

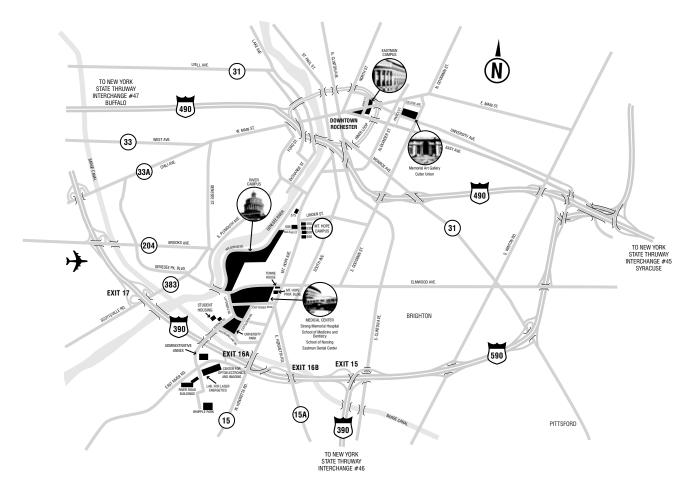
Information Guide 2009–2011

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CAMPUS AND AREA MAPS





MARK ZUPAN, Dean and Professor of Economics and Public Policy

Dean Zupan assumed his duties at the Simon School on a full-time basis on January 1, 2004. He is responsible for the administrative and academic functions of the Simon School, and serves as the leading advocate of the School's faculty, programs and students to the business community and other external constituencies.

Zupan served as dean and professor of economics at the University of Arizona's Eller College of Management from 1997 to 2003. Among his accomplishments at Eller were highly successful fundraising efforts, a record of promoting scholarship, fostering innovation in academic programs and enhanced community outreach.

Before his appointment at Arizona, Zupan taught at the University of Southern California's Marshall School of Business, where he also served as associate dean of master's programs. He was a teaching fellow in Harvard's Department of Economics while pursuing his doctoral studies at M.I.T., and he has been a visiting faculty member at the Amos Tuck School of Business Administration at Dartmouth College.

Zupan's research interests include water policy, the influence of economics and ideological preferences on the political behavior of voters and elected officials, industrial organization, regulation and political economy. He has received research grants from the National Science Foundation and the Center for International Business Education and Research at the University of Southern California. He is the co-author of two books: *Microeconomic Theory and Applications* (with E. K. Browning), published by John Wiley and Sons, and *Microeconomic Cases and Applications* (with T. W. Gilligan and A. M. Marino), published by HarperCollins.

Zupan is also the author of numerous scholarly articles which have appeared in leading publications including the American Economic Review, Journal of Law and Economics, Rand Journal of Economics, Public Choice, and Journal of Regulatory Economics. His opinion pieces have appeared in such outlets as The Wall Street Journal, The New York Times, the Financial Times of London, Los Angeles Times, Arizona Republic, BusinessWeek.com, Democrat and Chronicle (Rochester, N.Y.) and San Francisco Chronicle. He has served as co-editor of the journal Economic Inquiry, and is on the editorial boards of Public Choice, Journal of Business Economics and Research in Law and Economics.

Zupan earned a B.A. degree in economics from Harvard University and a Ph.D. in economics from the Massachusetts Institute of Technology.

RONALD W. HANSEN, Senior Associate Dean for Program Development; William H. Meckling Professor of Business Administration; Director of the Bradley Policy Research Center

Dean Hansen is responsible for Simon's international program development, undergraduate program and the Technical Entrepreneurship And Management (T.E.A.M.) M.S. program, and serves as area coordinator for the concentrations of Business Environment and Public Policy, Health Sciences Management and International Management.

He came to the School in 1971 as an assistant professor and became director of the Systems Analysis Program in 1972. From 1977 to 1986, he was the associate director of the Center for Research in Government Policy and Business, now the Bradley Policy Research Center. He briefly left the Simon School to become the first recipient of the Merrell Dow Professorship of Pharmaceutical Administration in the College of Pharmacy at The Ohio State University (1986–88). Prior to his current Simon School appointment, he served as senior associate dean for faculty and research for 21 years.

Hansen is widely recognized for his scholarly research in drug-development policy and in the regulation of the pharmaceutical industry. He helped to establish and collaborates on research with the Tufts Center for the Study of Drug Development. Hansen was on the editorial board of the *Journal of Research in Pharmaceutical Economics*. He was a member of the National Advisory Council on Health Care Technology Assessment (1985–88) and the Committee on the Children's Vaccine Initiative, Institute of Medicine, National Academy of Sciences (1992–93).

Hansen earned a B.A. degree in mathematics from Northwestern University, and an M.A. degree in economics and a Ph.D. in economics from the University of Chicago.

RAJIV M. DEWAN, Senior Associate Dean for Faculty and Research; Chairman, Ph.D. Program

Professor Dewan is responsible for faculty affairs, faculty research and faculty recruiting and development.

He has teaching and research interests in electronic commerce, organizational issues in management of information systems, the information technology industry and financial information systems. He has won three Best Paper Awards for research, done in collaboration with his colleagues at the Simon School, in the use of information systems standards in organizations, redesign of business processes and management of Web sites. His current research interests include marketing on the Internet, the Internet industry, strategic use of technology,

the use of standards in managing information systems, and accounting and financial information systems. His papers have appeared in the *Journal of Computing, Management Science*, *Decision Support Systems* and *IEEE Transactions on Computers*, among other journals.

Prior to joining the Simon School, Dewan was a faculty member at Northwestern University's Kellogg Graduate School of Management. He is a member of INFORMS, the Association for Information Systems and Beta Gamma Sigma.

Dewan earned a B. Tech. degree from the Indian Institute of Technology, New Delhi; an M.S. degree with concentrations in Computers and Information Systems and Operations Research from the University of Rochester; and a Ph.D. in Business Administration from the University of Rochester.

DELORES CONWAY, Faculty Associate Dean for Master's Programs; Visiting Professor of Statistics and Real Estate

Professor Conway focuses on enhancing corporate outreach and the School's visibility, two activities that are key toward further improving the Simon School School. Her research interests include statistics, real estate, health care management, finance, law and labor markets.

Conway is a tenured faculty member at the University of Southern California (U.S.C.) Marshall School of Business and the director of the Casden Real Estate Forecast at the Lusk Center for Real Estate. She is widely respected for her research on the commercial and residential real estate markets in Southern California and her reports are widely cited. She is frequently interviewed by the national news media for her viewpoints and within the last year has been quoted by The Wall Street Journal, the New York Times, Bloomberg, BusinessWeek, Forbes, the Chicago Tribune, the Los Angeles Times, the Washington Post, Investors Business Daily, and the San Francisco Chronicle, and has appeared on CNN, the CBS Evening News, and CNBC. Recently, Real Estate Southern CA Magazine listed her as one of the "50 Women of Influence in Real Estate" in California.

She is a distinguished faculty fellow at the U.S.C. Center for Excellence in Teaching. While teaching statistics in the M.B.A. Core, she received U.S.C.'s highest teaching honor, the University Associates Award for Teaching Excellence, which is awarded each year to only two of the university's faculty.

Prior to joining U.S.C., Conway served on the Graduate School of Business faculty at the University of Chicago. She is an elected fellow of the American Statistical Association and a former chair of the Business and Economics Statistics Section. She has also served on the editorial boards of major academic journals including the Journal of the American Statistical Association. Conway earned two undergraduate degrees in mathematics, statistics and computer science from the University of Wisconsin—Madison and master's and Ph.D. degrees in statistics from Stanford University.

HOLLIS S. BUDD, Associate Dean for M.B.A. Administration and External Relations

Dean Budd oversees the administration of full time, part time and executive M.B.A. and M.S. programs, non-degree executive education, student services, career management, marketing/communications and external relations.

Budd joined the University of Rochester in 1979 and the Simon School in 1988. Her work in developing relationships across the globe has greatly expanded awareness of and support for the School. After a four-year assignment as vice president of development for the University of Rochester, the University's first female vice president, Budd returned to Simon to head up advancement and external relations in 2001. She was named associate dean in January 2004.

In her 20-year tenure at Simon, Budd has worked with successive deans to help secure the funding crucial for growth and development of the institution, including support for the building of Schlegel and Gleason Halls, endowed professorships, scholarship support and continued operating dollars.

Budd is a trustee of the Max and

Marian Farash Charitable Foundation and the Consortium for Graduate Study in Management, and is a board member of Junior Achievement of Rochester. Her past and present board affiliations also include the Memorial Art Gallery, SUNY Geneseo Parents Council, School of the Arts, the Jewish Community Center, Jewish Family Services, Friends of Strong and Golisano Children's Hospital, many organizations for which she continues to volunteer.

Budd holds a B.S. degree in medical technology from Rush Medical College and has completed graduate coursework at the University of Rochester.

THE FULL-TIME FACULTY

PAULO ALBUQUERQUE, Assistant Professor of Marketing

Professor Albuquerque's research interests include the study of new product introductions, spatial and temporal diffusion of new brands using multimarket information, and heterogeneity in the behavior of consumers and firms across geographic markets.

His current research focuses on consumer switching patterns to new brands that have been progressively been introduced across local markets in the United States. He is also presently investigating the impact of geographic distance between car dealerships and consumers on their car purchasing decisions in the California market.

Prior to pursuing his Ph.D., Albuquerque worked as a product manager and trade marketing manager at a multinational company in Lisbon, Portugal.

B.A., Management, Portuguese Catholic University Ph.D., Marketing, University of California, Los Angeles (Anderson School of Management)

ALEXEI ALEXANDROV, Assistant Professor of Economics and Management

Professor Alexandrov works in theoretical industrial organization. He is particularly interested in the effects of product differentiation in the market on strategic competition between firms.

Alexandrov's recent work includes papers on the incentives of firms to interconnect (or standardize) in industries with network effects, and firms competing for not fully rational customers. His dissertation included chapters on strategic competition with self-customizable products, competition between intermediaries and an examination of restaurants' incentives to offer reservations.

B.A., Economics, Wayne State University Ph.D., Managerial Economics and Strategy, Northwestern University (Kellogg School of Management)

JAMES A. BRICKLEY, Gleason Professor of Business Administration; Professor of Economics and Management and of Finance; Area Coordinator, Competitive and Organizational Strategy

Professor Brickley has research and teaching interests in the economics of organizations, corporate governance and compensation policy, corporate finance, franchising and banking. His papers have been published in the Journal of Business, the Journal of Law and Economics, The Journal of Finance, the Journal of Accounting and Economics, the Journal of Financial Economics, the Journal of Economic Perspectives, the Journal of Risk and Insurance, the Journal of Financial and Quantitative Analysis, Financial Management and the Journal of Corporate Finance. The fourth edition of Managerial Economics and Organizational Architecture (authored by Brickley, Clifford W. Smith Jr. and Jerold L. Zimmerman) was published by McGraw-Hill/ Irwin in 2006. Brickley, Smith, Zimmerman and Janice Willett authored a trade version of this text entitled Designing Organizations to Create Value, published by McGraw-Hill in 2003. Brickley is associate editor of finance and accounting journals. A study published in Financial Management (Autumn 2001) reported that Brickley was among the most cited researchers in leading finance journals over the 25-year period of 1974 to 1998 (top one percent out of a total of 12,637 individuals). In 2002, three of his published papers received the Journal of Financial Economics All Star Paper Award (based on number of citations through

From 1989 to 1991, he was chairman of the finance department and research director

at the University of Utah's Garn Institute of Finance. Prior to his position at the University of Utah, Brickley was an associate professor of economics at the Simon School. He is chairman of the Faculty Curriculum Committee.

Brickley is a past winner of the Simon School's Distinguished Teaching Award. He has also been listed on the School's Teaching Honor Roll.

In addition to his academic achievements, Brickley has been a consultant to major corporations and law firms on organizational, franchising, valuations and antitrust issues. He has also held various positions in government in the state of Oregon, including executive director of the Jackson-Josephine County C.E.T.A. Program, public transportation planner for the Rogue Valley Council of Governments and economic analyst for an economic development district.

B.S., Economics, University of Oregon M.S., Economics, University of Oregon Ph.D., Finance, University of Oregon

GEORGE R. COOK, Executive Professor of Business Administration

Professor Cook's teaching interests are in the areas of marketing, management, sales management, marketing communications, services marketing, industry/vertical marketing, industrial/organizational psychology and TeleBusiness.

He has taught at Boston University, Nazareth College, St. John Fisher College, Roberts Wesleyan College, SUNY Geneseo, Keuka College and Rochester Institute of Technology, where he has served as the evening chairperson for the Marketing Program. He was a distinguished professor at R.I.T. He instructs both at the undergraduate and graduate level.

Cook was employed by the Ford Division of the Ford Motor Company for 10 years in various marketing and management assignments both in the operations side of the business and in the Headquarters Marketing Staff.

He recently retired from the Xerox Corporation after 30 years of service in numerous sales, marketing and customer service assignments including: district manager, division manager, industry marketing, general manager, customer services marketing, division manager of national account service and marketing manager, TeleBusiness.

