

PMBA Courses

REQUIRED

ACCOUNTING

ACCT 5001. Introduction to Financial Accounting

In this course we will study the three fundamental financial accounting issues, including (1) recognition, (2) measurement/valuation, and (3) classification/disclosure and consider how business transactions are reflected on the financial statements using generally accepted accounting principles (GAAP). We will cover the four primary financial statements (balance sheet, income statement, statement of stockholders' equity, and statement of cash flows), the supporting footnotes to these statements, and several reports (annual reports, proxy statements, and press releases). The course incorporates both a preparer's perspective (i.e. how to apply GAAP requirements for recording and presenting financial information) and a user's perspective (i.e. how an investor or analyst can interpret and use financial statement information). 1.5 Credits.

ACCT 5002. Strategic Cost Analysis

This course provides an introduction to cost concepts, cost behavior and cost systems. Understand how strategy, technology and the environment affect a firm's choice of cost system type and system design alternatives. Discuss how cost system choices, in turn, influence tactical and strategic managerial decision-making. Tools such as cost-volume-profitability analysis, customer profitability, value chain analysis and relevant-cost analysis are presented. Case discussions illustrate the application of course topics. 1.5 Credits.

FINANCE

FIN 5203. Financial Management

Students will learn in this class how the decisions of a company affect shareholder value and what decisions can increase it. To understand the perspectives of shareholders, we will study basic principles of investing: time value of money, valuation of debt and equity securities, discounted cash flow as a foundation for stock prices, the impacts of diversification and leverage on portfolio risk, the relationship between risk and expected return in securities markets, and capital market efficiency. We will use these principles to analyze capital investment decisions by estimating cash flows and discounting them at the appropriate cost of capital. We will also study how shareholder value is affected by a firm's financing decisions, such as the choice of using debt or equity capital.

3.0 Credits (previously FIN 5201 and 5202)

MANAGEMENT, POLICY, AND HUMAN RESOURCES

MGT 5301. Introduction to Management and Strategy

This course focuses on the job, perspective, and skills of the general manager - an individual charged with developing and implementing the long-term strategy of a business organization. The course helps students develop skills in identifying and analyzing past and current strategies and with formulating and implementing new ones. During the course, students are introduced to concepts around strategy formulation, resource and capabilities assessment, and industry and competitor analysis. 1.5 Credits.

MGT 5320. Strategic Management

This capstone course provides an opportunity for students to integrate concepts from prior functional courses (marketing, operations, finance, accounting, managerial economics) through the development and implementation of a business strategy. The centerpiece of this course is an intensive, global business simulation. The exercise requires students to acquire, operate, and develop strategy for a simulated firm within a high technology industry. The course is designed to deepen students understanding of strategy formulation, competitive advantage, rivalry and competition, negotiation, and global management. To prepare for the simulation game, the course will examine topics of strategy formulation, industry analysis, global strategy, and managing in technology-intensive industries. **Prerequisite: MGT 5301.** 1.5 Credits.

MANAGERIAL ECONOMICS

MEC 5401. Managerial Statistics

Introduces the statistical methods for analysis of business and economic data. The role of probabilistic concepts such as independence, conditional probability, expectation, and variance, and probability models such as the Bernoulli, binomial, Poisson, and normal are examined. Particular emphasis is placed on topics that relate to model formulation, estimation of

model parameters, hypothesis testing and simple and multiple regression.
1.5 Credits.

MEC 5406. Managerial Economics

This course introduces the basic principles of economics and their applications to managerial decision-making. The course begins with the analysis of the decision making of individual consumers and producers. The course then examines how consumers and producers interact with one another in a variety of market settings ranging from situations in which firms have many competitors and few tactical options to those in which there are a small number of firms competing vigorously along several strategic dimensions. Applications covered include decision making in risky situations, pricing policies in firms, and the relationship between market structure and the strategic choices that are open to the firm. 3 Credits (previously MEC 5404 and 5405)

MARKETING

MKT 5503. Marketing Management

The purpose of this course is to familiarize students with the foundational elements of marketing strategy and execution in various managerial contexts. Class sessions emphasize customer/market focus and competitor analysis to coordinate marketing tactics in a manner that drives growth in revenues and earnings. The course primarily uses case discussions, with lectures where appropriate. The cases provide students an opportunity to develop their oral and written skills in formulating and defending their marketing proposals. Recent developments in theory and practice are integrated into the course as appropriate. 3 Credits (previously MKT 5501 and 5502)

OPERATIONS AND MANUFACTURING MANAGEMENT

OMM 5704. Operations Management

This course discusses the main principles and concepts in managing operations for competitive success. Among the topics covered are: operations strategy, capacity analysis and organization, queuing theory, service management, quality management, inventory management, and a brief introduction to supply chain management. Students learn the basics of how to manage the operations of a firm, and how operational issues affect and are affected by the many business decisions they will be called upon to make or recommend in their careers. Most sessions consist of in-depth case discussion, integrated with theory. 3 Credits (previously OMM 5701 and 5702)

OMM 5705. Quantitative Decision Making

This course has the following objectives: (a) to introduce students to the science of quantitative decision making; (b) to enhance and reinforce students' analytical skills and their ability to intelligently use information; (c) to teach the art and science of spreadsheet modeling; and (d) to expose students to different approaches, support tools, and analytical methods for decision making, particularly those analytical methods useful for later courses. These objectives will be facilitated through the following key tools taught in this course, which are spreadsheet modeling, decision analysis, simulation for risk-analysis and modeling uncertainty, and optimization tools. The course will be taught from an interdisciplinary standpoint and examples will be provided from a variety of functional areas. 1.5 Credits (previously OMM 5703)

ORGANIZATIONAL BEHAVIOR AND STRATEGY

OB 5601. Organizational Behavior

Develops a conceptual tools and basic skills for managing people in organizations. The course focuses on the basic problems that confront every manager: communicating effectively, negotiating sound agreements that build lasting relationships, managing the inevitable conflicts that arise in every organization, and exercising leadership in work teams. 1.5 Credits.

OB 5602. Organizational Design

Develops a framework for designing organizational structures to fit critical contingencies such as strategy, competition, size, and technology. Also considers the human resource systems appropriate to support different structures, the impact of power and influence on decision-making, and the practical problems of implementing large scale organizational change and reengineering. 1.5 Credits.

Electives

ACCOUNTING

ACCT 500C. Tax and Business Strategy: A Planning Approach

This course is intended to provide business students with an overall framework for taking tax considerations into account when making business decisions. More specifically, as the textbook authors point out in the preface to the book, the course is intended to provide students with “a solid understanding of the decision contexts that give rise to tax planning opportunities, how to integrate tax strategy into the bigger picture of corporate decision making, and the dramatic impact that changes to transaction structure can have on after-tax cash flows.” The course is not intended to provide students with an understanding of the technical tax rules that will be discussed during the course. However, many technical tax rules will be mentioned throughout the course and a general framework of the tax rules will be provided so as to facilitate a discussion of how these tax rules affect business decision-making. Prerequisites: ACCT 567 or permission of the instructor. 1.5 Credits.

ACCT 500D. Fraud Prevention and Internal Controls

This course is designed to provide students with an overview of various forms of fraud, the role of auditors and forensic accountants in detecting the fraud, and how internal controls may be designed to prevent such activity. The course will draw extensively on cases that illustrate the various types of fraud. In each topical area, students will examine the techniques that may enable an investigator to detect the fraudulent practices and also develop appropriate internal controls that would help a corporation minimize or prevent the fraudulent practices. Prerequisites: ACCT 5011 or ACCT 5001. 1.5 credits

ACCT 500E. Information Technology Control and Audit

This course is designed to provide students with an introduction and overview of the field of Information Technology (IT) Auditing. It is intended to provide students with an understanding of risks in the IT environment, general computer and application control concepts and the basics of how to perform an IT audit. The course will also introduce students to the ISACA COBIT framework and the concepts of IT governance and assurance. **PMBA Prerequisite: ACCT 5001. MBA Prerequisite: ACCT 5011. Concurrent enrollment in or completion of ACCT 564.** 1.5 credits

ACCT 500F. International Financial Reporting Standards

This course examines the advantages and disadvantages of using International Financial Reporting Standards (IFRS) rather than the Generally Accepted Accounting Principles (GAAP) commonly applied in the US. It reviews the arguments for and against the adoption of IFRS, the Security and Exchange Commission’s roadmap for the adoption of IFRS in the US, the International Accounting Standards Board’s and the Financial Accounting Standards Board’s convergence project. Key differences between IFRS and GAAP in revenue recognition, inventories, long-term and intangible assets, research and development costs, borrowing costs, taxes, and employee benefits are explored. **Prerequisite: ACCT 5011; Concurrent enrollment in or completion of ACCT 563 or equivalent.** 3 credits.

ACCT 500G. Analysis of Financial Institutions & Financial Instruments

The main goal of the course is to give you an in-depth understanding of how financial reports provide unusually accurate and detailed (but not perfect) information about the risks and performance of firms in the financial services industries. These firms’ financial statements increasingly are based on fair value accounting and their financial reports typically include extensive risk and estimation sensitivity disclosures. Both fair value accounting and risk and estimation sensitivity disclosures are necessary ingredients for financial reports to convey the risk and performance of financial services firms in today’s world of complex, structured, and risk-partitioning financial instruments and transactions. While financial services firms often apply fair value accounting and risk and estimation sensitivity disclosures imperfectly (or worse), careful joint analysis of the information they do provide invariably yields important clues about their risks and performance. **Prerequisite: ACCT 5001 and ACCT 501 or 501B or equivalent.** 1.5 credits.

