JOHNSON GRADUATE SCHOOL OF MANAGEMENT

ADMINISTRATION

Robert J. Swieringa, dean

John A. Elliott, associate dean for academic affairs

Michael J. Hostetler, associate dean for executive education

Cathy S. Dove, associate dean for MBA Program and operations

Richard A. Shafer, associate dean for corporate relations

Steven J. Sharratt, executive director of development

Natalie M. Grinblatt, director of admissions

John D. Nozell, director of career services

Harriet Peters, director of advising and student activities

Debra Gulini, assistant to the dean

Ann W. Richards, financial aid director and associate director of admissions

Janet S. Gray, registrar and associate director for MBA Program

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 Comell-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. 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.

NCC 558 Production and Operations Management

Spring. 3 credits. Course intended for non-Johnson School students only. Prerequisites: NCC 501 or permission of the instructor. Staff.

Operations management deals with the problems of producing and delivering goods and services, topics that are of strategic importance in almost every organization. Production scheduling is a significant problem for manufacturing firms; smooth work flow and quality control are important in banking operations; inventory control is crucial in large retail establishments; and proper task sequencing is a major problem in the construction industry. The course deals with these problems and others from a managerial viewpoint. The course is designed around managerial problems in the operations area. Students use case studies to improve skills in problem identification. This course is similar in content to the MBA core course NCC 508.

NBA 553 Accounting and Finance for Engineers

Spring. 3 credits. Course intended for non-Johnson School students only. R. Hilton. 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

IMMERSIONS

Only at the Johnson School will you find learning immersion courses in manufacturing, managerial finance, investment banking, brand management, 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 2.5 credits.

NBA 506 Financial Statement Analysis 1.5 credits.

NBA 511 Financial Modeling 1.5 credits.

NCC 508 Managing Operations 2.5 credits.

NCC 509 Strategy 2.5 credits

NBA 656 Valuation Principles 1.5 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

3.0 credits.

NBA 506 Financial Statement Analysis
1.5 credits.

NBA 511 Financial Modeling 1.5 credits.

NCC 508 Managing Operations 2.5 credits.

NCC 509 Strategy 2.5 credits.

NBA 656 Valuation Principles 1.5 credits.

SBM —Semester 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 will focus on managing traditional consumer brands, high tech products, services, and global branding will also be addressed. In-class methods will 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 will 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 7.5 credits.

NBA 502 Managerial Cost Accounting 3.0 credits.

NCC 508 Managing Operations 2.5 credits.

NCC 509 Strategy 2.5 credits.

SIM—Semester in Manufacturing

This is a full-time program for the semester; students will not be able to 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. It will be taught by a team of faculty and industrial practitioners, and much of the student work will be teamoriented. There will be off-campus travel for field study of a variety of manufacturing plants. Johnson School students should complete NCC 501 and NCC 506 before taking this course. Enrollment limited; permission of instructor required.

NCC 508 Managing Operations 2.5 credits.

NCC 509 Strategy 2.5 credits.

NBA 650 Semester in Manufacturing Practicum 10 credits.

EBI—Electronic Business Intensive

This intensive will take a comprehensive look at all emerging areas of this new way of doing business. The E-Business Intensive is designed to offer instruction in different, fundamental areas of e-business. For spring 2000, there will not be one leading professor who champions the experience, as there is in the immersions. However, the participating professors will support a one-credit, team-based project that will stand alone or extend work required in the component courses. This intensive may lead to a full-fledged immersion for the spring of 2001. Therefore, in the future, as with the other immersions, it will most likely be a curriculum solely for first-year students.

The total of 12 credits for first years will allow students to bid for an additional three-credit elective. As this intensive is a response to student and recruiter interest and has been created quickly, it is likely that it will evolve. This dynamic situation offers some obvious advantages and disadvantages. Students in the initial year of the intensive will be a part of shaping the future of this new course of study. They will introduce many people outside the Johnson School to the existence of the intensive in interviews and through other avenues of corporate interaction. They will also encounter the frustrations common to early adopters and innovators. Students choosing the intensive should be prepared to provide constructive feedback and positive energy.

NCC 508 Managing Operations 2.5 credits.

NCC 509 Strategy 2.5 credits.

NBA 601 Electronic Commerce 3.0 credits.

NBA 613 E-Business Project 1.0 credit.

NBA 619 Workshop: Internet Startups 1.5 credits.

NBA 633 Internet Marketing 1.5 credits.

NCC COMMON CORE COURSES

NCC 500 Financial Accounting

Fall. 2.5 credits. Johnson School core course. Enrollment limited. J. D'Souza, 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, J. Thomas.