He has served as a president of the Rochester, N.Y., chapter of the American Marketing Association and serves on the new business books review board of the *Journal of Consumer Marketing*. Cook has recently completed a marketing case study on "JOLT, America's Original Energy Drink!" that should be published soon. He has served as a member of the Business Advisory Council for the John Wiley School of Business at SUNY Geneseo. He was a member of the R.I.T. President's Speakers Bureau and speaks on the subjects of quality, customer satisfaction, customer services marketing, affinity marketing and telebusiness.

B.S., Business Administration, Indiana University M.B.A., Marketing The Ohio State University

GREGORY DOBSON, Associate Professor of Operations Management

Professor Dobson's current work concentrates on the application of process improvement principles to health care and other industries. The methodology employed is known as "Six Sigma," which refers to a set of tools for doing fact-based decision making in process improvement. He teaches an elective course on Six Sigma and Lean as well as the core Operations course. He remains interested in the interface of operations and marketing. Examples include work on the management of product variety, product line design, and the interface of production and distribution. His past work was in job shop scheduling and batch manufacturing. His articles have appeared in Management Science, Marketing Science, Operations Research, Production Planning and Control, and Transportation Science. He is associate editor for Interfaces and a member of the editorial board of the International Journal of Services and Operations Management and Operations Management Education Review. He is a member of INFORMS ASQ, and Beta Gamma

B.S., Operations Research and Industrial Engineering, Cornell University Ph.D., Operations Research, Stanford University

PAUL ELLICKSON, Assistant Professor of Economics and of Marketing

Professor Ellickson's research interests lie at the intersection between quantitative marketing and industrial organization, with a focus on using structural modeling to understand the forces that drive strategic interaction and optimal decision making. He is particularly interested in modeling the importance of dynamic and spatial competition in retail trade.

Ellickson's research has been published in various academic journals including the RAND Journal of Economics, Marketing Science, Marketing Letters and the International Journal of Industrial Organization.

Before joining the Simon School in 2009, Ellickson was an assistant professor of economics at Duke University.

A.B., Economics and Mathematics, University of California at Berkeley Ph.D., Economics, Massachusetts Institute of Technology

MARSHALL FREIMER, Professor of Management Science and of Computers and Information Systems (retired)

Professor Freimer has teaching and research interests in applied probability and optimization. He currently utilizes some of this work in the analysis of problems in information systems and marketing. His work appears in management, engineering, economics, statistics and mathematics journals. He is co-author, with Leonard S. Simon, of the book *Analytical Marketing*. He has held a Ford Foundation Faculty Fellowship and has won the Simon School Superior Teaching Award.

A.B. (summa cum laude), Mathematics, Harvard University Ph.D., Mathematics, Harvard University

J. WILLIAM GAVETT, Professor Emeritus of Operations Management

Professor Gavett held dual appointments in the Simon School and the Department of Preventive, Family and Rehabilitation Medicine at the University of Rochester School of Medicine and Dentistry. He is involved in the management of Flower City Habitat for Humanity, a private non-profit agency that builds affordable housing for low-income families.

B.S., Mechanical Engineering, University of Rochester M.M.E., Mechanical Engineering, Cornell University Ph.D., Industrial Engineering, Cornell University

HARRY GROENEVELT, Associate Professor of Operations Management

Professor Groenevelt has interests in health care operations, logistics and supply chain management (including reverse logistics); service system management and design; and quality management. He has been a consultant on operations management issues for numerous manufacturing and service companies (including hospitals and other health care providers), as well as the city of Amsterdam, the Netherlands. He has had articles published in Management Science, Operations Research, the Journal of Applied Probability, the European Journal of Operations Research and other journals. He wrote the chapter on "The Just-in-Time System" for Volume 4 of the Handbooks in Operations Research and Management Science on logistics of production and inventory.

B.S., Econometrics,
Vrije Universiteit, Amsterdam,
The Netherlands
M.S., Econometrics,
Vrije Universiteit
Ph.D., Operations Research,
Columbia University

SHANE HEITZMAN, Assistant Professor of Accounting

Professor Heitzman's research interests include the role of accounting information, taxes, and incentives in mergers and acquisitions and the effect of taxes on business decisions and asset prices. He has teaching interests in financial accounting and taxes and business strategy. Previously, he was a senior fund accountant for the Office of Sponsored Projects at the University of Arizona. He is a Certified Public Accountant in Arizona and was a recipient of the Deloitte Foundation Doctoral Fellowship in 2004.

B.S., Business Economics, Eastern Oregon University M.Acc., University of Arizona Ph.D., Management (Accounting and Finance), University of Arizona

DAN HORSKY, Benjamin L. Forman Professor of Marketing and Area Coordinator, Marketing

Professor Horsky has primary research interests in the analysis of consumer and firm behavior as they relate to marketing activities. He has applied stochastic models to describe consumers' brand-switching behavior. He has conducted studies of sales response to advertising and salesforce efforts, examined optimal advertising and salesforce policies and studied the estimation of multiattribute models and the optimal positioning of new brands. Horsky's research on the effects of price, income and informa-

tion on the diffusion of new durable products has been funded by the National Science Foundation.

Horsky's publications have appeared in Management Science, Marketing Science, the Journal of Marketing Research and the Journal of Business. In 1991, Horsky and his co-author, Moshe Givon, received the John D. C. Little Award for "Untangling the Effects of Purchase Reinforcement and Advertising Carryover," which was selected as the best marketing-related paper published in 1990 in either Marketing Science or Management Science. Horsky received the John D. C. Little Award again in 1993 jointly with his co-author, Paul Nelson, for "New Brand Positioning and Pricing in an Oligopolistic Market." Horsky is a member of the editorial board of Marketing Science.

Horsky has taught in M.B.A. and Executive M.B.A. programs in the U.S., the Netherlands, Switzerland, Australia and Israel. Based on his achievements in research and teaching, Horsky has been named a University Mentor and received the Executive Development (M.B.A.) Program Class of 1987 Superior Teaching Award. He has consulted on marketing-related topics, in particular on consumer multiattribute brand choice and on life cycles of new consumer durables, with firms worldwide.

B.S., Industrial Engineering, Technion, Israel Institute of Technology M.S., Operations Research, Technion, Israel Institute of Technology Ph.D., Industrial Administration, Purdue University

THOMAS H. JACKSON, Distinguished University Professor and President Emeritus

Thomas H. Jackson, president of the University of Rochester from 1994 to 2005, holds faculty positions in the William E. Simon Graduate School of Business Administration and in the University's Department of Political Science.

Before he became Rochester's ninth president, Jackson was vice president and provost of the University of Virginia, which he first joined in 1988 as dean of Virginia's School of Law. He had been professor of law at Harvard from 1986 to 1988 and served on the Stanford University faculty from 1977 to 1986.

A 1972 graduate of Williams College, Jackson earned his law degree from Yale in 1975. He first clerked for U.S. District Court Judge Marvin E. Frankel in New York in 1975–76, and then for Supreme Court Justice (and, later, Chief Justice) William H. Rehnquist in 1976–77.

Jackson is the author of bankruptcy and commercial law texts used in law schools across the country, and served as Special Master for the U.S. Supreme Court in a dispute involving every state in the country over the disposition of unclaimed dividends held by brokerage houses.

B.A., American Studies, Williams College J.D., Yale University

GREGG A. JARRELL, Professor of Finance and Economics

Professor Jarrell served as chief economist at the U.S. Securities and Exchange Commission from 1984 to 1987. He served as director of the School's Managerial Economics Research Center from 1988 to 1990 and as director of the School's Bradley Policy Research Center from 1990 to 1994. Jarrell frequently serves as an expert witness on financial-economic issues in business litigation, and he is active in management consulting. He has served as a consultant for the Federal Trade Commission, and he has held senior positions in two private consulting firms: The Alcar Group, Inc. and Lexecon, Inc. He is a frequent contributor to the op-ed page of The Wall Street Journal, and he is widely quoted as a financial-economic authority by the

Besides previously teaching at the Simon School (from 1977 to 1981), Jarrell has taught at Georgetown University Law School and has been a research fellow at the University of Chicago's Center for the Study of the Economy and the State. Jarrell has won six Superior Teaching Awards from the Simon School's Executive M.B.A. Program and Full-Time M.B.A. Program. He was the Simon School's A.T.&T. Foundation Resident Management Fellow in 1987. He was a member of the S.E.C. Advisory Committee on Tender-Offer Policy in 1983, and he has published extensively on subjects such as the economics of corporate control, the economics of regulation, applied corporate finance, and the effects on stock prices of various kinds of corporate disclosures and other news events.

B.S., Business Administration, University of Delaware M.B.A., Economics and Finance, University of Chicago Ph.D., Business Economics, University of Chicago

ROY JONES, Clinical Assistant Professor of Computers and Information Systems

Professor Jones's current research studies markets for information goods and the impact of development costs and the complexity of the development process on market structure. He is broadly interested in the information industries, in particular the economics of information systems, electronic commerce, and the evolution of the information technology industry.

Before pursuing his Ph.D., Jones was a lecturer for the Stanford University computer science department. In addition, he founded a relational database consulting firm. In this capacity, he worked with *Fortune* 500 firms and start-ups.

B.A., History, Stanford University M.S., Computer Science, Stanford University Ph.D., Operations, Information and Technology, Stanford University

ANZHELA KNYAZEVA, Assistant Professor of Finance

Professor Knyazeva has research interests in corporate finance. Her recent research examines issues in payout, corporate governance and firm investment decisions.

M.A., International Policy Studies, Stanford University Ph.D., Economics, New York University (Stern School of Business)

DIANA KNYAZEVA, Assistant Professor of Finance

Professor Knyazeva is a recent graduate of New York University. Her research interests are in corporate finance with a focus on corporate governance, firm investment behavior and analyst following. Her teaching interests are in corporate and international finance.

She is a member of the American Finance Association and the Salomon Center for the Study of Financial Institutions.

M.A., International Policy Studies, Stanford University Ph.D., Economics, New York University (Stern School of Business)

LEONARD KOSTOVETSKY, Assistant Professor of Finance

Professor Kostovetsky has research interests in financial economics (asset pricing, behavioral finance, and portfolio theory). His paper "Index Mutual Funds and Exchange-Traded Funds" was published in the *Journal of Portfolio Management* in 2003. He was a contributor to *The Theory and Practice of Investment Management Workbook* in 2004) with Frank J. Fabozzi and Harry M. Markowitz.

He was quoted in *The New York Times* on February 29, 2004, in an article entitled "Warming Up to Funds That Trade Like Stocks." In 2007, he received the Towbes Teaching Prize awarded by the Princeton University economics department for outstanding teaching.

A.B., Economics, Princeton University M.A., Economics, Princeton University Ph.D., Economics, Princeton University

PHILLIP J. LEDERER, Associate Professor of Operations Management

Professor Lederer has research interests in operations management and its integration with economic theory. His current research focuses on three areas: the financial justification of manufacturing technology, performance evaluation in operations and competition

in network-based industries. His work has appeared in Econometrica, the International Journal of Flexible Manufacturing Systems, the Journal of Manufacturing and Operations Management, the Journal of Operations Management, Operations Research, Operations Research Letters, Regional Science and Urban Economics and Transportation Science. Lederer is associate editor of the International Journal of Production Economics and an occasional referee for Econometrica, the Journal of Accounting and Economics, Management Science, Operations Research and the Review of Economic Studies. He is a former assistant professor of business administration at the Darden Graduate School of Business Administration at the University of Virginia.

B.S., Physics, State University of New York at Stony Brook M.S., Applied Mathematics, Northwestern University Ph.D., Applied Mathematics, Northwestern University

EDWARD X. LI, Assistant Professor of Accounting

Professor Li has research interests in securities laws and Securities and Exchange Commission (S.E.C.) regulations, information intermediaries, institutional investors and capital markets. His teaching interests are in the areas of financial accounting and financial statement analysis.

He was invited to present his paper, "Market Reaction Surrounding the Filing of Periodic S.E.C. Reports," at the American Accounting Association annual meeting in 2007. The paper is currently being revised for third round submission at *The Accounting Review*. Another working paper, "One-Step or Two-Step? The Strategy for Periodic Corporate Disclosure and Its Implications for Earnings Release and S.E.C. Filing Timing," with K. Ramesh, is being revised for second round submission at *Contemporary Accounting Research*.

Li received a Graduate School Dissertation Completion Fellowship and a Department of Accounting and Information System Student Research Award from Michigan State University in 2007. He holds the Certified General Accountant of Canada and the Chartered Financial Analyst designations.

B.S., Accounting,
Tsinghua University (Beijing)
M.S., Accounting,
Tsinghua University (Beijing)
M.S., Agricultural and Consumer Economics,
University of Illinois
Ph.D., Accounting,
Michigan State University

JOHN B. LONG JR., Frontier Communications/Rochester Telephone Professor of Rusiness

Telephone Professor of Business Administration; Professor of Finance and Economics; Area Coordinator, Applied Economics

Professor Long has research interests primarily in the area of financial economics. In his published articles, he has addressed many of the financial decision problems faced by individuals and firms. These include total savings and portfolio-selection decisions (with particular emphasis on income tax implications and the performance of sophisticated portfolio-selection techniques), investment-project evaluation and dividend-policy choice. In other articles, he addresses the behavior of relative asset prices, the measurement of "abnormal" asset returns, the implications of taxes and inflation for common stock prices and the term structure of interest rates. With Charles I. Plosser, Long has done theoretical and empirical research on fundamental interpretations of fluctuations in economic activity (business cycles). Long is a past editor and advisory editor of the Journal of Financial Economics and a member of Beta Gamma Sigma.

