JOHNSON GRADUATE SCHOOL OF MANAGEMENT

ADMINISTRATION

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The Johnson Graduate School of Management prepares men and women for managerial careers in business. The school offers course work in many disciplines to provide potential managers with an understanding of the complexities of the professional world in which they will operate and of the organizations of which they will become a part.

A bachelor's degree or its equivalent is required for admission to the two-year program leading to the Master of Business Administration (M.B.A.) degree. Nearly half of the students have a background of undergraduate studies in arts and sciences, and about one-quarter in engineering. Five percent of the students begin their graduate training immediately after receiving their bachelor's degrees and the remaining 95 percent following work experience.

Combined degree programs allow highly qualified Cornell students to co-register in the school during their senior year, thereby earning a master's degree in less than the usual time.

The doctoral program, administered through the Graduate School, provides an advanced level of education in business for those who seek careers in teaching and research at leading universities.

More detailed information about these programs is available from the Office of Admissions and Student Affairs, Johnson Graduate School of Management, Room 111 Sage Hall.

Students in other graduate programs and undergraduate students registered with the university are welcome in many classes. Since matriculated MBA students require certain courses for graduation, non-Johnson School students are not allowed to pre-enroll. During

the first week of classes, registration of non-Johnson School students occurs on a space available basis.

UNDERGRADUATE ONLY

NBA 300 Entrepreneurship and Enterprise

Fall, spring. 3 credits. D. BenDaniel. The course uses Cornell-developed case studies and lectures to address entrepreneurial management in start-up ventures and newbusiness development in existing companies. Among the topics covered are valuation of business, planning, obtaining resources, management of growth, and cashing out. Guest lecturers speak on specialized topics such as corporate and patent law, bankruptcy and workouts, leveraged buy-outs, and valuations of businesses. Students team up to write and present business plans. The course attempts to integrate marketing, finance, operations, and human-resource topics in the context of high-growth business ventures. For non-Johnson School students only. Johnson School students see NBA 564.

NBA 401 Entrepreneurship for Scientists and Engineers

Fall, spring. 3 credits. J. Nesheim, G. Schneider.

This course is intended to introduce students to the new business startup process. Small teams will be formed to come up with an idea for a startup and create a business plan that can attract venture capital or other funding for the new enterprise. Guest lecturers are from successful high-technology companies. The course is led by instructors from Silicon Valley and Ithaca who created high-technology businesses.

COURSES FOR NON-JOHNSON SCHOOL STUDENTS

NCC 550 Financial Accounting

Fall, spring. 3 credits. Course intended for non-Johnson School students only. Staff. An introductory accounting course that examines the subject from the viewpoint of users external to the organization. Topics include transaction analysis; the accounting cycle; financial-statement preparation, use, and analysis; revenue recognition and cost measurement; present value; and problems in financial-accounting disclosure. This course is similar in content to the MBA core course NCC 500.

NCC 553 Marketing Management

Fall, spring. 3 credits. Course intended for non–Johnson School students only. Staff. The course addresses controllable and uncontrollable marketing variables that managers in multi-product firms face in today's business environment. Topics include customer behavior, product planning, distribution, advertising and promotion,

pricing, and competitive strategy. This course is similar in content to the MBA core course NCC 503.

NCC 554 Management and Organizations

Fall. 3 credits. Course intended for non-Johnson School students only. Staff. This course takes a resource-based approach to management by arguing that organizations should link their strategy to their internal resources and capabilities. This theme is developed by addressing: (1) the strategic value of internal resources and capabilities; (2) the role of human resources and organizational behavior in formulating and implementing strategy; and (3) the importance of structure and the design of organizations in formulating and implementing strategy. Included among the topics are: how firms create sustainable competitive advantage through internal resources and capabilities; what the best practices are for managing people; what effects best practices have on attitudes and behaviors, why putting the customer first is not necessarily best practice from a resource-based perspective; why organizational culture is central to organizational effectiveness; why the formal organizational chart and structure of an organization are important; how organizations innovate; how organizations change through rearchitecture and re-engineering; what firms gain and lose through pursuing core competencies; and what firms gain through strategic alliances and networks. The course makes extensive use of case materials. This course is similar in content to the MBA core course NCC 504

NCC 556 Managerial Finance

Fall, spring. 3 credits. Course intended for non–Johnson School students only. Staff. An introduction to business finance through theory and case studies. Topics include stock and bond valuation, the capital-budgeting decision, portfolio theory, the asset-pricing models, raising capital, capital structure, mergers and acquisitions, costs of capital, option pricing, and risk management. International applications are considered within each topic area. Letter grade only, based on exam, group case reports, homework and class participation. This course is similar in content to the MBA core course NCC 506.

NBA 553 Accounting and Finance for Engineers

Spring. 3 credits. Course intended for non-Johnson School students only. J. D'Souza. This course focuses on basic financial and managerial accounting and the economic and financial concepts that have a bearing on managerial decisions. The goals of the course are: (1) to give students a working knowledge of the accounting process and the value and limitations of the data that comes out of the accounting information system; (2) to familiarize students with key concepts in managerial accounting and the application of cost information to pricing and operating decisions; (3) and to promote an understanding of the use of economic theory in the

evaluation of capital investment projects. The teaching methods consist of lectures and cases. Students are evaluated on the basis of exams.

IMMERSIONS

Only at the Johnson School will you find learning immersion courses in manufacturing, managerial finance, investment banking, brand management, entrepreneurship, and e-business. Immersions offer a semester of continuous focus, real-world problem solving, and site visits to dozens of companies.

MFI — Managerial Finance Immersion

This is a unique immersion course specifically designed for students planning to pursue finance careers. Some students interested in non-finance careers (including consulting) may wish to consider this course, but they should recognize that it is not specifically designed for this purpose. A major objective of this course is to help students make more informed choices about how to launch their finance careers

NBA 502 Managerial Cost Accounting 3.0 credits.

NBA 549 Managerial Finance—Practicum 1.0 credits.

NBA 506 Financial Statement Analysis 1.5 credits.

NBA 558 Corporate Financial Policy 1.5 credits.

NBA 565 Corporate Governance 1.5 credits.

NBA 656 Valuation Principles 1.5 credits.

NCC 508 Managing Operations 2.5 credits.

NCC 509 Strategy 2.5 credits

IBI —Investment Banking Immersion

This course is specifically designed for those students planning to pursue careers in investment banking. The course is inappropriate for students interested in following a finance career in non-financial industry or non-finance careers (including consulting).

This course is designed to meld the practical and the theoretical aspects of the field. We will be expecting a great deal of interaction and discussion between students, the participating faculty, and visiting practitioners. While the course is designed to make its students more attractive as candidates for employment in the investment banking profession, and we expect that some of the participating firms will be using their visits to identify candidates for summer internships, obtaining relevant summer internships remains the responsibility of the students. Prerequisite: NCC 506.

NBA 500 Intermediate Accounting 3.0 credits.

NBA 556 Investment Banking— Practicum

1.0 credit

NBA 506 Financial Statement Analysis
1.5 credits.

NBA 511 Financial Modeling 1.5 credits.

NBA 558 Corporate Financial Policy 1.5 credits.

NCC 508 Managing Operations 2.5 credits.

NCC 509 Strategy 2.5 credits.

NBA 656 Valuation Principles 1.5 credits.

SBM —Immersion in Brand Management

This is a full-time program for the semester; students will not be able to take other courses concurrently. The course objective is to begin developing students to think and act like brand managers, some of the best trained and most upwardly mobile professionals in industry. It will provide students with a unique opportunity to begin internalizing the concepts, principles, and tools necessary to achieve success in brand management. While the course focuses on managing traditional consumer brands, high tech products, services, and global branding will also be addressed. In-class methods consist of: (1) academic and industry lecturers; (2) on-site visits with marketing and manufacturing professionals; (3) case and project discussions and presentations; and (4) a brand management simulation. Course requirements consist of: (1) discussion of readings; (2) individual case write-ups and presentations; (3) group projects and presentations (including a capstone simulation); and (4) in-class exams. There will be considerable off-campus travel for field study. Prerequisites: NCC 500, 501, 502, 503, and 506. Restricted enrollment permission of the instructor required.

NBA 624 Brand Management—Practicum
4 0 credits

NBA 502 Managerial Cost Accounting 3.0 credits.

NBA 620 Marketing Research 3.0 credits.

NCC 508 Managing Operations 2.5 credits.

NCC 509 Strategy

SIM—Semester in Manufacturing

This is a full-time program for the semester; students cannot take other courses concurrently. The course is concerned with the integration of technological, human-resource, logistical, and financial considerations to produce a manufacturing enterprise that can respond quickly and effectively to market requirements. The class is taught by a team of faculty and industrial practitioners, and much of the student work is team-oriented. There is off-campus travel for field study of various manufacturing plants. Johnson School students should complete NGC 501 and NGC 506

before taking this course. Enrollment limited; permission of instructor required.

NBA 650 Semester in Manufacturing Practicum

10 credits.

NCC 508 Managing Operations 2.5 credits.

NCC 509 Strategy 2.5 credits.

EBI—Electronic Business Immersion

The E-Business Immersion is unusual in that it is a joint undertaking of the Johnson School and Cornell's Faculty of Computing and Information Science (CIS). Three faculty members from CIS will participate in teaching the course, providing state-of-the-art background in Internet infrastructure and technology. EBI project work will be done by mixed teams of MBA and computer science graduate students. The computer science students will learn about business models and strategy; the MBA students will get a direct understanding of the limited and potential of technology, and both will learn from the approach and perspectives of the other.