ACCT 501. Financial Accounting II

This course is the second in the accounting sequence. It will build upon the first mini-course ACCT 5001. The issues that will be discussed are fundamental to an MBA’s training. The course content is important to all students, irrespective of their concentration. This course will enhance your ability to spot problem areas in a firm’s financial statements, which is very relevant, in the light of recent corporate scandals. The primary focus will be on the components of the balance sheet and how these components impact the income statement and cash flow statement. Students will learn the implications of financing with equity, debt or off-balance sheet financing. Students will be able to contrast investments in operating assets versus investments in securities. **PMBA Prerequisite: ACCT 5001. MBA Prerequisite: ACCT 5011.** Note: Students cannot take both this course and ACCT 501B for credit. 1.5 Credits.

ACCT 502. Managerial Control Systems

Organizations face both information and incentive problems, usually simultaneously. Managerial control involves developing policies and systems to cost-effectively minimize these problems while helping the organization achieve its objectives. The course focuses on control issues by analyzing the financial aspects of planning, feedback, and performance measurement. Topics include: responsibility accounting, budgeting, benchmarking, target costing, variance analysis, productivity measures,

transfer pricing and optimal design of performance measures. **PMBA Prerequisite: ACCT 5002. MBA Prerequisite: ACCT 5012.** 1.5 Credits.

ACCT 503. Business Analysis Using Financial Statements

In this course we use concepts from financial accounting, finance, and strategy to develop models used by financial analysts in valuing equity securities (although we will focus on equity valuation, our approach is applicable to issues faced by managers considering investment opportunities). We will discuss/review a variety of models, including the dividend model, the free cash flow model, the method of comparables/multiples, and the asset-based valuation model. These more traditional models will be contrasted with the residual income valuation model, a relatively recent valuation innovation. **PMBA Prerequisites: ACCT 5001, ACCT 501, FIN core. MBA Prerequisites: ACCT 5011, 501B, and FIN 5200.** 1.5 Credits.

ACCT 503B. Advanced Business Analysis Using Financial Statements

This course covers equity valuation, including such topics as forecasting free cash flows, using earnings for equity valuation, estimating risk-adjusted discount rates. We also explore the role of financial accounting in contracts, credit analysis, and forecasting financial distress. **Prerequisite: ACCT 503.** 1.5 Credits.

ACCT 507/FIN 536. Financial Issues in Leasing

This course is devoted to studying the various elements that are involved in identifying leasing opportunities and structuring a lease. Topics covered include accounting and tax issues related to leases, the legal and financial structure of a lease, options embedded in lease agreements, and the marketing and negotiation of leases. **PMBA Prerequisites: FIN core and ACCT 5001. MBA Prerequisites: FIN 5200 and ACCT 5011.** 1.5 Credits.

ACCT 508. Financial Reporting from the CFO's Perspective

This course will (1) enhance students' understanding of the role of the CFO (of publicly traded firms) in financial reporting and the related roles of the CFO in issues of corporate governance and investor relations, (2) provide students with a strong understanding of the impact of Sarbanes-Oxley on financial reporting for public companies, as well as requirements of the SEC in financial reporting, (3) develop students' skills in using the authoritative accounting and regulatory literatures when preparing financial reports, (4) examine issues related to financial reporting for specific accounting issues and in times of financial crisis, and (5) provide a basis of understanding the technological changes affecting financial reporting. **PMBA Prerequisites: ACCT and FIN core, and ACCT 501. MBA Prerequisites: ACCT 5011, 501B, and FIN 5200.** Formerly ACCT 500B. 1.5 Credits.

ACCT 564. Auditing

Blends research findings in auditing with traditional auditing topics, such as the objectives and procedures employed in the examination of financial statements. Research studies cover the market for auditing services, legal liability, evidence gathering and evaluation, and the impact of qualified audit reports. Also includes certain topics taken from CPA examinations. **PMBA Prerequisites: ACCT 5001 and ACCT 501. MBA Prerequisites: ACCT 5011 and 501B.** Cross-listed with BUS 464. 3 Credits.

ACCT 567. Federal Income Taxes

Examines the impact of taxation on economic behavior. Develops a framework for analysis and applies it to various topics. Introduces fundamentals of individual and corporate income taxation and highlights their interrelationships in the context of tax planning. **Prerequisite: first 30 units of required courses;** recommended ACCT 562. 3 Credits.

FINANCE

FIN 521. Financial Intermediation

Discussion centers on the role of banking institutions and credit markets, the design of financial contracts and institutions and the public regulation of financial markets. After establishing a framework for analyzing financial institutions and markets, we turn to a current topic of special interest. Students will research and present a report advocating a particular point of view. **PMBA Prerequisites: FIN core or permission of instructor. MBA Prerequisites: FIN 5200 or permission of instructor.** 1.5 Credits.

FIN 523B. Mergers and Acquisitions

The course will provide an in depth view of the theory and empirical regularities of various corporate control transactions. Specifically, we will discuss valuation of target firms, possible sources of value creation, various motives for mergers, tax consequences of mergers, legal issues in merges, financing an acquisition, defensive tactics in hostile takeovers, going-private transactions and bidding behavior of acquirers. The method of instruction is a mix of lecture and case analysis. **PMBA Prerequisites: FIN core and 534. MBA Prerequisites: FIN 5200 and 534.** 1.5 Credits.

FIN 524. Options & Futures

Focuses on futures with an introduction to options. Discusses forward and futures pricing, and the use of various futures contracts to hedge commodity price risk, interest risk, currency risk, stock portfolio risk, and other risk exposures. **PMBA Prerequisites: FIN core. MBA Prerequisites: FIN 5200.** 1.5 Credits.

FIN 524B. Derivative Securities

Provides an in-depth analysis of valuation and trading strategies for options and other derivative securities which have applications across areas of finance such as hedging, swaps, convertible claims, mortgage payments, index arbitrage, insurance, capital budgeting and corporate decision making, and are responsible for many new innovations and developments of the financial markets. **PMBA Prerequisites: FIN core and 524. MBA Prerequisites: FIN 5200 and 524.** 1.5 Credits.

FIN 525. Fixed-Income Securities

This course analyzes investment in bonds and related fixed-income instruments. Major topics are bonds, interest rate risk, and related securities. Bond topics include yield curves and forward interest rates. Risk analysis covers duration, convexity, and immunization. **MBA/PMBA prerequisite: FIN 5203.** 1.5 Credits.

FIN 527. Financial Markets

Financial managers participate in a broad array of market structures. Indeed, from time to time, a financial manager is required to choose among existing market structures or even design a new market structure. In this class we study important primary and secondary markets for financial assets. Our purpose, in addition to learning about existing institutional arrangements, is to develop a theoretical foundation which will help us understand why each market is structured as it is and the strategies of market participants. Our discussions of theory will include the role of private and public information, of ethics and reputation, of government regulation and self-regulation, and of strategic behavior. A theoretical framework is crucial to successfully participating in markets which continue to evolve at a rapid rate. Since the theoretical underpinnings of financial markets apply to all markets, this course may be of interest to students who are not finance majors. Representative topics include: Treasury security auctions and bidding strategies, reputation and the underwriting and distribution of initial public offerings, informational asymmetries and the over-the-counter markets for bonds, restrictions on membership and member trading on the NYSE, daily settlement and the CBOT, insider trading and mandatory disclosure of material information, the market for corporate control. Pedagogy: The format for the course will include in roughly equal parts cases and readings and lectures on theory. **PMBA Prerequisites: FIN core. MBA Prerequisite: FIN 5200.** 1.5 Credits.

FIN 528. Investments Praxis

In this course students serve as managers of a portfolio, the Investment Praxis Fund, which is owned by the school. Students will analyze investment opportunities in various industries and present recommendations to the class for possible purchases or sales of securities. Students must demonstrate that their investment decisions are consistent with the style and objectives of the fund. Valuation tools, financial statement analysis and investment techniques are emphasized as part of a thorough analysis. The course will blend theory with practical advice from investment professionals such as portfolio managers, securities traders, and consultants. **Prerequisites: FIN532 and FIN534.** 3 Credits.

FIN 530. International Finance

Measuring and hedging exposures to exchange rate fluctuations is a central topic of this course. The relationships among spot and forward exchange rates, interest rates, and inflation rates are described. Additional topics include capital budgeting for international projects, international capital markets, and international portfolio diversification. **PMBA Prerequisites: FIN core. MBA Prerequisite: FIN 5200.** 1.5 Credits.

FIN 531. Venture Capital and Private Equity

Private equity funds are an important source of financing for new ventures and buyouts of established companies. Asymmetric information and the need for monitoring and control are among the reasons private equity has evolved as a substitute for other financing sources, such as bank loans and public debt and equity issues. This course will discuss how private equity funds are raised and structured and how private equity investors (i) analyze investment opportunities, (ii) interact with the management of the companies they finance, and (iii) exit investments. Students will be expected to have some proficiency in financial valuation. Prerequisite: completion of at least one of the following: Advanced Corporate Finance I—Valuation, Cases in Corporate Finance, Investment Banking, Mergers & Acquisitions, Financial Statement Analysis or consent of the instructor. **Prerequisites – At least one of the following recommended: FIN 534, FIN 523, FIN 523B, FIN 549F, or ACCT 503** or permission of the instructor. 1.5 Credits.