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. M. Waldman. 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. 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 Management and Organizations

Fall. 2.5 credits. Johnson School core course. Enrollment limited. D. Sally. 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 have important applications to many aspects of financial decisions all of us have to make on a daily basis (e.g., is getting an 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. M. Lojo, L. Robinson.

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. 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 will be based on recent advances in game theory, industrial organization, and organization theory, although the course will also draw 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 501 Accounting for Mergers and Consolidations

Spring, first half of semester. 1.5 credits. Prerequisite: NBA 500 or permission of the instructor. R. Libby.

The course focuses on accounting problems related to equity financing, including leveraged restructuring, intercorporate investments, leveraged buyouts, consolidated reports, proforma statements for a merger prospectus, and other related financial reporting problems. The method of instruction is lecture mixed with cases. Grading is based on two closed book exams. Course continues in NBA 508, Advanced Accounting, offered second half of semester.

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, first half of semester. 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; 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 505 Auditing

Spring. 3 credits. Prerequisite: NCC 500 or permission of the instructor. M. Nelson. The course examines the process by which financial-accounting systems are audited. Topics include ethics, the meaning of audit reports, the legal liability of auditors, the study and evaluation of internal control systems, and various approaches for testing account balances. Problems, cases, and video simulations are used to illustrate concepts.

NBA 506 Financial Statement Analysis

Spring, first half of semester. 1.5 credits. Prerequisite: NCC 506, NBA 500 (or concurrent enrollment) or permission of the instructor. S. Tasker.

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 507 Tax Implication of Mergers and Acquisitions and Other Special Topics

Spring, second half of semester. 1.5 credits. Prerequisite: NBA 504 or permission of instructor. R. Bloomfield.

This course examines special topics in tax planning for businesses, with particular emphasis on capital structure choices and reorganizations (mergers and acquisitions), and intra-entity transactions (transfer pricing issues). Readings include many current research papers examining how large corporations exploit their tax planning opportunities.

NBA 508 Advanced and International

Spring, second half of semester. 1.5 credits. Prerequisites: NBA 501 or permission of the instructor. J. D'Souza.

The course examines advanced topics in accounting for international transactions and international subsidiaries, including foreign currency translation, price level adjustments and international variation in accounting principles. The method of instruction is lectures mixed with cases. Grading will be based on two exams and some written cases. Continuation of NBA 501, Accounting for Mergers & Consol (offered first half of semester).

NBA 509 Advanced Financial Analysis

Fall, second half of semester. 1.5 credits. Prerequisites: NBA 506, a finance immersion course, or permission of the instructor. C. Lee.

This course builds on the core financial analysis skills developed in NBA 506. Topics covered include equity valuation, residual income models, quality of earnings assess-

ments, 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 510 Cornell Equity Research

Fall, spring. 1.5 credits. S-U grading only. Prerequisites: NCC 500 and NCC 506 or equivalent, and be taking (or have completed) NBA 506 or have permission of the instructor. R. Bloomfield.

Students write and revise equity research reports on companies that are neglected by analysts and preferably undervalued. Class work includes lectures and cases on equity research and valuation, presentations by guest visitors, and presentations by students who must persuade the class to approve their stock recommendations.

NBA 511 Financial Modeling

Fall, spring, second half of the semester. 1.5 credits. Prerequisites: NBA 506 or permission of the instructor, and mastery of basic EXCEL skills. S. Tasker.

of basic EACEE skills. S. Tasker. Financial modeling is the art and science of constructing spreadsheet models of firms' future financial statements. In this class, we build 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. 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 will 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 will be competitive and merithased.

Economics

NBA 523 Business and Economic Forecasting

Spring, second half of the semester. 1.5 credits. S-U grading only. Prerequisite: NCC 501 or the equivalent. R. Highfield. This course will focus on statistical and econometric approaches to forecasting business and economic data series that have a time dimension (time series). The course provides students with a toolbox of time series forecasting methods and teaches them how to choose the appropriate one. Topics will

include the relationship of forecasting to decision making, univariate methods such as ARIMA modeling, and some multivariate methods such as transfer function, regression, vector autoregression, and neural networks. Applications will usually involve the forecasting of business and economic data. Although statistical theory will be covered as necessary with lecture and supplemental class notes, the emphasis will be on applications and learning by doing. Passing the course requires participation in class discussions and satisfactory performance on both individual and group projects. There are no exams. There is no text for the course but students will be required to use the student version of a sophisticated econometric software package.

NBA 524 Macroeconomics and International Trade

Fall. 3 credits. Prerequisite: NCC 502 or equivalent or permission of the instructor. R. Lind.

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.

NBA 527 Applied Economic Analysis (also ECON 616)

Spring. 4 credits. Letter/S-U optional grading. R. Frank.