The E-Business Immersion is also unusual in that it has a corporate sponsor and partner. Corning Inc., a world leaders in fiber, cable, and photonics, will supply speakers and open its nearby facilities to site visits. In addition, the EBI project teams will join existing projects in various Corning divisions. Corning staff will be invited to attend and participate in EBI classes.

E-business, of course, is a field that has experienced unprecedented growth and, recently, attrition. The immersion will examine the rapid rise and fall of the early phases of the Internet economy and look for patterns and lessons. If the first round of pure-play B2C is somewhat tarnished, there is no doubt that multi-channel B2C activity will become vitally important in many industries. Customized manufacturing will be a significant part of this—a topic that EBI will explore jointly with the Semester in Manufacturing. Also joint with SiM will be examination of procurement and supply-chain coordination. EBI will also assess the next generation of applications that can be supported by wireless, networked Internet appliances.

EBI seeks to prepare students to deal with a world of infinite bandwidth, unlimited storage, and universal wireless connectivity. It will examine the fundamental underlying issues of intellectual property protection, privacy and security, and the challenging economics of zero-marginal-cost goods. It will identify and distinguish the four different levels of e-business problems: strategy, tactical design, implementation, and execution.

The Internet is inexorably transforming the way the world does business. Cornell's E-Business Immersion is an appropriately innovate way to address preparation for participation in this revolution.

NBA 508 Managing Operations 2.5 credits.

NBA 509 Strategy 2.5 credits.

NBA 684 Internet Technology and Applications

3 credits.

NBA 685 Rebooting IT Strategy 3 credits.

[NBA 686 E-Business Projects 3 credits.

Not offered 2002-2003.]

EBI—Entrepreneurship and Private Equity Immersion (E&PE)

This is a comprehensive course that integrates the technical, strategic, and economic aspects of entrepreneurship and is the student's full course load for the semester. David J. BenDaniel, the Don and Margi Berens Professor of Entrepreneurship at the Johnson School, will lead the faculty team for this immersion.

NBA 564 Entrepreneurship & Private Equity

3 credits

NBA 653 Strategic Alliances 1 credits.

NBA 502 Managerial Cost Accounting 3 credits.

NBA 656 Valuation Principles 1.5 credits.

NBA 531 Startup Forum 1 credits.

NBA 559 Venture Capital & Private Equity Markets

.5 credits.

NCC 508 Managing Operations 2.5 credits.

NCC 509 Strategy

2.5 credits.

NCC COMMON CORE COURSES

NCC 500 Financial Accounting

Fall. 2.5 credits. Johnson School core course. Enrollment limited. R. Libby. An introductory accounting course that examines the subject from the viewpoint of users external to the organization. Topics include transaction analysis; the accounting cycle; financial-statement preparation, use, and analysis; revenue recognition and cost measurement; present value; and problems in financial-accounting disclosure.

NCC 501 Statistics for Management

Fall. 2.5 credits. Johnson School core course. Enrollment limited. J. McClain. An introduction to decision making under conditions of uncertainty. Topics include descriptive statistics, probability theory, classical statistics, statistical decision theory, and simple and multiple regression analysis. Applications in finance, marketing, and operations management are discussed.

NCC 502 Microeconomics for Management

Fall. 2.5 credits. Johnson School core course. Enrollment limited. R. Hilton. Microeconomic theory is introduced and applied to problems faced by managers. Specific topics covered include supply and demand, consumer behavior, pricing when a

firm has market power, and the role of contracts. The class employs a lecture format and emphasizes problem solving. Grading is based on a midterm and a final exam.

NCC 503 Marketing Management

Fall. 2.5 credits. Johnson School core course. Enrollment limited. D. Stayman, S. Jain.

The course is designed to convey the key concepts of marketing and how they fit into the larger context of management strategy and decisions. Both the practical "how" and the fundamental "why" of marketing activities are presented in the light of contributions from behavioral science, economics, and statistics. The goals are to provide sufficient understanding for those who will need only to interact with the marketing function, as well as communication concepts and developing processes that can provide the foundation for further course work and future experience in marketing. The course makes extensive use of case materials.

NCC 504 Managing and Leading in Organizations

Fall. 2.5 credits. Johnson School core course. Enrollment limited. D. Sally, K. O'Connor.

If you think about it, stories are central to how we know and remember events, people, and facts, and to how we communicate knowledge and history. Most of the jobs you aspire to involve a particular form of story-tellingthe CEO's vision, the analyst's report, the planner's strategy, the salesperson's pitch, the consultant's analysis, and the manager's brand. What distinguishes these as business stories is that they are often analytical (based on a set of objective facts and statistics) and reflect a deep understanding of the complex interactions of individuals and organizations. This course has two goals: (1) to make you appreciate the complexity of the issues that often arise in organizations, and (2) to develop and refine your analytical story-telling abilities. To achieve these goals, the course will be taught by the case-study method. Cases are an efficient way to expand your experience base with respect to such issues as motivation, power, leadership, ethics, structure, design, and change. We hope to teach you how to make good inferences about what will and won't work in particular situations, and how to learn from your own experiences and those of others.

NCC 506 Managerial Finance

Fall. 2.5 credits. Johnson School core course. Enrollment limited. R. Michaely. The course objective is to introduce students to the basic concepts of finance. In particular, we address the issue of what type of investments should firms and individuals take on, and how these investments should be financed. Understanding these concepts are essential to financial managers and professional investors, and has important applications to many aspects of financial decisions all of us have to make on a daily basis (e.g., is getting a MBA a good investment?). These issues involve capital budgeting decisions, stock and bond valuation, how to assess and account for risk through the capital asset pricing model (CAPM), option pricing, capital structure and cost of capital, and market efficiency. Letter grade only, based on examinations, quizzes, group case reports, homework, and class participation.

NCC 508 Managing Operations

Spring. 2.5 credits. Johnson School core course. Enrollment limited. Prerequisite: NCC 501 or permission of instructor. R. Zhang.

This course focuses on managing processes: actions that convert inputs into outputs. Almost any business function can be modeled as a network of processes. The first part of the course examines processes, both individually and as part of a larger system; we see that good process design reflects both the volume and the variety of the product. A common course theme is the deleterious effect of variability (in demand, supply, quality, or capacity) in complex systems. Queuing theory and simulation are particularly helpful for analyzing process capabilities. The second part of the course analyzes how goods and services are produced. After describing the strategic role of operations, we examine forecasting systems, inventory management, and just-in-time and logistic management. Constrained optimization models provide information about managing with finite resources. The final part of the course examines process improvement through quality and productivity management and corporate learning.

NCC 509 Strategy

Spring. 2.5 credits. Johnson School core course. Enrollment limited. V. Kadiyali, I. Johnson.

Among the critical tasks facing any senior manager are the creation, implementation, and evaluation of a business unit's strategy. This course seeks to provide the management student with the tools and frameworks essential to carrying out these tasks. Many of these tools and frameworks are based on recent advances in game theory, industrial organization, and organization theory, although the course also draws from the older business policy tradition as well. Students who successfully complete this course will be able to analyze industries, identify areas of strategy advantage and disadvantage, and to devise strategies that exploit advantages and remedy disadvantages.

NBA MANAGEMENT ELECTIVE COURSES

Accounting

NBA 500 Intermediate Accounting

Fall, spring. 3 credits. Prerequisite: NCC 500 or the equivalent. T. Dyckman. The course is based on the essential concepts and terminologies of financial accounting introduced in the accounting core course. Students learn to evaluate financial statements through the use of case studies drawn from actual corporate financial reports.

NBA 502 Managerial Cost Accounting

Fall, spring. 3 credits. Prerequisites: NCC 500, NCC 501, and NCC 502, or the equivalent. R. Hilton.

The course is designed both for those responsible for internal accounting information and those who use such information for decision making. Topics include budgeting, accumulating costs for product costing, activity-based costing, standard costs, the analysis of cost variances, cost estimation and

prediction, cost-price-volume decisions, performance measurement, nonmanufacturing cost analysis, cost allocation, and transfer pricing. Instruction will be a mixture of lecture and case discussion. Student evaluation will be based on a midterm exam, a final exam, a project, and class participation.

NBA 503 Strategic Cost Management 1.5 credits. R. Hilton.

This course focuses on the role of cost management and related issues in helping a firm compete successfully in the global market. Topics considered include activity-based costing, activity-based management, value chain analysis, the lean enterprise, confronting competition in an industry dominated by lean enterprises, re-engineering, process value analysis, identification of nonvalue-added activities and costs, target costing, Kaizen costing, continuous improvement, time-based competition, cost versus quality, and benchmarking. The course is almost entirely based on cases, many of them lean enterprises in Japan.

NBA 504 Taxation Affecting Business and Personal Decision Making

Spring. 1.5 credits. Prerequisite: NCC 500 or permission of the instructor. R. Bloomfield.

This course introduces students to the fundamental concepts and techniques of tax planning for individuals and businesses. Planning opportunities considered include changing the timing and nature of income, investments, and expenses; choosing an organizational form; and constructing transactions that allow two or more parties to engage in tax arbitrage. The course also introduces tax research techniques and issues regarding tax compliance. Course continues with NBA 507.

NBA 506 Financial Statement Analysis

Spring. 1.5 credits. Prerequisite: NCC 506, NBA 500 (or concurrent enrollment) or permission of the instructor. S. Bhorjraj, P. Hribar.