FIN 532. Investment Theory

This course covers the theory of risk and return in capital markets. Topics covered include the CAPM, factor models of asset pricing, measures of mutual fund performance evaluation. **MBA/PMBA prerequisite: FIN 5203.** 1.5 Credits.

FIN 532B. Data Analysis for Investments

The objective of this course is to obtain an in-depth understanding of some of the major empirical issues in investments. Based on recent research articles and cases, students are required to learn the facts, theories and the associated statistical tools to analyze financial data. The topics for this course include models of stock returns, Bayesian and shrinkage estimations for expected returns and covariances, multifactor asset pricing models, GARCH models, principal components, asset allocation, stock screening, predictability, performance evaluation, anomalies, limits to arbitrage and behavioral finance. **PMBA Prerequisites: FIN core and 532. MBA Prerequisites: FIN 5200 and 532.** 1.5 Credits.

FIN 533. Real Option Valuation

This is an applied course in capital budgeting under uncertainty and flexibility. Traditional NPV analysis assumes that corporate investments are “now or never,” but most corporate projects have a great deal of flexibility in their timing, scale, etc. The

objective here is to obtain an in-depth understanding of these problems and the associated real option theory. The theoretical option pricing tools are binomial models and Monte Carlo simulations. The application topics cover all types of typical real options, cases of leasing, R&D, take-over, market expansion, growth values, dot-coms, staged investments, multiple project uncertainties, ranging from standard European and American options to compound and rainbow options. **Prerequisite: FIN 524. FIN 524B and FIN 534 are both highly recommended.** 1.5 Credits.

FIN 534. Advanced Corporate Finance I -- Valuation

This course considers issues faced by corporate financial managers with respect to the valuation of projects, divisions, and entire companies. The prime focus is on assessing the profitability of different business alternatives in a forward-looking sense. The impact of financing decisions on the valuation of business alternatives is explicitly considered. Also covered is an introduction to measuring the role of flexibility inherent in business alternatives. The course is "hands-on" and heavily focuses on direct applications of the theory and the individual development of spreadsheet modeling skills. **MBA/PMBA prerequisite: FIN 5203.** 1.5 Credits.

FIN 534B. Advanced Corporate Finance II - Financing

This course considers a broad range of issues faced by corporate financial managers with respect to the financing of investment opportunities. In this course, we turn to the right-hand side of the balance sheet as a direct follow up to the skills acquired in the Advanced Corporate Finance I - Valuation, a course that focused on the left-hand side of the balance sheet. The course is designed to be "hands-on", and we will heavily focus on direct applications of the theory of financing to business practice. To that end, we will cover topics related to the valuation of bond and convertible securities, estimating the costs of financial distress, the reorganization of firms in financial distress, deriving an optimal capital structure, and the effects of management stock option grants on valuation. Students may not take both this course and FIN 523 for credit. **PMBA Prerequisites: FIN core and 534. MBA Prerequisites: FIN 5200 and 534.** 1.5 Credits.

FIN 534C. Advanced Corporate Finance III – Frontiers of Valuation

This course covers advanced topics in valuation. Main topics covered will be the valuation of private firms and young businesses, and the valuation of financial services firms such as banks and insurance companies. The course applies both theory and practical valuation methods through the analysis of cases and real world examples. Students may not take both this course and FIN 500I for credit. [This course was previously numbered 500I.] **PMBA Prerequisites: FIN core, 534, and 534B. MBA Prerequisites: FIN 5200, 534, and 534B.** 1.5 Credits.

FIN 535. Mortgage-Backed Securities

This course focuses on the valuation and hedging of securitized products with particular attention to mortgage backed securities. We will discuss various types of loans which can be securitized (fixed-rate mortgages, floating rate mortgages, commercial mortgages, car loans, student loans, etc) , the institutions which exist to facilitate loan sale, and what type of derivative securities have been created. We will discuss how default and prepayment risk are measured and how these risks are managed. We will use a commercial software package, WINOAS from the Mortgage Industry Advisory Corporation, to incorporate prepayment scenarios into our valuations. We will have one or more guest speakers come and talk to use about the management of portfolios of securitized products. Obviously recent events related to the meltdown of the subprime mortgage market have had huge impacts on this industry as well as the economy as a whole. While this is not a class about the financial crisis we will try to shed some light on what happened, why it happened, and how the market will be different going forward. **Prerequisite: FIN 525.** 1.5 Credits.

FIN 536/ACCT 507. Financial Issues in Leasing

This course is devoted to studying the various elements that are involved in identifying leasing opportunities and structuring a lease. Topics to be covered include the legal and financial structure of a lease, options embedded in lease agreements, accounting and tax issues related to leases, and the marketing and negotiation of leases. **PMBA Prerequisites: FIN core and ACCT 5001. MBA Prerequisites: FIN 5200 and ACCT 5011.** 1.5 Credits.

FIN 537. Advanced Derivative Securities

This course focuses on implementation of models for pricing and hedging derivative securities in the equity, currency, and fixed-income markets. Students will learn to write programs in a programming environment such as MATLAB to implement the Black-Scholes model, binomial models, Monte-Carlo methods and finite-difference methods. The derivatives studied will include exotic equity and currency derivatives and caps, floors and swaptions. The goals of the course are to learn more about the various instruments that are traded, the various assumptions and methods that may be chosen in modeling them, and the importance of the assumptions in determining the prices and hedges that are chosen. The course will be especially useful to students pursuing careers in sales and trading who will interact with research departments and students pursuing careers in asset management. **Prerequisites: FIN 524 and 524B.** 3 Credits.

FIN 549H. Special Topics: Real Estate Finance

This course provides a broad introduction to real estate finance and investments. Topics include both equity and debt. We begin with an overview of real estate markets in the United States. On the equity side students will be introduced to the fundamentals of real estate financial analysis, including pro forma analysis and cash flow models, and elements of mortgage financing and taxation. Ownership structures, including individual, corporate, partnerships and REITS will also be covered. On the debt side, we examine a number of financing tools in the context of the evolution of the secondary mortgage market, both residential and commercial. Those wishing to pursue more advanced topics in real estate finance could follow this course with Fixed Income and Mortgage-Backed Securities. **Prerequisite: FIN core.** 1.5 credits.

FIN B62 550. Numerical Methods & Optimization In Finance

This is a project-based course in which you learn how to apply numerical methods and optimization techniques to solve financial problems. The course will cover a variety of numerical methods and optimization techniques for both linear and non-linear problems with several examples of financial applications. Among the optimization methods (either exact or approximate solution techniques) covered will be: Linear and non-linear optimization, Integer programming, Stochastic Programming, Dynamic Optimization, and Robust Optimization. The numerical methods will mostly concentrate on finite difference schemes for partial differential equations as frequently encountered in financial applications. The course will be most effectively taught if it follows the basic decision models course, and this way can build upon familiarity with basic spreadsheet optimization capabilities. The course will also expose students to the capabilities of more sophisticated off-the-shelf mathematical programming packages. The course will depend on students working in groups on certain projects and case studies in applying the various optimization and numerical methods techniques to financial settings. Groups will have to present the results of their analysis in class. As suitable textbooks do not currently exist for this breadth of coverage, a course packet will be the primary source of relevant readings. **Prerequisite: FIN 524 and 524B.** 1.5 Credits.

FIN B62 551. Advanced Fixed Income and Credit Risk Modeling

This course is an advanced course in fixed-income. This means that a basic knowledge of fixed-income markets and concepts is assumed. The focus of the course is on the modeling of fixed-income securities. We will examine the behavior of the yield curve and discuss what this suggests for hedging liabilities. We will cover models of the term structure and of various types of fixed-income derivatives including caps, floors, and swaptions. We will also introduce credit-risk modeling, credit-default swaps, and collateralized debt obligations. **This is a class in the MSF curriculum. Prerequisites: Fin 525, 537, 538, and 539; or permission of the instructor.** 2 credits.

MANAGEMENT, POLICY, AND HUMAN RESOURCES

MGT 500P. Integrated Value Creation: The Wholomics Approach

The purpose of this course is to develop an integrated model of shareholder value creation in organizations that relies on concepts students have learned in various functional areas, and to show how tangible(six-sigma quality initiatives, EVA, mergers, etc.), as well as seemingly intangible(leadership development, creativity, knowledge, innovation, etc.), forms of value creation affect firms' market values. This model exposes both the complementarities and the tensions in the four basic ways in which value is created in organizations, and sheds lights on how "metric-driven" conflicts arise in organizations to impede effective value creation for shareholders. We will discuss the "rules" of value creation in the four quadrants of the Wholomics model and examine the optimal design of performance metrics in these quadrants. We will examine best practices for different forms of value creation and analyze organizational situations from the perspective of a value-creation consultant. The goal is to develop an improved understanding of how "soft" and "hard" value creation initiatives interact and how one should design, manage and lead an organization. **Prerequisite: 2nd year standing. This course is primarily an MBA course, but PMBAs who have completed the core may take it if space is available.** 1.5 credits.