B.A., Mathematics, Rice University Ph.D., Industrial Administration, Carnegie Mellon University

MITCHELL J. LOVETT, Assistant Professor of Marketing

Professor Lovett's teaching interests include marketing research, marketing intelligence, marketing strategy and consumer behavior. His research interests include learning by consumers, voters and firms and the influence of that learning on behavior. Current projects investigate the following research questions: How does changing product quality affect consumer learning, purchase decisions and brand equity? What dynamic learning challenges constrain the firms' ability to generate value from marketing learning? Why do candidates use negative political advertising more often the more competitive the race? These research projects have been presented at the Marketing Dynamics Conference and Marketing Science Conference.

Lovett was the Sheth Doctoral Consortium Fellow for Duke University in 2007 and in 2006 received the Institute for the Study of Business Markets' Research Grant Silver Medalist Award, with Chris Moorman, for their project on marketing learning.

B.A., Economics, Mathematics, German, Ohio Wesleyan University M.B.A., Boise State University Ph.D., Business Administration, Duke University

SUSAN FENG LU, Assistant Professor of Economics and Management

Professor Lu is an economist specializing in industrial organization and economics of organization. Her research interests mainly concern how information problems affect individual behavior and the organization of firms and markets, especially the structure of those industries related to health care.

Her current research focuses on two lines concerning incentives under information asymmetry. The first is on the long-term care industry. In a series of papers based on the introduction of the Nursing Home Quality Initiative (a report card policy) in the United States in 2002, she studies the effect of information to consumers on the behavior of nursing homes under different organizational forms. In the second line of research, she studies the incentives of managers in China during the transition from the planned economy to the market economy.

She has done fieldwork in the areas of nursing home quality investigation in the greater Chicago area and the state owned enterprises (S.O.E.) in the process of privatization in China

Her teaching interests include econometrics and statistics, health care strategy, business in emerging markets, and nonprofit management.

B.A., Economics,
Beijing University
B.A., International Relations,
Beijing University
M.A., Economics,
Beijing University
Ph.D., Managerial Economics and Strategy,
Northwestern University

RAVINDRA N. MANTENA, Assistant Professor of Computers and Information Systems

Professor Mantena studies economics of digital and information-rich products. His research explores how the increasing information technology content in products alters competition, strategy and market structure. Recent research has focused on issues of pricing, product design and entry in converging digital markets, and also on price and demand evolution in network industries. In addition, he also has research interests in measuring decision performance, revenue management and information economics. Prior to pursuing his Ph.D. in information systems, Mantena worked as a sales manager for a consumer goods multinational firm and founded an aquaculture company in India.

B.E. (honors), Electrical Engineering, Birla Institute of Technology and Science (India) M.B.A., Business Management, Indian Institute of Management (India) M.Phil., Ph.D., Information Systems,

New York University

LAWRENCE J. MATTESON, Executive Professor of Business Administration

Professor Matteson brings to the Simon School over 25 years of experience in technology and manufacturing management and in strategy development in large corporations. He teaches corporate strategy, economics of competitive strategy, marketing strategy and manufacturing and service strategy in both the regular M.B.A. and the domestic and European Executive M.B.A. programs. Matteson was previously senior vice president and manager of electronic imaging at Eastman Kodak Company, which he joined in 1965. He holds an M.S. degree in electrical engineering from Rensselaer Polytechnic Institute and received the Hugh H. Whitney Award for highest academic honors from the School's Executive M.B.A. Program in 1979. He serves on several boards and is active as a management consultant.

B.S., Electrical Engineering, Union College M.S., Electrical Engineering, Rensselaer Polytechnic Institute M.B.A., Executive Development Program, University of Rochester

JEANINE MIKLÓS-THAL, Assistant Professor of Economics and of Marketing

Professor Miklós-Thal has research interests in industrial organization, marketing and personnel economics. She has written articles on cartel stability, the competitive effects of various contractual arrangements in the grocery industry, product branding strategies, and contests in organizations.

Prior to joining the Simon School in 2009, Miklós-Thal taught at the University of Mannheim in Germany. She was also a visiting scholar at the MIT Sloan School of Management, and a postdoctoral fellow at the European University Institute. In 2008, she received the Dissertation Prize of the Toulouse Chamber of Commerce and Industry.

Propaedeuse, International Economic Studies, Maastricht University Propaedeuse, Econometrics, Maastricht University M.A., Economics, Maastricht University D.E.A., Economic Theory and Econometrics, University of Toulouse 1 Ph.D., Economics, University of Toulouse 1

SANJOG MISRA, Associate Professor of Marketing and Applied Statistics

Professor Misra's current research involves a theoretical and empirical investigation of marketing related issues. He is particularly interested in modeling the strategic decisions made by managers in salesforce and distribution environments in response to consumer demands and competitive pressure. In addition, he is interested in the econometric analysis of discrete and qualitative data, from both classical and Bayesian perspectives. Professor Misra's research has been published or is to appear in various scholarly journals such as Marketing Science, Quantitative Marketing and Economics, the International Journal of Research in Marketing, Marketing Letters, IIE Transactions and the Journal of Law and Economics, among others.

Misra has also used his research to design and implement sophisticated analytical and econometric models for firms such as Xerox, Sprint, IMS Health, A. T. Kearney and Lucent Technologies, with an aim of helping them make better marketing decisions.

B.A., Economics,
Ravenshaw College, India
M.B.A., Marketing,
FSM, New Delhi, India
M.S., Statistics,
State University of New York at Buffalo
Ph.D., Marketing,
State University of New York at Buffalo

DUNCAN T. MOORE,

Vice Provost for Entrepreneurship, Rudolf and Hilda Kingslake Professor of Optical Engineering, Professor of Biomedical Engineering, Professor of Business Administration, and Area Coordinator, Entrepreneurship

Professor Moore is the former dean of the School of Engineering and Applied Sciences and the former director of The Institute of Optics. He is a past president of the Optical Society of America. From 1997 to 2001, he served as associate director for technology in the White House Office of Science and Technology Policy for the Clinton Administration, where he worked on the Next Generation Internet, Clean Car Initiative, new construction materials, and NASA. From 2002 to 2004, he served as president and chief executive officer of the Infotonics Technology Center Inc., an industry, academia and government partnership to foster cutting-edge research, prototyping of new technology and economic development in upstate New York.

Moore teaches an entrepreneurship course to a combined class of engineering graduate students and M.B.A.'s.

B.A., Physics, University of Maine at Orono M.S., Optics, University of Rochester Ph.D., Optics, University of Rochester

PAUL NELSON, Clinical Professor of Marketing

Professor Nelson's teaching and research interests are concentrated on the multi-attribute model of consumer behavior, brand management, product positioning and pricing, outsourcing and the Internet. Nelson directs the Brand Management Program at Simon. He recently had marketing articles published in Marketing Science, Management Science and the Journal of Retailing as well as philosophy and information systems journals. He has served as a reviewer for numerous journals, including Marketing Science, Management Science and the Journal of Consumer Research. Nelson and his co-author, Dan Horsky, won the John D. C. Little Award for the best paper published in 1992 in Management Science or Marketing Science, for their paper, "New Brand Positioning and Pricing in an Oligopolistic Market." Nelson has also won the Frank M. Bass Award for the best published marketing paper based on a dissertation. Nelson previously taught at the Krannert Graduate School of Management at Purdue University. He has been inducted into Beta Gamma Sigma, Omicron Delta Epsilon, Pi Mu Epsilon and Phi Beta Kappa.

B.A., Mathematics, Economics and Business, Macalester College M.S., Business Administration, University of Rochester Ph.D., Business Administration, University of Rochester

BORIS NIKOLOV,Assistant Professor of Finance

Professor Nikolov has research interests in theoretical and empirical corporate finance. His recent resarch investigates the effects of real market frictions and agency conflicts on firms' financing, cash holdings and investment policy. His teaching interests are in corporate and entrepreneurial finance.

Prior to joining the Simon School, Nikolov spent one year as a postdoctoral researcher at the Ecole Polytechnique Federale de Lausanne..

M.A., Finance University of Lausanne, Ph.D., Finance, University of Lausanne

DAVID J. OLIVEIRI, Executive Professor of Business Administration

Professor Oliveiri has held several executive positions over a 30-year career in publishing and law.

He most recently served as group vice president of legal education for West Group (an operating arm of Thomson-Reuters) and president of Foundation Press.

He has held positions as senior vice president and publisher, vice president of business development, vice president of product

systems, and general manager/chief operating officer for various Thomson subsidiaries and operating groups.

Oliveiri began his career at Lawyers Cooperative Publishing in Rochester, N.Y., where he was a managing editor, and later, an editorial director. He has also served as general counsel at Theatre Confections Inc. and was assistant counsel at Central Trust Bank.

He is a member of the New York State and Monroe County Bar Associations, Beta Gamma Sigma, the Scribes Society of Legal Writers, and the Academy of Legal Studies in Business. He is licensed to practice law before the courts of New York State and the Federal Court of the Western District of New York.

Oliveiri is the author of the revised edition of Nimmer's Commercial Asset-Based Financing (Thomson/West), a leading legal treatise. His research interests are in the areas of law and economics as interrelated disciplines, and in particular how the legal environment affects comparative advantage.

B.S., Accounting, University at Buffalo J.D., University at Buffalo M.B.A., University of Rochester

EDIEAL J. PINKER,

Associate Professor of Computers and Information Systems and of **Operations Management; Director, Center for Information Intensive** Services; Area Coordinator, **Management Science Methods**

Professor Pinker's research interest focuses on issues of business process design, electronic commerce and Homeland Security. He has published research on the use of contingent workforces, cross-training and experiencebased learning in service sector environments as it applies to work and workflow design, online auctions and responses to terrorist threats. He is currently studying how medical offices can be organized to improve productivity, and business process outsourcing. Pinker has consulted for the United States Postal Service, the financial services industry and the auto industry. His work has been published in leading journals such as Management Science, Manufacturing and Service Operations Management, IIE Transactions, the European Journal of Operational Research, the International Journal of Operational Research, Production and Operations Management and the Communications of the Association of Computing Machinery.

Pinker teaches the core M.B.A. course on framing and analyzing business problems. In the past, he has taught courses on business process design, telecommunications technology and spreadsheet modeling at the Simon School.

Pinker is an associate editor for Management Science, Operations Research, Decision Science and the International Journal of Operational Research.

He is a member of INFORMS and Beta Gamma Sigma.

B.A., Mathematics, Columbia University M.S., Operations Research, Massachusetts Institute of Technology Ph.D., Operations Research, Massachusetts Institute of Technology

MICHAEL A. RAITH, Associate Professor of Economics and Management

Professor Raith joined the Simon School in 2002 and teaches an M.B.A. course on competitive strategy, for which he was named to the Teaching Honor Roll twice. His research interests include the economics of organizations and industrial economics. He has worked on pricing strategies in the presence of market uncertainty, the effects of financial constraints on firms' behavior in product markets, incentive contracting and performance evaluation in organizations, and the interaction between incentives and communication in various principal-agent settings. Raith's work has been published in the American Economic Review, RAND Journal of Economics, Journal of Economic Theory, International Journal of Industrial Organization, Journal of Law, Economics and Organization and Journal of Financial and Quantitative Analysis.

Prior to joining the Simon School faculty, Raith taught at the Graduate School of Business of the University of Chicago. He also spent two years as a research fellow at the European Centre for Advanced Research in Economics in Brussels. During 2005–06, he visited the University of Southern California's Marshall School of Business, where he received a Golden Apple teaching award.

Vordiplom, Economics, University of Bielefeld Vordiplom, Computer Science, Fernuniversität Hagen Diplom, Economics, University of Bonn Ph.D., Economics, London School of Economics

WERNER SCHENK, **Clinical Assistant Professor of Computers and Information Systems**

Professor Schenk has professional and teaching interests in computers and information systems as applied to end-user computing, documentation and training, and applications development for office and manufacturing automation. Prior to joining the faculty, he worked as a principal information specialist and manager of programming services for Xerox Corporation. He now consults independently on information systems. He was a visiting professor of management information systems at St. John Fisher College and has held adjunct teaching positions at the Rochester Institute of Technology and the State

University of New York at Brockport. He has been a member of the A.N.S.I. Committee for Programming Language Standardization and is a co-author of the American National Standards for Information Systems Programming Languages-Fortran. Schenk is an arbitrator for the American Arbitration Association and a member of the Financial Industry Regulatory Authority (FINRA) Board of Arbitrators.

B.A., Mathematics, University of California M.B.A., University of Rochester

RONALD M. SCHMIDT, Janice M. and Joseph T. Willett **Professor of Business Administration** for Teaching and Service

Professor Schmidt developed the Executive Development (M.B.A.) Program at Erasmus University in the Netherlands and served as its first chairman. His teaching areas include economics, statistics, marketing, organizations and corporate strategy.