This course will emphasize how economics analysis can help firms and individuals make the most of their opportunities. Of special interest to managers and consultants will be the course's focus on examples that illustrate how faulty economic reasoning leads to inefficient outcomes. The course will also emphasize strategic thinking, and will instruct students in the art of "economic naturalism"—the use of economic reasoning to understand and explain patterns of individual and firm behavior.

NBA 529 Economics of Imperfect Information (also ECON 757)

4 credits. Prerequisites: ECON 609–610 and 619.

The purpose of this course is to consider some major topics in the economics of uncertain information. Although the precise topics considered will vary from year to year, subjects such as markets with asymmetric information, signaling theory, sequential choice theory, and search theory will be discussed.

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 541 Economic Evaluation of Capital Investment Projects

Spring. 3 credits. Prerequisite: NCC 506 or permission of the instructor. B. Swaminathan.

This course deals with the evaluation of capital investment projects under uncertainty. The first part of the course focuses on traditional capital budgeting techniques using the discounted cash flow approach. This involves the estimation of cash flows, the treatment of risk and discount rates, the role of inflation and taxes, and the use of single factor and multi-factor asset pricing models in determining discount rates. The second part of the course focuses on the valuation of future investment opportunities of a firm using option pricing techniques. This includes issues such as flexibility options, options on real assets, evaluation of natural resource investments, and evaluation of new product investments. The methods of instruction are lectures, case discussion, spreadsheet exercises, statistical exercises, and seminars by practitioners. Students are evaluated on the basis of mid-term and final examinations. cases, and homework assignments.

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 such as CAPM, APT, etc., and empirical anomalies such as size effect, January effect, etc. Second, the course deals with the issue of evaluating portfolio performance, mutual fund performance, etc. Third, it deals with investment strategies based on patterns in historical security returns. This may be loosely considered as similar to technical analysis. In addition, the course deals with investment strategies based on publicly available information related to accounting and other market statistics, the use of earnings forecasts, etc. 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 the students in the latest tools and techniques in portfolio theory and familiarize 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 in this course will be 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, W. Bailey. 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. We look at the workings of a variety of markets and develop an understanding of the different problems which different types of markets address. We study the question of market efficiency and the interaction between government policies and financial markets. We analyze issues in innovation and regulation with basic principles of financial economics. Throughout the course, we consider the relevance of these issues for the practical corporate, portfolio, or public sector decision maker. 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 544 Bank Management

3 credits. Prerequisite: NBA 543. M. O'Hara.

The course provides an in-depth treatment of management issues in commercial banking. Topics include risk management, credit decisions and pricing, information problems, bank performance evaluation, international lending, and strategic planning. Students learn concepts through case studies and participate in a bank-simulation exercise.

NBA 545 Corporate Finance

Fall, first half of semester. Spring, second half of semester. 1.5 credits. Prerequisite: NCC 506. J. Zender.

This half-semester course will cover some of the more advanced topics in the area of corporate finance, including executive compensation, corporate governance, and bankruptcy law. The course will include lecture/discussion sessions in which the main ideas and the existing evidence (i.e., the theory and the empirics) will be presented and discussed. Cases will be used to illustrate the importance and applicability of these ideas and to provide "hands on" understanding of the material.

NBA 546 Introduction to Derivative Securities

Fall, spring. 3 credits. Prerequisite: NCC 506 (Finance Core) or permission of the instructor. C. Gukhal, 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 commodities. Fixed income derivatives are covered in NBA 555. The method of instruction is primarily lectures, supplemented by guest speakers. A midterm and a final exam comprise roughly half the grade, with the remaining half determined by assignments and class participation. The course is a prerequisite for NBA 550, Advanced Topics in Derivative Securities.

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. F. Diz.

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

NBA 550 Risk Management with Derivatives

Spring. 3 credits. Prerequisites: NBA 546 and NBA 555 (NBA 555 can be taken concurrently). R. Gukhal.

This course studies advanced topics in derivatives and risk management. The first part of the course covers topics in derivatives and develops the tools necessary for analysis and the second part is their application to risk management. This course is intensive and demanding—about 50 percent more demanding than the Fall NBA 546 course.

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 and this course will look at these issues from both an economic and legal perspective. Emphasis will be 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 Students. Students who took NBA 535 and/or NBA 536, 1.5 credit version, can not enroll in this course. H. Bierman.

This course consists of discussions of corporate finance cases dealing with corporate financing. Students will 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 basic principles of international finance, we then apply those principles to a variety of problems. The course helps students to understand the ideas and research results of international finance and to adapt what they learn to the practical problems of 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, spring. 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 557 Case Studies in Venture Investment and Management

Fall. 2 credits. Prerequisites: NCC 500 and NCC 506 or concurrent enrollment. W. Thomas.