MGT 500T/S50-5060 Social Entrepreneurship

This course is about using entrepreneurial skills to craft innovative solutions to lead and fund efforts to resolve social needs. Entrepreneurs are particularly good at recognizing opportunities, exploring innovative approaches, mobilizing resources, managing risks, and building viable enterprises. These skills are just as valuable and essential in the 'independent' social sector as they are in the 'private' business sector. While entrepreneurship can be broadly defined as any innovative effort that brings new processes, approaches, and solutions to bear on opportunities and problems; this course focuses more specifically on the opportunity to create innovative 'earned income' revenue solutions to funding mission based social organizations. Additionally, while social entrepreneurship can conceptually apply to both for-profit and not-for-profit models, this course is focused on the not-for-profit organizational form, which is seeking to create social value and fully leverage its not-for-profit tax status. This course will be co-sponsored and co-taught by the George Warren Brown School of Social Work and the Olin School of Business as an innovative approach to blend cross-discipline competencies to help solve the social issues of our world. 3 credits

MGT 500U. The Basics of Bio- Entrepreneurship

Bio-Entrepreneurship" investigates issues and decisions that inventor/scientists, investors, founders, business people, lawyers and others might typically encounter when they are considering the application and commercialization of early stage scientific discoveries. This course is intended for anyone interested in working in the life sciences industry as a chief scientist, entrepreneur, manager, consultant, or investor. It focuses on the issues and decisions that researchers typically face when considering how a discovery might be moved from a university laboratory to actual use. This course will provide an overview of the scope of knowledge and range of skills needed. The goals of the course are to: 1. Introduce a framework for evaluating discoveries and ideas that might be commercially viable through licensing or partnership agreements and in some cases lead to high opportunity startup companies. 2. Consider the implications of a researcher's or research team's personal motivations in choosing potential next steps for commercialization including the tradeoffs between scientific interests, reputation, personal time commitment, wealth creation, control, valuation and access to resources. 3. Develop an appreciation for the overall process including understanding university resources, economics, intellectual property, competitive dynamics and value milestones that impact various discoveries and the stages of monetizing different types of bio-entrepreneurship discoveries. 4. Develop skills including idea evaluation, intellectual property strategies, feasibility analysis, market assessments, regulatory approval, funding cycles, business planning, team formation and financial planning. The course will include examples and case

studies from drug discovery, diagnostic tool/medical device development and possibly other products Bio-Entrepreneurship is offered to Post Docs, PhD and masters level students who have or are pursuing advanced degrees in science. 3 credits.

MGT 501. Management Center Practicum

Students work in four-person teams on consulting projects, applying insights from their course work to real-world business problems under faculty supervision. Each student is expected to spend about 150 hours on the project. Grades are based on the quality of the final written and oral reports, as determined by the faculty supervisor. Students are paid a small gratuity, the amount, depending on the quality of the work. 3 Credits.

MGT 502. Ethical Issues in Managerial Decision Making

This course consists of a seminar, which focuses on ethical issues in management. This course is “team taught” and surveys a number of ethical standards or levels by which managers make decisions involving most functional areas of business. Course will emphasize discussion by student of cases and problem situations which confront managers and for which ethical dimensions are a significant part of the business choices. Course grade is determined by class participation and a written summary paper. See instructor for additional information. 1.5 Credits.

MGT 511A. Law and Business Management

We will review different rules of substantive law which affect the conduct of individuals and businesses. We will analyze different legal theories and rules of substantive law which regulate the conduct of individuals and businesses and which impose liability for damages on individuals and business entities when those rules are violated. We will survey basic rules of criminal law, intentional torts, and negligence. We will next focus on the rules affecting the making and performance of contracts, and the liability which results from breach of contractual relationships. This will include general contract law, as well as specific rules that exist in the sale of goods and merchandise, and in the purchase, ownership and sale of real property. In addition, we will also analyze and compare the choices available for dispute resolution, including mediation, arbitration, and trial in court. 1.5 Credits.

MGT 511B. Legal Issues at Business Stages

An analysis of legal issues affecting business from startup, operation, and the sale or closing of the business, including mergers and acquisitions. Startup analysis will include a comparison of business entities available and the factors to be considered in choosing one form of entity over another. We will compare general partnership, limited partnership, corporate and limited liability company forms of doing business, and basic rules of taxation of business entities, including and understanding of Apass through entities@ for tax purposes. Specific issues to be considered in the operation and conduct of the business will include a review of the law of agency, employment law, intellectual property law, securities regulation and antitrust. We will conclude with a review of legal issues affecting the sale or closing of a business, including mergers and acquisitions. We will discuss specific issues affecting seller and buyer including representations and warranties by seller, successor liabilities, and indemnification arrangements. 1.5 Credits.

MGT 512. International Business

Deals with U. S. and foreign-based multinational corporations, U. S. small business, entrepreneurs’ methods of evaluating foreign countries, foreign trade, and investment. Also covers special topics such as negotiations and divestment. Countries studied are either major industrial countries or countries representative of a region or world area. **Prerequisite: first year required courses or permission of instructor.** 3 Credits.

MGT 513N. Labor and Employment Laws

As you are or will be hiring and managing people during your career, knowing the discrimination laws (NLRA, ADA, Title VII, Age Discrimination Act, FMLA, etc.), the wage and hour laws, and non-compete laws and being exposed to their practical application will make you an effective manager and an asset to your employer. This course is designed to give you the practical knowledge of how to avoid violating the law and how to effectively deal with employees without incurring liability to you and your employer. More specifically, by taking this course, you will be able to: (1) identify potential legal issues associated with managing employees (for example, discrimination problems); (2) learn effective strategies to avoid lawsuits against yourself and your company; and (3) learn how to earn the respect of and bring out the best in the employees you manage. 1.5 Credits.

MGT 520. Taylor Community Consulting Project

This course is designed to provide business assistance and expertise to St. Louis area non-profit agencies. Applications available in the Center for Experiential Learning, Simon 117. Open to PMBA/MBA students, upper level BSBA students, and MSW students. 1.5 Credits.

MGT 521. Introduction to Entrepreneurship

This course is designed not only for the student with a burning passion to start his/her own business, but anyone who believes that entrepreneurial skills are an essential element of business success. “Introduction to Entrepreneurship” is taught primarily via the case method. Most case discussions will be followed by a relevant guest speaker —either an experienced entrepreneur or a professional from the investment community. You will hear from entrepreneurs and corporate managers with an entrepreneurial flair, some who have experienced great success, and others for whom success has been elusive. The structure of this course follows the evolutionary process of a new venture. Topics covered include: Idea Assessment, Organization Formation, Capitalization, Growth, and Exit. Corporate Entrepreneurship also will be explored. This course integrates much of what you have learned in your core courses and challenges you to apply those learnings. In each class you will be expected to make difficult business choices with less than perfect information, dealing with ambiguity and uncertainty,

much like a real life entrepreneur. Analytical rigor will be emphasized throughout and you will be expected to have “run the numbers” for each case. A central element of this course is the opportunity to pitch your “business idea” to classmates via a 5 minute “elevator pitch”. Those with the winning business concepts will recruit classmates to join their team to conduct a comprehensive feasibility analysis. Your “final” will consist of a formal 20 minute dress presentation of your idea—much like you would pitch your business concept to a potential investor. It is the professors’ objective that by the end of this course you will:

- 1) Better understand entrepreneurship and the entrepreneurial process
- 2) Be an incisive analyst of a business and/or business concept
- 3) Be a more persuasive seller of your business ideas.

Note: This course is strongly recommended for students interested in participating in the MGT 524. Students may not receive credit for both this course and MGT 514A. 3 Credits.

MGT 524. Business Planning for New Enterprises [The Hatchery]

In this course, two- to five-person student teams work on their own business idea or support outside entrepreneurs and scientific researchers. The academic deliverables are business plans, investor presentations or feasibility studies (for early stage scientific discoveries). Projects encompass both commercial and social ventures.

Students pursuing their own ideas must have their teams formed before the class begins. Students wishing to support outside entrepreneurs and scientific researchers must apply and be selected for those teams. Most of the work will be done outside the classroom with the support of mentors, advisors and the instructor. Classes will be held once per week for the first half of the semester. Workshops and rehearsals will be required in the second part of the term. Students make final presentations to a panel of outside judges including venture capitalists, angel investors, entrepreneurs, and people involved with early stage ventures. **Prerequisite: Completion of core requirements.** 3 Credits.

MGT 525. Strategic Consulting

The focus of the course is developing a strategy for a real world company. Many students use their current employer, a past employer, or the organization they would like to work for after the MBA. In this individual project, students use everything they have learned in their business career and MBA program so that each element of the strategy fits together and reflects the company’s business realities. The strategy should provide superior value to employees, customers, and owners. While the primary emphasis is on strategy development and implementation, the secondary emphasis is on the consulting process. Outside speakers and a case study discuss consulting issues at the major strategy firms, the Big 5, and smaller consulting firms. Most students should take the course in their last year but some full-time MBAs take it in their first year if they plan to do a consulting internship. Formerly MGT 513J. 1.5 Credits.

MGT 526. Topics and Case Studies in Ethical Decision Making

This course will focus on current issues in business and examine the values used by corporate leaders in decision making. The readings and class discussions will challenge students to examine some of the fundamental values in business. Using case studies, students will engage in active role playing to expose the variety of interested parties often involved in difficult choice situations. Students will examine different models for ethical decision making and be encouraged to develop practical models of their own. The course is open to MBA candidates. Others may be enrolled by permission of the instructor. Formerly MGT 513I. 1.5 Credits.