Schmidt received Superior Teaching Awards from the M.B.A. Classes of 1974, 1976, 1983 and 1991; the Executive Development (M.B.A.) Classes of 1984, 1985 and 1988; the Rochester-Erasmus M.B.A. Class of 1987 and the Rochester-Nyenrode Classes of 2000 and 2001. His publications include papers on pricing, regulation and management compensation. His current research activities include an examination of the relationship between pay and performance for C.E.O.'s and an investigation of the impact of contractual provisions on the performance of major-league baseball players. He has served as a consultant to Eastman Kodak Company, Xerox Corporation, Bausch & Lomb, Schlegel Corporation, Croon Electrotechniek and several other corporations.

B.A., Economics, The Ohio State University M.A., Economics, The Ohio State University

G. WILLIAM SCHWERT, **Distinguished University Professor and Professor of Finance and Statistics**

Professor Schwert has research and teaching interests in portfolio and capital-market theory, corporate finance and control, econometrics and time-series analysis, and in the effects of public regulation on business. From 1978 until 1982, his research was sponsored by the National Science Foundation. During 1982, he was the first CRSP Distinguished Research Scholar at the University of Chicago. He received a Batterymarch Research Fellowship for the 1982-83 academic year. In 1990, he won the Graham and Dodd Plaque for the best paper ("Stock Market Volatility") published in the Financial Analysts Journal, and he won a Smith-Breeden Distinguished Paper Award for one of the best papers ("Why Does Stock Market Volatility Change Over Time?") published in *The Journal of Finance*.

Schwert has been an editor of the Journal of Financial Economics since 1979 and the managing editor since 1995. He was an associate editor of The Journal of Finance from 1983–2000, and he is an advisory editor of the Journal of Monetary Economics. His current research deals with the pricing of initial public offerings of stock, the effects of insider trading on the market for corporate control, the effects of anti-takeover devices on takeover activity, and on stock market volatility.

A.B. (honors), Economics, Trinity College M.B.A., Finance, Econometrics, University of Chicago Ph.D., Finance, Econometrics, University of Chicago

ABRAHAM SEIDMANN,

Xerox Professor of Computers and Information Systems and Operations Management; and Area Coordinator, Computers and Information Systems, Electronic Commerce, and Operations Management

Professor Seidmann is the author of over 100 research articles, which appear in many of the leading scientific journals, and has been the founding department editor on interdisciplinary management research and applications in Management Science for 10 years. He is also an associate or area editor for IIE Transactions, the International Journal of Flexible Manufacturing Systems, Production Planning and Controls, the Journal of Intelligent Manufacturing, the Journal of Management Information Systems and Production and Operations Management. His current research and consulting activities include medical informatics, electronic commerce, online auctions, information systems, health care management, business process design, project management and optimal resource allocation, strategic manufacturing systems, information economics, stochastic processes and performance modeling for capacity planning and pricing.

Seidmann has consulted with many of the leading industrial and service corporations and presented numerous research and executive seminars on four continents. He has won teaching awards from the M.B.A. and Executive M.B.A. classes at the Simon School, as well as from the Rochester-Nyenrode Class of 2003. His research was cited twice on the front page of The Wall Street Journal, and he was granted several prestigious prizes at international conferences for publishing outstanding research papers in the areas of information systems, information economics and electronic commerce. These include the Award for Best Research Paper at the 16th International Conference on Information Systems, presented in Amsterdam, the Netherlands. He also won the best paper award at the 1998 Hawaii International Conference on Systems Sciences, in Kohala, Hawaii. In 1999, the Workshop on

Information Systems and Economics gave him a special award for writing "The Best Paper on Information Systems and Economics."

B.Sc., Industrial and Management Engineering, Technion, Israel Institute of Technology M.Sc., Operations Research, Technion, Israel Institute of Technology Ph.D. (cum laude), Industrial Engineering, Texas Tech University

JOEL SELIGMAN, President, University of Rochester

Joel Seligman, president of the University of Rochester since July 1, 2005, also holds faculty positions in the University's Department of Political Science and in the William E. Simon Graduate School of Business Administration.

Before he became the University of Rochester's tenth president, Seligman was dean of Washington University's School of Law since 1999. He was dean and Samuel M. Fegtly Professor of Law at the University of Arizona College of Law from 1995 to 1999. He also served on the faculty at the University of Michigan Law School, George Washington University Law School and Northeastern University Law School.

A graduate of Harvard University, Seligman is one of the nation's leading experts on securities law, and is the co-author, with the late Louis Loss, of the 11-volume Securities Regulation, the leading treatise in the field, and author of The Transformation of Wall Street: A History of the Securities and Exchange Commission and Modern Corporation Finance.

He also has served as reporter for the National Conference of Commissioners on Uniform State Laws, Revision of Uniform Securities Act (1998–2002); as chair of the Securities and Exchange Commission Advisory Committee on Market Information (2000–2001); and as a member of the American Institute of Certified Public Accountants Professional Ethics Executive Committee. He is currently a member of the board of the Financial Industry Regulatory Authority (FINRA).

He is the author or co-author of 21 books and over 40 articles on legal issues related to securities and corporations. He is the co-author (with John C. Coffee Jr. of the Columbia University Law School faculty) of the leading casebook, *Securities Regulations: Cases and Materials*, and author of the casebook, *Corporations: Cases and Materials*.

A.B., Political Science, University of California at Los Angeles J.D., Harvard University

GREG SHAFFER, Wesray Professor of Business Administration; Professor of Economics and Management and of Marketing

Professor Shaffer teaches the course on pricing policies to full-time and part-time M.B.A. students. He has been named to the Teaching Honor Roll numerous times and was awarded the Superior Teaching Award from the M.B.A. classes of 2001 and 2004. Shaffer's research employs game-theoretic methods to examine issues in pricing policies, antitrust and regulation, distribution channels, vertical restraints, principal-agent theory, and oligopoly models of strategic competition. He has received research grants from the U.S. National Science Foundation, the Social Science Research Council (U.S.A.) and the Social Research Council (U.K.).

Shaffer's work has appeared in the American Economic Review; Economic Journal; the RAND Journal of Economics; Journal of Economics and Management Strategy; Journal of Law and Economics; Journal of Law, Economics and Organization; Journal of Industrial Economics; International Journal of Industrial Organization; Advances in Economics and Public Policy; Advances in Applied Microeconomics; Marketing Science; and Management Science. He received Emerald Management Review's Citation of Excellence Award as the author of one of the top 50 management articles of 2002.

Shaffer is an area editor of Marketing Science, a co-editor of the Journal of Economics and Management Strategy and an associate editor of the Journal of Economics and Business. He has been involved in numerous consulting projects and antitrust cases in the U.S. and abroad related to issues on pricing and vertical relations among firms, and he has served as a visiting scholar in the two U.S. government antitrust agencies: the Antitrust Division of the U.S. Department of Justice and the Bureau of Economics at the U.S. Federal Trade Commission. Shaffer participated in the writing of the 2001 Federal Trade Commission's report on slotting allowances (payments for retail shelf space), and he has twice given invited testimony on their competitive effects, serving on a three-member panel investigating this practice at the Hearings on Global and Innovation Based Competition (1995) and again at the Federal Trade Commission's sponsored workshop on slotting allowances (2000).

Prior to joining the Simon School in 1997, Shaffer taught in the economics departments at Indiana University (Bloomington, Ind.) and the University of Michigan (Ann Arbor, Mich.). He has held an appointment at Princeton University's Woodrow Wilson School, and he has been a visiting scholar in the marketing department at Northwestern University's Kellogg School of Management.

In addition to his teaching and research duties at the Simon School, he is a research associate with the Centre for Competition Policy at the School of Management, University of East Anglia (Norwich, U.K.).

In addition, Shaffer is the director of the Center for Pricing at the Simon School.

B.A. (high honors), Economics and Mathematics, Swarthmore College M.A., Economics, Princeton University Ph.D., Economics, Princeton University

CLIFFORD W. SMITH JR., Louise and Henry Epstein Professor of Business Administration and Professor of Finance and Economics

Professor Smith has research interests in the fields of corporate financial policy, derivative securities and financial intermediation. He has published 16 books and over 90 articles in leading finance and economics journals. Students in the Executive M.B.A. Program have given him their Superior Teaching Award 19 times; students in the M.B.A. Program have given him their Superior Teaching Award 10 times. In 2003, he received the F.M.A. Fellows Award by the Financial Management Association International. He was named Distinguished Scholar by the Southern Finance Association in 2000, and Distinguished International Visiting Scholar by the British Accounting Association in 1991. In 1986, he was given the first Special Award for a Perfect Teaching Rating by the School; in 1983, he was chosen a University Mentor in recognition of his scholarship and teaching.

Smith has served as president of the Risk Theory Society, president of the Financial Management Association National Honor Society, vice president for Global Services of the Financial Management Association International, vice president of the International Economics and Finance Society, a member of the board of advisors of the International Association of Financial Engineers, and a member of the board of directors of the Financial Management Association and the Southern Finance Association. He is an advisory editor of the Journal of Financial Economics; an associate editor of the Journal of Risk and Insurance, Financial Practice and Education, the Review of International Economics, the Journal of Financial Services Research, the Journal of Derivatives, and the Journal of Financial Research; a member of the editorial board of the Review of International Economics; and a member of the advisory board of the Journal of Applied Corporate Finance, The Financier, Contemporary Finance Digest, and The Arbitrageur. His paper, "Trading Cost for Listed Options: The Implications for Market Efficiency" (with Susan M. Phillips), was awarded the Pomerance Prize for Excellence in Options Research by the Chicago Board Options Exchange for 1980; his paper, "On the Convergence of Insurance and Finance Research," was awarded the Alpha Kappa Psi-Spangler Award by the American Risk and Insurance Association for 1996.

B.A., Economics, Emory University Ph.D., Economics, University of North Carolina at Chapel Hill

MINJAE SONG, Assistant Professor of Marketing and Economics

Professor Song's research topics include developing an empirical model of consumer demand, measuring consumer benefit from technology innovation, modeling/analyzing cooperative R&D in high tech industries, and analyzing pricing strategies for inter-firm product bundling. He has published articles in the RAND Journal of Economics, the Journal of Business and Economics Statistics and the International Journal of Industrial Organization.

Prior to joining the Simon School in 2007, he was a faculty member at Georgia Institute of Technology in Atlanta, Ga., and a visiting scholar at Northwestern University's Kellogg School of Management in the summer of 2005.

B.A. (highest honor), Economics, Seoul National University, Seoul, Korea M.A., Economics, Harvard University Ph.D., Economics, Harvard University

DANIEL H. STRUBLE, Clinical Assistant Professor of Business Communications and Area Coordinator, Business Communications

Mr. Struble has extensive experience in leadership and executive communications training and delivery. Previously, he was a career naval officer with tours as a helicopter pilot, flight instructor, joint staff and congressional liaison officer, financial specialist, helicopter squadron commander, public affairs officer and naval attaché. Prior to his retirement from the Navy in 2006, he was in charge of the Naval R.O.T.C. Unit at the University of Rochester.

B.A., Biology, Cornell University M.B.A., University of West Florida

DAVID TILSON, Clinical Assistant Professor of Computers and Information Systems

Professor Tilson's research interests are in the interrelationship between technical standards and industry structures, as well as the impact of mobile and ubiquitous information systems. His teaching interests include strategic and business systems consulting, information systems, and business statistics. Previously, he taught information systems at Case Western Reserve University, and managerial data analysis in the Simon Executive M.B.A. Program.

His industry experience includes three years in strategy consulting, mostly with McKinsey & Company, along with a decade in R&D and project management in the telecom, high-tech and media industries. He has consulted for clients in financial services, insurance, telecom, software and energy. His track record of accomplishments includes a Royal Television Society (British equivalent to an Emmy) for broadcast technology. Having lived and worked on three continents gives him an understanding of business and collaboration in an international context.

B.Eng., Electrical and Electronic Engineering, Queen's University of Belfast (U.K.)
M.Sc., Telecommunications Engineering, University of London (U.K.)
M.B.A., Information Systems and Entrepreneurship,
University of Texas at Austin
Ph.D., Information Systems,
Case Western Reserve University

VERA TILSON, Assistant Professor of Operations Management

Professor Tilson's research interests are in supply chain management, stochastic scheduling and health care operations. Her teaching interests are in production and operations management, management science and business statistics. Previously, she taught operations management at the Weatherhead School of Management at Case Western Reserve University. She has 18 years of industrial experience as a software engineer and project manager in telecommunications, medical instrumentation, supply chain software and financial industries. She has published articles in the European Journal of Operations Research, Mathematical Social Sciences, International Journal of Revenue Management and the Production and Operations Management Journal.

S.B., Electrical Engineering,
Massachusetts Institute of Technology
M.S., Applied Mathematics,
Colorado School of Mines
Ph.D., Operations Management,
Case Western Reserve University

HEIDI TRIBUNELLA, Clinical Associate Professor of Accounting

Professor Tribunella has served as an auditor for two national firms, Deloitte & Touche and PricewaterhouseCoopers LLP. At those firms, she served clients in the health care industry as well as midsized firms. Tribunella, also a New York State Certified Public Accountant, spent over five years in industry as a manager of financial reporting for two different health care companies. Prior to joining the Simon School faculty, she taught a variety of business and accounting courses at various colleges.

Tribunella has an interest in accounting and auditing research and has published

articles with in the CPA Journal, the Journal of Business and Economics Research, the Journal of College Teaching and Learning, The Review of Business Information Systems, and the Accounting Information Systems Educator Journal.

