course is the continuation of Business English for Graduates III. This course is designed to polish students' communicative competence for academic and professional success through analysis of texts, discussion, in-class writing, group work, and reflection activities. It meets for 3 hours a week for 8 weeks.

Credits: 0.00

BU.001.620

Summer Intensive

The Summer Intensive aims to prepare international students entering the Johns Hopkins Carey Business School full-time graduate programs for the academic rigors of one of the world's premier universities.

The program focuses on helping participants adjust to American life and culture. Daily practice in writing and speaking English in a variety of contexts helps students prepare for the logistical, academic, professional, and social challenges they will face. Through close reading of articles and case studies, they learn and apply essential business concepts and terminology from such core disciplines as economics, accounting, organizational behavior, and marketing. In addition, participants are introduced to resources and strategies to cope with the logistics of living in a foreign country, from housing and transportation to grocery shopping and navigating a telephone book. One function of such a carefully orchestrated transition is to reduce the anxiety and stress usually associated with the start of classes.

Credits: 0.00

BU.003.892

Leadership Development Expedition I: Pre-trek Seminar

This two-part course is a leadership-intensive seminar and expedition focused on helping students develop their own leadership capacity, while also emphasizing a conceptual understanding of leadership in diverse settings. The course utilizes the unique opportunity for leadership development embedded in outdoor experiential education, providing students the challenge of serving as a leader during an adventure expedition, and helping students reflect on this challenge to develop their own conceptualization and practice of leadership. The course combines a thorough academic introduction to leadership development and opportunity for self-assessment (before the expedition) with repeated reflection and feedback (during and after the expedition) to help students develop their own path as leaders.

Participants will spend 9 days in Belize sea kayaking through the pristine coastal waterways, while experiencing the first-hand challenges of leading a group in a remote destination. The group will work together as an expedition team to navigate, cook, eat, and set up camp. Along the way we will enjoy snorkeling, fishing, and local island life. Throughout the trip, students will focus on enhancing individual and team performance, learn and apply appropriate leadership models and provide/receive structured feedback. Trip logistics will be outfitted by Island Expeditions who will provide us with local guides to teach us about life in Belize.

Note: In order to participate in the expedition, students must also register for BU.003.893 Leadership Development Expedition II: Belize Trek. This seminar (BU.003.892) is a required prerequisite for the Trek course (BU.003.893).

Credits: 0.00

BU.003.893

Leadership Development Expedition: Norway Trek

This two-part course is a leadership-intensive seminar and expedition focused on helping students develop their own leadership capacity, while also emphasizing a conceptual understanding of leadership in diverse settings. The course utilizes the unique opportunity for leadership development embedded in outdoor experiential education, providing students the challenge of serving as a leader during an adventure expedition, and helping students reflect on this challenge to develop their

own conceptualization and practice of leadership. The course combines a thorough academic introduction to leadership development and opportunity for self-assessment (before the expedition) with repeated reflection and feedback (during and after the expedition) to help students develop their own path as leaders.

Participants will spend 9 days in Belize sea kayaking through the pristine coastal waterways, while experiencing the first-hand challenges of leading a group in a remote destination. The group will work together as an expedition team to navigate, cook, eat, and set up camp. Along the way we will enjoy snorkeling, fishing, and local island life. Throughout the trip, students will focus on enhancing individual and team performance, learn and apply appropriate leadership models and provide/receive structured feedback. Trip logistics will be outfitted by Island Expeditions who will provide us with local guides to teach us about life in Belize.

Credits: 2.00

BU.003.892

Global Immersion: Finance in Europe

This course is offered to Carey Business School students interested in learning more about European financial markets. The course takes place in Frankfurt, Germany, and London, England. It aims to develop in-depth knowledge of the European financial system through a partnership with the Frankfurt School of Finance and Management (FSFM). Both Carey Business school faculty and FSFM professors will provide classes on the history and current status of the financial system in Europe and compare those systems to the US financial landscape. Corporate and government organization visits will complement lectures and case studies.

Credits: 2.00

BU.120.601

Business Communication

This course refines students' skills in written and oral communication to internal and external audiences. Through analyses and practice of communication strategies adopted by successful business professionals, students learn to write clearly and concisely, make compelling oral presentations, and construct effective arguments.

Credits: 2.00

BU.121.610

Negotiation

This course provides students with the foundational knowledge and skills needed to negotiate. Designed around a series of research-based negotiation exercises, this course exposes students to a variety of negotiation situations that help them to understand the two fundamental approaches to negotiation. By reflecting on these exercises in light of negotiation theory, students develop an awareness of their personal negotiation style, including its strengths and weaknesses. By the end of the course, students will be able to negotiate in an effective, ethical, and culturally appropriate manner.

Credits: 2.00

BU.131.601

Business Leadership and Human Values

This course explores ethical leadership as a framework for enterprise value creation in a complex environment of competing economic and moral claims. Students examine the intrinsic ethical challenges of leadership and the concept of a moral compass as a foundation for responding effectively to the ethical challenges of corporate citizenship and value creation in a competitive global economy.

Credits: 2.00

BU.132.601

Business Law

A thorough working knowledge of the legal and regulatory environment in which businesses operate is essential for well-prepared business executives. This course provides an overview of the legal and regulatory environment affecting business in the United States. Topics include forms of business organization, contracts, torts and product liability, intellectual property, constitutional law business transactions, and discrimination and employment issues. Students are expected to utilize electronic library and Internet resources to complete assignments.

Credits: 2.00

BU.132.615

Real Estate Legal Environment

Complex legal issues involved in a real estate development and management transaction are reviewed and analyzed in this course. Students explore legal topics, beginning with the basic principles of property law and extending to zoning and comprehensive planning, environmental issues and safeguards of site acquisitions through construction, including leasing, conflict resolution, operation, and sale of a real estate project. Negotiation, legal aspects of entity structures and resolving disputes are discussed.

Credits: 2.00

BU.141.710

Effective Teaming

In today's businesses, teams are a basic organizational building block. Teaming is perennially listed as one of the top skills that recruiters look for in graduating MBAs. This course conveys knowledge and practical tools that help students become more productive team members and leaders. Topics include the characteristics of high performing teams, leadership strategies for creating performing teams, strategies for avoiding dysfunctional team dynamics, and best practices for managing diverse and virtual teams.

Credits: 2.00

BU.142.620

Leadership in Organizations

The goal of Leadership in organizations is to help students learn how to leverage organizational behavior to enhance their ability to lead. Specifically, this course seeks to provide students with both the analytical frameworks and the practical experience necessary to better lead individuals and groups in organizations. The analytical frameworks will help students to understand leadership; the practical experience will

help students put that understanding into action. The aim is to help students lead, even if they do not currently find themselves in a formal leadership role. The practices that are discussed will promote effectiveness at any level.

Please note: Students cannot earn credit for both BU.930.631 and BU.142.620 as they are equivalent courses.

Credits: 2.00

BU.142.720

Managing in a Diverse and Global World

Business organizations and other critical organizations operate in both a market and nonmarket environment. A major focus of the course is examining contextually global diversity, inclusion, and multicultural issues through the lens of multiple dimensions. Successful, globally minded managers align the firm's capabilities with the demands of both its market and nonmarket environment. This course examines political, regulatory and societal factors of influence. Students learn to analyze the motives for focused intervention to better judge when and how political developments may affect business or organization interest. It explores the rise of "private politics" (activists, civil society networks, and NGOs), which are increasingly complementing conventional "public politics." This new plurality also opens exciting new nonmarket strategic opportunities for profit and socially driven business, providing it with new potential allies. This course stresses collective moral agency and the ethical dimensions of business and management in such a global political economy. Students explore cross-cultural perspectives on economics and business culture, and how to analyze and proactively manage the nonmarket environment through integrated market and nonmarket strategies. Cumulatively through class interaction and team activities students develop strategies for managing aspects of global diversity and inclusion within the context of a real organization opportunity.

Credits: 2.00

BU.142.730

Strategic Human Capital

Developing and managing human capital is vital for the success of any organization. In this course, students will examine ways in which human resources management can be used to enhance an organization's competitive capabilities. The goal will be to understand how an organization can select, train, and retain the right employees, and how it can effectively motivate them to make decisions that will allow the organization to successfully implement its overall strategy. Students will explore and master topics such as hiring and layoff decisions; human capital and on-the-job training; turnover; the provision of incentives; the advantages and disadvantages of alternative compensation schemes; objective and subjective performance evaluation; relative performance evaluation; promotions and other career-based incentive schemes; team production and team incentives; stock options and executive compensation; intrinsic and extrinsic motivation; non-monetary compensation; and mandated benefits.

Credits: 2.00

BU.150.710

Discovery to Market I

This course is the first part of a two part course that teaches the process of bringing discoveries to market. Students are required to register for parts of the course. Students learn about innovation and invention processes, how to identify opportunities and assess when ideas are inventions, the steps required to bring the product to market,

including intellectual property protection and regulatory processes, and strategies to license early stage invention to third parties that can pursue entrepreneurial funding and development. As part of the experiential learning process, students work in small teams on early-stage invention projects sourced by the instructor from university and government technology transfer offices.

Credits: 2.00

BU.150.715

Discovery to Market II

This course is the second part of a two-part course that teaches the process of bringing discoveries to market. Students are required to register for parts of the course.

Students learn about innovation and invention processes, how to identify opportunities and assess when ideas are inventions, the steps required to bring the product to market, including intellectual property protection and regulatory processes, and strategies to license early stage invention to third parties that can pursue entrepreneurial funding and development. As part of the experiential learning process, students work in small teams on early-stage invention projects sourced by the instructor from university and government technology transfer offices.

Credits: 2.00

Prerequisite(s): BU.150.710

BU.151.620

Global Strategy

This course provides students with the conceptual tools necessary to understand and work effectively in today's interconnected world by developing strategic perspectives that link this changing environment, the state of the global industry, and the capabilities and position of the firm. The course provides frameworks for identifying and taking advantage of the opportunities presented in a dynamic global environment at the level of the country and industry. It then focuses on firm-level strategic choices regarding where to engage in which activities. Finally, it covers the challenges of integrating the multiple perspectives, functions, and interests that constitute the multinational firm.

Credits: 2.00

BU.151.720

Corporate Strategy

This course is concerned with the formulation and analysis of corporate strategy. Corporate strategy asks the question, 'In what industries should a firm compete?' These are the objectives and policies that collectively determine how a business positions itself to increase its returns and create economic value for its owners and stakeholders. In this course, students learn analytical techniques for diagnosing the industrial landscape of a business, a firm's overall portfolio, and identifying and analyzing specific business options. These concepts and frameworks will help you to learn to put structure on complex and unstructured problems in corporate strategy to provide a solid foundation for managerial decision making.

Credits: 2.00

BU.151.770

Power and Politics

The purpose of this course is to immerse you in issues and dynamics related to power and politics in organizations. We seek to make power and politics discussable, recognizable, and usable. In other words, this course is designed to fuel learning of

concepts that are useful for understanding, analyzing, and harnessing power and political processes. But beyond discovering ways to extend your own power, influence, and political skill, we will also uncover lessons about ways in which power and politics can blind and deceive you, and how you might better navigate situations in which you are up against relatively more powerful people or forces. We will use a range of learning methods including theoretical and business articles, cases, exercises, assessments, and simulations. We will cover a variety of topics ranging from political skills, bases of power and influence, dangers of power, power and change, and leading with power.

Credits: 2.00

BU.152.710

Entrepreneurial Ventures

This course focuses on the knowledge, skills, and attitudes that enable entrepreneurs to pursue opportunities in business development. Students form teams to experience each step of the entrepreneurial process. The end result is an opportunity assessment of a business idea. Emphasis is placed on a hands-on approach with learning supplemented by cases appropriate to each phase of the course. Students are exposed to real entrepreneurial operations and businesses, via final project and presentations.