This course develops a set of core skills essential to financial statement analysis. We will cover strategic ratio analysis, cash flow analysis, pro forma financial statements, financial modeling, credit analysis, bond rating and bankruptcy predictions, and firm valuation using discounted cash flow techniques. Emphasis is on practical applications. The course format is a combination of case studies and lectures. The lectures communicate subtler aspects of the material while the cases provide hands-on experience. There will be an exam.

Note: Students who have completed the three-credit version of NBA 506 cannot enroll in this course.

NBA 509 Advanced Financial Analysis

Fall. 1.5 credits. Prerequisites: NBA 506, a finance immersion course, or permission of the instructor. S. Bhorjraj. This course builds on the core financial analysis skills developed in NBA 506. Topics covered include contractal parties are ideal.

analysis skills developed in NBA 506. Topics covered include equity valuation, residual income models, quality of earnings assessments, earnings manipulation detection, market efficiency issues, fairness opinions in MBO's, and large sample stock screening strategies. The overall focus is on using accounting-based information to make investment decisions. Emphasis is on practical applications and special attention is given to

cultivating analytical and communication skills. The course features both lectures and cases. There will be a group term project, but no final exam.

Note: Students who have completed the three-credit version of NBA 506 cannot enroll in this course.

NBA 511 Financial Modeling

Fall, spring. 1.5 credits. Prerequisites: NBA 506 or permission of the instructor, and mastery of basic EXCEL skills. J. D'Souza, P. Hrilar.

Financial modeling is the art and science of constructing spreadsheet models of firms' future financial statements. This class, builds on the brief introduction to financial modeling in NBA 506 by modeling the effect on the income statement, balance sheet, and statement of cash flows of more complicated financial transactions such as leveraged buyouts, mergers & acquisitions, and corporate reorganizations. The class meets in the state-of-the-art Parker Center computer lab, and active student participation is emphasized.

NBA 512 Applied Portfolio Management

Fall, spring. 3 credits. Restricted. B. Swaminathan, C. Lee.

An accounting/finance elective course that focuses on the management of an investment fund (see Charles Lee for a full course description). Students enrolled in this course must commit to taking the course for fall and spring semesters. They receive three credit hours for each semester's work. Strong preference is given to second year MBA students who have successfully completed either NBA 506 or one of the finance immersions. Students need to apply formally. If the number of applicants exceeds 12, admission is competitive and merit-based.

Economics

NBA 524 Macroeconomics and International Trade

Fall. 3 credits. Prerequisite: NCC 502 or equivalent or permission of the instructor. I. Azis.

The course applies basic macroeconomic theory to such problems as inflation, unemployment, economic growth, and productivity and examines how those problems interact with international trade and finance. Students learn to be informed observers of national and international economic policies and discerning users of economic analyses and forecasts. A lecture/discussion format is used as the method of instruction.

Entrepreneurship

NBA 530 Entrepreneurship Lab

Fall, spring. 3 credits. Prerequisites: NBA 564 Entrepreneurship, or concurrent enrollment, or permission of the instructor. MBA students only. P. Sears.

Students team up with entrepreneurs in the greater Ithaca area on defined projects, which will be integral to the companies' operations, such as production planning, new product launches, or assessing organizational structure. The goal of the course is for students to gain first-hand exposure to the application of functional knowledge in a start-up setting, while bringing real value to the host company.

NBA 531 Startup Forum: Cornell Technologies with New Venture Potential

Fall, spring. 1 credit. R. Ryan.
The course focuses on research at Cornell,
which may be a basis for new business
ventures. It addresses the fundamental ways in
which university-based research differs from
industrial research. Students explore and
critique the business potential of each
concept.

NBA 532 New Business Development

Spring. 1.5 credits. P. Sears.
The course examines the role of the business development executive in managing partnerships between big companies and new ventures. Topics include setting growth targets, negotiating partnership agreements, managing expectations, licensing, and divestiture.

NBA 559 The Venture Capital Industry and Private Equity Market

Spring. 0.5 credit. D. BenDaniel. This course focuses on the industry from the practitioners' perspective. Topics include (1) an introduction to the private equity market focusing on the transactions that define the industry, its structure, participants, history and trends; (2) institutional private equity investing—now an increasingly important and dynamic part of the asset allocation mix; and (3) issues in private equity investing such as concentration in fewer, larger funds and the critical role of a new class of gatekeeper/consultants for limited partners. The course involves four lectures and a final paper.

NBA 563 Initial Public OfferIngs and Acquisitions

Spring. 3 credits. J. Shulman. An in-depth look at initial public offerings (IPOs) and acquisitions from a practitioner's point of view. With respect to IPOs the course covers: the applicable statutory framework, pre-offering corporate preparation (such as implementation of poison pills and stock option plans), the due diligence process, the implementation of corporate governance policies appropriate for a public company, the offering registration process, liability under federal securities laws, the Securities and Exchange Commission review process, underwriting arrangements, pricing, selection of a trading forum (i.e., NYSE, NASDAQ, or AMEX) and the consequences of going public. Regarding acquisitions, the course explores: financing alternatives, accounting treatment, due diligence, choosing an appropriate transaction structure (i.e., stock versus asset sale) and crucial aspects of acquisitions, such as letters of intent, continuity of employees, anti-takeover strategies, and non-competition agreements. Mr. Shulman is an attorney with experience in IPOs and acquisitions, and an adjunct professor at the Cornell Law School where he teaches a seminar course on this

NBA 564 Entrepreneurship and Enterprise

Fall, spring. 3 credits. D. BenDaniel. The course uses Cornell-developed case studies and lectures to address entrepreneurial management in start-up ventures and newbusiness development in existing companies. Among the topics covered are valuation of business, planning, obtaining resources, management of growth, and cashing out. Guest lecturers speak on specialized topics such as corporate and patent law, bankruptcy

and work-outs, leveraged buy-outs, and valuations of businesses. Students team up to write and present business plans. The course attempts to integrate marketing, finance, operations, and human-resource topics in the context of high-growth business ventures.

NBA 653 Strategic Alliances

Spring. 1 credit. J. Suwinski. A wide variety of strategic alliances are being used today as companies try to leverage their resources for competitive advantage. This course gives an overview of the spectrum of alliances, examining the strategic rationale and pros and cons of each major type of alliance. The primary focus of the course is on joint ventures as a specific form of strategic alliance, where the success rate is less than 50 percent. The course develops a set of principles that have contributed to success for Corning Incorporated. The course is taught from the perspective of the general manager of a major business unit.

NBA 678 Special Lectures on the Venture Capital Industry

Spring. 1.5 credits. Prerequisites: NBA 564, NBA 300, NBA 401 or permission of instructor. J. Bartlett, D. Bendaniel. The course focuses on venture capital financing, including the issues facing emerging growth companies as they progress from early-stage start-up status to mature public companies. The emphasis is on practical skills: hands-on examination, for example, of how deals are negotiated and valuations arrived at, our principal focus being the so-called Series A, or first professional, round of financing. We view the early-stage space from three points of view: the entrepreneur, or founder; the professional investors, or VCs; and, the key executives, i.e., the major players in emerging-growth finance. We review economics; finance; tax; securities; corporate and employment law considerations; and, finally, custom and usage in the industry. This is an Internet course with one classroom lecture with Prof. Bartlett.

Finance

NBA 540 Advanced Corporate Finance (Theory and Practice)

Fall, spring. 3 credits. Prerequisite: NCC 506 or the equivalent. Students who took NBA 540 and/or NBA 548, 1.5 credit version, can not enroll in this course. H. Bierman.

This course is relevant for both investment banking and the treasurer's activities of an operating corporation. Most class sessions are lecture-discussion, but there are several corporate finance cases. The topics include common stock, preferred stock, debt securities (duration, convexity, inverse floaters, bond refunding, term structure, swaps), hybrids, security design, weighted average cost of capital, basic capital structure issues, cash distribution policy, and the buy versus lease decision. The use of debt to add value, mergers and acquisitions, corporate restructuring, LBO's and MBO's, and Merchant Banking are also covered.

NBA 542 Investments and Portfolio Analysis

Fall, spring. 3 credits. Prerequisites: NCC 501, 502, and 506, comfort with quantitative methods. H. Li.

This course deals with several important issues pertaining to investments in securities

markets. First it deals with portfolio diversification theory, asset allocation, asset pricing models (e.g. CAPM and APT) and empirical anomalies such as size effect, January effect, and others. Second, the course also deals with the issue of evaluating portfolio performance and mutual fund performance. Third, it deals with investment strategies based on patterns in historical security returns. This may be loosely considered technical analysis. In addition, the course deals with investment strategies based on publicly available information related to accounting and other market statistics and the use of earnings forecasts. This may be considered as falling under fundamental analysis. Finally, the course deals with frictions to trading imposed by the institutional structure of securities markets. The goal of this course is to train students in the latest tools and techniques in portfolio theory and familiarizes them with the latest developments in securities market research and applications. This is a highly quantitative course involving extensive analysis of security market data using regression analysis and other statistical tools. Grades are based on mid-term and final exams, cases, a project, and a trading game.