Tribunella has received the Oneida County Comptroller's Office Accounting Award for academic achievement in the M.S. accountancy program at the SUNY Institute of Technology. She is listed in the 2002 edition of Who's Who Among America's Teachers and has received Best Paper Awards at the International Business and Economics Research Conference and the Accounting Information Systems Educators' Conferences.

B.S., Accounting,
State University of New York at Geneseo
(John Wiley Jones School of Business)
M.S., Accountancy,
State University of New York Institute of
Technology

JEROLD B. WARNER, Fred H. Gowen Professor of Business Administration; Professor of Finance and Area Coordinator, Finance

Professor Warner has teaching and research interests in portfolio theory, capital markets and corporate finance. He is currently an associate editor of the *Journal of Financial Economics*. He is a former member of the faculty of the University of Chicago Graduate School of Business.

B.S., Economics, University of Pennsylvania M.A., Operations Research, Yale University M.B.A., Economics and Finance, University of Chicago Ph.D., Economics and Finance, University of Chicago

CHARLES E. WASLEY, Joseph and Janice Willett Distinguished Scholar; Area Coordinator, Accounting

Professor Wasley's teaching interest is the financial reporting area. His research interests encompass the role of accounting information in capital markets. He currently serves as an associate editor of the Journal of Accounting and Economics. His current research focuses on the rational pricing of earnings, cash flows and accruals, measuring earnings management, voluntary management cash flow forecasts and voluntary pre-announcements of non-recurring gains and losses. Recent publications include "An Analysis of the Theories and Explanations Offered for the Mis-Pricing of Accruals and Accrual Components" and "Why Do Managers Voluntarily Issue Management Cash Flow Forecasts," both forthcoming in the Journal of Accounting Research. Wasley's other research has been published in the Journal of Accounting Research and Economics; The Accounting Review;

the Journal of Accounting Research; the Journal of Finance; the Journal of Financial Economics; the Journal of Accounting, Auditing and Finance; the Journal of Portfolio Management and the Review of Quantitative Finance and Accounting.

Prior to his appointment at the Simon School, Wasley was a faculty member at Washington University in St. Louis and The University of Iowa.

B.S., Accounting,
State University of New York at Binghamton
M.S., Accounting,
State University of New York at Binghamton
Ph.D., Accounting,
The University of Iowa

GERARD J. WEDIG, Associate Professor of Business Administration

Professor Wedig's research interests involve the application of corporate finance, governance, organizational economics and incentives to the health care industry. He has studied the investment and financing decisions of hospitals and nonprofit entities, incentive payment systems for physicians and hospitals, and a variety of other issues in health economics, including the incentive effects of Medicare and Medicaid payment systems on costs, insurance coverage and charity care. His current research focuses on the organizational economics of the managed care industry. Wedig's publications have appeared in The Journal of Finance, the Journal of Business, the Review of Economics and Statistics, the Journal of Health Economics, Health Affairs, Medical Care Research and Review and other journals. In addition, he has been the recipient of numerous research grants from the Centers for Medicare and Medicaid Services (formerly HCFA) and the Robert Wood Johnson Foundation.

Wedig teaches courses in organizational economics as well as the corporate finance and governance of health care organizations. He has consulted to numerous medical organizations including hospitals, H.M.O.'s, physician groups, pharmaceutical firms and consulting firms on issues of health care finance. Prior to joining the Simon School, Wedig taught at Boston University's School of Management, the Wharton School at the University of Pennsylvania and Indiana University's Kelley School of Business.

B.S. (summa cum laude), Economics, Washington University (St. Louis) M.A., Economics, Harvard University Ph.D., Economics, Harvard University

TONI M. WHITED, Michael and Diane Jones Professor of Business Administration and Professor of Finance

Professor Whited was named the first Michael and Diane Jones Professor of Business Administration on February 24, 2009.

Previously, Whited was the Kuechenmeister-Bascom Professor at the Wisconsin School of Business at the University of Wisconsin, Madison. She earned a B.A. from the University of Oregon, majoring in French literature and economics, and a Ph.D. from Princeton University in economics, working with Ben Bernanke. Professor Whited worked at the Federal Reserve Board and was on the faculty of the University of Pennsylvania, Northwestern University, the University of Michigan and the University of Iowa before joining the University of Wisconsin in 2003

Whited has taught in a wide variety of areas in finance, macroeconomics and econometrics at the undergraduate, M.B.A. and doctoral levels. She has published over 20 articles and has twice won a Brattle Prize for one of the top articles in the *Journal of Finance* in corporate finance. Her research deals primarily with the effects of financial markets on firm capital budgeting decisions. She has also conducted research in the areas of theoretical econometrics, asset pricing, macroeconomics and corporate debt policy. She serves on the editorial boards of the *Journal of Financial Economics* and the *Journal of Macroeconomics* and was one of the founding co-editors of Finance Research Letters.

B.A., French Literature and Economics, University of Oregon Ph.D., Economics, Princeton University

KURT WOJDAT, Clinical Assistant Professor of Accounting

Professor Wojdat gained public accounting experience working for two years as an auditor with Peat Marwick and Mitchell. A certified public accountant, he spent five years at Warner Lambert engaged in internal auditing, cost accounting, financial analysis and treasury activities. He then performed financial planning and analysis functions at Xerox Corporation for three years. After receiving his doctoral degree, he taught at Syracuse University for one year before joining the Simon School faculty.

B.S., Accounting, State University of New York at Albany M.B.A., Finance, University of Rochester Ph.D., Accounting, University of Buffalo

JOANNA SHUANG WU, Associate Professor of Accounting

Professor Wu's teaching interest is in the area of financial reporting. Her research interests are in the areas of international financial reporting, the behavior of financial analysts, management compensation, and mutual fund performance. Her work has been published in *The Journal of Finance* and the *Journal of Accounting and Economics*, among others. She is currently serving as associate editor for the *Journal of Accounting and Economics*.

B.A., International Economics, Beijing University M.A., Economics, Tulane University Ph.D., Business Administration, Tulane University

WEI YANG, Assistant Professor of Finance

Professor Yang has research interests in empirical corporate finance and asset pricing. His recent research focuses on corporate investment and inefficiency, and dynamic term structure models and their fit to historical interest rate behavior.

M.S., Electrical and Computer Engineering, Carnegie Mellon University Ph.D., Electrical and Computer Engineering, Carnegie Mellon University Ph.D., Finance, Stanford University

JEROLD L. ZIMMERMAN, Ronald L. Bittner Professor of Business Administration and Professor of Accounting

Professor Zimmerman's research and teaching interests involve financial and managerial accounting. In 2004, he and Professor Ross L. Watts (at M.I.T.) received the American Accounting Association Seminal Contribution to the Accounting Literature Award, the most prestigious research award in the field of accounting. They received the American Institute of Certified Public Accountants Award in 1979 and 1980 for their joint papers. Zimmerman was the 1978 winner of the Competitive Manuscript Award, sponsored by the American Accounting Association, for his paper, "The Costs and Benefits of Cost Allocation." The Watts/Zimmerman research, which has come to be called "positive theories of accounting," seeks to understand the costs and benefits of various accounting procedures. He and Watts co-authored a book, Positive Accounting Theory, published by Prentice-Hall in 1986.

Zimmerman's current research includes: "Asymmetric Sensitivity of C.E.O. Cash Compensation to Stock Returns," with

Andrew J. Leone and Joanna Shuang Wu (Journal of Accounting and Economics); "Unintended Consequences of Granting Small Firms Exemptions from Securities Regulation: Evidence from the Sarbanes-Oxley Act," with Feng Gao and Joanna Shuang Wu (Journal of Accounting Research); and "The Joint Effects of Materiality Thresholds and Voluntary Disclosure Incentives on Firms' Disclosure Decisions," with Shane Heitzman and Charles Wasley (Journal of Accounting and Economics 2008 Conference).

The fifth edition of Managerial Economics and Organizational Architecture by James A. Brickley, Clifford W. Smith Jr. and Jerold L. Zimmerman was published by McGraw-Hill/ Irwin in 2009. Brickley, Smith, Zimmerman and Janice Willett authored a popular version of this text entitled Designing Organizations to Create Value published by McGraw-Hill in 2003. The sixth edition of Zimmerman's textbook, Accounting for Decision Making and Control, was published by McGraw-Hill in 2009. Professors Cheryl McWatters (McGill University), Dale Morse (University of Oregon) and Zimmerman published an undergraduate accounting text, Management Accounting Analysis and Interpretation by Prentice Hall FT in 2008.

Zimmerman is an editor of the *Journal* of Accounting and Economics. He was also a distinguished faculty member of the American Accounting Association's Doctoral Consortium, and a visiting professor at Chinese University of Hong Kong, Hong Kong University of Science and Technology, Hong Kong University, and Hong Kong Polytechnic University. He is on the board of directors of IEC Electronics and on the company's audit and compensation committees.

B.S. (cum laude), Finance, University of Colorado Ph.D., Business Administration, University of California at Berkeley

ELLEN ZUROSKI, Clinical Assistant Professor of Business Communications

Professor Zuroski has teaching and research interests in cross-cultural communication and second language acquisition. Her work for educational and corporate institutions includes design implementation of numerous communication skills courses and workshops, as well as coordinating translations and editing of marketing, training and instructional publications for internal use. Her clients have included Eastman Kodak Company, Gleason Corporation, Bausch & Lomb, Volvo and Saatchi & Saatchi Ltd.

Zuroski has served as a language arts educational consultant with public television and has written and produced a number of nationally syndicated educational television programs. She was awarded a Kellogg Foundation Fellowship in International Development for her work in fostering educational and enter-

prise initiatives among U.S., Latin American and Caribbean partners.

B.A., English Literature and Asian Studies, Cornell University M.S., Education, University of Rochester Ph.D. (candidate), University of Rochester

THE STAFF

The experienced and dedicated support staff brings an average of nine years of service to the faculty and students of the Simon School.

Faculty have individually assigned staff who can serve as liaisons to the students on course-work and research-related matters. The staff offices are located in close proximity to the faculty for optimal support and effectiveness for the students.

Additionally, the staff help support three world-renowned academic journals and the Bradley Policy Research Center.

THE ADJUNCT FACULTY

JOHN ANDERSON, Lecturer in Finance

Mr. Anderson is currently president of Northern Capital Group Inc., a real estate development and investment company headquartered in Rochester, N.Y. Prior to this, Anderson was president and chief executive officer of Wilmorite Properties Inc., a private real estate investment trust based in Rochester.

Anderson has over 25 years experience in the banking and real estate industries. After teaching high school English for four years, Anderson received an M.B.A. from the University of Rochester and then joined the Irving Trust Company at One Wall Street in New York City. From 1985 to 1989 he was vice president of Citicorp Real Estate Inc., Citicorp's main real estate banking vehicle, which provided financing for large real estate developers and owners on a worldwide basis. În 1989, Anderson joined Wilmorite to become the C.F.O. and subsequently was named the president and C.E.O. At Wilmorite, Anderson created a new capital structure which included raising institutional private equity and culminated in 2000 in the formation of a private real estate investment trust (REIT). In 2005, Wilmorite was acquired by the Macerich Company, a publicly traded REIT.

Throughout Anderson's career, he has managed the construction, development and acquisition of a variety of commercial real estate properties. Northern Capital Group recently oversaw the conceptual planning, design and approval of a three million square foot transit-oriented mixed-use project in Tysons Corner, Va. One of Anderson's current initiatives is a real estate investment fund targeting the upstate New York market.

Anderson serves on the Simon School Executive Advisory Committee, is a council member of the Urban Land Institute, is the chairman of the board of the Trinity Montessori School, and coaches junior league baseball and basketball.

B.A., English, State University of New York M.B.A., Finance, Applied Economics, University of Rochester

GREGORY H. BAUER, Visiting Assistant Professor of Finance

Professor Bauer's main area of interest is international finance. In one paper from his dissertation on empirical models of the foreign exchange risk premium, he shows how to model the risk premium over long horizons to gain extra-explanatory power. In another paper, he shows how to evaluate different volatility models using an economic metric. Prior to earning his doctorate at Wharton, Bauer was a foreign exchange trader at the Bank of Canada and a macroeconomist at the Ontario Ministry of Finance. He holds the Chartered Financial Analyst (C.F.A.) designation. Bauer won the Superior Teaching Award from the M.B.A. Classes of 1999, 2000 and 2002.

B.A., Applied Economics, University of Waterloo M.A., Economics, Queen's University M.A., Finance, University of Pennsylvania Ph.D., Finance, University of Pennsylvania

DANIEL J. BURNSIDE, Lecturer in Finance

Dr. Burnside is director of quantitative research at Rochester money manager Clover Capital Management. He has held various roles in the investment, risk management and financial planning fields, and has worked extensively with both individual and institutional clientele. His teaching goal is to provide students with the knowledge to bridge the gap between the academic theories and the practitioner world of money management.

Burnside is a chartered financial analyst (CFA) and a certified financial planner (CFP).