MGT 527. Human Resource Strategy for General Managers

This course will provide a basic understanding of how to gain competitive advantage through developing the right human resource strategy for the business. It will begin with a consideration of how to link the people strategy to the business strategy, move through a discussion of segmenting and analyzing the workforce, and then cover the contribution of human resource functions in creating the right environment to motivate the highest levels of performance. Formerly MGT 500Q. 1.5 credits

MGT 529. Management and Corporate Responsibility

Corporate leaders are expected to maximize returns to shareholders, produce compelling products and services, and create attractive work environments for their employees while at the same time adhering to the laws and expectations of the communities and countries within which they operate. This course will explore real situations in which the objectives of the corporation’s various constituencies—shareholders, employees and communities are in conflict. It will also focus on situations in which societal concerns—environmental and health, for example may be at odds with the immediate interests of important stakeholders. Through vigorous case discussions, dialogues with industry leaders and role-play simulations students will wrestle with these often ambiguous dilemmas, gain insights into the conflicts, and develop their own approaches and decision-making frameworks for resolving these situations and those they will face during their careers. Formerly MGT 500S. 1.5 credits

MGT 530 Asian Business Networks

To engage successfully with the dynamic economies of Asia, business leaders and their firms need to understand how the region’s business networks operate. This course examines the structures and the behavioral principles which govern the major business networks of Asia, including the Japanese keiretsu, Korean chaebols, Overseas and mainland Chinese, and the Indian networks. We also will consider successful and failed strategies of non-Asian headquartered firms who have attempted to participate in Asian networks. Business actors are placed in social organizational, economic, and political contexts, and a rich set of case studies comprise the core of the evidence. Formerly MGT 500Y. 1.5 credits

MGT 5313. Career Navigator

The objective of the Career Navigator course is to prepare Olin PMBAs to understand the complexity, challenges, skill set acquisition and knowledge base necessary to compete successfully for full-time positions in the global MBA marketplace. The course’s focus consists of a strategic and tactical framework which will allow PMBAs to: assess capabilities and goals against

the competitive MBA marketplace, explore the variety of traditional and non-traditional career opportunities available to them, build networking and information gathering skill sets, clarify their strategic objectives for both on and off campus searches, and demonstrably enhance presentation capabilities – in both written and verbal form. Meeting the objectives of the course, successful students will demonstrate outstanding strategic and tactical knowledge and skills, and build a customized foundation for establishment and management of their post MBA degree career. **This is a zero credit course. Career Navigator is a requirement for any PMBA student planning to use the services of the Weston Career Center.**

MGT 533. Effective Managerial Communication

This course expands MBA candidates' competencies in writing the emphatic and active voice style for different stakeholders, presenting under difficult or unplanned circumstances, evaluating the work of others and delivering constructive feedback, running better meetings, and writing and evaluating strategic documents. MBA candidates benefit from constructive feedback provided by the instructor and an international range of classmates. Assignments are drawn from real organizational cases requiring solid tactical thinking to ensure that communication is received well. 1.5 Credits.

MGT 534. Corporate Strategy

This course explores the unique strategy issues that arise within multi-business firms. The course examines how value is created or destroyed through the process of combining businesses and examines strategic issues surrounding mergers and acquisitions. Discussion within the course will critically evaluate patterns of diversification and growth within firms. The course will also address issue of vertical integration, exploring the limits of firm size. The course will also address the unique organizational design choices that emerge in multi-business settings, including an exploration of corporate governance. **PMBA Prerequisite: MGT 5301. MBA Prerequisite: MGT 5311.** 1.5 Credits.

MGT 535. Strategic and Crisis Communication

This course refines MBA candidates' competencies in delivering strategic communications related to three concentration tracks (financial, marketing, and consulting), communicating with employees and the public during high risk situations, strategizing and delivering damage control messages and crisis communications, preparing for media coverage, and managing media interactions. The videotaped sessions, within the context of simulated high risk and crisis situations, provides MBA candidates with immediate feedback about the potential consequences of their communication strategy and word choices. Outside speakers provide anecdotal stories and advice; a local businessperson serves as a client for the final business presentation simulation. 1.5 Credits

MGT 550A. Introduction to Non-Market Environment

While a firm's competitive advantage derives in large part from the development and exploitation of difficult to imitate capabilities and resources in the market environment, a firm's nonmarket business environment also poses important hazards and opportunities for strategy makers. Many barriers to imitation originate from legal rules or government policies that favor some capabilities over others. The rules, and in many cases their enforcement, are not fixed constraints. Rather, they are determined by the competition between interests in public institutions. In many industries, participation in the policymaking and judicial process is a critical component in creating or sustaining a company's competitive advantage. This class focuses on the nonmarket environment from the point of view of managers and consultants. Its primary objectives are to examine the nonmarket environments of business in terms of the issues, interests, and institutions; to learn a set of conceptual frameworks for analyzing those issues, interests, and institutions; and to practice forming effective strategies for managing in nonmarket environment. Three sets of topics are considered: Anticipation and management of nonmarket issues, Nonmarket strategies in governmental arenas, and Globalization and international business. 1.5 Credits

MGT 550B. Managing the Innovation Process

The course takes the perspective that innovation is a core business process associated with survival and growth of the organization, and it should be managed as such. We view innovation broadly as a process of knowledge creation. Innovation creates new possibilities through combining different knowledge sets. This process is multi-stage and takes place under highly uncertain conditions. The course objective is to help develop for our students the needed managerial skills in managing the multi-stage process of innovation. We focus on the systematic management of innovation processes through careful resource commitment and management of involved uncertainties. Enrollment limited to 2YR MBAs and PMBAs. 1.5 credits

MGT 550C. Sports Management

This course examines business and management issues involved in the sports industry. This industry is very diverse, ranging from global sports events (such as the Olympic Games, World Cup Soccer, etc.) to major national competitions (such as the National Football League, Major League Baseball, etc.). Engaged in this industry are many different players, including franchises, governing leagues, sponsors, media, stadium owners, government, fans, and so forth. This course will take a practical look at the world of sports management and administration, with an eye on extracting key lessons for corporate management and administration. 1.5 credits.

MGT 550G Olin Grand Rounds

Grand rounds in medical schools are a forum for presenting new and challenging clinical problems and cases. The goal of Olin Grand Rounds is to focus on the challenges and solutions facing the business of medicine. The course will therefore provide an introduction to the current issues facing the health care sector that integrates management tools and clinical knowledge. The objective is to provide students new insights into how modern management tools can be combined with scientific and clinical knowledge to manage health care organizations more efficiently and practice medicine more effectively. 3 credits. **Course is cross-listed with the undergraduate business program as MGT 320; MBA or PMBA students must enroll in MGT 550G.)**

MGT 550H Health Economics and Policy

The basic tenets of health economics will be covered. This course will, however, place a unique emphasis on incorporating materials from three broad source categories: textbook elements, “lay” press and media, and academic journal publications. A particular aim is to foster application of rigorous, critical thought to media presentations of health care economics and policy issues. 3 credits. **Course is cross-listed with the undergraduate business program as MGT 321; MBA or PMBA students must enroll in MGT 550H.**

MGT 550I Healthcare Management

The goal of the course is to develop facility in applying basic tenets of general management to actual situations and dilemmas that might be faced by health care managers, consultants, financiers, investors, innovators, or providers in the course of their work. Issues addressed will include but not be limited to financial issues, management challenges, and conduct of operations. 3 Credits. **Prerequisites: MEC 5401 and 5406.**

MGT 550J Research in Healthcare Management

The overarching goal of the course is to develop the skills and confidence necessary for applying rigorous statistical and analytical approaches to research questions in health services, including but not limited to questions relating to management, finance and economics, operations, and policy. The course will focus on directed research projects with faculty oversight. Prior to the initiation of the course, course faculty will identify several available research project options, and prepare to present these options to the course enrollees. The goal would be for these projects to be drawn from sources capitalizing on the strength of the university medical school and affiliated medical centers, as well as for these projects to capitalize on existing relationships between the school and healthcare firms. 3 Credits **Prerequisites: MGT 550G, MGT 550H and MGT 550I. The course can be taken concurrently with one of the latter 2 courses.**

MGT 550M Community Development & Environmental Preservation through Entrepreneurial Collaboration

This course seeks to develop and implement a new grass roots community development approach that builds on investments made by NGOs, aid groups, and governments. Specifically, in the approach designed by the Skandalaris Center and implemented in this course, we are integrating conservation goals with self-directed, economic growth in the rural subsistence communities of Madagascar. This academically rigorous course and accompanying travel will provide intensive experiential learning that is rich in hands-on content, designed to extend and enrich core discipline learning. The course is designed to facilitate the conditions in which entrepreneurial skills can be learned in their broadest and richest sense. The cross disciplinary (e.g. Anthropology, Business, Design, Engineering, Law, Social Work, Economics, Political Science, etc.) and cross level (e.g. undergraduate, graduate, alumni, etc.) participation when combined with the daunting complexity and intellectual challenge of travel and the setting create a lasting capstone experience. Local level economic capacity building is a particularly difficult issue in the world's poorest rural communities like those in Madagascar. 4.5 Credits.

MGT 550N Olin Cup – Business Venture Valuation

In return for the cash investment, the Skandalaris Center takes equity stakes in the winning business-ventures. Thus, an important part of the selection process is coming up with a fair value of the finalist ventures as well as negotiating investment terms with the finalist teams. Students in the class will learn the basics of valuating business ventures (through class lectures and case studies). Then, they will assist the Skandalaris Center in valuations of the competing ventures and with negotiations of investment terms with the finalists of the competition. Concurrent enrollment in MGT 521 is recommended. 1.5 credits.

MGT 555. Global Management Studies

Encourages MBA students to improve their understanding of business management outside of the USA by allowing them to plan, organize and lead a course that includes field study in foreign nations of their choice. Offered in the spring term of each year, this course is planned, organized and led by a team of students under the direct supervision of an Olin faculty member recruited by the student team. Both a faculty adviser and the GMS policy committee must approve each course proposal. Open to MBA degree candidates only. 1.5 Credits.