A series of cases that focus on the venture capital investment process and on the subsequent management of such ventures The primary perspective is that of the venture capitalist in assembling and evaluating information, preparing forecasts, assessing risks, developing and negotiating investment structure and terms, and deciding whether to invest. Cases also focus on management and financial problems, policy issues, and the relationship between venture capitalists and entrepreneurs. The secondary perspective is that of the entrepreneur and the techniques and skills employed in managing growing enterprises. Presentations by venture capitalists and entrepreneurs will supplement student discussion and analysis of cases. Grades will be based on written reports, quality of classroom participation, and a final exam.

NBA 558 Corporate Financial Policy

Fall, second half of semester. Spring, first half of semester. 1.5 credits. Prerequisite: NCC 506 (Finance core). J. Zender. The course will deal 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 will enable us to estimate firm values more precisely. The course objective is to enable you to better analyze financial situations you may encounter in the future, as well as firms' valuation techniques.

Entrepreneurship

NBA 530 Entrepreneurship Lab

Fall, spring. 3 credits. Prerequisites: NBA 564 Entrepreneurship, or concurrent enrollment, or permission of the instructor. MBA students only. Letter/S-U optional grading. P. Sears.

Students will 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. S-U grading only. R. Holsten.

The course will focus on research at Cornell, which may be a basis for new business ventures. It will address the fundamental ways in which university-based research differs from industrial research. Students will explore and critique the business potential of each concept.

NBA 532 Venture Partnerships—The Corporate Business Development Role, Big Company vs. Emerging Company

Spring. 1.5 credits. Letter/S-U optional grading. P. Sears.

In an era when large corporations are 'downsizing' and 'outsourcing' in order to save on fixed costs, and emerging companies are dependent upon strategic partnerships with large companies as part of their financing strategies, the business development executive can be found at the vortex of this activity. Priorities for the business development executive are distinctly different depending upon the size and history of the enterprise. This course, taught by a venture capitalist who has also served as a Corporate Development Vice President for a Fortune 100 Company, examines the multitude of roles played by managers in business development jobs. A significant amount of attention will be paid to planning and managing the merger and acquisition process, as well as key elements in negotiation of the strategic partnership. There will be several guest speakers, each an acknowledged expert in the field. Students will be assigned deal-making tasks in the context of a case study that will be the centerpiece of the course. Class dates will be announced. Students will be expected to have read the Big Pharm case study prior to the first

NBA 559 The Venture Capital Industry and Private Equity Market

Spring. 0.5 credit. S-U grading only. D. BenDaniel, J. Reyes.

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 will involve four lectures and a final paper. The course is given jointly by Professor David BenDaniel and Jesse Reyes, director of Research of Venture Economics Information Services.

NBA 563 Initial Public Offerings and Acquisitions

Spring. 3 credits. Letter/S-U optional grading. 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 will cover: 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 will explore: 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 topic.

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.

General Management

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 will review 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. S-U grading only. 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 (sections offered in both first and second halves of semester). 1.5 credits. S-U grades only. 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 (sections offered in both first and second halves of semester). 1.5 credits. S-U grades only. 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. In addition, students are required to write a comprehensive analytic term paper.

NBA 570 Leadership in Management

Spring (meets during winter break). 1.5 credits. MBA students only. S-U grades 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 will provide training. The first two days will focus on self-awareness 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 will also be trained in giving and receiving feedback from team members and faculty. Mid-week activities will 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 selfassessment 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

NBA 572 Environment, Economics, and Management Policy

Fall. 3 credits. Enrollment preference to Johnson School and other graduate students, others by permission. D. Chapman.

Environmental protection and pollution controls are of major importance in the United States and OECD countries, and are growing in importance in developing countries. This

course analyzes the economic rationale affecting business and public decision making. It investigates the success achieved in the United States, and the important role that business has played in that success. Case studies review government-business cooperation, methods of analysis, and management strategy. The course concludes with business leaders presenting their past experiences and current challenges for analysis by the class. The general goal of the course is to introduce future managers to the realistic process of successful environmental decision making.

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 will involve 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 Field 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. Field Projects is not classroom-based. Although there will be a few class sessions early in the semester, the course structure will revolve around (a) periodic reviews and (b) 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. Letter/S-U optional grading. 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 and 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 will affect many aspects of business well into the next century, 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.

Fall, 3 credits.

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

NBA 579 Business Strategy

Fall, first half of semester. 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 well as tools useful for industry and company analysis. Situational analysis will also be covered. This course will compliment the core strategy course, with emphasis on understanding and practicing frameworks that are useful in case-based interviews. The course will draw 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 will present their approaches to strategy, and the analytical tools they find most effective in working on business strategy. Students will 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 form and orally in class. A major case write-up and presentation in a mock board environment at the end of the course gives students an opportunity to play the role of strategy consultants working on a real case.