Credits: 2.00

Prerequisite(s): BU.210.620[C] and BU.410.620[C]

BU.152.725

Real Estate Entrepreneurship

The real estate industry is made up of real estate entrepreneurs. This class examines how to become a real estate entrepreneur and compete in today's marketplace. Course topics focus on the skills and knowledge real estate entrepreneurs successfully use to thrive. Students will learn techniques such as: how to create wealth, real estate pro-formas, back-of-the-envelope calculations, leverage, attracting external investors, and creating a winning business plan. Students will work in teams on case studies.

Credits: 2.00

Prerequisite(s): BU.241.610

BU.152.735

Strategy Consulting Practicum

This course is concerned with the formulation and analysis and practical application of business strategy. Business strategy is the set of objectives and policies that collectively determine how a business creates value for stakeholders. Strategy is concerned with answering two central questions: "What businesses should we participate in?" and "How should we compete?" Students will learn analytical techniques for diagnosing the competitive position of a business, evaluate strategies, and identify and analyze strategic options.

Students integrate and apply previous course work to strategic challenges addressed by organizational leaders. Analytic, integrative, and decision-making skills are also developed as student teams confront these strategic challenges. Creativity and innovation are critical to achieve success; as to follow often-traveled strategic paths is unlikely to result in superior performance. Students are challenged to use both critical and creative thinking as they perform analyses and provide strategic recommendations to their clients.

Credits: 2.00

BU.152.740

CityLab Toolkit: Business for Urban Social Innovation and Impact

For the first time in history, humans are an urban species; the livability of cities now determines the future of humanity and the planet. CityLab is an urban innovation platform engaging students in a global experiment of reinventing cities by revitalizing struggling, undervalued urban neighborhoods from within. The CityLab Toolkit connects students with urban innovation leaders and immerses them in a CityLab neighborhood to explore the concrete context of urban livability issues, strategies, tools and practices.

Please note: In order to be adequately prepared and fully engaged in this course, students should have completed at least four of the required foundation courses within their graduate program prior to enrolling in this set of courses.

Credits: 2.00

BU.152.745

City Lab Practicum: Urban Neighborhood Project

For the first time in history, humans are an urban species; the livability of cities now determines the future of humanity and the planet. CityLab is an urban innovation platform engaging students in a global experiment of reinventing cities by revitalizing struggling, undervalued urban neighborhoods from within. The CityLab Practicum engages students in a challenging project that strengthens their urban innovation practice network and demonstrates concrete progress towards a more livable neighborhood.

Please note: In order to be adequately prepared and fully engaged in this course, students should have completed at least four of the required foundation courses within their graduate program prior to enrolling in this set of courses.

Credits: 2.00

Prerequisite(s): BU.152.740

BU.210.001

Accounting and Financial Reporting Waiver Exam

This exam affords students the opportunity to confirm proficiency in Accounting and Financial Reporting. Students who successfully complete the waiver exam will be granted a waiver with replacement for BU.210.620.

Please note: Waiver exams may only be taken once per student, in the first or second semester of registration in a new program. The exam will be completed online in Blackboard within the time frame stipulated listed within this course description. Students will be required to use Remote Proctor for the actual completion of the exam.

Credits: 0.00

BU.210.620

Accounting and Financial Reporting

This course emphasizes the vocabulary, methods, and processes by which business transactions are communicated. Topics include the accounting cycle; basic business transactions involving assets, liabilities, equity, revenues, and expenses; as well as preparation and understanding of financial statements, including balance sheets, statements of income, and cash flows.

Credits: 2.00

BU.210.650

Advanced Financial Accounting

Advanced Financial Accounting is designed to prepare you to analyze, interpret, and use financial statements effectively, both from a general manager and from an investor perspective. The course will review and extend the topics introduced in Accounting and Financial Reporting with an emphasis on value creation. Specifically, the course will introduce a thorough framework for financial statement analysis, focusing on (1) accounting analysis, (2) financial (ratio and cash flow) analysis, and (3) prospective (forecasting and valuation) analysis.

Credits: 2.00

Prerequisite(s): BU.210.620 or BU.910.611

BU.220.610

The Firm and the Macroeconomy

This course explores the workings of an economy from a macroeconomic perspective. Although the course focuses primarily on the United States economy and its relation with the rest of the world, the concepts and tools apply to market economies around the world. Major topics include: the determinants of an economy's output in the long run; the role of money in the long run and short run; the determinants of the price level; the role of interest rates and exchange rates in the U.S. economy and in small, "open" economies; the causes and nature of the business cycle; the Keynesian model of the economy and how it differs from the classical theory of the economy; and the role of fiscal and monetary policy in stabilizing the economy and ensuring full employment. The last module of the course examines the recent meltdown of the economy, stemming from the collapse of housing prices and the financial system.

Credits: 2.00

BU.220.620

Economics for Decision Making

This is a microeconomics course with emphasis on the application of economic principles and methodologies to private and managerial decision problems. Major topics include consumer choice and market demand, costs and profit maximization, market structures, output/price decisions, and strategic interactions.

Credits: 2.00

Prerequisite(s): BU.510.601 or BU.914.610

BU.220.720

Financial Econometrics

Financial econometrics is the intersection of statistical techniques and finance. It provides a set of empirical tools to analyze historical financial data, model underlying economic mechanisms, and predict future price trends. This course covers both cross-sectional and time-series data. Multivariate regression analysis is developed to study the cross-sectional differences in stock returns of individual firms and associated portfolio models. Applications of these techniques to evaluate the performance of new trading strategies and hedge fund managers are also discussed. Furthermore, time-series models are introduced to model and forecast both time-varying aggregate stock returns and volatility. The course prepares students to conduct empirical research in an academic or business setting. Stata will be used for the class.

Credits: 2.00

Prerequisite(s): BU.232.701 and (BU.510.601 or BU.914.610)

BU.230.620

Financial Modeling and Valuation

The objective of this course is to introduce students to the current practices in financial modeling and valuation using Excel. Students will learn how to manipulate financial data and how to perform financial analyses using various analytical tools. Using the skills, students will learn how to forecast financial statements and build interactive valuation models for firms. By the end of the course, students will complete an equity research paper. One important aspect of this course is also to introduce students to portfolio modeling, efficient frontiers, and portfolio choice subject to constraints.

Credits: 2.00

Prerequisite(s): BU.232.701

BU.230.640

Development Modeling and Risk Analysis

This course emphasizes the estimation of development and investment budgets, including construction costs, construction loan interest, tenant improvements, lease-up reserves, marketing costs, and other soft costs. Ongoing property operations, including lease-up and refit allowances, are also examined. In this context, various capital structures are analyzed including mortgage loans, various equity investors, and possible refinancing opportunities. In addition, critical risks are examined using sensitivity analysis, Monte Carlo simulation, scenario analysis to calculate the most likely returns, and the probability of loss. This course was previously titled Development II.

Credits: 2.00

Prerequisite(s): BU.241.610 or BU.231.620

BU.230.710

Quantitative Financial Analysis

This course explores the fundamentals of Monte Carlo simulation techniques and their applications in finance. Using MATLAB as the programming platform, this course intends to train students to become familiar with simulation techniques in financial modeling, such as derivative pricing and market risk assessment. This course is taught mostly using hands-on computer exercises, and students are required to bring their laptops to class.

Credits: 2.00

Prerequisite(s): BU.232.710 and BU.232.701

BU.230.730

Managing Financial Risk

The course offers an introduction to financial risk management. Risk management is a complex process of identifying, measuring, and controlling risk exposure. The course will balance theory and practical application. Topics include market and credit risks, liquidity, and operational and legal risks, including volatility modeling, and derivatives as tools for controlling risk. Using modern econometric models, such as ARCH and GARCH, along with widely used quantitative methods (Monte Carlo simulation and Filtered Historical simulation), the course will describe how to measure and control risk exposure towards various types of risks, especially market and credit risk.

Credits: 2.00

Prerequisite(s): BU.220.620 (or BU.912.611) and BU.232.710

BU.230.750

Financial Crises and Contagion

This course takes students through the last 30 years of financial bubbles, manias, and scandals in the United States, from the thrift crisis of the 1980s, to the Long-Term Capital Management and Enron debacles, to the recent mortgage meltdown and Great Recession. Examining these upheavals is key to understanding how the landscape and laws of modern financial markets evolved and where they might be headed.

Credits: 2.00

Prerequisite(s): BU.231.620 or BU.910.611

BU.231.620

Corporate Finance

This course is designed to introduce students to the basic, yet fundamental, issues of modern finance. The goal of the course is to provide students with the basic tools needed to successfully complete more advanced finance courses. This course deals primarily with a firm's investment and financing decisions, and its interactions with the capital markets. Students are taught the fundamental principles of financial valuation and analysis, which provide a solid foundation for all other finance courses.

Please note: Students cannot earn credit for both BU.910.611 and BU.231.620, as they are equivalent courses.

Credits: 2.00

Prerequisite(s): BU.210.620 or BU.234.610

BU.231.710

Financial Institutions

The financial service industry plays a significant role in the economy and it continues to undergo dramatic changes. Financial institutions (FIs) perform the essential function of channeling funds from savers to users of funds. Financial intermediation is subject to a significant risk as the recent financial crisis vividly illustrated. The risk management of FIs is crucial not only in maximizing shareholders' value, but also in ensuring the stability of the whole financial system. In this course, we focus on the measurement and management of fundamental risks of banks (depository institutions).

For example, banks hold assets that are exposed to default or credit risk. Banks also tend to mismatch the maturities of their balance sheet assets and liabilities, and therefore are exposed to interest rate risk. Banks hold funds their portfolios of illiquid assets with deposits and their short-term liabilities, and hence they are exposed to liquidity risk. When they operate in foreign currency they take on foreign exchange risk. Banks can manage their risks in a variety of ways. Furthermore, banks need to manage the uncertainty of the earnings of their trading portfolios caused by extreme market changes, a risk that is known as its market risk. Liability management, loans sales and securitization, portfolio diversifications, and capital adequacy are alternative ways to manage these risks.

Credits: 2.00

Prerequisite(s): BU.231.620 or BU.910.611

BU.231.720

Corporate Governance

The value of a firm depends on good corporate governance practices protecting investors. Greater protection of shareholders lowers the cost of capital due to better risk mitigation. Thus, the set of governance practices, rules, and regulations that promote private sector investment and jobs creation also promote firm value. Topics include the role and responsibilities of shareholders (principals), the boards of directors (the principals' representatives), and the executive management (agent). They also include executive compensation policies, boardroom structure and practices, corporate disclosure and transparency, and the value of the shareholder vote. The course looks into corporate pyramidal structures, hostile takeovers, and the failure of the market for corporate control. It examines the role of financial institutions and credit rating agencies in promoting corporate governance, and how transparency, accountability, responsibility, and fair and equitable treatment of all shareholders help improve corporate governance and reduce agency conflicts between principals, management, and the board of directors.

Credits: 2.00

Prerequisite(s): BU.231.620

BU.231.740

Mergers and Acquisitions

Using a case approach, this course explores the incentives for using acquisition, divestiture, and alliances as vehicles to achieve corporate strategic objectives. Students address analytical techniques often employed in restructuring and alliances, negotiation strategies, and valuation, and the evolution of these transactions. Also discussed are problems encountered in post-merger integration, and alternative modes of market entry, including joint ventures and internal development.

Credits: 2.00

Prerequisite(s): BU.231.620 or BU.910.611

BU.231.790

Advanced Corporate Finance

By employing a case study approach, students learn how the theoretical concepts and tools learned in Corporate Finance and other finance classes are applied in solving real-world problems. Through such key concepts as financial forecasting, cost of capital, capital budgeting, optimal capital structure, dividend policy, and firm valuation, students learn the analytical techniques necessary to make rational financial decisions.