MANAGERIAL ECONOMICS

MEC 500F. Real Estate Development

This course provides an overview of the real estate development process and evaluates “ground-up” development as well as re-hab, re-development, and acquisition investments. We will examine the similarities and differences of traditional real estate product types including office, retail, industrial, single family and multi-family residential, and mixed use. Emphasis is on concise analysis and decision-making. We will discuss the development process, including market analysis, site acquisition, due diligence, zoning, historic preservation, entitlements, approvals, site planning, building design, construction, financing, leasing, and ongoing management and disposition. Throughout the course, we will focus on risk management and leadership issues. Numerous guest lecturers who are leaders in the real estate industry participate in the learning process. **PMBA Prerequisites: MEC core. MBA Prerequisite: MEC 5400.** 1.5 Credits.

MEC 531. The Global Economy

The purpose of this course is to present current issues pertaining to international economics, macroeconomics, and the global economy. The broad topics to be covered are: macroeconomic principles; exchange rate determination; balance of payments analysis; the choice between fixed and floating exchange rates, and the implications of that choice on the implementation of

domestic policies; and finally a brief treatment of the determinants of economic growth and nations' development strategies. The material will be presented through a combination of lectures and case discussions. 1.5 Credits.

MEC 537. Data Analysis, Forecasting & Risk Analysis

This course presents a modern and contemporary coverage of several econometric models that are used for the analysis and forecasting of business data. The basic building blocks for the analysis are regression time series models. Broad coverage of non-seasonal and seasonal ARIMA models is included. The important family of ARCH-GARCH models, used to represent changing volatility, are also covered in detail. These models are widely used in option pricing and in other financial applications. The course includes some extensions of these models to multivariable problems. Students are exposed to numerous real data sets in class and in assignments. All the models are analyzed with a popular econometrics software package that is employed in business. A group project is required. **PMBA Prerequisites: MEC core. MBA Prerequisites: MEC 5400 and 5410.** 3 Credits.

MEC 538. Economics of the Organization

Business organizations are complex systems with mutually dependent parts. Understanding the economic factors that influence how the organizational pieces function together can be a daunting task. The goal of this course is to provide an economic framework for the analysis of a variety of challenges that face businesses, both at the organizational and individual employee levels. In this course we will consider what economics can say about the efficient organization of firms and businesses, and provides an economic approach to solving organizational and incentive problems. The aim of this mini is to describing general organizational issues facing firms, such as incentive problems arising from adverse selection, moral hazard, and agency. We consider alternative solutions to these problems and then apply these lessons to readings and cases. **PMBA Prerequisites: MEC core. MBA Prerequisites: MEC 5400 and 5410.** 1.5 Credits.

MEC 538B. Compensation, Incentives, and Organizations

This course is the second in a linked sequence looking at the study of the economics and management of organizations, and focuses on issues at the individual employee level. We will use the tools developed in MEC 500D, Economics of the Organization, to examine how incentives and performance contracts should be combined in an organizational framework to motivate executive and employee performance. In this course we consider the economic incentive problems faced by a firm in recruiting, training, motivating, and retaining workers in the firm's internal labor market, as well as economic tools which may be used to construct compensation and non-compensation schemes to address these incentive problems and raise worker productivity. The format of the course is to present the underlying theory or framework for the topic at hand, and then to illustrate how a firm was able (or unable) to implement the recommended approaches for solving the incentive problem. **Prerequisite: MEC 538** or permission of the instructor. 1.5 Credits.

MEC 540 Money, Capital Markets and Economic Growth

An introduction to the U.S. monetary and financial system and its interaction with the overall economy. Among topics considered are the determination of interest rates, the relationship between monetary and "real" sides of the economy including savings and investment decisions and inflation rates, and the role of capital markets in GDP and productivity growth. 1.5 Credits.

MEC 592. Competitive Industry Analysis

Uses economic and game-theoretic models to analyze behavior of firms. Focus will be split between evaluating the competitive environment within industries and developing competitive strategies that are responsive to specific competitive forces facing individual firms. Topics typically covered include models of price and quantity competition, barriers to entry, commitment strategies and credible threats, product differentiation, vertical integration, research and development, and patenting strategies. **PMBA Prerequisites: MEC core. MBA Prerequisites: MEC 5400 and 5410.** 3 Credits.

MEC 595. Market Competition and Value Appropriation

The objective of this course is to provide students with frameworks and capabilities for making smart strategic decisions in evolving markets. Skills of this variety are critical for those intending to pursue careers in management consulting. Markets offering opportunities for improvement in technology or product quality/features are a classic example of the kind of situation to which these skills may be applied. For example, what is the value-maximizing mix of internally-oriented ("innovative") versus externally-oriented ("imitative") R&D investments? Do the life cycles of markets of this kind display common features? And if they do, how can these shared features be used to make smarter R&D mix choices, and to predict or influence the degree to which a firm can appropriate any value it creates? **Prerequisite: MEC 592.** 3 Credits.

MARKETING

MKT 500H. Creating & Building Brand Equity

This course covers topics such as customer-based brand equity, brand positioning, choosing brand elements, designing marketing programs to build brand equity, integrated marketing communications to build brand equity, and leveraging secondary associations. You can think of this course as Brand Management, part I, and MKT 555, Brand Management, as Brand Management, part II. You can take either course or both courses, it's completely up to you. You will not be at a disadvantage if you take only one course, it's really more about how much depth you want on brand management. In this course, we will go through topics from the first half of Kevin Keller's Strategic Brand Management textbook. The course consists of readings and cases, and you will hear from industry guest speakers and complete a project on creating brand equity. There are no prerequisites. Credits: 1.5.

MKT 500I. Measuring & Managing Brand Equity

This course focuses on the concepts, guidelines and techniques used by managers to measure, maintain and manage 'brand equity' with a view towards establishing powerful brands and branding strategies. Recognizing the importance of consumers in a customer-centric marketplace, the framework of this course approaches branding from the perspective of the consumer - called customer-based brand equity. A major part of this course examines what consumers know about brands, what marketers want them to know and how measurement procedures are developed to assess brand knowledge and 'brand equity'. Through the use of relevant cases and real-life examples, this course examines how new products should be introduced and named, how 'brand equity' can be measured and how the value of brands (to both customers and firms) can be quantified and evaluated. Also covered will be the approaches to measuring sources of 'brand equity', outcomes of 'brand equity' and the development and implementation of a 'brand equity management system'. **Prerequisite: MKT 5503. MKT 555 Brand Management or MKT 500H recommended, but not required.** Credits: 1.5.

MKT 500J. Business-to-Business Marketing I

This mini course, and its complement, MKT 500K, focus on business marketing management: Understanding industrial, institutional and governmental purchase behavior and processes, and recognizing, creating, and capturing value in those markets. We will place emphasis on issues of channel coordination, customer relationship management, systems approaches, and personal selling, as well as value calculation and pricing, in the creation of business marketing strategy and implementation plans. This course is recommended, but not required, for those wishing to take MKT 500K. **Prerequisite: MKT 5503.** Credits: 1.5.

MKT 500K. Business-to-Business Marketing II

This mini course continues the in-depth treatment of business marketing management begun in MKT 500J, with a focus on understanding industrial, institutional and governmental purchase behavior and processes, and recognizing, creating, and capturing value in those markets. We will place emphasis on issues of channel coordination, customer relationship management, systems approaches, and personal selling, as well as value calculation and pricing, in the creation of business marketing strategy and implementation plans. We will make use of some lexicon and analytical tools introduced in MKT 500J, without explicitly reintroducing them in this course. **Prerequisite: MKT 5503. MKT 500J is recommended, but not required.** Credits: 1.5.

MKT 500L. Customer Relationship Management

This course focuses on concepts and techniques used by managers to understand and manage customer relationships. A fundamental shift has occurred in marketing from managing and marketing products to understanding and managing customers. This necessitates an understanding of the customer management process and the value of customers to the firm. In this course we will focus on understanding consumer behaviors relevant to relationship management. We will define and discuss the usefulness of metrics such as customer satisfaction and various measures of customer loyalty. We will also consider how marketing programs can be designed to improve customer management outcomes. **Prerequisite: MKT 5503.** Credits: 1.5.

MKT 500M. Customer Equity Management

One consequence of the proliferation of CRM systems and customer centric marketing philosophies is that customers are increasingly viewed as valuable economic assets. In this course you will learn strategies for managing customers as economic assets. We consider topics such as customer acquisition, customer retention and customer lifetime value. We will focus on how marketing tactics and strategies can be used to grow a firm's overall customer equity. **Prerequisite: MKT 5503 and MKT 500L.** Credits: 1.5.

MKT 500N. Retail Management

The purpose of this course in retail management is to introduce students interested in marketing, consumer packaged goods and retailing to the elements of successful retail strategies. The curriculum will include identifying the critical elements of the retail mix, studying key retail metrics, focusing on the challenges presented by multiple channels of distribution including the internet and examining obstacles and strategic choices confronting mature retailers. The course will conclude with side-by-side comparisons of the strategies and financials of preeminent retailers like Home Depot and Lowes and Target and Wal-Mart. 1.5 credits.