B.S., Engineering,
Cornell University
M.S., Engineering,
Cornell University
Ph.D., Engineering and Mathematics,
Cornell University
M.B.A.,
University of Rochester

BARRY A. FRIEDMAN, Lecturer in Economics and Management

Dr. Friedman's professional interests include leadership, management effectiveness, human resource management, and employee development. His corporate experiences include Xerox, ExxonMobil and Harris Interactive. He has published articles in the Journal of Applied Psychology, Personnel Psychology, Industrial Relations, Journal of Educational Administration, Employee Rights and Responsibilities Journal, Personnel Journal, and the Training and Development Journal.

B.S., Psychology and Political Science, University of Rochester Ph.D., Industrial and Organizational Psychology, The Ohio State University

W. BARRY GILBERT, Executive Lecturer in Business Administration and E-Commerce

Mr. Gilbert is currently C.E.O. and chairman of the board of IEC Electronics Corporation and has served on a number of advisory boards.

He served as president of the Thermal Management Group of Bowthorpe Plc. from 1991 until 1999, where he had responsibility for eight manufacturing locations in the U.S., Mexico, Hong Kong, Malaysia, England, Italy and Germany.

Prior to Bowthorpe, Gilbert served as corporate vice president and division president for Milton Roy Company, a mid-sized N.Y.S.E. company, and held several senior leadership roles for Bausch & Lomb, Inc., concluding with becoming a division president for the company. Gilbert started his commercial career at Ernst & Young in New York City in its public accounting and management consulting groups.

In 1992, Gilbert was given the Simon School Distinguished Alumnus Award.

B.S., Accounting (Honor Society), The Ohio State University M.B.A., Finance, Applied Economics, University of Rochester

DONALD GOLINI, Lecturer in Entrepreneurship

Mr. Golini is currently the president of QED Technologies, a company he founded in 1996 to commercialize a novel optical polishing technology transferred from the University of Rochester. QED develops, manufactures and markets polishing and metrology equipment for the precision optics industry.

Over the past 12 years, QED has grown from 5 to more than 60 employees, with personnel in the U.S., Germany, France, Japan and Australia. The QED portfolio includes more than a dozen fundamental international patents, and the company has sold more than

150 machines in North America, Europe and Asia. In July 2006, QED was acquired by Cabot Microelectronics Corporation, the leading supplier of chemo-mechanical planarization slurries used for polishing semiconductor and data storage devices.

Over the years, QED has received various prestigious awards, including the Photonics Circle of Excellence Award, the U.S. Department of Defense Manufacturing Technology Achievement Award, the Rochester Top 100 Award, the R&D Magazine R&D100 Award, and the Rochester Business Ethics Award.

Prior to founding QED, Golini was involved in the development, management and commercialization of new technologies related to the manufacture of precision optics. He managed the research program at the Center for Optics Manufacturing (C.O.M.) at the University of Rochester from 1992–1996, and worked on large optics manufacturing and R&D at Itek Optical Systems in Lexington, Mass., from 1986–1992.

Golini is the author of many technical publications, has assisted in conference and technical session planning, and has served as a technical referee for the Optical Society of America (O.S.A.), the Society of Photographic Instrumentation Engineers, the American Society for Precision Engineering and the U.S. Department of Energy. He is a former president of the Rochester chapter of the O.S.A., and is named on seven U.S. patents. In Mr. Golini was named an Ernst & Young Entrepreneur of the Year®, and in 2003, selected as a Small Business Administration Rochester Small Business Person of the Year finalist.

B.S., Optics, University of Rochester M.S., Electro-Optics, Tufts University

ELISABETH HAGER, Lecturer in Entrepreneurship

Dr. Hager is founder, chairman and C.E.O. of Balan Biomedical, a medical and consumer health intelligence company that brings the voice of physicians and patient to the design and development of medical products. She is a board-certified neuropsychiatrist and served as board chairman and acting C.E.O. of the Rochester Community Individual Practice Association, a 2,700-physician independent practice association and also served as president of the Monroe County Medical Society and president of the High Tech Business Council.

Her success as an entrepreneur includes founding Adroit Research Solutions Inc, a global clinical trials management organization. Prior to founding Balan Biomedical Inc., Dr. Hager served as C.E.O. of GentCorp Ltd., where she was responsible for building an innovation laboratory for Mr. Wilson Greatbatch, inventor of the first successfully implanted cardiac pacemaker.

B.A. Chemistry,
Hope College
M.D.,
University of Missouri–Columbia
M.M.M.,
Tulane University

DAVID HESSLER, Lecturer in Entrepreneurship

Mr. Hessler is an entrepreneurial business executive experienced in both operating management and in private equity financing. He has management experience in both large and small technology businesses, including as C.E.O. and business owner. In addition, he has financing transactional experience as a principal of a small venture capital fund and as managing director of two middle market investment-banking firms.

Hessler is currently entrepreneur-in-residence at High Tech Rochester (HTR), specializing in technology commercialization and start-up financing. He heads HTR's capital readiness program, and is involved in the mentor capital program.

Hessler is also currently chief financial officer of PharmaNova Inc., a privately held, specialty drug development company in Rochester, N.Y. PharmaNova was founded on the re-purposing and enhancement of known drugs, and is successfully building on its initial success in sublicensing a valuable patent secured from the University of Rochester

In addition to his undergraduate and graduate education, he received additional training at the NASBIC Venture Capital Training Institute and the Xerox/Harvard Executive Program (Exeter).

Hessler has held National Association of Securities Dealers (N.A.S.D.) Series 63, Series 7 and Series 24 securities licenses.

In his community, Hessler is a founding member of the Rochester Venture Capital Group and the Rochester Angel Network. He served as a delegate to the 1995 White House Conference on Small Business and serves on the boards of several Rochester, N.Y., non-profit organizations.

B.S., Mechanical Engineering, Clarkson University M.S., Engineering, University of Michigan M.B.A. (with honors), University of Michigan

VINCENT W. HOPE, Lecturer in Marketing

Mr. Hope is a specialist in leveraging customer knowledge, with expertise in strategic planning, market research and integrated infobased marketing..

He has served dozens of clients including Apple, Bank One, Disney, GM, I.B.M., Kellogg's, Kodak, Matsushita, Mitsubishi, Procter & Gamble, Sony, Sprint, 3M and Xerox. He works with mid-market and start-

up firms to help focus ahead of shifting market opportunities.

Hope served as director of customer knowledge at the database marketing arm of Acxiom Corp., working in consumer privacy and "Smart Marketing" services for the agency's clientele. In the 1990's, Hope created the office of Strategic Research at the head-quarters of the American Society for Quality, where his team earned Baldrige Award recognition for customer focus, business metrics and bottom-line impact.

Early in his career, Hope grew and then led a primary market research firm, designing proprietary services for media communications, entertainment and publishing industries.

B.S., Psychology, Denison University M.B.A., Finance, Rochester Institute of Technology

DENNIS KESSLER, Edward J. and Agnes V. Ackley Executive Professor of Entrepreneurship

Professor Kessler is co-owner of Kessler Restaurants LLC, a Rochester, N.Y.-based owner and operator of 21 Burger King and 41 Friendly's restaurants. Kessler has 27 years experience in restaurant ownership, real estate and human resource development. He employs about 3,000 workers in central and western New York State and is the largest Friendly's franchise restaurant owner in the country. He has led a number of successful start-up companies and is a member of the Council of Advisors for Gerson Lehrman Group Inc., an international association of academic and industry thought leaders consulting for leading investment professionals worldwide.

Kessler is a member of the board of trustees of the University of Rochester Medical Center and The Boy Scouts of America, and serves as an advisor to local law enforcement agencies on matters pertaining to business.

B.S.,
City University of New York
M.A., Sociology,
John Jay College of Criminal Justice
M.S.L.,
Yale University Law School

GREGG LEDERMAN, Lecturer in Marketing

Mr. Lederman is the founder of Brand Integrity Inc. and co-creator of the Achieving Brand IntegrityTM process. With over 15 years of experience as a business and marketing strategy professional, Lederman is an entrepreneur who has owned and operated several businesses in the Rochester area prior to founding Brand Integrity Inc.

Brand Integrity focuses on facilitating senior management teams to achieve alignment and consensus in regards to an "ultimate business strategy," the brand strategy, and creating actionable ways to live it internally through people and processes. Brand Integrity Inc. works with leadership to achieve employee "buy-in" to the brand strategy to ensure sound execution and to establish accountability for performance, which in turn leads to increases in employee productivity, loyalty among existing customers, and greater sales to new customers. Lederman has crafted and implemented organization-wide and productspecific brand strategies with many of today's leading companies including Wegmans Food Markets Inc., Hallmark Cards Inc., Erickson Communities, PAETEC Communications Inc., Corning Incorporated, Duke Energy, Frito-Lay and the American Red Cross.

Throughout the year, Lederman delivers keynote interactive presentations at various conferences across the country. Lederman is a board member with the Learning Disabilities Association, the Genesee Valley Trust Advisory Board, and the Simon School Alumni Advisory Council.

B.S., Ithaca College School of Business M.B.A., University of Rochester

ROBERT M. PLACE, Lecturer in Business Law

Mr. Place has been a practicing attorney for 20 years and utilizes this experience in teaching for the University of Rochester. He taught social studies at the junior and senior high school level for four years before attending law school at Syracuse University. He is a partner in the law firm of Place & Arnold, a general practice which represents local municipalities, real estate, matrimonial, bankruptcy and estate clients. His varied legal experience gives students a practical understanding of business law.

A.S., Liberal Arts,
Monroe Community College
B.S., U.S. and European History,
S.U.C. at Oneonta
M.S., Social Science Education,
S.U.C. at Oneonta
J.D.,
Syracuse University

IRFAN SAFDAR, Lecturer in Finance

Professor Safdar's research interests and working research papers include "The Rising Trend in Idiosyncratic Volatility," "ARCH/GARCH Modeling and Volatility Forecasting," "Stock Return Predictability" and "Earnings Management Due to Stock Option Exercise."

Previously, he worked as an investment analyst at Solomon Smith Barney, a bulge bracket investment bank. Also, he led a regional economic impact study for a major ferry transportation project between Rochester, N.Y.

and Toronto, Canada. His teaching interests include asset pricing, risk management and portfolio analysis.

B.S., Physics,
Haverford College
M.S., Finance,
Boston College
M.S., Applied Statistics
University of Rochester
M.B.A.,
University of Rochester

LEONARD SCHUTZMAN, Executive Professor of Business Administration

Professor Schutzman held a variety of senior executive positions at PepsiCo for 20 years. Most recently, he served as a senior vice president and treasurer and was responsible for the worldwide financing activity. He served as senior vice president/finance at several of PepsiCo's business units, including Taco Bell, Frito Lay, and Pepsi Cola International.

Schutzman has served on 10 corporate boards. He is a member of the Executive Advisory Committee of the William E. Simon Graduate School of Business Administration and is a trustee of the Queens College Foundation.

B.A., Queens College M.B.A., University of Rochester

PAUL F. SHANAHAN, Lecturer in Business Law

Mr. Shanahan is a trial lawyer admitted to practice law before all federal and state courts in New York State and the District of Columbia. He maintains an active statewide practice with emphasis on commercial and civil litigation. Mr. Shanahan has published various articles in the *Albany Law Review* and the *International Practitioner's Notebook*. He has lectured extensively to legal and professional groups, speaking on a number of topics concerning the civil justice system.

Shanahan is a three-time recipient of the President's Distinguished Service Award by the New York State Trial Lawyers Association. He is a founding member of the New York Trial Lawyers Academy and a member of the American Board of Trial Advocates. He has served as both an officer and director of the New York State Trial Lawyers Association.

B.S. (cum laude), Management Law and Economics,

Rensselaer Polytechnic Institute J.D., Albany Law School of Union University (Member, *Albany Law Review*)

BOB TOBIN, Lecturer in Entrepreneurship

Mr. Tobin's current position is Entrepreneurin-Residence at the University's Center for Entrepreneurship as well as Associate Director of the Center.

Prior to the University, he was president and C.E.O. of Tobin & Associates Inc., an information technology services firm that was established in 1987. Over the next 20 years, the company grew from six employees to over 140, while extending the core competencies and capabilities to better meet the evolving technical requirements of its clients.

Tobin & Associates Inc. was a seven-time recipient of the Rochester Top 100 Award and also received the Quality First Award from Eastman Kodak Company. Tobin & Associates Inc. was also awarded the Empire State Employer Recognition Award, earning statewide praise for its proactive employment efforts on behalf of physically challenged individuals.

In addition to running a highly successful information technology firm, Tobin is very active in the Rochester community. He was an inaugural member of the Entrepreneurial Partnership of Nazareth College, a member of the Rochester Rehabilitation Center Board, board member of the Center for Information Services (a nonprofit IT collaboration project) and a member of the finance committee for the Nazareth Schools. He is past president of the Small Business Council of the Greater Metro Rochester Chamber of Commerce, past board president of the Rochester Rehabilitation Center and past president of Prevention Partners, a drug use prevention and education agency.

Tobin was named Small Business Person of the Year by the Small Business Council of the Greater Metro Rochester Chamber of Commerce and Citizen of the Year by the Penfield (N.Y.) Lions Club.

B.A., Sociology, Seton University

FRANK C. TORCHIO, Lecturer in Finance and Economics

Mr. Torchio is the president of Forensic Economics Inc., located in Rochester, N.Y. He founded Forensic Economics in 1989. Torchio is the 1991 Rosenthal Fellow at the University of Rochester and teaches courses in finance and economics at the Simon School.