Credits: 2.00

Prerequisite(s): BU.231.620 or BU.910.611

BU.232.650

Continuous Time Finance

This course provides a conceptual understanding of the basic ideas in mathematical finance and shows how these ideas are applied to practical situations, through the development and use of financial models. Mathematical abstractions are created which deal with issues including option pricing, risk neutrality, incomplete markets, stochastic volatility, and other responses to the realization of a variety of "unknowns". Topics include Ito calculus, options theory, martingale pricing, exotic options, jump-diffusion processes, and variance gamma models.

Credits: 2.00

Prerequisite(s): BU.232.710

BU.232.701

Investments

Through an in-depth study of portfolio theory and asset pricing models, students acquire the analytical skills necessary to conduct the valuation of equities, fixed-income securities, and alternative investments. This exploration builds on a thorough exposure to the concepts of risk, risk aversion, and compensation for risk in financial markets. It leads to an understanding of the importance of diversification in controlling portfolio risk for effective asset management.

Credits: 2.00

Prerequisite(s): BU.231.620 (or BU.910.611 or BU.510.601), and BU.220.620 (or BU.231.620 or BU.910.611)

BU.232.710

Derivatives

This course offers a rich overview of forwards, futures, swaps and options. The course will cover both the actual working of derivatives and the analytical tools needed to effectively understand derivatives. Skills are developed in pricing analysis, use of pricing models, trading, and hedging strategies. The strategies are developed to match specific economic goals, such as portfolio risk reduction.

Credits: 2.00

Prerequisite(s): BU.231.620 or BU.910.611

BU.232.720

Fixed Income

This advanced course focuses on the major markets and instruments, pricing and volatility, and risk management of fixed income securities and portfolios. Topics include features and risks of a variety of fixed income securities, including bonds with embedded options, mortgage-backed and other derivative bonds, yield spreads, forward rates and term structure theories, risk management techniques, and bond investment risks and portfolio management strategies.

Credits: 2.00

Prerequisite(s): BU.232.701 and BU.231.620 (or BU.910.611)

BU.232.730

Wealth Management

This course provides strategies for coordinating financial planning for high-net-worth individuals. Students will become skilled at identifying and dealing appropriately with clients' goals, needs, and problems in the areas of investment and investment planning.

Credits: 2.00

Prerequisite(s): BU.231.620 or BU.910.611 or BU.234.610

BU.232.750

Advanced Portfolio Management

This is an advanced course designed as a comprehensive study of primarily institutional investment analysis and portfolio management. It will approach investment management as a rational decision-making process based on the theoretical foundation and best practice techniques of investments. The course is presented to help understand how the basic theories of managing a portfolio of financial assets within the risk/return framework will be addressed. Due to the increasing globalization in the capital markets, portfolio management has become an international business. Thus, a good understanding of valuation of equities and fixed income securities, options and futures,

and other investment instruments within a global setting is necessary to maintain optimal investment in this dynamic environment. The course emphasizes portfolio management as a dynamic process in which the concepts from security analysis are factored into the dynamics of strategic and tactical investment decision-making criteria. The course covers the formulation of appropriate investment portfolio objectives for a key institutional investor, and alternative techniques for achieving them. Determination and allocation of asset classes—including bonds, equities, and alternative investment instruments into efficient portfolios—will be discussed, along with such topics as portfolio optimization, risk management, asset selection and allocation, investment management, monitoring, and revising and rebalancing a portfolio.

Finally, criteria for evaluating portfolio performance will be discussed. Students are encouraged to incorporate corporate social responsibility and sustainable investing concepts into class discussions and deliverables.

Credits: 2.00

Prerequisite(s): BU.230.620 or BU.930.634

BU.232.770

Blockchain

This course introduces students to one of the most exciting financial technological innovation in modern time -- the Blockchain. Students will gain a strong understanding of how blocks are created and linked together by cryptography. Within this decentralized peer-to-peer ledger system, students will examine in detail its construction, immutability, and security with a keen focus on the potential benefits and weaknesses of its fundamental structure as applied to businesses and organizations. Moreover, students will learn how companies are applying blockchain technologies in practice. We will review the first use-case of the blockchain—Bitcoins. Additionally, the course will chart the evolution of Bitcoins to Ethereum and the advantages of Ethereum's smart-contract framework. Additionally, we will dive into the growing alternative crypto-currencies markets. Initial Coin Offerings (ICOs) will be discussed with focus on their potential implications for destabilizing traditional funding sources. The regulatory challenges and current ICO best practices will be reviewed and analyzed. We will be discussing this industry from the perspective of the academic, entrepreneur, investor, and software engineer. The course will be delivered by standard lectures, presentations, case study discussions, assignments, guest speakers, programming exercises in Python, group presentations, and a final comprehensive exam.

Credits: 2.00

BU.232.790

Advanced Hedge Fund Strategies

This course surveys a broad range of hedge fund and proprietary trading strategies with an emphasis on understanding their fundamental investment process. Students will gain practical knowledge in regards to creating, back-testing, and implementing these strategies. There will be particular focus on the theoretical justification for the existence of inefficiencies or risk premium, and the successful extraction of them. The course will cover the gambit of popular hedge funds strategies, such as Long/Short, Event-Driven (Distressed, Risk Arbitrage), Equity Market Neutral, Statistical Arbitrage, Dedicated Short-Bias, Convertible Arbitrage, Emerging Markets, Fixed Income Arbitrage, Global Macro, Managed Futures, and Multi-Strategy. Particular attention will be placed on understanding the mechanics of the alpha-extraction methodology. An example of the type of question that will be addressed in this course is: What do hedge fund managers strive to capture, and how do they do it? Hidden risks and limitations associated with

the implementation of such strategies will be highlighted throughout this course. Upon successful completion of this course, students should gain a firm understanding of the popular hedge fund trading strategies currently employed in the industry.

This course is presented from a practitioner's perspective and will assume that students have knowledge of basic financial theory, portfolio construction, arbitrage concepts, return calculations, statistics, and financial instruments and derivative products. The class projects will be highly quantitative and will require that students be able to analyze and manipulate market data using statistical and mathematical modeling techniques.

Credits: 2.00

Prerequisite(s): BU.231.620 (or BU.910.611) and BU.232.701

BU.233.730

Entrepreneurial Finance

This course introduces students to identifying, accessing, and evaluating sources of financing for start-ups and expanding technology companies. The approach uses case studies, group interaction, and presentations from experts in the field. Attention will be given to financial theory, risk assessment, valuation options, term sheets, due diligence techniques, and the setting up of financial reports for monitoring progress toward meeting milestones.

Credits: 2.00

Prerequisite(s): BU.231.620 or BU.910.611

BU.234.610

Real Estate and Infrastructure Finance

This course examines selected techniques and issues in the area of real estate finance. Special emphasis will be placed on the design and valuation of mortgage instruments. This class will be conducted using a lecture format. While lectures will follow the textbook to some extent, supplemental readings will be required. Students are assumed to have some knowledge of finance. Before taking this class, it is important for students to have a clear understanding of the time value of money concept and knowledge of how to use spreadsheets to solve time value of money problems. Knowing how to use a calculator to solve present value problems (but without a clear understanding of the underlying concept) is not sufficient for tackling the course material of this class. Use of calculators or spreadsheets will not be taught in this class.

Credits: 2.00

BU.241.610

Real Estate Investment and Development

This course provides an overview of the real estate development and investment processes, as well as introduces students to various disciplines, professionals, and industry sectors, and how they interact and participate in these processes. Students learn to apply direct capitalization models and discounted cash flow models to estimate real estate values by converting future income expectations into present values. These values are compared to current costs and prices to determine the financial feasibility of proposed projects and existing properties. The concept of highest and best use is also introduced and discussed. The use of Excel and Argus software is introduced along with financial calculators and the CoStar database. This course was previously titled Development I.

Credits: 2.00

BU.241.620

Design and Construction Feasibility

This course examines site planning, building design, and managing the construction project. The class is divided into two sections. The design section focuses on the conceptualization of the project, and the construction section looks at the management of the implementation of the project. Emphasis is placed on how the selection of materials, equipment, and systems can affect both the function and cost of the building. The course also includes a detailed review of the forms of construction contracts and associated documents commonly used in the industry. This course was previously titled Managing Construction Projects.

Credits: 2.00

BU.241.725

Global Perspectives in Real Estate

This course focuses on real estate and infrastructure investment and financing issues around the globe. Using a case approach supplemented by assigned articles and textbook readings, the course examines the global nature of the real estate asset class, the market players and the issues they encounter when identifying opportunities, and executing real estate strategies in various global markets. Topics covered include risks and returns of international real estate investment; challenges in international real estate development; identification of opportunities and execution of real estate strategies around the world; REITs around the globe; and global real estate portfolio considerations.

Credits: 2.00

Prerequisite(s): BU.241.610 or BU.234.610 or BU.231.620

BU.241.735

Infrastructure Development for Sustainable Cities

This course provides an understanding of the demand for, and supply of, sustainable infrastructure related to the pace of urbanization across the globe. The challenges for both developing and developed countries is examined from the perspective of potential new strategies, new technologies, new business models, and new financing techniques that could make a difference in addressing a full range of infrastructure needs while addressing sustainability objectives. In terms of sustainability, this will include an understanding of the demand and supply side, cultural factors, the policy framework, and the potential impact of technology and innovation. This course was previously titled Sustainable Cities: Urbanization, Infrastructure, and Strategic Choices.

Credits: 2.00

BU.241.740

Project Finance and Public-Private Infrastructure Delivery

Project financing, as an alternative to conventional direct financing, is a well-established technique for large capital intensive projects. It grew in importance in the 1990s as a means of financing projects designed to help meet the tremendous infrastructure needs existing in both developed and developing countries. Whether project financing is suitable for such a purpose will depend, ultimately, on if this financing method offers the most cost-effective means of accomplishing the project after all social and private benefits and costs are considered. This course will discuss the basic project financing framework; the rationale for using project financing as opposed to direct conventional financing; the identification and management of risks associated with a large scale

project; evaluating a project's viability using analytical tools; sources of project funds; using public-private partnerships as a mode of project financing; and the crafting of contractual arrangements to allocate a project's risk and economic rewards among the parties involved. This course was previously titled Project Finance for Infrastructure.

Credits: 2.00

Prerequisite(s): BU.234.610 or BU.231.620

BU.241.750

Advanced Valuation and Investment Analysis

This course will integrate advanced valuation principles with the science of econometrics. Trend analysis, in the form of regression analysis, is used to reveal the influences on value for real estate. This integrates the results of regression analysis into the discounted cash flow methodology. This course is intended to prepare the student for real-world challenges in valuing complex real estate.

Credits: 2.00

Prerequisite(s): BU.242.715 or BU.510.601

BU.241.760

Strategic Commercial Leasing

Strategic Commercial Leasing teaches students how to understand and negotiate commercial leases to create maximum value for property owners of all sizes, including institutional owners and investors. The course provides in-depth coverage the economic, legal and control issues related to commercial leasing. In-class discussions include the risk-return considerations property owners must evaluate when negotiating individual lease provisions. Leasing considerations include the impact on property valuation, property financing and asset disposition strategies. Students evaluate how a company's leasing strategy impacts their overall real estate portfolio risk, valuation and returns.

The course structure will include lectures, group discussion, in-class negotiation. Guest speakers will include institutional owners, lenders and appraisers, enabling students to understand how lease terms are evaluated by a range of professionals. A special focus will be on how institutional owners and REITS view leases, various tenant uses, and overall leasing strategies. This highly interactive course will also cover the differences between apartment leases and commercial leases.