MKT 555. Brand Management

This course covers topics such as developing a brand equity and management system, measuring sources of brand equity, measuring outcomes of brand equity, designing and implementing branding strategies, introducing and naming new products and brand extensions, managing brands over time, and managing brands over geographic boundaries and market segments. You can think of this course as Brand Management, part II, and MKT 500H, Creating & Building Brand Equity, as Brand Management, part I. You can take either course or both courses, it's completely up to you. You will not be at a disadvantage if you take only one course, it's really more about how much depth you want on brand management. In this course, we will go through topics from the second half of Kevin Keller's Strategic Brand Management textbook. The course consists of readings and cases, and you will hear from industry guest speakers and complete a project on brand management. There are no prerequisites. 1.5 Credits.

MKT 555A. Data Analysis for Brand Management

Firms in several industries, most notably in the packaged goods sector, now have access to accurately measured data on actual market performance of their brands and competing brands, especially with the availability of syndicated data provided by

suppliers such as A.C. Nielsen and IRI. Given such vast quantities of data, brand managers must be equipped with the analytical skills required to bring such data to bear on marketing problems facing the brand. This course will introduce students to these new sources and a set of analytic tools useful to analyze such data. Marketing decision support systems will also be discussed. Cases will be used to illustrate the use of the various techniques. **Prerequisite: MKT 5503.** 1.5 Credits.

MKT 558. Pricing Strategies

This course is designed to equip you with some essential concepts and techniques needed to make profitable decisions about one of the most important marketing variables - price. The course is structured around four fundamental factors that firms need to consider in their pricing decisions: costs, customers, competitors and climate (legal environment). Through an airline pricing game, case studies, and in-class discussions, this course will provide you with a conceptual framework, grounded in modern economics and consumer psychology, for analyzing a complex marketing environment and designing proactive pricing strategies that are most profitable for your business. **PMBA Prerequisites: MKT core. Familiarity with basic statistical techniques and a spreadsheet package like Excel is desirable. MBA Prerequisite: MKT 5500. Familiarity with basic statistical techniques and a spreadsheet package like Excel is desirable.** 1.5 Credits.

MKT 558B. Pricing Decision Making and Implementation

The focus of this course is on pricing tactics and strategies that are proven to be profitable for firms. Through case studies, lectures, and practical exercises, this course will help you to gain insights into successful pricing strategies in various industries and to develop your own skills necessary to make the most important business decision - pricing, in your organization. Topics of discussion include pricing over the product life cycle, discounting, price bundling, price discrimination, pricing through the channel, competitive bids, strategic pricing, etc. **PMBA Prerequisites: MKT core. Familiarity with basic statistical techniques and a spreadsheet package like Excel or Lotus 1-2-3 is desirable; completion of MKT 558 is strongly recommended. MBA Prerequisite: MKT 5500. Familiarity with basic statistical techniques and a spreadsheet package like Excel or Lotus 1-2-3 is desirable; completion of MKT 558 is strongly recommended.** 1.5 Credits.

MKT 559. Creating and Marketing Innovative Products and Services

New product development is a major strategic activity for most firms. Success in new products becomes vital as product life cycles shorten and competitive activity leads to record numbers of product introductions. This course is the first in a two part sequence; it will explore key new product issues including ideation, assessment of new designs, and the development, positioning, pricing, and diffusion of innovative new products and services. Barriers as well as accelerators of diffusion will be discussed. The impact of disruptive innovations on mainstream markets will be studied. This is a case-based course, and there is no text book. **PMBA Prerequisites: MKT core. MKT 571A and MKT 555 are strongly recommended. MBA Prerequisite: MKT 5500. MKT 571A and MKT 555 are strongly recommended.** 1.5 Credits. [This course was previously listed as MKT 553 Customer Driven New Product Design]

MKT 559B. Marketing Strategies for Innovative Products and Services

This is the second in a two-part sequence; it will explore product portfolio decisions, the first mover advantage, pricing of new and innovative products, channel decisions, the marketing mix, and test marketing. It is a case-based course. **PMBA Prerequisites: MKT core. MKT 553, MKT 571A and MKT 555 are strongly recommended. MBA Prerequisite: MKT 5500. MKT 553, MKT 571A and MKT 555 are strongly recommended.** 1.5 Credits. [This course was previously listed as MKT 553B New Product Strategies]

MKT 571A. Marketing Research

Description: This course teaches the essentials of marketing research - how to collect and analyze data in order to understand and characterize the target consumer. It does so in two steps: first, collection of data from consumers using techniques such as focus groups, surveys, laboratory experiments etc.; second, analysis of the collected data using techniques such as linear regression, factor analysis, multidimensional scaling, conjoint analysis etc. The course will teach students how to implement these techniques using standard software. The format for the course is lecture and cases. **Prerequisites: MKT core** or permission of instructor. 1.5 Credits.

MKT 571C. Database Marketing

Until recently, marketing research was mostly based on data collected using surveys or experiments. Firms now have access to a wide variety of real-world marketing data, collected using sophisticated database management techniques. This course demonstrates the value that firms can derive from such databases. This course will familiarize students with these new data sources, and describe a set of analytical tools that are necessary to make sense out of such data. Familiarity with some statistical analysis software (Microsoft Excel, Matlab etc.) will be useful. **Prerequisite: MKT 571A.** 1.5 Credits.

MKT 573. Advertising Management

Building upon a foundation in marketing and brand management, students in this course will learn how advertising plays a major role in an integrated marketing communications program. Each session will encompass discussions focusing on the components of the integrated marketing communications process and how advertising, PR, promotion and other agencies are used by clients to create and implement effective marketing programs. The course will include presentations by representatives from these advertising and other agencies, team projects, and case analyses. The students will gain an understanding of how clients and their agencies conceive, create, deliver and evaluate successful marketing programs. **Prerequisites: Completion of the Marketing core.** Credits: 1.5

MKT 576A. Understanding and Influencing Consumer Behavior

A firm makes money by understanding consumer value. This course gives you tools to understand how consumer needs arise, how these needs guide their learning, product choice, loyalty, and therefore value, and to design marketing actions that influence consumer needs and behaviors. **PMBA Prerequisites: MKT core. MBA Prerequisite: MKT 5500.** 1.5 Credits.

MKT 577. Marketing Strategy

Our objectives in this course are twofold: (1) Develop and sharpen your skills in making strategic marketing decisions, and (2) Understand the steps involved in the formulation and implementation of marketing strategies. Strategic marketing decisions, unlike tactical decisions, have long term effects and are often costly to change once implemented. Strategic decisions often involve more than one marketing mix (price, advertising, product features) variable. As such these are very important decisions. Strategic decisions involve internalizing competitive reactions and customer behaviors to evaluate the effectiveness of the strategies. We will develop frameworks and conceptual tools for you to analyze strategic problems in marketing and to develop the optimal strategy. Once you have identified the options, you need to implement the strategy. We will discuss the analyses you need to perform to formulate a successful strategy, how to implement the strategy through the marketing mix, and to follow up.

We will use case analyses, lectures, assignments, group project, a simulation game, and guest speakers to enrich our learning. **PMBA Prerequisites: MKT core and MEC 5401. Recommended: MKT 571A AND 571C. MBA Prerequisite: MKT 5500 and MEC 5410. Recommended: MKT 571A AND 571C.** 3.0 credits

MKT 579I. International Marketing Management

This course begins by defining a strategic approach to international marketing and by raising, in particular, the challenges of international marketing research. It then addresses international market, segmentation, targeting, positioning, and internationalization mode decisions. Finally, the elements of the marketing mix are explored from an international perspective.

PMBA Prerequisites: MKT core. MBA Prerequisite: MKT 5500. 1.5 Credits.

OPERATIONS AND MANUFACTURING MANAGEMENT

OMM 500D. Project Management

Change management has become synonymous with project management, since organizations that want to change their focus or direction increasingly recognize that introducing new products, processes, or programs in a timely and cost effective manner requires professional project management. This course analyzes complex projects and discusses available tools for managing them. Some of the topics covered include life cycle models, project selection, project monitoring and control, planning with uncertainty, project risk management, the critical chain method, and managing multiple projects. It also discusses commercial project management software and how to overcome its limited functionality to address the requirements of managing risky complex projects in practice. Students learn project management skills that will be useful throughout their careers. As such, this course is essential for current or future managers regardless of their career concentration. **This is a required course in the Master of Science in Supply Chain Management program. MS/SCM students will have first priority. PMBA**

Prerequisites: OMM core or permission of instructor. MBA Prerequisite: OMM 5700 or permission of instructor. 3 Credits.

OMM 500E. Supply Chain Risk Management

Many events in the last few years made supply chain managers keenly aware of the multiplicity and diversity of risks affecting them, from fluctuating commodity prices, unstable currencies, hurricanes and earthquakes, fires, terrorist attacks, contaminated material sourced from developing countries, and suppliers going bankrupt in tight financial credit environments. Building a functional supply chain requires careful planning and consideration of a variety of disruption risks, and it is of paramount importance to integrate management of physical flows and financial hedges when dealing with such risks. Companies that effectively manage their supply chain risks enjoy a level of robustness (flexibility) and resilience (disruption-"proof-ness") that affords them significant competitive advantage. This course will develop a comprehensive risk management framework for complex supply chains and introduce students to all needed decision tools for supply management and risk hedging. In addition, it will outline a portfolio of proven strategies to assess, reduce, hedge, and mitigate supply chain risks.

Prerequisites: OMM 5704 (MBA, PMBA). 1.5 Credits.