NBA 543 Financial Markets and Institutions

Fall, spring. 3 credits. Prerequisite: NCC 506 (Finance core). M. O'Hara, S. Tinic. This course applies principles of finance in order to understand modern financial markets. Central themes are the structure of financial markets, their pricing function, the interaction between financial markets and macroeconomic conditions, and the processes of innovation and regulation in these markets. Students look at the workings of a variety of markets and develop an understanding of the different problems which different types of markets address. The question of market efficiency and the interaction between government policies and financial markets is studied. We analyze issues in innovation and regulation with basic principles of financial economics. Throughout the course, the relevance of these issues for the practical corporate, portfolio, or public sector decision maker is considered. The course includes ideas and evidence from academic research along with historical, institutional, and international perspectives. Recent events are used to illustrate concepts and develop analytic skills. Spreadsheet assignments and a term project requiring data analysis develop research skills and illustrate academic concepts. Exams consist of computational. short answer, and short essay questions.

NBA 547 Applied Financial Engineering (also OR&IE 565)

Spring. 4 credits. Prerequisites: NCC 506, NBA 546, NBA 555, NBA 542, OR&IE 523, OR&IE 523, COMS 211, permission of instructor. Staff.

This course is designed to integrate students' course work in engineering (computing, stochastic modeling) and finance (options/ futures and investment theory) through the completion of a project. The course project is undertaken via student groups. It involves the implementation of a financial model to a real world problem. The implementation includes model formulation, computer programming, data collection, and data analysis. The course format is a mixture of lectures by faculty, industry professionals, and students (project presentations).

NBA 551 Current Topics at the Crossroads of Law and Finance

Spring. 3 credits. M. O'Hara.
This course explores a series of selected topics that involve important issues in law and finance. The premise of the course is that financial institutions of all kinds, whether they are known as insurance companies, banks, investments banks, or pension funds, invest money and advise clients in a wide variety of settings. This agency relationship introduces a number of important dimensions to the intermediary-client relationship. This course looks at these issues from both an economic and legal perspective. Emphasis is placed on the intersections between modern finance theory and legal analysis.

NBA 552 Cases in Corporate Finance

Spring. 3 credits. Prerequisites: NCC 506 or the equivalent. Recommended: NBA 540. Course is limited to second-year MBA's and Twelve-Month Option (TMO) students. Students who took NBA 535 and/or NBA 536, 1.5 credit version, cannot enroll in this course. H. Bierman.

This course consists of discussions of corporate finance cases dealing with corporate financing. Students form groups and formally present one case and critique a second. This is in addition to the normal class sessions. The cases in this course deal with mergers, acquisitions, valuation, corporate restructuring, LBO's, MBO's, Merchant Banking, and the financing of corporations. The material applies equally to careers in investment banking and managerial finance. The course does not deal with sales trading or the details of managing an investment banking firm. Several executives working in corporate finance will present cases.

NBA 554 International Finance

Spring, 3 credits. Prerequisite: NCC 506 (Finance core) or permission of instructor. W. Bailey.

This course applies principles of finance to the international setting. International finance is different in two basic respects. First, the existence of multiple currencies adds risk to investment and financing decisions. Second, when corporations and portfolio investors cross international borders, both problems and opportunities arise. We focus on these issues and highlight how finance theory can be extended to address them. Starting with the basic principles of international finance students apply those principles to a variety of problems. The course helps students understand the ideas and research results of international finance and adapt what they learn to the practical problems in the increasingly globalized business world beyond the classroom. The first part of the class outlines three basic themes: exchange rate volatility, barriers to international capital flows, and the value of international diversification. The second part of the class presents a variety of problems, examples, and applications from the three basic themes. These range from corporate finance applications of capital budgeting to portfolio management strategies. Spreadsheet assignments and a term project requiring data analysis develop research skills and illustrate academic concepts. Exams consist of computational, short answer, and short essay questions.

NBA 555 Fixed Income Securities and Interest Rate Derivatives

Fall. 3 credits. Prerequisites: NCC 506 (Finance core), NCC 501 (Quantitative Methods core). R. Jarrow.

This course is designed to study the pricing, hedging, and risk management of fixed income securities and interest rate derivatives. Topics to be studied include: the term structure of interest rates, interest rate swaps (caps, floors, collars), the risk structure of interest rates, credit risk spreads, and corporate bond valuation. The method of instruction is lectures and discussion, with computer illustrations being an integral part of the class content.

NBA 558 Corporate Financial Policy

Spring. 1.5 credits. Prerequisite: NCC 506 (Finance core). Y. Grinstein. The course deals with frontier topics in corporate finance and investment strategy. The financial world is changing at an increasing pace. New financial products are coming to the markets, and the financial structure of many corporations is becoming more and more complicated. Corporate financial officers and investors (such as money managers) need to know the driving forces behind the financial products (debt, equity, and more complicated products) to understand the products themselves. Understanding these issues enable us to estimate firm values more precisely. The course objective is to enable students to better analyze financial situations they may encounter in the future, as well as firms' valuation techniques.

NBA 565 Corporate Governance

Spring. 1.5 credits. Prerequisites: NCC 506 and NBA 656 or permission of instructor. Y. Grinstein.

Corporate governance deals with the ways in which different investors assure themselves of getting a return on their investments. How do investors get managers to return some of the profits to them? How do they make sure that managers do not invest their money in bad projects? This course explores these issues through case studies and examples. We start with the venture capital process and discuss the ways venture capitalists monitor projects, and the role of stage financing in mitigating VC losses and its effect on project valuation. We then explore different governance mechanisms in more established firms, in particular, the board of directors, merger and acquisition market, institutional investors, compensation contracts, debt contracts, and bankruptcy proceedings.

NBA 655 Advanced Valuations

Spring. 1.5 credits Prerequisites: Must have taken the IBI Immersion or permission and signature of professor. B. Swaminathan. The advanced valuation course builds on the valuation principles course. It applies discounted cash flow valuation (DCF) and valuation by multiples using comparables to multinational contexts. We consider mergers and acquisitions, and multinational project and firm valuations, from the viewpoint of a U.S. manager. Issues such as differences in parent and project cash flows, accounting differences, exchange risks, political risks, and valuation in developing countries are discussed. Then, we examine the contingent claims valuation approach, with emphasis on flexibility in managerial decision-making. We focus on the valuation of strategic options, growth options, and flexibility in capital investments using traditional and non-traditional option pricing

techniques. Valuation of growth options, expansion options, natural resource investments, land development, R&D, young-highgrowth companies, etc., using the Black-Scholes option pricing model and its variants are discussed. Grading is based on cases, a valuation project involving a foreign company, and a final exam.

NBA 656 Valuations Principles

Spring. 1.5 credits B. Swaminathan. The course deals with the principles of valuation for publicly traded firms, divisions of publicly traded firms, or private firms that have publicly traded comparables, using discounted cash flow (DCF) valuation. The definitions of cash flow and discount rate depend on whether we want to value the entire firm or value only equity. We first discuss how to compute free cash flows based on historical income statements and balance sheets. We then discuss the concept of value drivers and economic value added (economic profits or residual income). Next, we cover operating risk and financial risk, the relation between financial leverage and cost of capital, the levering and unlevering of equity betas, capital asset pricing model, computing cost of equity, cost of debt, cost of preferred stock, weighted average cost of capital, divisional cost of capital, etc. We apply these concepts to computing cost of capital. Finally, we introduce valuation by multiples using comparables and discuss its applications to valuing divisions of multi-business firms.

NBA 673 Introduction to Derivatives, Part 1

Fall, spring. 1.5 credits. Prerequisite: NCC 506 (finance core) or permission of the instructor. F. Diz, H. Li.

The course introduces students to the pricing and hedging of derivative securities. The course briefly covers forward contracts, futures contracts and swaps. The primary emphasis is on option contracts. Underlying assets include stocks, currencies, and commedities

NBA 674 Introduction to Derivatives,

Fall, spring. 1.5 credits. Prerequisite: NCC 506 (finance core) or permission of the instructor. F. Diz, H. Li. See above, NBA 673.

General Management

NBA 538 Inclusive Leadership

Spring. 1.5 credits. P. Stepp. This course prepares students for leadership in diverse organizations of today and the future. Discussions and readings about accountability, fairness, stereotyping, mentoring, networking, and the impact of challenging assignments are used to help students become aware of ways they may discriminate against, judge, or exclude people, and to help students initiate and develop relationships with people who are different from themselves. Case studies, group activities, a diversity awareness profile, and written assignments that require students to critically reflect on situations where they felt excluded are the primary teaching methods used in the course.

NBA 560 Business Law I (also ARME 320)

Fall. 3 credits. Limited to juniors, seniors, and graduate students. D. Grossman.

The course introduces the basic tenets of law as they apply to businesses and their operations. Topics include personal property, contracts, agency, real property, and landlord-tenant concerns. Text readings and case studies are used. All students intending to be professional accountants are required to take the course, and it is strongly recommended for finance students.

NBA 561 Business Law II (also ARME 321)

Spring. 3 credits. Prerequisite: NBA 560 or permission of the instructor. D. Grossman. The first portion of this course examines legal issues in the formation and operation of business enterprises, particularly partnerships, corporations, and limited liability companies. The second portion of the course covers selected topics in business law, such as employment discrimination, secured transactions, product liability, unfair competition, and international business law.

NBA 562 Estate Planning (also ARME 422)

Fall. 1 credit. Limited to juniors, seniors, and graduate students. D. Grossman. Fourteen sessions on the various aspects of estate planning. The law and use of trusts, the law of wills, federal and New York State estate and gift taxes, and probate procedures are covered.

NBA 567 Management Writing

Fall, spring. 1.5 credits. B. Mink, A. Pike, M. Hittleman, C. Rosen.