For over 18 years, Torchio has consulted on numerous litigation assignments pertaining to financial valuations, regulatory economics, transfer pricing, and analysis of stock price responses to public information. His assignments include the Cendant, Enron and Worldcom securities litigations, and the lawsuits arising out of the recent private-equity acquisitions including the Kinder Morgan transaction and the Clear Channel transaction.

Torchio has testified at trial and numerous times in depositions and at arbitrations.

His areas of expert testimony include business valuation, investment portfolio analysis, damages arising from breach of contract, and damages in securities fraud lawsuits. He has coauthored an article with the late Simon School Professor Michael J. Barclay about the trading models used for estimating damages in securities lawsuits. The article is published in Duke University School of Law's Law and Contemporary Problems.

Torchio has passed the Level III examination of the chartered financial analyst (CFA®) program of the CFA Institute and has been awarded the CFA® charter.

B.A., Mathematics, Niagara University M.B.A., University of Rochester

THOMAS TRIBUNELLA, Lecturer in Accounting

Professor Tribunella's teaching and research interests are in the fields of accounting and information systems. He has published papers related to markup languages such as XML and XBRL, open source accounting systems, and technology's effect on productivity. He has also won four best paper awards at academic conferences. Examples of his publication appear in the following outlets, among others: Journal of Information Systems, The CPA Journal, The Review of Business Information Systems, Journal of Global Information Management and Journal of Business and Economics Research.

Tribunella worked in industry as an auditor and accountant before beginning a career in academia. He has been on the faculty at the Rochester Institute of Technology, SUNY Institute of Technology, SUNY Oswego and SUNY Geneseo. He is currently teaching Accounting Information Systems, Management Information Systems, Auditing and Information Systems, and Cost Accounting.

Ph.D., Information Science, State University of New York at Albany M.B.A., Accounting, Rochester Institute of Technology B.B.A., Accounting, Niagara University Certified Public Accountant, New York State License

MARK W. WILSON, Lecturer in Entrepreneurship

Mr. Wilson founded Initiatives Consulting L.L.C. in 1997 to help clients turn technical ideas into new products and companies.

Initiatives Consulting has created business plans, marketing support, and road show coaching that has been instrumental in starting six companies, raising several million dollars of seed money, and launching two new medical devices. Since 2004, Wilson has taken nearly 150 teams through an intense workshop to jump-start their technology-based product

ideas. Over the past three years, Initiatives has been providing outsourced design, development and testing services to a mid-sized company; including a proprietary syringe-product with market-leader position and a I.V. catheter-care product just receiving 510(k) clearance.

Wilson has conducted market and competitive research, recommended pricing strategies and business models and directed sales training and business development endeavors. He has been commissioned for hundreds of conceptual sketches. He has created cartoons, video storyboards and marketing collateral for a variety of technology and product areas.

With diverse roles prior to Initiatives in product design, process engineering, optical tooling, lean manufacturing and automation, Wilson has been involved in the creation and launch of five new medical device platforms currently generating more than \$1 billion in annual sales. As a project manager, Wilson has installed over \$12 million in capital. He has over eight years engineering management experience leading groups of up to 70 resources and budgets to \$3.5 million.

B.S., Mechanical Engineering, Rensselaer Polytechnic Institute M.S., Mechanical Engineering, Rensselaer Polytechnic Institute

REQUIREMENTS AND CORE-COURSE CHARTS

To earn the Master of Business Administration degree, a student must complete 67 credit-hours of study (64 credit-hours for part-time study) with a 3.0 grade-point average. Full-time M.B.A. candidates must successfully complete a Communicating Business Decisions course sequence and the Simon VISION Program.

The M.B.A. curriculum consists of nine required core courses, plus a Communicating Business Decisions course sequence over three quarters (full-time students only). Additionally, 11 electives are required.

Although not required, students may complete a concentration. Most opt for at least one and, in many cases, two. Concentrations permit students to develop expertise in the following areas:

- Accounting and Information Systems
- Business Environment and Public Policy
- · Business Systems Consulting
- Competitive and Organizational Strategy
- Computers and Information Systems
- Corporate Accounting

- Electronic Commerce
- Entrepreneurship
- Finance
- · Health Sciences Management
- International Management
- Marketing
- Operations Management—Manufacturing
- Operations Management—Services
- Public Accounting

Because of the increasing reliance managers place on information technology, knowledge of and a substantial ability to use computers is integral to the Simon education.

Much of the academic work in the M.B.A. program will rely on computer-based analysis and computer-assisted presentations. Upon entry to the program, faculty will expect students to have a working knowledge of spreadsheet and word-processing software. The programs most widely used are Microsoft Excel and Access. Most of the core curriculum and several elective courses require significant computer use.

CORE COURSES

ACC 401. Corporate Financial Accounting

CIS 401. Information Systems for

Management

FIN 402. Capital Budgeting and Corporate

Objectives

GBA 411. Framing and Analyzing Business

Problems 1

GBA 412. Framing and Analyzing Business

Problems 2

MKT 402. Marketing Management

OMG 402. Operations Management

STR 401. Managerial Economics

STR 403. The Economic Theory of

Organizations

In addition, full-time M.B.A. students are required to take the Communicating Business Decisions course sequence.

First-Year Mandatory Core-Course Sequence for Full-Time M.B.A. September Entrants

FALL QUARTER	WINTER QUARTER	SPRING QUARTER
September-December	January–March	March–June
ACC 401* Corporate Financial Accounting	GBA 412 Framing and Analyzing Business Problems 2	STR 403 The Economic Theory of Organizations
STR 401* Managerial Economics	MKT 402 Marketing Management	CIS 401* Information Systems for Management
FIN 402 Capital Budgeting and Corporate Objectives	OMG 402 Operations Management	Elective
GBA 411* Framing and Analyzing Business Problems 1	Elective	Elective
MGC 401 (Module I) Communicating Business Decisions	MGC 402 (Module II) Communicating Business Decisions	MGC 403 (Module III) Communicating Business Decisions

Total Credit Hours: 16

Total Credit Hours: 13

Total Credit Hours: 14

Notes: Courses carry three credit-hours unless otherwise noted. Electives are listed in course descriptions beginning on page 27 of this guide.

*Three credit-hour lecture plus one credit-hour lab

First-Year Mandatory Core-Course Sequence for Full-Time M.B.A. January Entrants

WINTER QUARTER	SPRING QUARTER	SUMMER QUARTER
January–March	March-June	June-August
ACC 401* Corporate Financial Accounting	GBA 412 Framing and Analyzing Business Problems 2	OPTION A STR 403 The Economic Theory of Organizations
STR 401* Managerial Economics	MKT 402 Marketing Management	CIS 401* Information Systems for Management
FIN 402 Capital Budgeting and Corporate Objectives	OMG 402 Operations Management	Elective
GBA 411* Framing and Analyzing Business Problems 1	Elective	OPTION B** Summer Internship
MGC 401 (Module I) Communicating Business Decisions	MGC 402 (Module II) and MGC 403 (Module III) Communicating Business Decisions	

Total Credit Hours: 16

Total Credit Hours: 14

Total Credit Hours Can Vary

Notes:

Courses carry three credit-hours unless otherwise noted. Electives are listed in course descriptions beginning on page 27 of this guide.

Part-Time M.B.A. Core-Course Offerings**

(For an updated listing, see the Simon Information Guide 2009–2011 at www.simon.rochester.edu after December 2009.)

	FALL QUARTER	WINTER QUARTER	SPRING QUARTER	SUMMER QUARTER
	September–December	January–March	March–June	June-August
ACC 401* Corporate Financial Accounting		1		1
FIN 402 Capital Budgeting and Corporate Objectives	√		√	
STR 401* Managerial Economics	✓	✓	✓	
GBA 411* Framing and Analyzing Business Problems 1		√		✓
CIS 401* Information Systems for Management	✓	√		✓
MKT 402 Marketing Management	✓		✓	
OMG 402 Operations Management	✓		✓	
STR 403 The Economic Theory of Organizations		1		✓
GBA 412 Framing and Analyzing Business Problems 2	✓		√	

Notes:

Courses carry three credit-hours unless otherwise noted. Electives are listed in course descriptions beginning on page 27 of this guide.

^{*}Three credit-hour lecture plus one credit-hour lab

^{**}The U.S. Immigration and Naturalization Service requires enrollment of international students for at least one full academic year (three quarters) before eligibility is granted within the United States for paid, off-campus employment, including an internship. Participation in Simon's English Language and U.S. Culture (E.L.U.S.C.) Program is one option that may fulfill this particular requirement and requires approval by the Admissions Committee.

^{*}Three credit-hour lecture plus one credit-hour labor

^{**}Offerings are tentative and subject to change

ACCOUNTING AND INFORMATION SYSTEMS (AIS)

(6 courses)

Given the close working relationship between the accounting function and information technology in organizations, the School offers a joint concentration in Accounting and Computers and Information Systems. The concentration provides thorough training in both areas.

Required core courses, plus six other courses. At least four must be selected from this list:

ACC 410.	Accounting for Management and
	Control
ACC 411.	Financial Statement Analysis
ACC 438.	Auditing II—Auditing and
	Information Systems
CIS 413.	The Economics of Information
	Management
CIS 415.	Business Process Analysis and
	Design (ECM 415)
CIS 416.	Advanced Information

The other **two** may be selected from this list:

Technology (ECM 416)

,
Auditing
Taxes and Business Strategy
Financial Reporting I
Financial Reporting II
International Financial Statement
Analysis
Financial Information Systems
(FIN 446)
Advanced Topics in Database
Design
Corporate Finance

BUSINESS ENVIRONMENT AND PUBLIC POLICY (BPP)

(4 courses)

Business success requires an understanding of the economic environment in which a firm operates. The Business Environment and Public Policy concentration provides the skills required to achieve this understanding.

Required core courses, plus **four** other courses. At least **two** of the four must be selected from this list:

BPP 426.	Macroeconomics
BPP 431.	Legal and Tax Considerations of
	New Ventures (ENT 431)
BPP 440.	Evolving Medical Markets (HSM
	440)
BPP 442.	International Economics and
	Finance (FIN 442)
FIN 430.	Financial Institutions

The other **two** may be selected from this list:

STR 422.	Strategic Decision Making: Theory
	and Practice
STR 423.	Pricing Policies (MKT 414)
OFFITS 4 6 4	3.5

STR 424. Managing Human Resources STR 425. Organization of Industry and Markets

STR 426. Property Rights and the Law

BUSINESS SYSTEMS CONSULTING

(5 courses)

This concentration appeals to students seeking an opportunity to use their skills in new ways, in environments that promote free thinking, and present extreme challenges while making a real impact.

The Simon School concentration in Business Systems Consulting offers a cutting-edge, highly focused program designed to equip students with the skills and experience necessary to excel in the business systems consulting enterprise. While students will be exposed to a variety of career possibilities during the course of their studies, most students are likely to assume a position in the business systems practice of one of the major consulting firms.

Required core courses, plus **five** other courses. At least **two** must be selected from this list:

CIS 415.	Business Process Analysis and	
	Design (ECM 415)	
CIS 461.	Strategy and Business Systems	
	Consulting Practicum (OMG 461)	
or		
OMG 415. Process Improvement		

The other **three** electives must be selected from this list:

ACC 438. Auditing II—Auditing and

Information Systems

CIS 416.	Advanced Information
	Technology (ECM 416)
CIS 418.	Business Modeling and Analysis
	for Management
CIS 440.	Electronic Commerce Strategy
	(ECM 440)
CIS 446.	Financial Information Systems
	(FIN 446)
ECM 437.	Marketing on the Internet
	(MKT 437)
MKT 436.	Database Marketing (ECM 436)

MKT 436. Database Marketing (ECM 436) OMG 411. Supply Chain Management OMG 412. Service Management

OMG 413. International Manufacturing and Service Strategy

OMG 415. Process Improvement OMG 416. Project Management

OMG 437. Managing Health Care Operations (HSM 437)

STR 421. Economics of Competitive Strategy

COMPETITIVE AND ORGANIZATIONAL STRATEGY (STR)

(5 courses)

The Competitive and Organizational Strategy concentration builds on the economic fundamentals introduced in STR 401 and STR 403. Its cross-functional and integrative curriculum provides a sound basis for the evaluation and implementation of a broad range of business strategies and policies. Topics included are: policies internal to the firm such as compensation, performance evaluation, job design and aspects of hiring; strategic interaction among industry competitors, including pricing and advertising; and the influence of external factors such as the regulatory and macroeconomic environments.

Skills offered by the STR curriculum will develop the student's ability to identify the root causes of business problems and sources of new opportunities. The student will respond to these problems and opportunities with innovative solutions and strategies based upon the School's economics-based approach to management. The concentration holds particular interest to those seeking careers in consulting, general management or industry analysis, as well as those seeking an integrative complement to concentrations in other functional areas. Particular emphasis goes to developing the student's capacity to deal with unstructured business situations.