Credits: 2.00

BU.242.601

Real Estate Market Feasibility Study

Understanding the urban environment is the key to understanding the marketability of real estate. Likewise, understanding the marketability of real estate is the key to making wise investment decisions. In this course, students will examine the forces that form, shape, and influence the growth of cities with the goal of understanding how real estate benefits and suffers from these dynamics. Students will explore the techniques for forecasting demand and supply in specific markets, as well as evaluating sites based on product criteria. Products include residential, commercial, and retail properties. Final sessions deal with feasibility analysis.

Credits: 2.00

BU.242.701

Real Estate Investment Trusts: Analysis and Structuring

This course examines the role that Real Estate Investment Trusts play in commercial real estate capital and investment. Topics include the history, legal structure, and financial basis for establishing REIT portfolios. Students will examine the role of public and private capital markets in facilitating commercial real estate investments through REITs using real world examples. The primary course objective combines public company finance theory with practical real estate capital applications for intelligent business decisions in complex scenarios. Subjects include a history of the REIT industry; how REITs compete for capital and control investment risk; how to value individual REIT stocks and REIT shares generally; the regulatory and capital markets process for the REIT IPO; quarterly and annual filings; follow-on capital raising; and recent developments and strategies in the REIT industry. This course was previously titled Capital Markets and Real Estate.

Credits: 2.00

Prerequisite(s): BU.234.610 or BU.231.620 or BU.241.610

BU.242.710

Real Estate Funds and Portfolio Management

A significant amount of commercial real estate investments is held in the form of large real estate funds. These funds typically range in size from \$50 million to over \$50 billion. Many of the large office buildings, regional malls, apartment buildings, and industrial parks in the country are held in these funds. Some funds invest in senior housing, student housing, parking, healthcare, and even farm and timberland. The managers of these funds are large institutional investment management firms that manage the properties on behalf of wealthy investors, pension funds, endowments, and sovereign wealth funds. The purpose of this course is to understand how these funds are organized, how they arrive at an investment strategy, and how to evaluate how they have actually performed relative to that strategy. Case studies and actual industry data will be used to reinforce the concepts discussed in the course. This course was previously titled Managing Real Estate Portfolios.

Credits: 2.00

Prerequisite(s): BU.231.620 or BU.234.610

BU.242.715

Real Estate and Infrastructure Valuation

This course integrates the real estate curriculum with the valuation process. The three traditional approaches to value (land and site valuation; building cost estimates, depreciation, direct capitalization; and yield capitalization) will all be covered in the course. This course is integral for students pursuing the appraisal/valuation concentration within the MS Real Estate and Infrastructure Program. This course was previously titled Advanced Valuation and Investment Analysis.

Credits: 2.00

BU.242.720

Real Estate Capital Market Analysis

This course examines selected topics and issues related to real estate capital markets. Special emphasis will be placed on mortgage backed securities (MBSs) and real estate investment trusts (REITs). This class will be conducted using a lecture format. While lectures will follow the table of contents of the textbook rather closely, quite often supplemental readings are required. Students are assumed to have some knowledge

of real estate finance. Before taking this class, it is important that students have a clear understanding of the design of mortgages and knowledge of how to use spreadsheets to solve mortgage related problems. Knowing how to use a calculator to solve present value problems is not sufficient for tackling the course materials of this class. This course was previously titled Real Estate Finance II.

Credits: 2.00

Prerequisite(s): BU.234.610 or BU.231.620

BU.245.790

Real Estate and Infrastructure Capstone

The Capstone course provides you with a mentored professional real estate industry experience that integrates all aspects of the MS in Real Estate and Infrastructure curriculum. You may choose one of three options:

1. *A real estate and/or infrastructure development project proposal.*

Students selecting this option work in teams to produce a state-of-the-art development proposal for a challenging site selected by Capstone faculty and judged by a project review board of faculty and industry professionals.

2. *A real estate and infrastructure research project.*

Students selecting this option work individually or in teams to conduct original research and analysis of a critical issue in real estate and infrastructure development.

3. *An internship with a real estate company.*

Students selecting this option work on a portfolio of defined assignments mentored by an industry professional in a real estate company, agency, professional or industry association, or portfolio management company.

Capstone choices will differ based on individual interests and career goals, but you are encouraged to choose experiences that provide an opportunity for growth and showcase your professional knowledge, skills and talent. Examples include a development proposal for a brownfield site; an analysis of weather-related risks in coastal infrastructure security; or a written participation/ observation report based on a supervised internship. The structure of deliverables may vary, but deliverables for all capstone experiences will include a written report, presentation slide deck, and oral presentation.

Students must receive approval and permission from their academic adviser before enrolling in this course.

Credits: 2.00

BU.300.620

Managing Complex Projects

This course aims to equip you with effective techniques, methods, and practices for defining, scoping, and planning a project, and then managing it to successful completion. Special areas of emphasis in the course are driven by practical experiences with large and complex projects frequently being late, over budget, and failing to meet specifications. We will pay particular attention to understanding project complexity, risk, and uncertainty so that you are prepared to address these challenges to success. You will gain experience using a leading project management software package.

Credits: 2.00

BU.300.700

Developing Internet Systems and Services

The subject of this course is the development of services that are delivered over the Internet: system feature specification, design, user interface, implementation, and the role of development environments. Increasingly the delivery of services and user access to them is driven by considerations of third-party development, user platform specifications, security, privacy, and performance. Much of the focus of contemporary development is on mobile apps, reflecting the changing modes of behavior and expectations of users for instant availability of highly special-purpose and location-aware applications. This course will consider these trends and their implications for design and development.

Credits: 2.00

BU.330.705

Telecom Clouds and Mobile Applications

This course covers technological advancements in telecommunications and emerging wireless mobile systems, with emphasis on their business application: how the nature of these advances are driving business models and amplifying the strengths of today's firms; how businesses can select, integrate, and apply telecom and emerging mobile systems and cloud services into their business processes to maximize their value creation value capture, and value delivery. Business applications and contents delivered by mobile systems in public and private sectors such as in healthcare services (mHealth), in financial and banking industries (mCommerce), mobile money and credits in social entrepreneurship will be covered. Analysis and selection of the needed telecom and mobile technologies, necessary to support business applications and processes, are examined. This course enables the students to gain an in-depth understanding of different telecom network systems, their developments and international standards. Finally, managerial, business critical, and technical issues such as technology evaluation, cost vs. performance trade-offs analysis, requirements analysis and vendor selection as they are needed by today's commercial and public organizations are covered.

Credits: 2.0

BU.330.730

Cybersecurity

This course considers the contemporary cybersecurity threat landscape facing organizations. Students apply various risk frameworks to provide structure to the decision making needed to invest in resources for security controls and countermeasures. Multiple strategies are explored, including policies, procedures, training, strategic alliances, technologies, and methodologies, especially drawing upon risk management and financial decision making that are used in other sectors of an organization. Topics include qualitative and quantitative risk analysis, audits, metrics, vulnerability assessment, capital budgeting, return on security investment, legal and regulatory compliance, and security best practices. The course will prepare students to be successful in taking on leadership roles in assuring the security of an organization's operations.

Credits: 2.00

BU.330.770

Database Management

The emerging trend of organizations and business decision making is based on data-driven decision making. In fact, database systems are central to most organizations' information systems strategies. At any organizational level, users are expected to face frequent contact with and use of database systems. Therefore, skills in using such systems, which include understanding the capabilities and limitations of the systems, identifying whether to access data directly or through technical specialists and knowing how to retrieve and utilize the information effectively became essential in any industry vertical. Also, skills in designing new systems and related applications are distinct advantage and necessity today. The Relational Database Management System (RDBMS) is one type of database systems, which is widely used and is the primary focus of this course.

Further, the course will provide students with an opportunity to apply the knowledge they learn from the lectures, homework assignments, SQL assignments, and a database implementation project.

Credits: 2.00

BU.330.780

Data Science and Business Intelligence

This course introduces a set of fundamental principles and a framework that guide extracting business insights from data to generate competitive advantage. We will discuss how the ubiquity and massiveness of digital data and the application of business intelligence have changed competitive landscapes. The business intelligence techniques that will be covered in this course include data visualization, online social network and sentiment analysis (for user-generated content), and predictive analytics (e.g. classification and clustering), which are widely used in the real world. The topics and cases discussed in this course cover a wide range of fields, including marketing, finance, healthcare, and more. This course is not a statistics or computer programming course. The emphasis will be on applications and interpretations of the results from business intelligence techniques for making business decisions. Students will apply these techniques in hands-on exercises as we analyze strategic concepts, which will allow students to deepen their understanding of the fundamentals and the applicability of business intelligence.

Credits: 2.00

BU.330.790

Applied IS Architecture

This course provides students with an integration over prior learning and an application of IS principles and practices in a challenging setting of a significant case or real organization. Within this project-based context, students investigate contemporary information systems and technology architectures that constitute operational and productivity platforms for modern enterprises.

Credits: 2.00

Prerequisite(s): BU.330.705

BU.350.620

Information Systems

This course addresses how markets, market mechanisms, and channels of product and service delivery are impacted and often transformed by information and communication technologies. Students will learn how technology, brought together with people and processes into systems, contributes to leveraging the creation of business value. The course considers different elements of the information architecture of the corporation and its impact on the nature of the work and the structure of the corporation.

Credits: 2.00

BU.350.710

IT and Global Sourcing Strategy

This course covers information technology developments and global-sourcing strategies. Specifically, it includes two interrelated topics. First, it covers strategic planning models in which it examines business and corporate strategies which require students to assume the role of a general manager or chief technology officer (CTO) where they have to cope with tremendous complexity, uncertainty, and inadequate information to make strategic decisions. Second, this course covers how advances in telecommunication technology along with the process of global collaboration and value creation enable the creation and delivery of new products and services. The course also explores various country evaluations and risk analyses techniques, and the opportunities and threats that business organizations face as a result of these business and technological trends. Finally, this course examines various global-sourcing and collaborations strategies, the role of standardization in global supply chains integration, and how technology influences new forms of value creation such as public-private partnerships and hybrid entrepreneurial forms in developing economies and how their businesses can develop capabilities, capacities, and competencies required to participate in global collaboration and value creation networks.

Credits: 2.00

Prerequisite(s): BU.350.620

BU.360.701

Competitive Intelligence

Competitive Intelligence (CI), as defined by the Society of Competitive Intelligence Professionals (SCIP), is a systematic and ethical program for gathering, analyzing, and managing external information that can affect an organization's plans, decisions, and operations. Students learn to apply the CI process and CI-related methodologies, techniques, and tools to better analyze an organization's current and future competitive position. Students apply analytical and socio-technical techniques to improve organizational decision making as related to CI, and should understand the issues related to the collection, analysis, and management of external information.

Credits: 2.00

BU.410.601

Marketing Research

Students will examine the fundamental concepts and techniques used in marketing research as decision-making tools. Problem formulation, research design, primary data collection, types of information and measurement scales, and evaluation and utilization of secondary data will be discussed. Other topics that will be discussed

include structured and unstructured interviews, focus groups, exploratory research, causal research, sampling, survey design, qualitative versus quantitative data analyses, and interpretation. Students will receive hands-on experience with the SPSS statistical package for analyzing data.

Credits: 2.00

Prerequisite(s): BU.410.620 (or BU.911.610) and BU.510.601 (or BU.914.610)

BU.410.620

Marketing Management

This course covers principles of market-driven managerial decision making that determine competitiveness in dynamic consumer and organizational markets. Particular areas of emphasis include industry analyses, dynamics of competition, market segmentation, target marketing, channels of distribution, and product and pricing decisions. In-depth analytical skills are developed through case analyses, class discussions, and applied projects.