Students learn to write clearly and effectively by focusing on the writing process as well as the finished product. Course topics include audience perspective, style, organization, strategy, and persuasion. There is a writing assignment every week. Students receive instructor and peer feedback. Priority given to MBA students. Open to other graduate students and employee degree candidates if there is room.

NBA 568 Oral Communication

Fall, spring. 1.5 credits. B. Mink, A. Pike, C. Rosen.

This course focuses on improving the presentation skills of management students. The course covers the areas of speaking formats (impromptu, extemporaneous, manuscript), delivery, organization, visual aids, and question/answer. Student speeches constitute the bulk of class time, with each student presenting seven or eight speeches in the seven-week session. The small class size allows for significant individual attention. Students receive feedback from classmates and the instructor, and have the opportunity to review in tutorials the videotapes of most of their presentations. Priority given to MBA students. Open to other graduate students and employee degree candidates if there is room.

NBA 569 Management Consulting

Fall, spring. 3 credits. A. McAdams. The course is case-study oriented and focuses on strategic consulting. It has multiple objectives. First, it provides students with the opportunity to understand the role of the consultant and to gain indirect experience in that role through dealing with a broad range of practical and real-world issues. Second, it helps students improve their analytic skills through practice with case studies. Third, it provides students with information that they are unlikely to gain in other courses, as well as experience in making group presentations

and evaluating them. Students are required to write a comprehensive analytic term paper.

NBA 570 Leadership in Management

Spring. 1.5 credits. MBA students only. R. Peterson, RPW Executive Development, and other Johnson School faculty. This course is a partnership with RPW Executive Development to provide MBA students with the self-awareness and interpersonal skills required to be effective leaders (the general principles of leadership course is NBA 668). RPW has partnered extensively with the Johnson School Executive Education Department in the past. The course consists of five full-day training sessions. Staff from RPW and Johnson School faculty provide training. The first two days focus on selfawareness and employ several experiential exercises and self-assessment instruments including, the Campbell Leadership Index (CLI), Meyers-Briggs Type Indicator (MBTI), the Fundamental Interpersonal Relations Orientation-Behavior (FIRO-B), the Kirton Adaptation/Innovation inventory (KAI), and the Ambiguity Preference Scale (APS), Class members are also trained in giving and receiving feedback from team members and faculty. Mid-week activities include various leadership and team challenges, including a business simulation. Attendance is required each day of the course to receive credit. NOTE: most of the self-assessment instruments listed above will need to be completed prior to the first day of class to allow for scoring and analysis.

NBA 571 Cornell Management Simulation

Fall, spring. 1.5 credits. Restricted to second-year MBA students. J. Hass, S. Smidt

This computer-based simulation is played by self-selected teams of four students who make marketing, production, and finance decisions for one of five companies operating competitively in the same industry. After the first week, during which the rules of the simulation are explained and the software used by each team is demonstrated, the teams make periodic decisions (meeting at their own convenience). At the beginning of the simulation, each team writes a Strategic Intent paper and, before the results of the last decision have been determined, each team presents an in-depth analysis of its performance and its strategy for the future in a "board of directors" meeting. Letter grading only, based on the value created for the company's shareholders (relative to other firms in the same industry), the team's Strategic Intent paper and the instructor's evaluation of team's performance at the BOD meeting. Students who have completed NBA 549 cannot take this course. Open to MBA IIs only. Meetings will be periodic throughout the semester.

NBA 572 Environmental Management Policy

Fall. 1.5 credits. D. Chapman. The seminar assists participants in remaining current with the rapidly evolving state of the art in the analysis and management of environmental policy and practice in enterprises. Although focused on the private sector, attention is given to understanding the economic basis for government's role in environmental protection. Another focus is the analysis of the operational significance of the concepts of sustainability, and ecoefficiency,

and market-based environmental policies. Seminar speakers from finance, marketing, electricity, forest products, construction, and other businesses with environmental responsibilities meet with the class. Readings and Harvard Business School (HBS) case studies are distributed throughout the semester. Each student makes a case study of an individual enterprise or organization.

NBA 573 Seminar in Sustainable Development (also ABEN 673)

Spring, first half of semester. S-U grading only. 1–3 variable credits. A. McAdams. This seminar-style course involves readings and discussion of issues in environmental management, and will also feature four significant outside speakers on the subject of environmental management. (Students interested in doing consulting projects in environmental management will be accommodated in NBA 575, Advanced Consulting.)

NBA 575 Consulting Projects

Fall. 3 variable credits. J. Russo. The course teaches how to frame unstructured business problems through a hands-on team project. Teams must identify what the central issues are, and then determine the most appropriate tools and concepts to provide insight into these issues. Students also learn to approach business problems from a crossfunctional perspective. Specific conceptual content includes: project management; power, politics, and personalities in work groups; managing in for-profit versus not-for-profit organizations; and organizational change. This course is not classroom-based. Although there are a few class sessions early in the semester, the course structure will revolve around periodic reviews and coaching sessions as needed. The instructor team will contain one regular member of the Johnson School's faculty, an experienced executive, and an administator.

NBA 577 The Political, Legal, and Regulatory Environment of Business

Spring. 3 credits. R. Schuler. The political climate, laws, regulations, and government arrangements for infrastructure have a profound effect on the nature, operation, and profitability of business. Many of the most important decisions that top management makes are driven by political, legal, and regulatory considerations (e.g., the responses of: Exxon to the Exxon Valdez oil spill; Union Carbide to the Bhopal, India, gas leak; and the decision of AT&T to accept the division of its company in response to an antitrust suit filed by the U.S. government). Environmental and waste-management concerns are leading to new laws and regulations that affect many aspects of business, creating opportunities as well as posing problems. The course begins with a discussion of the political and economic foundations of business regulation. Students examine different areas of application, including economic regulation, environmental regulation, antitrust, and product liability Guest speakers include leading scholars from throughout the university and business and government leaders.

NBA 579 Cases in Business Strategy

Fall. 1.5 credits. Enrollment limited to second-year MBA students only. J. Suwinski.

A well-defined strategy is essential for business success—describing where the business is going, how it's going to get there, and then providing a framework for making decisions along the way. Strategy is the responsibility of top executives of a company/ business, and the ability to formulate effective strategy is one of the key skills that distinguishes General Managers from functional managers. This course will focus on the process of effective strategy formulation from the perspective of the general manager of a business unit. This perspective also applies to consultants working for clients on business unit strategy. Corporate strategy and its interaction with business unit strategies will be discussed, as will tools for industry and company analysis. Situational analysis will also be covered. This course compliments the core strategy course, with emphasis on understanding and practicing frameworks that are useful in case-based interviews. The course draws heavily on the instructor's experience developing strategy for numerous businesses at Corning Incorporated. Guest speakers from industry and strategy consulting firms and also from industry present their approaches to strategy, and discuss the analytical tools they find most effective in working on business strategy. Students gain experience, via assigned cases, in analyzing business problems/opportunities, using the strategic process to formulate effective business strategies, and in presenting their recommendations in written and oral form. A major case write-up and presentation in a mock board environment at the end of the course gives each student an opportunity to play the role of a strategy consultant working on a real

NBA 671 Business Ethics

Fall. 3 credits. D. Radcliffe. Students examine actual situations in business, both in the United States and abroad, that involve ethical issues affecting individuals and organizations. Students are challenged to decide on appropriate ethical positions.

NBA 689 Law for High-Growth Business

Spring. 1.5 credits. Prerequisites: Big Red Venture students only or permission of instructor. Z. Shulman.

Topics include: choice of entity, driven by accounting/tax factors and corporation (S and C), LLC, partnership; protecting confidential information: the importance of third-party NDAs and how they work; invention assignment agreements with employees; patents, trademarks, copyrights; sources of capital: applicable federal and state securities laws; bridge loans, lease lines, and down rounds; common stock, preferred stock, employee options, warrants; basic employment practices: discrimination policies, company policies for e-mail and privacy, use of written employment agreements, benefits, noncompete covenants; legal responsibilities of boards of directors and executives; advisory/scientific boards; technology licenses, particularly from universities where technology was developed; negotiating relationships with distributors, resellers, and customers: exclusivity, pay to play; foreign corrupt practices laws, foreign subsidiaries, and foreign employees; dealing with creditors; and key accounting issues.

International Management

NBA 576 The World Geopolitical **Environment of Business**

Fall, 3 credits, G. Staller, The geopolitical face of the world is changing at a pace that few could have envisioned even five years ago. The unification of Germany. the fall of communism, the institution of sweeping economic restructuring in the former Soviet Union, the move toward democracy with market economies in eastern Europe, the movement of Europe toward a unified economy, and the flirtations with reform and its implications in China are just a few of the many examples of the changing world environment of business. This course provides students with a view of those fastpaced worldwide changes. Topics covered include developments in western and eastern Europe, the former Soviet Union, the Pacific Rim, Central and South America and the Middle East and the role and fate of developing countries in the world economy. Guest speakers include leading scholars from Cornell and other universities and leaders in business and government.

NBA 580 Strategies for Global Competitiveness

Spring. 3 credits. A. McAdams. Initially, students explore the role of government in several private-market industrialized nations—Japan, France, Germany, the United Kingdom, and Italy-for lessons the United States might learn and use. Students investigate the impact in each of those countries of government policies on the global competitiveness of the country's firms. Special emphasis is given to differential policies appropriate to each of a range of industries, from the mature to the high tech (including computers, telecommunications, and electronics), and to stages of development in each economy. Possible lessons are then tested for less developed countries that might include Venezuela and Malaysia and newly emergent countries such as Singapore. Classes are run in a discussion format. This course can be used to fulfill the strategy requirement.