NBA 653 Strategic Alliances: Lessons from Experience

Spring. 1 credit. S-U grading only. I. Suwinski.

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

NBA 665 Managing Technology and Innovation

Spring, 3 credits.

This course is designed for students who see themselves in settings where they have to develop new products or processes and for students who must implement change in existing products or processes. We discuss major issues involved in managing the introduction of new technology, including

competitiveness, technology assessment, R&D strategy, and positioning. We examine how industries are transformed by new technologies and how innovations diffuse among firms. We also consider internal management issues, including such topics as the structure of innovative organizations, the design of incentive and reward systems that foster risk taking, the way innovation champions manage the new-product development through crossfunctional teams, and the role of executive leadership. The course uses a combination of readings, lectures, discussions, case analyses, and guest lectures.

International Management

NBA 576 The World Geopolitical Environment of Business

Fall. 3 credits. Letter/S-U optional grading. R. Lind,

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. The 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. They 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. Aziz.

This course will analyze the patterns and processes of Southeast Asian 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 will assess important factors and consequences of the region's development patterns and use 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, first half of semester. 1.5 credits. Letter/S-U optional grading. This course can be used to fulfill the strategy requirement. J. Katz.

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 Cross-National Management

Fall, second half of semester. 1.5 credits. Letter/S-U optional grading. 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 semester.

NBA 586 Global Management Structures

Spring, second half of semester. 1.5 credits. Prerequisites: the new version of NBA 584. Letter/S-U optional grading. J. Katz. Focuses on the control, communication, and coordination systems within multinational corporations. Design and development of appropriate systems, to ensure enactment of corporate strategy will be addressed.

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 will use both lecture and case formats. Students will be evaluated on the basis of group and individual written assignments. The instructor for the course, Arthur Rosenbloom, is special partner and former chairman of the board of Patricof & Co. Capital Corp. a New York City-based firm specializing in mergers and acquisitions, private placements, and valuations of going concern businesses for tax and corporate purposes. Patricof has offices in New York and Palo Alto, affiliates in London, Paris, Zurich, Madrid, and Munich and is part of Apax Partners, which includes Patricof & Co. Ventures, Inc., one of the world's largest international venture capital firms. He holds a bachelor's degree from Bucknell University, a master's degree from Columbia University, and a law degree from Cornell. He has taught a similar course at Columbia.

Beginning with the third meeting of the course, Mr. Rosenbloom will conduct the course via a video-teleconferencing link from New York City.

NBA 590 Managing in Developing Countries

Fall, first half of semester, 1.5 credits. Letter/S-U optional grading. J. Katz. This class centers on the unique features of industrialized and newly industrializing countries as hosts for multinational business operations. It is a case-based course; each class is spent discussing one or two cases. Topics include environmental variation and how to deal with it and concentrated national power structures and their management. We cover a large number of countries spread throughout the world. Students are responsible for providing in-class updates on the countries discussed. Grading is based on the country update presentation, a final case write-up, and class participation.

NBA 592 Experience in International Management

Spring. 1.5 credits. S-U grades only. J. Katz. The objective of this course is to combine classroom sessions and international experience to increase 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 will 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 will be 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.

Management Information Systems

NBA 600 Database Management

3 credits. L. Orman. Database technology is the principal tool of bookkeeping, reporting, and auditing. It is also the primary infrastructure technology for all information systems. Not only is it critical to managing the information flow in modern organizations, but also in building systems to support managerial decisions. The course introduces the basic principles of management, design, and use of databases in organizations. Topics include: data storage and organization, efficiency and optimization, retrieval and end-user languages, reporting and auditing, and the impact on the organization. Students design, create and use databases using various database management 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 will learn to conduct economic transactions and manage businesses on the Internet. All major technical and managerial issues will be covered through computer exercises on the Internet, and case studies and examples of businesses on the Internet.

NBA 612 Imaging and the Electronic Age 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 will start 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 will cover 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 will be 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 will be required, a working knowledge of computers is necessary. The course will be especially tailored to a business school and industrial concerns and will have interactive live demonstrations at the state-ofthe-art laboratory of the Program of Computer Graphics. No prior knowledge in computer science is required.

NBA 614 Managing in the Information Age

Fall, first half of semester. 1.5 credits.

In this course we explore a topic that is just beginning to emerge: the implications of the explosion of the Internet and interactive multimedia communications for the way managers think and manage. We examine the origins of the Internet and some of the forces that have let to its rapid development, noting along the way, why and how it has "blindsided us" as Andy Grove of Intel and Bill Gates of Microsoft candidly stated. We then look at how information is being used today in pioneering applications in organizations of various kinds based, in part, on original case studies and on guest lecturers. Throughout the semester the student will be asked to identify new and innovative use of modern information technologies. The course itself will evolve—even in real time—with the developments in the field.