Credits: 2.00

BU.420.710

Consumer Behavior

This course provides students with a solid foundation in consumers' decision making based on theoretical and empirical findings from the fields of psychology, anthropology, and sociology. Topics include consumers' knowledge and involvement, attention, comprehension, learning, attitude, and purchase intention. Strong emphasis is given to the design and modeling of response patterns, diffusion of innovations, and consumer behavior for specific products and services. Also explored is the practical impact of consumer behavior analysis on marketing mix strategies, market segmentation/positioning, brand loyalty, persuasion process, and promotion.

Credits: 2.00

Prerequisite(s): BU.911.610 or BU.410.620

BU.420.720

Customer Relationship Management

Students investigate the critical role and impact that customer relationship management (CRM) plays in marketing and business decision making. Topics include CRM history and evolution, database marketing, big data, customer lifetime value, predictive modeling, analytics, key performance indicators (KPIs), multichannel customer management, and CRM platform systems. Course content begins with the definition and overview of CRM, and then proceeds to detail the evolutionary trend from database management to the current use of big data and analytics in the multichannel environment. Students are expected to understand how data can be leveraged by marketers to quantify marketing results, forecast marketing goals, and realize marketing objectives. The course is divided into three sections: (1) Customer Centricity & Data Evolution; (2) Leveraging & Quantifying Data; and (3) CRM Management.

Credits: 2.00

BU.420.730

Advanced Behavioral Marketing

Marketing, in particular, begins and ends with the consumer—from determining consumer needs to ensuring customer satisfaction. In this advanced behavioral marketing course, we will explore classic as well as the most recent scientific research in marketing, psychology, and behavioral economics on judgment and decision making.

Readings will include primary empirical research articles, business journal articles, and research reviews. We will develop your ability to understand and influence what people want, how people decide what and when to buy, and whether people will be satisfied or dissatisfied with their decisions. These psychological insights are not only particularly useful for marketing management decision making such as target marketing, brand positioning and marketing communication, but also shed light on common decision biases beyond marketing. In addition, we will examine the methodology of behavioral research to build the tools you will need to interpret scientific findings and base decisions on them.

Credits: 2.00

Prerequisite(s): BU.410.620 or BU.911.610

BU.430.710

Branding and Marketing Communications

A brand is a name, term, sign, symbol, or design—or a combination of these—intended to identify the goods and services of one seller or group of sellers, and to differentiate those of the competition. The essence of formulating competitive strategy is relating a brand to its environment. Although the relevant environment is very broad, encompassing social as well as economic forces, the key aspect of the brand's environment is the industry(ies) in which it competes. Therefore, the goal of competitive strategy for a brand is to find a position in the industry where the brand can: 1) articulate a compelling value proposition, 2) defend itself against competitive forces, and 3) leverage communication resources to communicate the brand message and build brand equity.

In this course, students examine how a favorable brand and memorable brand experiences can influence a firm's ability to withstand competitive pressures and thrive in dynamic market conditions. Students will study brand management from the consumer perspective to highlight the importance of customer perceptions in bringing brands to life and the role of brand knowledge in building brand equity. Students will become acquainted with cutting-edge frameworks, concepts, and tools that have been adopted across industries and around the globe to build lucrative brand franchises. Additionally, students will consider the role of marketing communication vehicles and platforms in effective brand management.

Credits: 2.00

Prerequisite(s): BU.410.620 or BU.911.610

BU.430.720

Pricing Analysis

Pricing is one of the most important and least understood business decisions. This course aims to equip students with proven concepts, techniques, and frameworks for assessing and formulating pricing strategies. The objective is to prepare students for addressing strategic and tactical pricing issues and identifying profit-boosting changes in pricing practices across a range of professional contexts—as product/service managers, business unit managers, management consultants, entrepreneurs, and M&A advisors.

Credits: 2.00

Prerequisite(s): BU.410.620 or (BU.911.610) and BU.510.601 (or BU.914.610)

BU.430.740

Sales Force and Channels of Distribution

A well-staffed sales function and full knowledge of the available channels of distribution is vital for business success. They go hand in hand with the goal of revenue generation for all organizations—profit, non-profit, product-based, and/or service-based. This course takes a close examination into the synergy of sales force and channels of distribution with a hands-on approach through simulation, role playing, case studies, readings, and interaction with marketing professionals who manage the dynamics of sales and channels management.

Credits: 2.00

Prerequisite(s): BU.410.620 or BU.911.611

BU.450.630

Designing Experiments

Did a new compensation scheme motivate employees to work harder or stay with the organization longer? Do larger subsidies for health insurance lead to improved employee health and productivity? Did a new website format increase user activity on the site? Did a charitable organization's program to train community leaders lead to positive changes in the community? Cause and effect questions like these are crucial to developing evidence-based practice in business, nonprofits and governments. Yet answering these questions is difficult when new ideas are not implemented with the explicit intent of measuring their impacts. In other words, developing evidence requires a scientific approach to business and policy.

This class aims to teach students to develop empirical evidence about the best ways to achieve their aims, whether these aims are to increase profits or to address social problems. The use of randomized controlled trials to test program impacts is becoming increasingly popular in businesses and government. An employee estimated that the average Facebook user is a participant in about 10 randomized controlled trials at any point in time. The U.S. government recently created a "Nudge Squad" that works with federal agencies to test new ideas through randomized controlled field trials. Experiments are an integral part of the 'big data' revolution going on in business, nonprofits and government. Importantly, they do not require advanced statistics or powerful computers to implement and interpret.

The course will blend lectures, group discussions, readings, homework, a group project, and guest speakers from private industry, nonprofits and government agencies. I am a firm believer that the most fundamental principles can be stated in plain English. Thus the course stresses intuition (in English) over math and mechanics. Nevertheless, there will be math and mechanics in the course.

Credits: 2.00

Prerequisite(s): BU.510.601 or BU.914.610

BU.450.710

Marketing Strategy

This course provides students an in-depth understanding of marketing strategy. It is designed to help students experience the role of senior business executives in formulating, implementing, and evaluating marketing strategies for a variety of complex, real-world business scenarios. Students will analyze and learn the key factors underlying the successful and lackluster marketing strategies of both major corporations and smaller firms across different industries, across different tiers of brands and products (luxury versus mass-market), and across the globe. Topics covered include industry and

market analyses, dynamics of competition, value creation, branding, segmentation, targeting, positioning, product development, pricing, distribution, and promotion. Through case analyses, in-class discussions, course assignments, and a research project, students will develop skills in devising, executing, and evaluating marketing strategies, as well as working in teams on complex business projects.

Credits: 2.00

Prerequisite(s): BU.410.620 or BU.911.610

BU.450.730

Design Leadership

This course offers students the opportunity to learn and participate in design thinking: a human-centered process utilized by some of the most creative and competitive business organizations. With emphases on research, ideation, and prototyping, design thinking helps students leverage their creativity and collective expertise to achieve innovative solutions. During this course, students will work in teams to solve complex problems while applying the entire design thinking process. A large component of the course is experiential, but students will examine design thinking through multiple academic lenses (design and design theory, organizational behavior, and social psychology).

Credits: 2.00

BU.450.740

Retail Analytics

The retail and service sector is the largest of all economic activities. This course will explore the strategic issues of retail firms. You will learn how to use data-driven empirical tools and theoretical models to analyze decisions of retail firms. We will cover a wide range of topics in strategic decisions in retailing: pricing, location, franchising, and omni-channel retailing. The focus throughout is on predicting the impact of marketing decisions on profitability. The questions this course will explore includes:

What is the right price of an item in presence of competitors?

How should a retailer choose a store location?

How does a franchising strategy lead to dynamic expansion and the success and failure of the company?

How does omni-channel retailing influence the way shoppers move through all channels in their search and buying process?

How is the landscape of retailing changing? What trends are emerging?

This class is practical and hands-on. Most strategic decisions businesses make require a quantitative assessment of cause and effect. For each topic, we will cover in depth the data-driven empirical tools that are most valuable for linking cause to effect. You will learn how to perform convincing data analyses to answer specific questions. We will use R and ArcGIS for analyzing data. We do not assume that you have used R or ArcGIS, software for statistical and geographical analyses, respectively, in a previous class. For potential overlaps with other courses, we will cover them at a faster pace and emphasize techniques that are not covered in other courses.

Credits: 2.00

Prerequisite(s): BU.510.601 or BU.914.610 and BU.410.620

BU.450.750

Strategic Market Intelligence

This course is focused on understanding advanced issues in marketing strategy and processes that determine marketing competitiveness in dynamic consumer and organizational markets. An important objective of the course is to teach students the skills of anticipating competitor's next marketing moves and incorporating them when setting own marketing strategies. Students will learn to apply game theoretic tools in various marketing contexts to understand the strategic implications of their marketing decisions as well as their competitors. Students will also learn strategies to help them make effective decisions when lacking important information and facing an uncertain market environment.

Credits: 2.00

Prerequisite(s): BU.410.620 or BU.911.610 and a basic understanding of microeconomics is recommended.

BU.450.760

Customer Analytics

This course introduces students to the modern practice of marketing analytics. Its main goal is to illustrate how marketing practitioners can improve decision making by leveraging scientific approaches in the analysis of big data. Leading analytical techniques and data structures are illustrated in the context of their most prominent applications. For example, predicting customer responses to marketing campaigns, and managing customer churn. The class has a strong "hands on" component, enabled by several in-class examples and group assignments (implemented on Microsoft Excel and the statistical language "R"). Students are not expected to become expert programmers or statisticians, but to acquire basic skills and knowledge to orchestrate an effective analytics strategy, given the firm's goals.

Credits: 2.00

Prerequisite(s): BU.510.601 (or BU.914.610) and BU.410.620

BU.450.765

Social Media Analytics

The rapid growth of social media has given the mass consumers a powerful tool to create knowledge and propagate opinions. At the same time, social media has created an unprecedented opportunity for companies to engage real-time interactions with consumers. In addition, the size and richness of social media data has provided companies an unusually deep reservoir of consumer insights to transform the business and marketing operations. The social media analytics course will enable students to grasp social data analytics tools including social media minoring and engagement, topical and trend analysis, social network analysis and evaluation of social media strategy. Numerous hands-on exercises will be involved.

Credits: 2.00

Prerequisite(s): BU.510.601 and BU.410.620

BU.460.700

Digital Marketing & Social Media

Integrated Digital Marketing is a course designed to give the student an understanding of the digital marketing environment and how it functions. This course is intended to prepare students for the complexities and nuances of the digital world and provide

them with foundational skill-sets that will translate into business value. The course will cover a wide spectrum of topics, including the history of the Internet, new and emerging digital trends, website design and development best practices, digital marketing campaign design, digital analytics, channel decision making, e-marketing research, digital positioning and branding, social network management, and digital messaging/creative best practices. Lectures, readings, case discussions and project assignments will offer both a digital agency management and an end-user perspective. Timely case studies, relevant text materials, digital marketing tools and group projects are used to augment the lectures and gain hands-on experience in the digital space.

Credits: 2.00

Prerequisite(s): BU.410.620 or BU.911.610

BU.460.710

Business-to-Business Marketing

This course provides a managerial introduction to the strategic and tactical aspects of business marketing decisions. Students examine the strategic concepts and tools that guide market selection, the development of a customer value proposition, and successful differentiation in business markets. They also study how this strategic analysis serves as the integrating theme for creating a firm's B2B marketing programs and managing strategic customers as assets. A mixture of lectures, discussions, cases, and readings are used to examine how product and service decisions are designed to deliver the B2B value proposition, how pricing captures customer value, how value is communicated to and among customers, and how marketing channels are used to make this value accessible to target customers. Students will compare and contrast how the strategic and tactical processes of developing and managing value-generating relationships differ between B2B and B2C markets.