NBA 581 Special Topics—Contemporary **Development of Southeast Asian** Economies

Spring. 3 credits. I. Azis. This course analyzes the patterns and economic development during the last three decades. The five plus two countries in the region that will be the focus of the course include Thailand, Indonesia, Malaysia, Singapore, the Philippines, Brunei, and Vietnam. The topics will be divided into the following categories: Southeast Asian economic development, regional economic cooperation in Southeast Asia, and the financial crisis of the 1990's. The course assesses important factors and consequences of the region's development patterns and uses international comparative analysis to explicate the relative position and uniqueness of the region's performance. Evaluation will be based equally on the student's participation in class discussions and debates and on a term paper.

NBA 584 International Competitive Strategy

Fall and spring. 1.5 credits. This course can be used to fulfill the strategy requirement. J. Katz.

The course focuses on the development of competitive strategies in the global environment-including the identification of internationally relevant strengths and weaknesses, the movement and use of resources to gain competitive advantage, and strategies to confront competitors, both domestic and multinational.

NBA 585 International Management

Spring. 1.5 credits. A. Un. Provides frameworks for understanding the international dimensions of management, for formulating effective strategies in an increasingly complex world economy, and for building and leveraging organizations that cross borders. Cases cover a variety of countries and regions and a range of industries, from consulting to manufacturing. The first part of the course studies strategy in international context that involves not only the analysis of the external environments of companies, but also their internal organizational capabilities and core competencies. In the second part, we focus on the steps by which companies extend their activities to new locations and the competencies they need to operate effectively in diverse locations. In the last part, we analyze more closely the link between organizational competencies and managerial processes in operating across national borders.

NBA 586 Cross-National Management

Fall. 1.5 credits. J. Katz. Focuses on the differences in managerial style across countries and develops skills to deal with these differences. Most of the material will be applicable to all countries, though two specific countries will be highlighted each

NBA 587 International Mergers & Acquisitions

Spring. 1.5 credits. J. Hanks. This course covers issues relating to mergers and acquisitions in an international context. Topics include business due diligence, pricing and negotiation, and other important topics from both the buy and sell side. The course uses both lecture and case formats. Students are evaluated on the basis of group and individual written assignments.

NBA 592 Experience in International Management

Spring. 1.5 credits. J. Katz. The objective of this course is to combine classroom sessions and international experience with an increased awareness of business environments outside the United States. NOTE: participation in a faculty approved study trip is required to complete this course (fee charged). On trips, students visit local businesses, subsidiaries of foreign multinationals, government officials, local business school students, and others. Students must also attend two pre-trip meetings (1 1/4 hours each) and two Saturday meetings during spring semester (2 1/2 hours each). Those meetings are used to present information on international business conditions, industrial structures, management styles, and also, to develop cross-cultural skills. A final paper, integrating the material learned in the classroom with their experiences, will be required.

NBA 593 International Entrepreneurship

Spring. 1.5 credits. M. Goldman. Venture capital firms, corporate venture funds, and "angels" have increased their financing in high-growth start-up activities outside of their

countries of origin. This course provides an overview of the diffusion of entrepreneurship institutions outside of the U.S. vis-a-vis traditional forms of start-up finance (i.e., family backing, intrapreneurship). It also focuses on the process of selecting, financing, managing, and exiting venture capital deals abroad. The course is designed to provide practical insights through the participation of guest speakers involved in various stages of international entrepreneurship activities (e.g., European corporate funds in the U.S., venture capital firms in Europe, U.S. based venture capital and "angel" initiatives investing abroad).

NBA 595 Economics of Financial Crises

Spring. 1.5 credits. I. Azis. The main purpose of this course is to familiarize students with the analysis of the causes, nature, and consequences of financial crises, and equip them with tools of analyses to better understand the economics of financial instability and alternative strategies for dealing with them. The first part of the course concentrates on financial instability/ crisis by way of explaining the empirical episodes of the crisis in various emerging market countries, and elucidating the relevant theoretical concepts in each of the cases. The second part is devoted to discussions of postcrisis episodes, emphasizing the different paths of recovery and major policy responses to the crisis. The latter includes financial and monetary policies and the unsettled relationship between interest rates and exchange

Management Information Systems

NBA 601 Electronic Commerce

Spring. 3 credits. Letter/S-U optional grading. L. Orman.

Electronic commerce is the use of information technology in conducting economic transactions and managing businesses over computer networks. It is a phenomenon that has captured the public attention because of its wide-ranging implications for businesses, markets, public institutions, and the general public. Electronic commerce involves a wide variety of cooperating technologies such as communications, networks, databases, expert systems, and multimedia. It also affects a wide variety of managerial issues. Electronic commerce created a new emphasis on information technologies and systems in management. It led to the development of new technologies and new combinations of existing technologies to support management. On occasion, it radically altered business practices and the role of management.

The students in this course learn to conduct economic transactions and manage businesses on the Internet. All major technical and managerial issues are covered through computer exercises on the Internet, and case studies and examples of businesses on the

NBA 612 Disruptive Technologies

Fall. 3 credits. D. Greenberg. The advances of computer graphics, computer processing power, network bandwidths, and video compression technologies are forcing the merger of the telephone, television, and computer industries. The influence of these technologies has created paradigm shifts that will drastically change the way we communicate, how we are educated, the way we work,

design, and in essence, how we will live in the next century. We are just beginning to fathom how these changes will influence our modus operandi and greatly modify our traditional patterns of behavior, both personal and organizational. Clearly, business and industry management will have to understand the implications of the advanced technology This course starts by presenting historical technological advances that created major paradigm shifts for communications. Advances in computer technology emphasizing the fundamentals behind the increases in processing power, video and computer graphics capabilities, and network transmission will be presented. The latter half of the course covers the effect of these scientific advances on many discipline-specific areas including photography, the film industry, the entertainment and animation industry. television broadcasting, publishing, as well as the computer industry itself. Sessions are devoted to the social and legal issues rising from the rapid advances in electronic communication. In attempting to predict the disruptive changes of the future, it is best to understand the technologies themselves. Thus, students with technology or science backgrounds are preferred. Although no computer programming is required, a working knowledge of computers is necessary. The course is especially tailored to a business school and industrial concerns and will have interactive live demonstrations at the state-of-the-art laboratory of the Program of Computer Graphics. No prior knowledge in computer science is required.

NBA 684 Internet Technology and **Applications**

Spring. 3 credits. R. Conway. Basic topics in computer science and communications that underlie the current information revolution, combined with analysis of dominant business applications. No prior computer science background is assumed. Key topics are supported in depth by guest faculty from the Department of Computer Science. Professor Dan Huttenlocker, currently on leave with a Silicon Valley startup, will join his CS colleagues this year in contributing to the course.

NBA 685 Rebooting IT Strategy

Spring, 3 credits, A. McAdams, This course builds on topics raised in the Special Edition (09–10–01) of Forbes Magazine, "Rebooting the Revolution." With input and support from the school's Technology Advisory Board, the course investigates the strategies of the major players in IT; prepares the student to understand and exploit the many real business opportunities of 2002 and beyond; and determines how, where, and why to introduce e-business approaches into established brick and mortar

NBA 686 e-Business Projects

Spring. 3 credits. A. McAdams, R. Conway. The course focuses on real-world, industrysponsored projects exploring strategic aspects of information-rich opportunities in the business environment, especially with brick and mortar businesses.

Management and Organizations

NBA 661 Strategic Career Management Fall. 1.5 credits. B. Nelsen.

This course acquaints students with principles and strategies that can be used to strategically plan and develop their career and the careers of their employees. The first part of the course focuses on skills and concepts useful for personal career development in today's labor market; the second part examines events that can disrupt career progression. Topics of discussion include career resiliency, building developmental relations, managing the work/ family interface, involuntary job displacement and recovery, glass ceilings, expatriation and repatriation, and managing older workers.

NBA 663 Managerial Decision Making Fall. 3 credits. J. Russo.

This course presents practical concepts from the behavioral sciences that can serve as guides to managerial action. Lectures, cases, and exercises are used to acquaint students with new perspectives on decision making, critical thinking, problem solving, and group processes. Taken together, these perspectives offer a trouble-shooter's guide to the uncertainty, complexity, and conflict in the business world.

NBA 666 Negotiations

Fall, spring. 3 credits. Staff. Judgment is the art and science of transforming perception into thought or opinion. Negotiation is the art and science of securing agreements between two or more interdependent parties. The purpose of this course is to understand the theory and processes of negotiation as it is practiced in a variety of settings. This course is designed to complement the technical and diagnostic skills learned in other courses. A basic premise of the course is that while a manager needs analytical skills to develop optimal solutions to problems, a broad array of negotiation skills are needed for these solutions to be accepted and implemented. The course highlights the components of an effective negotiation and teaches students to analyze their own behavior in negotiations. The course is largely experiential, providing students with an opportunity to develop their skills by participating in negotiations and integrating their experiences with the principles presented in the assigned readings and course discussions.