OMM 554. Operations Planning and Control

Examines approaches to problems of operations planning and control in various organizational settings. Topics include demand forecasting (data analysis, forecasting techniques, and control of forecasting systems), end-item inventory control (lot sizing, safety stock, and evaluation of systems), and materials requirements planning (master scheduling, shop scheduling, aggregate capacity planning, and systems implementation). **PMBA Prerequisites: OMM core or permission of instructor. MBA**

Prerequisite: OMM 5700 or permission of instructor. 3 Credits.

OMM 558. Advanced Operations Strategy

This course deals with operations issues having a long-term impact on the corporate strategy, and on the competitive viability of a firm. We develop a general framework for creating and analyzing strategies for managing domestic and international manufacturing and service operations. The strategic decision categories to be examined include product-process technology strategies, facilities, and capacity management, performance measurement, managing quality and productivity, and system design. The course covers productivity measurement, process choice, product profiling, interfaces with marketing, experience costs, process positioning, accounting and financial perspectives, and international operations. It gives equal attention to

service operations and manufacturing operations. Emphasis is on the application of systems thinking to case studies and the design of world class operations. It is valuable for students with an operations or general management focus, as well as for finance and marketing students. **PMBA Prerequisites: OMM core; or permission of instructor. MBA Prerequisite: OMM 5700; or permission of instructor.** 3 Credits.

OMM 559. Managing Global Business Process Outsourcing for Competitive Advantage

The growth of global outsourcing of all types of business processes (from manufacturing, to R&D, engineering, call centers, clinical trial tests, IT, Accounting, human resources, etc.) with third party contracting organizations all over the world has been heralded by the popular and academic press as the most important business trend of the last decade. As a result of such strategic trends and actions, it becomes essential to strategically manage the "global business process outsourcing" as a key business process by itself, and thus to hire and train managers that fully understand the tradeoffs, implementation challenges involved, approaches for managing risks, and more importantly, able to manage the business relationships with the third party contracting organizations. The course is intended to provide the fundamental skills to our MBA/PMBA students so they can become successful, global managers of "virtual" value chains, which when faced with outsourcing decisions, can competently make them within the context of their firm's strategy, but also effectively execute all aspects of the outsourcing process and manage the outsourcing relationship with their suppliers. There will be a course packet with readings and case studies. Formerly OMM 500C. 1.5 credits

OMM 572. Strategic Quality Management

Discusses the theory and practice of quality management in the business world. Covers operations and marketing issues that are typical for manufacturing and service organizations, a cross-functional perspective emphasizing the interactions between the operations and marketing decisions. Topics include quality strategies and competition; organization and incentives for quality enhancement (the approaches of Crosby, Deming, Feigenbaum, Ishikawa, and Juran); quality-function deployment; process mapping; and the role of top management. **PMBA Prerequisite: OMM 5704 and MEC 5406 or permission of instructor. MBA Prerequisite: OMM 5700 and MEC core.** 1.5 Credits.

OMM 573. Operations Management in the Service Industry

The service industry is of vital importance to today's economy. Through a greater understanding of the design and operation services, productivity improvements can be achieved which result in real growth. In this course we will analyze both the strategic issues in service management as well as the particular aspects of running firms. We will discuss important issues in the operations of major service providers such as hotels and restaurants, airlines, retailers, financial services, and health care providers. We cover such topics as: service design, capacity and demand management, quality in services, variability and bottlenecks, and revenue management. The course will approach services from an operations management viewpoint, though related aspects of strategy, marketing, technology management and organizations will be discussed. Much of the discussion will focus on case studies and articles. Students will be required to write-up several cases, complete other written assignments, and may be required to take part in a term project. **PMBA Prerequisite: OMM 5704. MBA Prerequisite: OMM 5700.** 1.5 Credits.

OMM 576. Foundations of Supply Chain Management

Examines how companies manage effectively the entire set of activities involved in the production and delivery of goods and services to their customers. Supply chain management (SCM) deals with the management of materials, information, and financial flows in networks consisting of suppliers, manufacturers, distributors, and customers. Recent trends in communication technology, sophisticated information systems, globalization of operations and markets, increased demand for mass customization, and increasing customer expectations have made the coordination and integration of these flows within and across companies critical to the success of businesses. This course focuses primarily on the foundations of SCM, touching topics such as: 1) matching supply with uncertain demand, 2) inventory management, 3) logistics, 4) design for variety, 5) global issues in SCM, 6) Quick/Accurate Response, 7) collaborative processes. **PMBA Prerequisites: OMM core. MBA Prerequisite: OMM 5700.** 1.5 Credits.

OMM 577. Information Technology and Supply Chain Management

Recent developments and breakthroughs in information technology have radically changed the business world, offering opportunities not only for new products and services also for reengineering supply chains and improving supply chain performance. The course will study how the innovations in information technology affect the ways information flows through the supply chain, which in turns provide opportunities to better coordinate the material and financial flows. The course will review business cases in which companies use supply chain management concepts and emerging technologies to improve business processes as well as creating values. **PMBA Prerequisites: OMM core. MBA Prerequisite: OMM 5700.** 1.5 Credits.

ORGANIZATIONAL BEHAVIOR AND STRATEGY

OB 523. Managing Politics and Power in Organizations

The use of power and politics is inevitable in modern organizations – and the higher one goes the more of it one encounters. Therefore, the development of real competency in managing power and influence can materially enhance career progression. The objective of this course is to develop such competency through the use of learner – centered instruction, which includes actual application of concepts through class discussion of case histories and the use of a learning journal. The content of the course includes: why power and politics occur; when are they particularly prevalent; what are the sources of power; how to build power throughout ones career; common influence tactics; the importance of political "fit" in job search, and; how to avoid

political mistakes in a new position. **PMBA Prerequisites: OB 5601 and 5602 or permission of the instructor. MBA Prerequisite: OB 5600 or permission of the instructor.** 3 Credits.

OB 524. Negotiation

Managers spend the majority of their time negotiating - from negotiating schedules and vacation time to negotiating resource allocations to negotiating mergers and major policy decisions and their implementation. Skillful negotiation is a critical component of the tool box of the successful manager. The purpose of this course is to improve students' abilities to diagnose conflict situations, to analyze, plan, and conduct negotiations. The course material addresses negotiation as an effective means for implementing decisions and strategies and resolving conflict in a variety of settings. Course format will involve simulated negotiation and experiential exercises, cases, discussion, and lecture. Students will be evaluated on the basis of case analysis, negotiating performance, and a final project. **Students may not take both this course and OB 561 for credit.** This course covers topics in greater depth than the shorter OB 561 course, offers more opportunities for hands-on practice, learning, and feedback, and also covers a wider range of additional topics. 3 Credits.

OB 561. Negotiation & Conflict Management

Managers spend the majority of their time negotiating - from negotiating schedules and vacation time to negotiating resource allocations to negotiating mergers and major policy decisions and their implementation. Skillful negotiation is a critical component of the tool box of the successful manager. The purpose of this course is to improve students' abilities to diagnose conflict situations, to analyze, plan, and conduct negotiations. The course material addresses negotiation as an effective means for implementing decisions and strategies and resolving conflict in a variety of settings. Course format will involve simulated negotiation and experiential exercises, cases, discussion, and lecture. Students will be evaluated on the basis of case analysis, negotiating performance, a final project, and participation. Students are expected to participate in all negotiation exercises. **Students may not take both this course and OB 524 for credit.** 1.5 Credits.

OB 561C. International Negotiations

International negotiations are more than just a language barrier -negotiating across cultural divides requires a framework for understanding cultural differences. Cultural differences impact not only the process of the negotiation itself, but also the preferences and positions of the parties. Different cultural perspectives result in different negotiator selection criteria, can impact the significance of different types of issues, can create misunderstandings over concerns with protocol, can result in very different bases of trust and comfort with risk, impact preferences for different positions, affect negotiation strategies, and determine the nature of a persuasive argument. This class is designed to help students build advanced skills in negotiation and dispute resolution, in particular in an international context, by providing a framework for understanding the impact of cultural differences on negotiation processes and outcomes. As demonstrated in the pre-requisite negotiations class, a win/lose mentality frequently results in sub-optimal agreements, yet even the definition of winning can change dramatically across different cultures. The ability to anticipate and understand such differences can result in the creation of a "bigger pie" and more integrative and lasting agreements. The class will train students in the advanced negotiation skills of the international negotiator. **Prerequisite: OB 561.** 1.5 Credits.

OB 562A. Leadership Competence

This course introduces theories of leadership that identify critical traits, skills, and behaviors typical of successful leaders, with a specific focus on developing competencies in the upcoming internship or career. Participants will review assessments of their own traits, dispositions, behavioral orientations, and social networks in light of contemporary frameworks for effective leadership. Competence in applying these frameworks will be developed through the development of cases and their analysis in 'leadership workshops.' In addition, course participants will engage in constructive leadership development training both as 'coaches' and recipients. Based on this feedback, participants will prepare an individual leadership development plan. **PMBA Prerequisites: OB 5601 or permission of the instructor. MBA Prerequisite: OB 5600 or permission of the instructor.** 1.5 Credits.

OB 565. Leading Change

This course introduces the concepts of how leaders create and manage change in four domains: developing a strategic vision, designing new structures and processes, aligning individual motivation with organizational culture, and gaining support for the implementation of change. The class approach will include presentations on leadership experiences, case studies of examples of leaders exhibiting specific behaviors, and experiential exercises. It offers participants meaningful opportunities for the development of a portfolio of tools for leading change. **PMBA Prerequisites: OB 5601 and 5602, or permission of the instructor. MBA Prerequisite: OB 5600 or permission of the instructor.** Students may not take this course and OB 525B for credit. 1.5 credits.