NBA 615 Information Technology to Manage Business

Fall. 1.5 credits (variable). S-U grades only. A. McAdams.

This course will rely on visiting speakers from several technology-based firms. The speakers will address how to manage the information technology function as a business and how to use IT to deal with business problems. Speakers will come from hardware companies, software companies, and other organizations dealing with large issues of managing the information resource. There will be assignments, with student groups interacting with speakers, and a short paper at the end of the course. The course will meet approximately 10 times during the semester for up to two hours. H-P, Intel, and other firms have indicated an interest in being involved.

Marketing

NBA 520 Pricing and Strategy

Spring, second half of semester. 3 credits. Prerequisite: NCC 502. V. Rao. This course extends material introduced in the core microeconomics course, where the focus is on pricing decisions. The course is taught very much like the core microeconomics course; i.e., the course consists mostly of lectures and problem sets that use the ideas contained in the lectures. One difference is that some understanding of calculus is required. The grading for the course is based on a midterm exam, a final exam, and a paper. Specific topics covered include price discrimination, peak-load pricing, product line pricing, and pricing when information is asymmetric.

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 will cover the use of secondary sources of marketing information as well as designing studies for collecting primary data. Students will be exposed to up-to-date methods in research design, qualitative research, measurement, data collection, and analysis. The emphasis will be on evaluating research methods and on interpretation and use of results rather than on mathematical derivations. Students will also be 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, spring, first half of semester. 1.5 credits. Prerequisites: NCC 501 and NCC

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 (e.g., specification of products and services) 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 selfchosen 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, second half of semester. 1.5 credits. Letter/S-U optional grading. 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. A. Isen. 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 627 Affect, Brand Equity, and Internet Marketing

Spring. 3 credits. A. Isen. The course will focus on concepts central to brand equity, including brand association. brand perceptions, brand loyalty, relationship marketing, and brand extensions and revitalization, with a special focus on the role of affect (feelings) in decision-making and thought processes that are fundamental to these and other concepts central to brand equity establishment, maintenance, and management. Additionally we'll cover the emerging area of internet marketing from the consumer perspective relative to brand equity, including consumer response to the internet as a medium and marketing channel

NBA 630 Policies for Marketing Channels

Spring, 3 credits. Prerequisite: NCC 503. V. Kadivali.

Marketing channels are analyzed as a chain of interdependent and interlocking organizations that produce and deliver goods and services to various types of consumers. We will look at various aspects of these relationships, such as efficiency, conflict, incentives, and government intervention. Instruction consists of lectures, cases, and guest speakers. Evaluation is based on cases and a final project (presentation and write up) and on class participation.

NBA 631 MARKSTRAT Simulation

Fall, second half of semester. 1.5 credits. Prerequisite: NCC 503. V. Rao. MARKSTRAT Simulation offers an opportunity for students to make various marketing strategy decisions in a realistic, dynamic, simulated, competitive environment. Students, working in teams, will manage a portfolio of a firm's products for several years (periods). They will learn how to make long term decisions (introduction of new products) and will deal with various cross-functional issues related to marketing management (e.g., research and development, product design, and budgeting). A major portion of the course will be devoted to an understanding of the basic concepts (e.g., competitive positioning, resource allocation, market segmentation and product design) on which the game is based and to a discussion of suitable methods of analysis of data generated in the game. Students will develop an initial strategy statement and strategic marketing plan for their firm. This game has become quite popular in various schools of management that are perceived to be competitive to the Johnson School. Students will develop an initial strategy statement and strategic marketing plan for their firm.

NBA 633 Internet Marketing

Spring, first half of semester. 1.5 credits. S-U grades only. V. Rao, D. Stayman, V. Kadiyali.

This class explores the effect of the Internet on marketing. The 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 will comprise industry speakers from Cendant, CSC, Netcentives, H-P, 1st USA, Catalina marketing, and 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 your choice. NBA 638 is restricted to MBA II's

because the same information is available for MBA I's in the strategy core.

NBA 635 Marketing Models

Fall. 3 credits. Prerequisite: NCC 503. V. Kadivali.

Students learn how to use mathematical models to solve marketing problems. The objective is to develop students' skills in evaluating marketing models and implementing them in management practice.

NBA 637 Direct Marketing

1.5 credits. Prerequisite: NCC 503 Marketing Management, or equivalent. V. Rao, D. Stayman.