NBA 667 Managing Intellectual Capital Fall. 1.5 credits. B. Nelsen. As the twentieth century draws to a close, economies long based on manufacturing are giving way to those based on the management of information, the production of knowledge, and the provision of services. Hence organizational profits will increasingly flow from intellectual rather than material capital. A firm's success will hinge upon the manager's ability to recognize and adapt to the unique challenges presented by managing intellectual capital. This course examines this shift in the business environment and its practical implications for managers. Topics addressed include (1) motivating and managing knowledge workers; (2) employee empowerment and self-managing teams; (3) organizational learning; and (4) leadership for innovation and creativity.

NBA 668 Leading Teams and **Organizations**

Fall. 3 credits. R. Peterson.

This course focuses on general principles for successfully leading teams and organizations (the personal development course is NBA 570). The course draws on the latest research in team decision making and organizational leadership to address questions such as: what is the difference between leadership and management? how does a leader establish trust and commitment to an organization? and how do leaders transform organizations? The course consists primarily of case studies of leaders, but also includes some experiential and group activities. Course grading is based on class participation, group case analyses, and a final individual case analysis. Priority is given to MBAs.

NBA 672 Goal Setting and Coaching for **Leadership Success**

Fall, spring. 1.5 credits. P. Stepp. This course is designed as a follow-up to NBA 570 Leadership Assessment for Managers. It provides structured support for personal change through personal learning plans, learning and development strategies, and feedback and coaching support from peers. The course includes a workshop on establishing a personal values statement to help guide personal learning plans and align them with career aspirations. The course employs a webbased, follow-through support system to facilitate further leadership growth by prompting students regularly to assess and document their progress. Learning coaching strategies and serving as a coach for the year for a classmate will further enhance leadership growth. The course is scheduled throughout the year to allow students time to develop personal goals and provide numerous opportunities to practice coaching.

NBA 680 Knowledge Management; **Driving Strategic Capability and** Change

Fall. 1.5 credits. Prerequisites: MBAs only. S. Snell

Today's business equation requires a combination of firms' developing core competencies and partnering externally to appropriate and integrate knowledge. Given the rapid pace of change in many industries, management of knowledge-based assets is essential. This course focuses on the strategies used to develop and leverage a firm's intellectual capital (human, social, and organizational capital). We explore processes that drive knowledge creation, transfer, and integration. We study methods for managing knowledge workers to create high performance work systems and learning laboratories. We study how firms achieve vertical alignment between their people-related systems and their market and financial objectives. Finally, we study how firms continually renew themselves in the context of rapid change and market adaptation.

NBA 682 Negotiation Essentials

Spring. 1.5 credits. M. Thomas-Hunt. This course is designed to complement the technical and diagnostic skills learned in other courses at the Johnson School. While a manager needs analytical skills to develop optimal solutions to problems, a broad array of negotiation skills is needed in order for these solutions to be accepted and implemented. The course is largely experiential, providing students with an opportunity to develop their skills by participating in

negotiations and integrating their experiences with the principles presented in the assigned readings and course discussions. Students who have taken NBA 666 cannot take this class.

Marketing

NBA 620 Marketing Research

Fall. 3 credits. Prerequisites: NCC 501 and NCC 503, or the equivalent. V. Rao. This course deals with marketing research as a critical support function in corporations. The broad objective is to provide a fundamental understanding of marketing research methods employed by better managed firms or proposed by leading academicians. The course is aimed at the manager, the ultimate user of marketing information, who is responsible for the scope and direction of research activities involved in obtaining, analyzing, and interpreting results of research. The course covers the use of secondary sources of marketing information for designing studies and collecting primary data. Students are exposed to up-to-date methods in research design, qualitative research, measurement, data collection, and analysis. The emphasis is on evaluating research methods and on interpretation and use of results rather than on mathematical derivations. Students are also exposed to the practical side of marketing research through case studies, problem sets, and projects.

NBA 621 Marketing Communications

Fall. 1.5 credits. Prerequisite: NCC 503 (Marketing core). D. Stayman. The course is designed to give students an understanding of the advertising and promotion management process. It covers the components of a successful advertising campaign and helps students develop an appreciation of the issues involved in advertising planning and decision making. They also learn how recent social-science findings and theory can facilitate advertising management.

NBA 622 Marketing Strategy

Fall. 3 credits. Prerequisite: NCC 503 (Marketing core). V. Rao. The course balances theoretical and practical approaches to the development and evaluation of marketing strategies for multiproduct firms. It considers various environmental opportunities and constraints in developing and evaluating integrated marketing strategies for new and established products and services. Recent research results are applied to decisions on product-market boundary definition, resource allocation, product positioning, and competitive reactions. It includes selected current topics such as brand equity, acquisitions, and lead-user analyses. Students use case studies extensively to develop skills in strategy analysis and to enhance skills in assessing external threats and opportunities. They employ computerassisted market strategy simulations to evaluate the effects of competing strategies. Guest speakers from industry provide a view of the operational aspects of marketing

NBA 623 Customer-Based New Product Development

Fall. 3 credits. Prerequisites: NCC 501 and NCC 503. P. Kumar.

The successful introduction of new products requires careful planning and systematic screening and testing. This course covers models and methods that are useful to managers in the development and marketing of new products. Heavy emphasis is placed on the measurement of consumer preferences. Students are required to complete a group project, consisting of a measurement instrument, data collection (from at least 30 respondents) and data analysis, for a self-chosen product category. The method of instruction consists of a combination of lectures and discussion of cases and articles. Performance is evaluated primarily based on exams and the group project.

NBA 625 International Marketing

Spring. 1.5 credits, Recommended: NCC 503. J. Katz.

Designed to train students to take a domestic product and expand it into international markets successfully. Market selection, international market research issues, and international marketing strategies are all discussed. The term project (actually submitted in three parts throughout the term) requires that students choose some product and develop a plan for taking it abroad. Each class includes cases, therefore, class preparation is essential. Grading is based on the term project, the final, and class participation. Core marketing provides a useful background, but is not a prerequisite.

NBA 626 Consumer Behavior

Spring. 3 credits. S. Chatterjee.
Topics include factors that influence response to advertising of various kinds, purchase decisions, product perceptions, response to promotion, consumer satisfaction, and the basic methodologies for understanding consumer behavior.

NBA 633 Marketing and E-Commerce

Spring. 1.5 credits. Y. Park. This class explores the effect of the Internet on marketing. Topics include an overview of the on-line industry, business models for the Internet, advertising and promotions on the Internet, marketing research on the Internet, loyalty programs for Internet marketing, and disintermediation or channel conflict resulting from Internet distribution. The course is comprised of industry speakers from Cendant, CSC, Netcentives, H-P, 1st USA, Catalina marketing, Bausch and Lomb, and others. Course requirements include write-ups on a subset of speakers, and a final report and presentation on an Internet marketing issue of the student's choice. NBA 638 is restricted to MBA II's because the same information is available for MBA I's in the strategy core.

NBA 639 Data-Driven Marketing

Fall. 3 credits. S. Gupta. Data-Driven Marketing introduces the future brand manager or marketing consultant to the use of market data to evaluate and construct pricing and promotional strategies. The course introduces new sources of data available on product purchases and consumers' reactions to the marketing environment. The course focuses on the practical use of popular data sources. Approximately 70 percent of the course covers panel data on high-volume consumer packaged goods, and 30 percent is devoted to direct or "database" marketing. The goal of this course is to introduce these new data sources and provide a solid foundation for the development of analytic tools. Examples are drawn from the consumer packaged goods industry. This course makes intensive use of EXCEL and the WINDOWS

computing environment. The data has been extracted and organized for use in EXCEL; this allows the student to concentrate on learning modeling tools without a large investment in computing or data manipulation methods.

Operations Management

NBA 641 Logistics and Manufacturing Strategy

Spring. 3 credits. Prerequisite: NCC 508, OR&IE 410, or permission of the instructor. L. J. Thomas.

The course is about supply-chain integration, which involves strategic management of the values chain, from materials to customer. Students discuss operations strategy issues that are important to both manufacturing and service. The course emphasizes written and oral communication skills. About a fourth of the classes are spent on case studies, with small groups presenting their analyses of them. There is one mid-term examination, but the majority of the grade is evaluated based on projects and class participation. There is an option of replacing some assignments with a "live case," a project with a local company.

NBA 643 Managerial Spreadsheet Modeling

Fall. 1.5 credits. L Robinson. The goal of this course is to develop proficiency in quantitative modeling within the environment of Microsoft Excel. This hands-on lab-style course, taught in the Parker Center, will develop and use spreadsheets to analyze a variety of business problems. There are two principle components of this course: spreadsheets and models. Spreadsheet topics to be covered include principles of good spreadsheet design, the effective presentation of information through spreadsheets (including graphical controls like sliding bars), and advanced Excel features (e.g., data validation, conditional formatting, scenarios, etc.). Modeling topics include the art of finding the appropriate level of modeling detail, practice in dealing with vague and unstructured problems, sensitivity analysis, and working with incomplete and unreliable data.

NBA 647 Advanced Spreadsheet Modeling

Fall. 1.5 credits. L. Robinson. The goal of this hands-on lab course, taught in the Parker Center, is to develop proficiency with Excel's quantitative tools of Solver (for optimization) and @Risk (for simulation). Building on their brief introduction in the Managing Operations core course, students use these advanced tools to analyze problems and cases in finance, marketing, and operations. Although the bulk of this course is devoted to case analysis, occasional lectures introduce some advanced features of these two powerful modeling tools, including integer and nonlinear programming and sensitivity analysis within optimization, and correlated random variables, scenario analysis, and valid statistical analysis within simulation.