Credits: 2.00

BU.460.730

New Product Development

This course focuses on the process whereby innovators solve consumer problems by innovating new products or services. Identification of the needs and wants of consumers are the starting point and the axis around which class contents revolve. Students are introduced to the techniques and insights required to navigate the processes of ideation, idea management, product development, and commercialization. They are presented with industry examples for the application of these methods and concepts, and required to apply them in a group project.

Credits: 2.00

BU.475.601

Foundations of Design Leadership

A rapidly changing market place demands leaders who must be intellectually dexterous and possess a range of skills and knowledge reflecting a multitude of creative disciplines. Foundations of Design Leadership surveys the language, tools, principles, and theories of the fields of design, engineering, and business as they apply to the generation of innovative design solutions. Focus is on a synthesis of design, technology, and business goals through the development of basic knowledge related to a range of topics including, aesthetics, ergonomics, finance, marketing, prototyping, creativity,

accounting, manufacturing, economics, etc. Students with varied backgrounds representing the fields of business, engineering, and design, share their experience through seminars, lectures, and projects while gaining new knowledge about industries in which they have limited background. The goal of Foundations of Design Leadership is to establish a common set of knowledge among the programs diverse cohort.

Credits: 3.00

BU.510.001

Statistical Analysis Waiver Exam

This exam affords students the opportunity to confirm proficiency in Statistical Analysis. Students who successfully complete the waiver exam will be granted a waiver with replacement for BU.510.601.

Please note: Waiver exams may only be taken once per student, in the first or second semester of registration in a new program. The exam will be completed online in Blackboard within the time frame stipulated listed within this course description. Students will be required to use Remote Proctor for the actual completion of the exam.

Credits: 0.00

BU.510.601

Statistical Analysis

Students learn statistical techniques for further study in business, economics, and finance. The course covers sampling distributions, probability, confidence intervals, hypothesis testing, regression and correlation, basic modeling, analysis of variance, and chi-square testing. The course emphasizes statistics to solve management problems. Case studies, spreadsheets, and Excel Add-in Data Analysis ToolPak computer software are used.

Credits: 2.00

BU.510.650

Data Analytics

This course prepares students to gather, describe, and analyze data, using advanced statistical tools to support operations, risk management, and responses to disruptions. Analysis is done targeting economic and financial decisions in complex systems that involve multiple partners. Topics include probability, statistics, hypothesis testing, regression, clustering, decision trees, and forecasting.

Credits: 2.00

Prerequisite(s): BU.510.601 or BU.914.610

BU.520.601

Decision Models

This course discusses quantitative methods that have proven to be particularly useful for decision making in business settings. The course covers a variety of models and methodologies. While a number of software programs are available, the course will leverage the capabilities of Excel for a large number of topics. An emphasis will be placed on formulating problems, translating those formulations into useful models, optimizing and/or displaying the models, and interpreting results. The lessons of this course prepare students to perform the analysis required in subsequent courses and in

practice. Topics such as Linear and Integer Linear Programming, Network Flow, Decision Analysis, and Monte Carlo Simulation will be discussed to demonstrate applications in planning and control for different types of business decisions.

Please note: Students cannot earn credit for both BU.913.610 and BU.520.601, as they are equivalent courses.

Credits: 2.00

Prerequisite(s): BU.510.601/ BU.913.610

BU.520.620

Advanced Business Analytics

This course trains decision makers to function in the face of multi-dimensional uncertainty, through the development and use of optimization models. Mathematical abstractions are created which deal with issues including resource allocation, scheduling, pricing, and other responses to the realization of a variety of “known unknowns”. Topics include linear programming, dynamic programming, multi-criteria optimization, and non-linear optimization.

Credits: 2.00

Prerequisite(s): BU.520.601 or BU.913.610

BU.520.701

Enterprise Risk Management Frameworks

This course provides an introduction to the formal principles and practices of modern COSO- and ISO-style enterprise risk management (ERM). The course provides a framework that integrates the core, foundational, and elective courses in the school’s Enterprise Risk Management Curriculum. A combination of didactic lectures, student presentations, and group conversation will be used to impart and enliven the material.

Credits: 2.00

BU.520.710

Big Data Machine Learning

This course provides students with a firm understanding of the mathematical and statistical theories that underlie the foundations of big data and machine learning. Students will be engaged in solving real-world problems by directly applying their data science skills through the implementation of code and rigorous analysis of financial data sets. In particular, this course will highlight some of the challenges and limitations of applying such machine learning algorithms. Focus will be on understanding the subtle differences in each technique. This course will be hands-on with weekly homework assignments and a final presentation geared towards fully immersing students in the data science process. Students will program in Python (e.g. Pandas, NumPy, Scikit-Learn, Matplotlib, pattern, NLTK, etc.). Topics that will be covered include: Principle Components Analysis, Multinomial Logistic Regression, Naïve Bayes, Perceptron, Support Vector Machines, Random Forest, Neural Networks, model evaluation ROC/AUC, k-fold cross-validation, etc.

Credits: 2.00

Prerequisite(s): BU.510.650 (or BU.914.610) and BU.231.620 (or BU.910.611)

BU.550.610

Health Care Financing

This course covers the analysis of the major financial decisions of corporations in the health care industry and application of techniques of corporate finance in the health care industry. Financial and operating decisions in the health care industry are discussed

as is the valuation of profitability and cost performance of service and product lines, the impact of cost containment and competition on hospitals and integrated delivery systems and other providers, modeling of cost drivers in health care including cost and production functions, cost accounting systems and concept of price and value. This course will also deal with managed care and risk management in relation to the relative roles of private sector and public sector insurance and providers, and the effect of delivery system design on cost, quality, and efficiency and equity. Topics related to the payment for the elderly, the poor, medically indigent and the underinsured are covered. Finally, innovations such as insurance exchanges and changing models of employer self-insurance are explored.

Please note: Students cannot earn credit for both BU.883.705 and BU.550.610, as they are equivalent courses.

Credits: 2.00

BU.550.620

The U.S. Health Care System: Past, Present, and Future

This course provides an overview of the health care delivery system in the United States, and explores the drivers of change over time that shape the organization and delivery of healthcare services and opportunities for innovation and improvements in the cost, quality, and access dimensions of health care services. The course considers the paradox of the U.S. health care delivery system, and how large expenditures on health care have not resulted in best outcomes due in part to issues of cost, access, and quality.

Credits: 2.00

BU.555.610

Leading Health Care Organizations

This course introduces concepts and tools in the management and promotion of change in health care organizations. It covers basic ideas behind organizational-structure decisions, information diffusion in informal social networks, and the basic tools for understanding and managing organizational culture. It discusses the unique attributes of the health care workforce in relation to these topics and examines leadership strategies in the context of change management.

Credits: 2.00

BU.555.710

Applied and Behavioral Economics in Health Care

This course covers the application of economic theory to health care markets and decision making. It explores the economic analysis of the health care industry across the continuum of care, including the role of non-profit and for-profit providers, the nature of competition, the effects of regulation and antitrust activity on hospitals, the effects of alternatives to hospital care and shifting of services between inpatient and outpatient settings and its effect on health care costs and quality. The course builds on analytical tools of economics applied to issues in health care to explore the use of economic incentives to influence health behavior, the role of asymmetric information and agency in health care, the role of decision-making biases as they apply to health care, the incentive implications of government as payer and regulator, issues surrounding equity and ethics, the role of health insurance in the economics of pricing, and the theory of the firm as it applies to physicians, hospitals, and systems.

Credits: 2.00

Prerequisite(s): BU.220.620 or BU.912.610

BU.610.625

Simulation and Strategic Options

In this course we draw from Economics, Monte Carlo Simulation, and Decision Theory to build a framework for the assessment and control of quantifiable risks. In the process we introduce the logic of real options and analysis of contingent claims. From this base we cover several classic problems including retirement planning, insurance valuation, market entry, and product introductions. The unifying theme is the application of rigorous approaches to thinking through “optionality” in the real world as a means to manage risks.

Credits: 2.00

Prerequisite(s): BU.231.620 (or BU.910.611) and BU.520.601 (or BU.913.610)

BU.610.630

Insurance and Risk Management

This course will examine the way in which business and society make assessments of, control and transfer risk. Topics covered will include identification of risks, selection of strategies to manage those risks, implementation of selected strategies, management and monitoring results. Emphasis will be place on the use on insurance instruments in such strategies.

Credits: 2.00

BU.610.705

Crisis Management

In this course, we will examine the entire crisis management lifecycle—from prevention and preparedness through response, recovery, and mitigation—and consider the lifecycle’s principles and practices. We will identify and use the entire crisis management toolkit to address challenges faced by managers when organizations face any crisis, due to either external factors outside the organization’s control or internal control or strategic management failures. We will develop a complete crisis management plan, including tools and methods to identify potential crises, implement response and mitigation strategies to limit exposure, manage crisis response teams, and create communications to address stakeholder and public relation issues.

Credits: 2.00

Prerequisite(s): BU.120.601 or BU.930.610

BU.610.730

Supply and Service Contracting

This course explores fundamental drivers of human and system behavior embedded in business contracting, with a view integrating economical, operational, legal, and political perspectives. These drivers include alignment of incentives for performance and information sharing, provisions for recourse in the face of unsatisfactory performance, and design of options to facilitate the pursuit of opportunities that arise after contract terms are set. Emphasis will be placed on analyzing and designing contracts to create win-win opportunities and share or minimize risks in global networks.

Credits: 2.00

Prerequisite(s): BU.680.620 or BU.912.611

BU.610.750

Global Supply Chain Management

In this course, we show applications of inventory theory to global supply chain management. In addition, we discuss several related issues in supply chain management, including distribution, coordination, global sourcing and mass customization. We will take analytical and detailed approach in model development. The presentation is designed to refine intuitions developed from models and case studies to build managerial insights.

Credits: 2.00

Prerequisite(s): BU.680.620 or BU.912.611

BU.680.620

Operations Management

Within a manufacturing or service organization, operations provide the power necessary for orchestrating technology and resources in creating products and services to meet the needs of end consumers. Operations management, accordingly, consists of ideas for shaping and innovating an organization's business model. This course provides a conceptual and actionable introduction to operations management and covers a wide range of topics, including operations strategy, process mapping and design, queuing theory, inventory management, lean manufacturing, and revenue management, unified by a thought framework known as "the operations prism" _ (flows, variability, and buffers). By taking a process view of value-added functions that lead to an understanding of how to make operations design choices, students will acquire analytical and strategic thinking skills crucial for managing 21st-century operations.

Credits: 2.00

Prerequisite(s): BU.520.601

BU.881.700

Health Care Overview Bootcamp

This case-based course provides an overview of the strategic and policy challenges of delivering health care around the world, summarizing the philosophy, pedagogical approaches, and courses in the program. Over a two-week introductory period, discussions will focus on the 4 Managerial Skills (Sense Making, Problem Solving, Sense Giving, and Global Mindset) and 4 Strategic Pillars (Quality, Access, Cost, and Innovation) that leaders in the industry require to achieve the triple aim of high quality, efficiency, and optimal health outcomes.

Credits: 0.00

BU.881.701

Fundamentals of Health Care Systems

Ensuring comprehensive access to health services, improving the quality of care, and containing the growth of health care expenditures is a dynamic that exists in health systems around the world. This course provides an overview and synthesis of health systems in different countries, and the challenges and opportunities for developing and strengthening systems to maximize population health. Students learn about the four major models of health systems, systems thinking, management concepts relevant to the analysis of health systems, and performance of health systems. We analyze the health systems of five countries in detail. The strengths and weaknesses of these various national health systems—including macroeconomics, models of public financing, political economy, public choice, individuals/communities, and delivery infrastructure—are identified, evaluated, and discussed.

Credits: 2.00

BU.881.702

Frameworks for Analyzing Health Care Markets

This course introduces students to basic economic concepts and the language used to analyze market structure, conduct, and performance, as well as nonmonetary outcomes including health outcomes and distributional issues. Students learn to discuss system changes and challenges faced by health care providers and patients, facility managers, insurers, and product manufacturers. Lectures and cases explore the drivers of costs, prices, access, innovation, and outcomes.