The objective of this short course is to expose MBA students to selected contemporary issues in the area of direct marketing. In addition to providing an overview of the direct marketing industry and trends in database technology, the course will address major strategic and tactical issues in the management of direct marketing. The discussion will mainly consider the perspective of a marketer interested in employing the opportunities in direct marketing as an integral element of the marketing mix for a product/service. It will also address appropriate ethical concerns with direct marketing. To acquire a flavor of various practices in the industry, students will visit one or two direct marketing firms in New York City or its vicinity toward the end of the

NBA 638 Analysis of Competitive **Decision Making**

Spring, 3 credits. Prerequisite: NCC 502 (Microeconomics core course). V. Kadiyali. This course brings methods of microeconomics analysis to competitive decision making. Specifically, we will address issues relating to optimal competitive decisions for a firm interacting with current and potential rivals. We discuss how firms can, by their choice of appropriate decisions, best signal to rivals their intentions and their degree of commitment to them. We also look at sustainability, flexibility, and correction of decision choices. Game theoretic perspectives are used to understand these concepts. The dimensions of competitive strategy that we look at include product proliferation, R&D and patent policies, choice of compatibility with existing products, bundling of products, investing in capacity, vertical integration, choice of channels of distribution partners, pricing, and promotions. We also discuss problems caused in the optimal choice and implementation of firm strategies when information is imperfect. Specifically, we look at issues of moral hazard and adverse selection, and how these issues affect firm choices of strategies (e.g., pricing, choice of channel partners, etc.). Instruction includes lectures and cases. Student evaluation is based on cases, class participation, and a final project. This course can be used to fulfill the strategy requirement.

NBA 639 Data-Driven Marketing

Fall. 3 credits.

Data-Driven Marketing will introduce the future brand manager or marketing consultant to the use of market data to evaluate and construct pricing and promotional strategies. The course will introduce 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 will cover panel data on

high-volume consumer packaged goods, and 30 percent will be 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. Letter/S-U optional grading. 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 644 Quality Management

Fall. 3 credits. Prerequisite: NCC 508 or permission of the instructor. L. Robinson. The theme of this course will be the design and improvement of products and processes. The topics to be covered within this survey course include: (1) principles of process improvement (the formal seven-step improvement process, quality tools); (2) process monitoring (statistical process control, process capability, Motorola's '6 sigma' program); (3) product design (the Kano model, customer satisfaction and delight, issues in survey design, quality function deployment (QFD), design and manufacturability); (4) product delivery and support (quality in service and administration, satisfaction guarantees, and customer loyalty); (5) process design and improvement (kaizen vs. business process reengineering, benchmarking, design of experiments); and (6) issues in implementing quality improvements. The structure of the course will emphasize 'hands-on' applications of the principles and learning's from the course. The guest speakers and local plant tour will be supplemented with Harvard cases, several exercises (e.g., assuming the role of a Baldridge Examiner, finding and correcting the root causes of problems in a process), and homework assignments (to allow you to work through quantitative problems without any time pressure). A sizeable component of this course will be a group project, which applies the formal quality improvement process at a local firm.

NBA 645 Product Development Practicum

Spring. 3 credits. J. Thomas. This course centers on developing a major new product for firms. It will involve training in creativity by a consulting firm and readings in product development. This course will provide the opportunity to learn from many different sources, consultants, faculty, and executives.

NBA 646 Managing Knowledge-Based Services

Spring. 3 credits. Prerequisite: NCC 508. This course is designed for students who plan to manage technical and high-skill service enterprises. We discuss the pros and cons of the "service economy" and examine the unique aspects of producing service products, focusing on high-end, high value-added services. Although some consumer service examples will be included, the primary emphasis is on corporate and industrial services that occur between large firms, including technical, financial, and expert services. We will explore the use of traditional operations management tools in the context of service industries, as well as concepts from other disciplines such as sociology, psychology, and economics. In addition to managing the efficient provision of services, we will address service design, marketing, evaluation, and improvement. The course uses a combination of case analyses, discussion, student projects and presentations, guest lectures, and readings.

NBA 651 Employment Relations Spring. 1 credit.

The course will be offered over two full days and will consist of three parts: (1) an overview of U.S. labor and employment law and its effect on today's management, (2) a case analysis of what can lead a workforce to seek union representation to be able to bargain collectively over wages and conditions of employment, and (3) an examination of union-management productivity partnership.

NBA 652 Integrating Product Design, Marketing, and Manufacturing

Spring. 1 credit. J. Bradley, J. Thomas. The course will make the necessity of integrating product design, marketing, and manufacturing for a firm's success apparent. Managerial tools and useful concepts that facilitate this integration will be introduced. Students will have the opportunity, through homework assignments or projects, to make a more in-depth foray into the course topics.

Organizational Behavior

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 Judgment and Negotiations

Fall, spring. 3 credits. K. O'Connor. 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 comple-

ment the technical and diagnostic skills learned in other courses at the Johnson School. 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 is needed for these solutions to be accepted and implemented. The course will highlight the components of an effective negotiation and teach students to analyze their own behavior in negotiations. The course will be 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, first half of the semester. 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, (1) what is the difference between leadership and management, (2) how does a leader establish trust and commitment to an organization (e.g., David Kearns at Xerox), and (3) how do leaders transform organizations (e.g., Jack Welch at GE)? 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.