NMI AND NRE RESEARCH AND ADVANCED STUDIES

NMI 500-502 Directed Reading and Research

Fall, spring. 1, 2, or 3 credits. Staff. Students undertake special-interest research under the supervision of faculty members. Registration is limited to students who have the approval of their advisers and of the faculty members involved in the research.

NMI 510 Multi-Cultural Work Environments

Spring. 1 credit. C. Rosen, B. Mink. NMI 510 is a independent study course that is open to students whose summer internships will be in a country other than that of their citizenship or prior work experience. The goal of the course is to promote an understanding of the cultural assumptions we bring to the work environment and the effects of cultural differences on organizational interactions and productivity. Registration for the course occurs in the spring semester prior to the internship, and grades are posted in the following fall semester after completion of the course project (a 10-page paper). Students may register for the course after obtaining an internship offer and completing the paperwork for the course instructors. International students obtain and process work authorization forms with the International Students Office. See Charlotte Rosen (Sage 304) for further details about the academic and immigration requirements for NMI 510.

DOCTORAL SEMINARS

NRE 502 Doctoral Seminar In Marketing 3 credits. Staff.

This class introduces students to empirical research in marketing. There is a strong focus on the historical development of econometric specifications of consumer choice models (with an emphasis on heterogeneity and issues of dynamic consumption patterns), and Bayesian methods in marketing. However, by the very nature of the class, the content is to some extent be driven by the participants in the course. Teaching is interactive, and each participant is expected to present one of the papers studied to the rest of the class. Furthermore, each participant is expected to replicate the results of one of the papers, requiring the participant to write the necessary code and briefly discuss their findings

Enrollment is by consent of the instructor. Students are required to have taken a graduate level course in either mathematical statistics or econometrics, although this restriction may be waived in special cases. Students are welcome to sit in on parts of the class; for example, the section on Bayesian Methods will be broad enough that students from other areas may find the presentation useful.

NRE 504 Doctoral Seminar in Accounting 3 credits. This course is for Ph.D. students

only. Staff.

The seminar provides a rigorous and integrative exposure to those aspects of the literature in accounting, behavioral economics, and psychology that are related to questions of accounting and auditing theory and research.

NRE 507 Doctoral Seminar: Affect and Cognition

Fall. 3 credits. Prerequisites: courses in statistics and experimental design. A. Isen. The course examines research on some of the ways affect influences such thought processes as memory, decision making (including risk taking), and problem solving (including creative problem solving). Applied topics relevant to management concerns (for example, organizational behavior and consumer behavior) as well as other theoretical and applied topics (among them medical decision making, social interaction, selfconcept, and cognitive and affective development) are considered, depending on student interests.

NRE 523 Doctoral Seminar in International Management

Spring. 3 credits. A. Un. Provides an overview of the evolution of the field of international management: its domain and professional organization, the key issues and how they have changed over time, and the evolving links between the approaches of this field and related disciplines. Readings focus on the classics of the field and some more-recent work that both extends and challenges the established approaches. The seminar is organized in three parts that reflect the interdisciplinary character of international management research. The first and second parts review the existence of MNEs from the perspective of economics/political economy and sociology/organization studies. The third part reviews selected topics on the management of firms across different institutional environments and the impact of the transformation of those environments on firms,

FACULTY ROSTER

Adair, WendiLyn, Ph.D., Northwestern. Asst. Prof., Organizational Behavior

Babbes, George, Ph.D., U. of California at Berkeley. Asst. Prof., Marketing

Bailey, Warren B., Ph.D., U. of California at Los Angeles. Assoc. Prof., Finance

BenDaniel, David J., Ph.D., Massachusetts Inst. of Technology. Don and Margi Berens Professor of Entrepreneurship

Bierman, Harold, Jr., Ph D., U. of Michigan. Nicholas H. Noyes Professor of Business Administration

Bloomfield, Robert J., Ph.D., U. of Michigan. Assoc. Prof., Accounting

Bradley, James R., Ph.D., Stanford U. Asst. Prof., Production and Operations Manage-

Conway, Richard W., Ph.D., Cornell U. Emerson Electric Co. Professor of Manufacturing Management, Prof., Management Information Systems, Director, Semester in Manufacturing

D'Souza, Julia, Ph.D., Northwestern U. Asst. Prof., Accounting

Dyckman, Thomas R., Ph.D., U. of Michigan. Ann Whitney Olin Professor of Accounting

Elliott, John A., Ph.D., Cornell U. Prof., Accounting, Associate Dean for Academic

Frank, Robert, Ph.D., U. of California at Berkeley. Professor of Economics

Prof., Finance and Business Strategy

Greenberg, Donald P., Ph.D., Cornell U. Prof., Management Information Systems Hass, Jerome E., Ph.D., Carnegie-Mellon U.

Hilton, Ronald W., Ph.D., Ohio State U. Prof., Accounting

Hribar, S. Paul, Ph.D., U. of Iowa, Asst. Prof.,

Accounting
Isen, Alice M., Ph.D., Stanford U. S. C. Johnson Prof., Marketing

Jarrow, Robert A., Ph.D., Massachusetts Inst. of Technology. Ronald P. and Susan E. Lynch Professor of Investment Management, Prof., Finance and Economics

Johnson, Justin, Ph.D., MIT. Asst. Prof., Economics

Kadiyali, Vrinda, Ph.D., Northwestern U. Asst. Prof., Marketing and Economics Lee, Angela, Ph.D., U. of Toronto. Asst. Prof.,

Marketing Lee, Charles M. C., Ph.D., Cornell U. Prof.,

Accounting and Finance, Henrietta Johnson Louis Professor of Management, Director, The Park Center for Investment Research

Li, Haitao, Ph.D, Yale U. Asst. Prof., Finance Libby, Robert, Ph.D., U. of Illinois. David A. Thomas Professor of Management, Prof., Accounting and Behavioral Science

Lind, Robert C., Ph.D., Stanford U. Prof., Economics, Management, and Public Policy Mannix, Elisabeth, A., Ph.D., U. of Chicago. Assoc. Prof., Organizational Behavior

McAdams, Alan K., Ph.D., Stanford U. Assoc. Prof., Managerial Economics

McClain, John O., Ph.D., Yale U. Prof., Quantitative Analysis

Michaely, Roni, Ph.D., New York U. Assoc. Prof., Finance

Nelsen, Bonalyn, Ph.D., Cornell U. Asst. Prof., Organizational Behavior

Nelson, Mark W., Ph.D., Ohio State U. Assoc. Prof., Accounting

O'Connor, Kathleen, Ph.D., U. of Illinois. Asst. Prof., Organizational Behavior

O'Hara, Maureen, Ph.D., Northwestern U. Robert W. Purcell Prof., Management, Prof.,

Orman, Levent V., Ph.D., Northwestern U. Assoc. Prof., Management Information Systems

Peterson, Randall S., Ph.D., U. of California at Berkeley. Asst. Prof., Organizational Behavior

Rao, Vithala R., Ph.D., U. of Pennsylvania. Deane W. Malott Professor of Management, Prof., Marketing and Quantitative Methods

Robinson, Lawrence W., Ph.D., U. of Chicago. Assoc. Prof., Operations Management Russo, J. Edward, Ph.D., U. of Michigan. S. C. Johnson Family Prof., Management, Prof., Marketing and Behavioral Science

Sally, David F., Ph.D., U. of Chicago. Asst. Prof., Organizational Behavior

Smidt, Seymour, Ph.D., U. of Chicago. Nicholas H. Noyes Professor of Economics and Finance, Director, Leadership Skills Program

Stayman, Douglas M., Ph.D., U. of California at Berkeley. Assoc. Prof., Marketing Suwinski, Jan H., MBA, Cornell U. Prof.,

Business Operations Swaminathan, Bhaskaran, Ph.D., U. of

California at Los Angeles. Asst. Prof., Finance

Thomas, L. Joseph, Ph.D., Yale U. Nicholas H. Noves Professor of Manufacturing, Director, Executive Development Program

Thomas-Hunt, Melissa, Ph.D., Northwestern. Asst. Prof., Organizational Behavior

Un, Annique, Ph.D., M.I.T. Asst. Prof., Management and Organizations Waldman, Michael, Ph.D., U. of Pennsylvania.

Prof., Economics, Charles H. Dyson Prof., Management

Zhang, Rachel, Ph.D., Northwestern. Asst. Prof., Operations Management

Lecturers

Katz, Jan, Ph.D., Massachusetts Inst. of Technology. Sr. Lec., International Business

and Marketing
Mink, Barbara E., M.A., Cornell U. Sr. Lec.,
Management Communications

Pike, Alan S., M.A., Cornell U. Sr. Lec., Management Communications Rosen, Charlotte, Ph.D., Cornell U. Sr. Lec.,

Coordinator, Management Communications

Adjunct and Visiting Faculty

Grossman, Dale A., J.D., American U. Sr. Lec., Tax and Business Law

Nesheim, John L., MBA, Cornell U. Visiting Lecturer, President, Aladdin Systems, Inc. Perez, Pedro D., Ph.D., Rochester Polytechnic

Inst. Visiting Asst. Prof.

Schuler, Richard E., Ph.D., Brown U. Prof. Economics, Prof. Civil & Environmental Engineering

Sears, Peter A., J.D., Harvard U. Visiting Lecturer, Vice President, Business Investments, Smith Kline Beecham Corporation Thomas, William, MBA, Harvard. Lec.,

Management, President, Capital Southwest