Credits: 2.00

BU.881.703

Health Care Law and Regulation

This course provides students with an overview of the legal environment as it affects medicine and business. Cutting-edge cases are utilized as students explore medical malpractice, negligence, liability (physician, product, and corporate), criminal aspects of health care including fraud and abuse, patient consent and rights, and the current state of health care reform. This is the foundational course in the health services management curriculum.

Please note: Students cannot earn credit for both BU.550.605 and BU.881.703, as they are equivalent courses.

Credits: 2.00

BU.881.704

Providers and Payers

This course focuses on strategies and tactics for provider networks and payers to manage resource constraints as well as insurance and reimbursement issues in order to deliver quality, ethical, and efficient care. Interactions between providers and payers are a critical topic, along with how these interactions lead to changes in health care provision and policy change.

Credits: 2.00

BU.881.705

Health Marketing and Access

This course focuses on how standard marketing techniques do, and do not, apply within the health sector, which poses several important constraints and challenges. Students explore the implications of these for marketing analysis, tactics, and strategy. We do so by reviewing existing applied work within the topic area of health care marketing and by leveraging students' experiences in this sector. The main topics covered include product, pricing, distribution and communications to patients, providers, and external stakeholders, such as regulators and nongovernmental organizations. Other topics of discussion include the role of marketing to encourage access; pricing as part of decisions on access; and the role of marketing communication to foster community health.

Credits: 2.00

BU.881.706

Health Innovation and Evaluation

This course focuses on emerging models of health care provision, including the role of information technology, mobile technologies, point of care diagnostics on a chip, health care at home, telemedicine, and technology-mediated innovations in health care for

both consumers and providers. The course discusses various models of evaluation and how health care innovation is valued, funded, and commercialized.

Please note: Students cannot earn credit for both BU.555.620 and BU.881.706, as they are equivalent courses.

Credits: 2.00

BU.881.707

Accounting for Decision Making in Health Care

This course offers an introduction to the most used tools and techniques of health care accounting, and financial management from a decisional perspective. It is intended to expose students to health care accounting theory, and practice, so as to enable enhanced decision making at the executive level. The primary objective of this course is to impart financial, and managerial accounting knowledge required in managing contemporary health care organizations. The teaching approach will be to provide fundamental concepts of healthcare financial management, including both accounting and financial management principles with emphasis on the current financial environment in which providers operate. The course will be structured in a way accounting information could be interpreted, and applied to better understand operational efficiency, financial soundness, and strategic opportunity. Mobilization of financial statements, cost reports, and budgeting information will be articulated to support optimality of the managerial decision making process. Case studies, and other real live anecdotes will be used to supplement concepts, and enhance comprehension.

Please note: Students cannot earn credit for both BU.210.620 (or BU.910.610) and BU.881.707, as they are equivalent courses.

Credits: 2.00

Prerequisite(s): BU.210.620 and BU.910.610

BU.881.710

Research and Policy Seminars in Health I

These seminars—conducted by industry experts and faculty from the Johns Hopkins Carey Business School, School of Medicine, Bloomberg School of Public Health, School of Nursing, and Whiting School of Engineering, and the University of Maryland Carey School of Law—focus on current issues and cutting-edge research related to health care. Deliverables include a research paper on a topic approved by the instructor, and a reflection paper of a personal development plan for how the student will keep abreast of the field.

Credits: 0.00

BU.881.711

Research and Policy Seminars in Health

These seminars—conducted by industry experts and faculty from the Johns Hopkins Carey Business School, School of Medicine, Bloomberg School of Public Health, School of Nursing, and Whiting School of Engineering, and the University of Maryland Carey School of Law—focus on current issues and cutting-edge research related to health care. Deliverables include a research paper on a topic approved by the instructor, and a reflection paper of a personal development plan for how the student will keep abreast of the field.

Credits: 2.00

BU.883.701

Fundamentals of Health Care Operations

This course focuses on designing, measuring, and improving processes that deliver care in both inpatient and outpatient settings. The course provides an introduction to process analysis, queuing theory, capacity management, cost measurement, and the metrics of process flow.

Please note: Students cannot earn credit for both BU.816.610 (or BU.557.720 or BU.680.620 or BU.912.611) and BU.881.707, as they are equivalent courses.

Credits: 2.00

BU.883.702

Emerging Frontiers in Health Technologies and Strategies

This course examines health care organizations from the perspective of managing the information systems that exist within the enterprise. Identifying the clinical and health care delivery processes and how they relate to information systems is the main focus. The intent of the course is to identify key issues confronting the management of today's health care information systems and health care organizations, examine their causes, and develop reasonable solutions to these issues. Specific federal regulations, vendor solutions, and financial implications as they relate to health care information systems are also examined.

Please note: Students cannot earn credit for both BU.350.720 and BU.883.702, as they are equivalent courses.

Credits: 2.00

BU.883.703

Medical Devices and Diagnostics

The goal of this course is to provide the latest market trends and industry analysis for products, services, and technologies in the medical device and diagnostics industry, as well as an assessment of market needs in the context of changing global demographics. The course discusses the barriers to and triggers for innovation with reference to the role of culture, regulation, cost effectiveness, and appropriate pricing. Students are introduced to medical device innovations across various geographic markets and industry sectors.

Credits: 2.00

BU.883.704

Biotechnology and Pharmaceuticals

Based on an overview of scientific, clinical, legal, financial, strategic and ethical perspectives, this course focuses on new developments in the pharmaceutical industry. Topics covered include business strategies in research and development, intellectual property, the role of regulatory bodies, pricing, reimbursement and marketing in the pharmaceutical industry. It explores fast evolving market models for innovation in the pharmaceutical industry in the context of changing global demographics and population health crises.

Credits: 2.00

Prerequisite(s): This course assumes students have basic knowledge of the US Healthcare system through previous work or course experience and/or BU.550.620.

BU.883.705

Health Care Financing and Financial Management

This course covers the analysis of the major financial decisions of corporations in the health care industry and application of techniques of corporate finance in the health care industry. Financial and operating decisions in the health care industry are discussed, as are the valuation of profitability and cost performance of service and product lines, the impact of cost containment and competition on hospitals and integrated delivery systems and other providers, modeling of cost drivers in health care including cost and production functions, cost accounting systems, and the concept of price and value. This course also covers managed care and risk management in relation to the relative roles of private sector and public sector insurance and providers, and the effect of delivery system design on cost, quality, and efficiency and equity. Topics related to the payment for the elderly, the poor, medically indigent, and the underinsured are also discussed. Finally, innovations such as insurance exchanges and changing models of employer self-insurance are explored.

Please note: Students cannot earn credit for both BU.550.610 and BU.883.705, as they are equivalent courses.

Credits: 2.00

BU.883.706

Health Care Organization and Management

The overall goal of the course is to increase student effectiveness in understanding and managing individuals and teams. These tools are essential to improve operations and consumer outcomes. The specific aims of the course are to enable students to a) learn theories and concepts in organization behavior and health care management, b) integrate theories with real world situations, c) learn to understand perspectives and value of health care management, and d) develop the ability to work productively with diverse teams. Students will develop the knowledge and skills to analyze strategic issues in health care organizations. Topics that will be discussed include management styles, performance improvement, culture, change, and leadership. We will draw on several sources to meet the course objectives, including conceptual and experiential approaches, case studies, role plays, and exercises.

Please note: Students cannot earn credit for both BU.555.610 (or BU.930.632) and BU.883.706, as they are equivalent courses.

Credits: 2.00

BU.883.707

The Wire: Business Solutions for Community Health Improvement

In this course, students consider “business with humanity in mind” within the context of Baltimore and its problems, examining the effects of the city’s economic decline on its citizen’s health and quality of life. Students will study the World Health Organization social determinants of health framework and identify ways to apply leadership and management strategies to effect change. This course uses Baltimore and the critically acclaimed HBO television show THE WIRE to identify and observe social determinants of health issues to learn and apply ways to develop innovative programs and services to help improve health status. THE WIRE is presented as text, not television, and is studied and analyzed as one would read a case study to complete course assignments.

Please note: Students cannot earn credit for both BU.863.610 and BU.883.707, as they are equivalent courses.

Credits: 2.00

BU.883.708

Negotiation in Health Care Settings

Negotiating successful agreements in today's healthcare environment presents a formidable challenge for healthcare professionals. In a world of managed care, hospital physician integration, and multi-institutional mergers, members of the healthcare profession are faced with creating agreement in which the complex services of healthcare can be delivered in a coordinated and financially viable fashion. To meet this challenge, healthcare professionals must develop negotiating skills that can achieve mutually beneficial, value added agreements. This course will provide you with the basic knowledge and applied skills to negotiate in a wide array of health care settings. The first part of the course focuses on understanding and systematically preparing for, structuring, and executing increasingly complex negotiations involving administrators, insurers, patients and providers. The second part of the course extends these basic principles to variety of health care settings, including group negotiations, agency relationships, and conflict resolution.

Credits: 2.00

BU.883.711

Analysis of Health Care Operations

This course expands on elements of Operations Management including process analysis, queuing theory, and process improvement to focus on nuances of the healthcare setting. It also used tools of statistical analysis and linear programming to consider performance metrics in the presence of variability or across multiple sites. Finally, it introduces new tools including Discrete Event Simulation as a way to gain insights into system performance.

Credits: 2.00

Prerequisite(s): BU.520.601 or BU.913.610

BU.890.711

Health Policy Design and Implementation I

The Health Policy Design & Implementation Practicum consist of two courses that prepare students with an operational understanding of health policy and its impact on healthcare delivery. Student are introduced to: 1) the global health policy framework through exploration of cutting edge research and multilateral health initiatives; 2) the design and implementation of national, state, and local health policy through public sector legal, regulatory, and political process; and 3) the managerial processes of health policy design and implementation in public and private healthcare systems. Through site visits to legislative bodies, governmental agencies, advocacy groups, and provider organizations, students meet health policy leaders and observe health policy design and implementation in action. Students integrate their classroom knowledge and experiential observations by writing a significant health policy brief, with the appropriate literature reviews, to address a critical health policy issue, using the frameworks and perspectives from their core courses and health policy course readings.

Credits: 2.00

BU.890.712

Health Policy Design and Implementation II

This course is the second part of a two-part course. Students travel to Washington, D.C., and Annapolis, Maryland, to visit federal and state institutions, advocacy groups, and nongovernmental organizations that are critical to the development of health policy, technology, and the delivery of health care services. Students write a significant scholarly paper, with the appropriate literature reviews, to address a critical policy debate, using the frameworks and perspectives from their core courses and the seminar series.

Credits: 2.00

BU.890.713

Client Consulting Practicum I

This course is the first part of a two-part course. This course examines business strategies for health care industries and services. It prepares the student to assume the role of a consultant or decision maker in a complex organization who has to cope with tremendous complexity, uncertainty, and inadequate information. The focus throughout is on strategic management—the process of choosing and defining purposes and objectives, formulating and implementing a viable strategy, and monitoring strategic performance. Strategic tools such as SWOT, PESTLE, Competitive Analysis are covered and practiced in-class on contemporary healthcare organizations' strategies. The emphasis is on the kinds of problems and issues that affect the success of the entire organization.

Credits: 2.00

BU.890.714

Client Consulting Practicum II

This course is the second part of a two-part course. Students enhance their business education by developing collaborative consulting engagements with businesses and nonprofit organizations in which students assist their client organizations in addressing existing and emerging challenges in the health care space. These clients may be domestic or international.