NMI AND NRE RESEARCH AND ADVANCED STUDIES

NMI 500-502 Directed Reading and Research

Fall, spring. 1, 2 or 3 credits. S-U grading

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. S-U grading only. Restricted to Johnson School students. 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 will 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. A. Ainslie.

This class is intended to introduce students to empirical research in marketing. There will be 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 will to some extent be driven by the participants in the course. Teaching will be interactive, and each participant will be expected to present one of the papers studied to the rest of the class. Furthermore, each participant will be 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. 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. This course is for Ph.D. students only.

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 509 Doctoral Seminar in Research Methods

3 credits. Staff.

This course concerns the fundamentals of scientific research: theory, research design, methods, and criticism. It is designed for doctoral students who wish to undertake research publishable in scholarly journals. Little or no scientific training is assumed. Statistics will not be emphasized; however, familiarity with elementary statistical concepts and inference will prove useful. The course will cover: (1) the principles of theory building: (2) the pros and cons of various general research designs (laboratory and field experiments, surveys, interviews, participant observation, archival studies, simulations, and formal mathematical models): and (3) the structure of research papers and the review

NRE 510 Ethnography in Organizations

3 credits. B. Nelsen.

This course is a comprehensive introduction to the philosophy and practice of fieldwork in an ethnographic tradition, with particular emphasis on conducting fieldwork in organizational settings. The course has four primary objectives: (1) to acquaint students with various philosophies and techniques for doing field research in organizational settings; (2) to provide students with an opportunity to engage in field research; (3) to provide students with an opportunity to develop unique insights into an organizational setting(s) and contribute to the theoretical understanding of social phenomena in their field of study; (4) to provide a climate of social support throughout the student's field experience.

NRE 511 Doctoral Seminar in Finance-**Corporate Finance**

1.5 credits Staff

This course will cover topics in corporate finance and empirical asset pricing.

NRE 513 Doctoral Seminar in Finance— **Market Microstructure**

3 credits. Staff.

The course examines recent research in market microstructure, particularly as it relates to theoretical issues. Topics covered include asymmetric information in securities markets, market behavior, and market structure

NRE 514 Doctoral Seminar in Finance— **Asset Pricing Theory**

5 credits. Permission of instructor required. Staff.

This course will cover asset pricing theory as based on either economic equilibrium or the absence of arbitrage. The method of instruction is primarily presentations given by the students on important papers. The presentation and the final exam each comprise about half the grade.

NRE 515 Doctoral Seminar in Behavioral **Decision Research**

Spring. 3 credits. J. Russo.

This seminar focuses on decision making. The first topic is competing paradigms for research in decision making. A central question of this topic is, "Which paradigms have been most successful or show promise in being most productive in the future?" Other topics will be guided by the interest of participants. They include connectionist approaches, dynamical systems, the interpretation (and distortion) of

information, consistency-based theories, biased allocation of attention, and memoryall as applied to the theories and phenomena of decision and judgment.

NRE 517 Doctoral Seminar in Information, Incentives, Games, and Contracts

3 credits. Staff.

An introduction to game theory and information economics for a broad audience—those who will construct (or just consume) gametheoretic models in applied fields of management (including accounting, finance, marketing, and organizational behavior) and applied fields of economics (including industrial organization, labor economics, macroeconomics, and international economics). The course emphasizes applications at least as much as pure theory; each step in the theory is illustrated by applications from management and economics before the next step in the theory is introduced. The wide variety of applications shows that similar issues arise in different fields and that the same game-theoretic tools can be applied in each setting.

FACULTY ROSTER

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

Greenberg, Donald P., Ph.D., Cornell U. Prof., Management Information Systems

Gukhal, Reddy, Ph.D., Columbia U. Asst. Prof., Finance

Hass, Jerome E., Ph.D., Carnegie-Mellon U. Prof., Finance and Business Strategy Hilton, Ronald W., Ph.D., Ohio State U. 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 Kadiyali, Vrinda, Ph.D., Northwestern U. Asst.

Prof., Marketing and Economics

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., Finance

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
Pusco, J. Edward, Ph.D. H. of Michigan

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

Tasker, Sarah, Ph.D., MIT. Asst. Prof., Accounting

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

Waldman, Michael, Ph.D., U. of Pennsylvania. Prof., Economics, Charles H. Dyson Prof., Management

Wittink, Dick R., Ph.D., Purdue U. Henrietta Johnson Louis Prof., Management, Prof., Marketing and Quantitative Methods

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