Credits: 2.00

BU.890.715

Health Services Improvement I

This course is the first part of a two-part course. Students work with clinical clients in the Baltimore/Washington, D.C. area to measurably improve the costs and quality aspects of their organization. The typical “real-world lab” for this project is a working facility within the Johns Hopkins medical system. While our efforts will evolve as we gather data and insight into actual operations, our focus will be on three interrelated sets of issues: physical flows, information flows, and cash flows. Physical flows include the movement of human assets such as medical staff and patients. Information flows involve data shared between agents via direct communication or via information systems. Cash flows include the assessment of cost savings and/or revenue enhancement projected to stem from project outcomes.

Please note: Students cannot earn credit for both BU.816.610 and BU.890.715, as they are equivalent courses.

Credits: 2.00

BU.890.716

Health Services Improvement II

This course is the second part of a two-part course. Students work with clinical clients in the Baltimore/Washington, D.C. area to measurably improve the costs and quality aspects of their organization. The typical “real-world lab” for this project is a working facility within the Johns Hopkins medical system. While our efforts will evolve as we gather data and insight into actual operations, our focus will be on three interrelated sets of issues: physical flows, information flows, and cash flows. Physical flows include the movement of human assets such as medical staff and patients. Information flows involve data shared between agents via direct communication or information systems. Cash flows include the assessment of cost savings and/or revenue enhancement projected to stem from project outcomes.

Credits: 2.00

Prerequisite(s): BU.890.715

BU.890.717

Commercializing Biomedical Innovations I

This course is the first part of a two part course that teaches the process of bringing discoveries to market. Students are required to register for parts of the course. Students learn about innovation and invention processes, how to identify opportunities and assess when ideas are inventions, the steps required to bring the product to market, including intellectual property protection and regulatory processes, and strategies to license early stage invention to third parties that can pursue entrepreneurial funding and development. As part of the experiential learning process, students work in small teams on early-stage invention projects sourced by the instructor from university and government technology transfer offices.

Credits: 2.00

BU.890.718

Commercializing Biomedical Innovations II

This course is the second part of a two-part course. The focus of this course is the commercialization of scientific and technological discoveries. Upon completion, students should be able to assess the feasibility of commercializing a discovery, define the process required to bring it to market, and recommend the best strategy to do so. The course uses lectures, case analyses, and experiential learning projects. Students work in small teams on early-stage invention projects sourced by the instructor from university and government technology transfer offices. This course helps answer questions such as: *When is an idea an invention? Who owns the invention? How can the invention be protected so as to maximize its commercial value? What are the steps to bringing the invention to market? What are the strategic options, and which best fits the situation?*

Credits: 2.00

BU.910.610

Accounting Foundations

This course emphasizes the vocabulary, methods, and processes by which for-profit business transactions are communicated. Topics include the accounting cycle; basic business transactions involving assets, liabilities, equity, revenues, and expenses; and preparation and understanding of financial statements, including balance sheets,

statements of income, and cash flows. The course also introduces the analysis of financial results and basic managerial accounting concepts and tools. This course prepares students for topics including capital budgeting, valuation and more advanced financial statement analysis courses.

Credits: 2.00

BU.910.611

Corporate Finance

This Part 2 course studies corporate finance and capital markets, emphasizing the financial aspects of managerial decisions. The course touches on all areas of finance, including the valuation of real and financial assets, risk management and financial derivatives, the trade-off between risk and expected return, and corporate financing and dividend policy. The course draws heavily on empirical research to help guide managerial decisions.

Credits: 2.00

BU.911.610

Marketing Management

This course covers principles of market-driven managerial decision making that determine competitiveness in dynamic consumer and organizational markets. Particular areas of emphasis include industry analyses, dynamics of competition, market segmentation, target marketing, channels of distribution, and product and pricing decisions. In-depth analytical skills are developed through case analyses, class discussions, and applied projects.

Credits: 2.00

BU.912.610

Competitive Strategy

This course requires students to assume the role of a general manager. General managers have to cope with tremendous complexity, uncertainty, and inadequate information. An important requirement of a general manager's job is the ability to think in a cross-functional and holistic manner. Creativity and innovation are critical to achieving success, and so is the ability to execute and manage day to day. The concepts and frameworks to be covered in this course include Porter's 5-forces Analysis, PEST Analysis, SWOT, emergent versus deliberate strategy, McKinsey Matrix, GE Growth/Share Matrix, Resource-Based View of the Firm, Core Competencies and Dynamic Capabilities, Cost Leadership Strategies, Differentiation Strategies, Vertical Integration, Diversification, Life-Cycle Theory, Cost Accounting, Business Process Management, Inventory Management, Newsvendor Problem, Value Chain Analysis, Activity-Based Accounting, and Queueing Theory.

Credits: 2.00

BU.912.611

Operations Management

This Part 2 module requires student to assume the role of a General Manager. General Managers have to cope with tremendous complexity, uncertainty, and inadequate information. An important requirement of a General Manager's job is the ability to think in a cross-functional and holistic manner. Creativity and innovation are critical to achieve success, and so it the ability to execute and manage day to day. The concepts and frameworks to be covered include Porter's 5-forces Analysis, PEST Analysis, SWOT, emergent versus deliberate strategy, McKinsey Matrix, GE Growth/Share Matrix,

Resource Based View of the Firm, Core Competencies and Dynamic Capabilities, Cost Leadership Strategies, Differentiation Strategies, Vertical Integration, Diversification, Life Cycle Theory, Cost Accounting, Business Process Management, Inventory Management, Newsvendor Problem, Value Chain Analysis, Activity Base Accounting, and Queueing Theory.

Credits: 2.00

BU.913.610

Business Analytics

This course lays the analytical foundation for modeling that supports many managerial decisions that entail tradeoffs among competing objectives. Building on concepts from Operations Research, Economics and Probability Theory, this course provides a basic introduction to a variety of resource allocation problems.

Please note: Students cannot earn credit for both BU.520.601 and BU.913.610, as they are equivalent courses.

Credits: 2.00

BU.913.611

Judgement and Decision Making

The purpose of this course is to improve students' leadership capabilities through a critical examination of the organizational and psychological forces that guide human decision making. Grounded in behavioral science and geared toward an understanding of decision makers within organizations, topics in this course include heuristics and biases, Bayesian updating (taught with a behavioral lens), prediction accuracy, social and motivational influences on decisions, trust decisions, and expert intuition. The course culminates in a final project geared toward improving managers' judgment and decision making.

Credits: 2.00

BU.914.610

Business Statistics

Students learn statistical techniques for further study in business, economics, and finance. The course covers descriptive statistics, probability, discrete and continuous random variables, estimation, hypothesis testing, regression analysis. The course emphasizes statistics to solve management problems.

Credits: 2.00

BU.920.610

Management of Technology

Advances in communication and information technologies have had far-reaching impact on markets, on price discovery mechanisms and the structure of the channels through which products and services are delivered. This course addresses how markets, market mechanisms and channels of product and service delivery have been impacted and often transformed by Information and Communication technologies. The nearly instantaneous transmission of rich information across the boundaries of the corporation and across geographical boundaries have enabled the enterprise-wide systems of corporations to connect to each other and enable business-to-business transactions and orchestrate complex, electronic, settlement and fulfillment mechanisms that bring together multiple value chain and supply chain partners. Students learn how B2B markets are evolving and their implications for businesses.

Credits: 2.00

BU.921.610

Networked Organizations

This course considers the evolving new models of innovation and value creation networks being introduced across different industries, and examines such critical managerial issues as product and process technology strategy, operational innovation, knowledge management, IT infrastructure, leadership and organizational processes, governance, and finance. Utilizing a series of case studies from across a range of industry networks, students will get a chance to learn how companies can participate in such inter-firm networks and what unique business resources and capabilities they can employ to enhance the probability of commercial success.

Credits: 2.00

BU.930.610

Effective Communication

This course prepares Innovation for Humanity (I4H) teams to communicate effectively with internal and external audiences. Students refine their written and oral communication skills through analyses and practice of communication strategies adopted by successful business professionals. In particular, students learn to write compelling memos/reports, deliver persuasive presentations, and construct convincing arguments.

Credits: 1.00

BU.930.630

Solving Organizational Problems

This course aims to equip GMBA Innovation for Humanity (I4H) teams with the fundamental knowledge and skills needed to thrive in their I4H projects and future organizational problem-solving endeavors. It differs from other management courses in its focus on the specific challenges faced by problem-solving teams (e.g., I4H teams) versus teams or individuals in other organizational settings (e.g., decision-making situations, organizational change efforts). It includes units intended to help students set up a problem-solving team for success, follow the iterative problem-solving process, adapt that process to manage scope and ambiguity, and both collect and evaluate the quality of problem-relevant evidence. Students will leave with foundational abilities needed to solve organizational problems.

Credits: 1.00

BU.930.631

Effective Management

The goal of this course is to help students translate research about individuals and groups into capabilities to become effective leaders. The course will provide students with analytical frameworks that will help them understand behavior in organizations, along with the practical experience to put that understanding into action. Key to developing this experience is using the classroom as a forum to apply knowledge and develop skills through immersive exercises, cases and interaction with practitioner experts.

Please note: Students cannot earn credit for both BU.142.620 and BU.930.631, as they are equivalent courses.

Credits: 2.00

Prerequisite(s): BU.142.620

BU.930.632

Management and Organizational Behavior

The purpose of this course is to introduce students to fundamental topics related to managing, leading, and working in modern organizations. The course exposes students to a broad array of frameworks for understanding individual, team, and organizational behavior, with particular emphasis on the design of work, interpersonal dynamics, organizational innovation and change, global work environments, and crafting meaningful careers. This breadth of topics, ranging across organizational levels and career stages, distinguishes the course and is meant to complement students' later coursework focused on individual decision making, solving problems in teams, and avoiding pitfalls of early career managers.

Credits: 2.00

BU.930.633

Business Microeconomics

This is a foundational microeconomics course with emphasis on the application of economic principles and methodologies to private and managerial decision problems. Major topics include consumer choice and market demand, costs and profit maximization, market structures (competition, monopoly, and oligopoly), short- and long-run output/price decisions, and strategic interactions (game theory).

Credits: 2.00

BU.930.634

Financial Valuation

This course provides comprehensive methods for valuing securities, projects, assets and firms. Notions and methods from corporate finance, corporate strategy, investments and financial statement analysis are employed extensively.

Credits: 2.00

BU.933.610

Thought and Discourse Seminar: Governance and Accountability

Corporate scandals such as those involving Enron, WorldCom, Lehman Brothers, and AIG have drawn increasing attention to corporate governance. What gives rise to the kinds of risky behavior that these scandals reveal? What mechanisms do—or should—corporations have in place to prevent such disasters? To whom are they ultimately responsible: shareholders and owners or a wider spectrum of stakeholders? What are the roles and responsibilities of boards of directors normally and in times of crisis? How do boards monitor performance and compliance among corporate officers, and what kinds of reporting structures exist? What laws and regulations seek to limit and punish corporate malfeasance? How do the approaches to self- and external-regulation of companies differ in other countries and in a global context? These are some of the questions addressed in this seminar. Through lectures, guest speakers, case studies, and team projects, students explore corporate governance with an eye to best practices.

Credits: 2.00

BU.940.610

Innovation for Humanity Project

This experiential learning course is designed to develop agile and creative business leaders who understand how to build sustainable, impactful businesses within developing communities around the world. The course is consistent with the Carey Business School's signature theme of "teaching business with humanity in mind" and it provides an understanding of the needs of developing communities around the world. Students will work domestically and abroad engaging with entrepreneurs, public officials, faculty and NGOs, exploring critical development issues. The students will learn to understand the complex systems that prevail in the emerging economies, the role of appropriate technologies and interventions in solving pressing problems, and to recognize the sustainable business opportunities embedded in these community needs.

Credits: 0.00

BU.940.611

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Credits: 4.00



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