Required core courses, plus **five** other courses. At least **three** must be selected from this list:

STR 421.	Economics of Competitive
STR 422.	Strategy Strategic Decision Making: Theory and Practice
STR 423. STR 424. STR 431. STR 440.	Pricing Policies (MKT 414) Managing Human Resources Practicum on Competitive Strategy Organizational Governance and Control

The other two may be selected from this list:

ACC 411.	Financial Statement Analysis
BPP 426.	Macroeconomics
BPP 440.	Evolving Medical Markets (HSM
	440)
BPP 442.	International Economics and
	Finance (FIN 422)
CIS 413.	The Economics of Information
	Management
CIS 415.	Business Process Analysis and
	Design (ECM 415)
CIS 461.	Strategy and Business Systems
	Consulting Practicum (OMG 461)
FIN 413.	Corporate Finance
FIN 423.	Corporate Financial Policy and
	Control
FIN 433.	Cases in Finance

GBA 435. Negotiation Theory and Practice:

Bargaining for Value (ENT 435)

	Management of Technology
MKT 435.	Distribution Channels and
	Salesforce Management
MKT 441.	Brand Management Workshop
MKT 449.	Global Marketing Strategy
OMG 412.	Service Management

OMG 413. International Manufacturing and Service Strategy

STR 425. Organization of Industry and Markets

STR 426. Property Rights and the Law STR 427. Organizational Behavior

STR 430. Health Sciences Management and Strategy (HSM 430)

STR 441. Executive Strategy Seminar

COMPUTERS AND INFORMATION SYSTEMS (CIS)

(4 courses)

The Computers and Information Systems area enjoys international recognition for its innovative research and teaching programs. The CIS concentration, taken by itself or combined with another functional concentration such as accounting, electronic commerce, finance or operations management, prepares students to manage the broad array of information-systems issues that arise in every organization or to act as successful management consultants.

The program focuses on the leading approaches used in the design and development of effective business processes that leverage information technology. It also emphasizes the major business issues that arise in choosing information technologies, designing information processes for improving the effectiveness of specific applications and using enterprise information technology for gaining competitive benefits. The concentration develops the necessary skills for managing in the current environment of rapid technological evolution, increased competition and global markets. The placement of Simon CIS students in retail or investment banks, Fortune 500 manufacturers and international consulting companies has been very strong. Typical CIS careers include electronic commerce leadership, the management of corporate information systems, business process re-engineering and general management consulting.

In the required courses, students learn how to analyze the fundamental subjects of business information and decision processes in organizations, and the resulting economic and technological trade-offs. In the advanced electives, students can study various aspects of electronic commerce, business process design, advanced information technologies, financial-information systems and business data communications systems.

A technical background prior to entering the M.B.A. program is not a prerequisite to success in the CIS concentration.

The faculty in this area make use of computers in the curriculum and in elective courses and also allow their use in some exams.

Required core courses, plus:

CIS 413. The Economics of Information Management

At least one of:

CIS 415. Business Process Analysis and Design (ECM 415) CIS 416. Advanced Information Technology (ECM 416)

Remaining **one** or **two** courses selected from this list:

ACC 438. Auditing II—Auditing and Information Systems
CIS 418. Business Modeling and Analysis for Management
CIS 440. Electronic Commerce Strategy

(ECM 440) CIS 446. Financial Information Systems (FIN 446)

CIS 512. Advanced Topics in Database
Design

ECM 437. Marketing on the Internet (MKT 437)

MKT 436. Database Marketing (ECM 436)

CORPORATE ACCOUNTING (ACC)

(5 courses)

Corporations actively recruit M.B.A. accounting majors for positions in the offices of controller, treasurer and internal auditing, as well as in accounting departments. Many corporate finance positions also require strong corporate accounting backgrounds.

Required core courses, plus:

ACC 411. Financial Statement Analysis FIN 411. Investments

FIN 413. Corporate Finance

Plus **two** courses selected from this list:

ACC 417. Auditing

ACC 418. Taxes and Business Strategy

ACC 423. Financial Reporting I

ACC 424. Financial Reporting II

ACC 431. International Financial Statement Analysis

FIN 423. Corporate Financial Policy and Control

ELECTRONIC COMMERCE (ECM)

(5 courses)

The Simon School introduced a concentration in Electronic Commerce in September 1999. Managing in this rapidly evolving environment requires an understanding of the technology infrastructure needed for e-commerce and the new business models that leverage on the special capabilities of the Internet. Students learn state-of-the-art tools for supporting the marketing, logistical, financial and service-delivery aspects of doing business online. The concen-

tration prepares students to create, manage, direct and analyze e-commerce initiatives. Courses in this concentration combine ideas, cases, projects and guest lectures by Internet entrepreneurs.

Required core courses, plus:

ECM 437. Marketing on the Internet (MKT 437)

ECM 440. Electronic Commerce Strategy (CIS 440)

Plus at least one from the Marketing electives:

MKT 412. Marketing Research

MKT 433. Advertising and Sales Promotion

MKT 435. Distribution Channels and Salesforce Management

ECM 436. Database Marketing (MKT 436)

Plus at least **one** from the Information Technology electives:

ECM 415. Business Process Analysis and Design (CIS 415)

ECM 416. Advanced Information Technology (CIS 416)

CIS 446. Financial Information Systems (FIN 446)

One elective can be from the following:

OMG 411. Supply Chain Management GBA 423. New Venture Management and Entrepreneurship (ENT 423)

ENTREPRENEURSHIP (ENT)

(5 courses)

The Simon School is committed to the teaching of entrepreneurship. The Entrepreneurship concentration allows the student to draw from a variety of carefully selected courses to become a business generalist, well versed in organizing and managing resources. Graduates with this concentration have started their own ventures or have pursued "intrapreneurial" careers with major corporations. Students often combine this concentration with finance or marketing to further enhance their educational base. This is especially true for those pursuing investment banking/M&A where the entrepreneurship knowledge can be very useful.

Required core courses, plus:

ENT 422. Generating and Screening Entrepreneurial Ideas (GBA 422)

Plus **two** of:

ENT 423. New Venture Development and Managing for Long Term Success (GBA 423)

or

ENT 425. Technical Entrepreneurship and

ENT 444. Entrepreneurial Finance

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Plus two courses selected from this list:

- ACC 411. Financial Statement Analysis ENT 424. Projects in Entrepreneurship
- ENT 426. Technology Transfer and Commercialization
- ENT 427. Practicum in Technology Transfer and Commercialization
- ENT 431. Legal and Tax Considerations of New Ventures
- ENT 432. Basic Business Law
- ENT 435. Negotiation Theory and Practice: Bargaining for Value (GBA 435)
- FIN 422. Special Topics in Finance—Real Estate
- FIN 433. Cases in Finance
- MKT 412. Marketing Research
- MKT 414. Pricing Policies (STR 423)
- OMG 461. Strategy and Business Systems Consulting Practicum
- STR 421. Economics of Competitive Strategy

FINANCE (FIN)

(5 courses)

The Simon School is best known for its research and scholarship in the area of finance. This concentration provides students with state-of-the-art techniques for financial analysis. Students learn to formulate and solve important corporate-finance problems and to obtain information from the many databases on financial markets.

Required core courses, plus:

- FIN 411. Investments
- FIN 413. Corporate Finance

Plus three courses selected from this list:

- ACC 411. Financial Statement Analysis
- ACC 423. Financial Reporting I
- ACC 424. Financial Reporting II
- ACC 431. International Financial Statement Analysis
- APS 420. Applied Time Series Analysis
- BPP 426. Macroeconomics
- FIN 423. Corporate Financial Policy and Control
- FIN 424. Options and Futures Markets
- FIN 430. Financial Institutions
- FIN 433. Cases in Finance
- FIN 434. Investment Management and Trading Strategies
- FIN 442. International Economics and Finance (BPP 442)
- FIN 446. Financial Information Systems (CIS 446)
- FIN 448. Fixed-Income Securities
- FIN 511. Advanced Financial Economics
- FIN 532. Advanced Topics in Capital Markets
- FIN 534. Advanced Topics in Corporate Finance
- HSM 431. Applications of Corporate Finance and Governance to Health Care
- STR 440. Organizational Governance and Control

HEALTH SCIENCES MANAGEMENT (HSM)

(5 courses)

The Health Sciences Management concentration draws on the Simon School's proven strengths and directs them to a dynamic industry. The Simon School's concentration focuses primarily on two management issues: ongoing operations and strategic planning. This is in contrast to the traditional Master of Public Health programs which generally focus on public policy issues. The program especially suits future health sciences consultants and front-line managers in health maintenance organizations, hospitals, insurance companies and pharmaceutical firms.

Required core courses, plus **five** additional courses as follows:

At least two of:

- HSM 420. Business Economics of the Health Care Industry
- HSM 430. Health Sciences Management and Strategy (STR 430)
- HSM 431. Applications of Corporate Finance and Governance to Health Care
- HSM 437. Managing Health Care Operations (OMG 437)
- HSM 440. Evolving Medical Markets (BPP 440)

The remaining courses can be taken from the list below:

- ACC 411. Financial Statement Analysis CIS 415. Business Process Analysis and
- Design (ECM 415)
- HSM 425. Managerial Accounting for Health Care Organizations
- OMG 412. Service Management
- PM 425. Health Economics* or
- PM 436. Health Policy*
- PM 484. Medical Decisions and Cost-Effectiveness Analysis*
- STR 421. Economics of Competitive Strategy
- STR 424. Managing Human Resources

Additionally, **one** of the remaining courses may be taken from the following, provided the project is health care related:

- MKT 441. Brand Management Workshop
- OMG 415. Process Improvement
- STR 431. Practicum on Competitive Strategy

*Courses taught at the University of Rochester School of Medicine and Dentistry, Department of Community and Preventive Medicine

INTERNATIONAL MANAGEMENT

The International Management concentration gives students opportunities to apply various disciplines to international markets. Differences in legal environments, currencies and workplace practices among countries provide both challenges and problems for businesses operating in the global marketplace.

One of two options will satisfy the concentration. The **International Management** option includes one required course and three electives. The **International Management Exchange** option includes one required course, one elective and one term (minimum of six credits) in an approved International Exchange Program.

INTERNATIONAL MANAGEMENT (ITL)

(4 courses)

Required core courses, plus:

FIN 442. International Economics and Finance (BPP 442)

Plus three courses selected from this list:

- ACC 431. International Financial Statement Analysis
- BPP 426. Macroeconomics
- GBA 435 Negotiation Theory and Practice: Bargaining for Value (ENT 435)
- GBA 486. Management of Technology (ENT 486)
- GBA 494. Foreign Language Transfer Credit (three credits)
- MKT 449. Global Marketing Strategy
- OMG 413. International Manufacturing and Service Strategy
- STR 421. Economics of Competitive Strategy
- STR 424. Managing Human Resources

INTERNATIONAL MANAGEMENT EXCHANGE (ITLE)

(Two courses at the Simon School, plus International Exchange Program. See p. 42)

FIN 442. International Economics and Finance (BPP 442)

Plus **one** course selected from this list:

- ACC 431. International Financial Statement Analysis
- BPP 426. Macroeconomics
- GBA 435. Negotiation Theory and Practice: Bargaining for Value (ENT 435)
- GBA 486. Management of Technology (ENT 486)
- GBA 494. Foreign Language Transfer Credit (three credits)
- MKT 449. Global Marketing Strategy
- OMG 413. International Manufacturing and Service Strategy
- STR 421. Economics of Competitive Strategy
- STR 424. Managing Human Resources

Plus **one** term in one of the approved International Exchange Programs (GBA 492—six credits; GBA 493—nine credits).

MARKETING (MKT)

(5 courses)

Marketing knowledge and skills have become a necessity in today's increasingly competitive global business environment. Regardless of the kind of business—consumer goods or industrial goods, financial services or the nonprofit sector—success depends on satisfying the customer better than one's competitors. The Marketing concentration at the Simon School prepares M.B.A. students for these challenges. Alumni with Marketing concentrations now hold key positions in marketing management, research and consulting. Specialized programs are offered to students interested in brand management. In addition, many students have combined marketing with another discipline to round out their education. Popular combinations include marketing/finance, marketing/operations management, and marketing/electronic commerce.

The Marketing curriculum emphasizes the integration of applications with theory. Applications are introduced via cases, experiential exercises, guest speakers and projects. Elective courses provide opportunities to pursue specific interests in marketing.

Required core courses, plus:

MKT 412. Marketing Research

Plus four elective courses from the following list. At least two of those elective courses must be from Group A.

Group A

MKT 414. Pricing Policies (STR 423) MKT 432. Product Planning and Development

MKT 433. Advertising and Sales Promotion MKT 435. Distribution Channels and Salesforce Management

Group B

HSM 440. Evolving Medical Markets (BPP 440)

MKT 431. Consumer Behavior

MKT 436. Database Marketing (ECM 436)

MKT 437. Marketing on the Internet (ECM 437)

MKT 441. Brand Management Workshop

MKT 442. Special Topics in Marketing

MKT 448. Brand Strategy Workshop

MKT 449. Global Marketing Strategy

MKT 451. Computation and Analysis of Advanced Quantitative Marketing Models

BRAND MANAGEMENT TRACK

(5 courses)

For those students wishing to become brand/product managers in either the consumer or industrial products markets or in financial services, a unique Brand Management Track is offered. Participation in the program requires taking MKT 412 (Marketing Research), MKT 441 (Brand Management Workshop) and choosing three courses out of:

MKT 414. Pricing Policies (STR 423) MKT 432. Product Planning and Development

MKT 433. Advertising and Sales Promotion MKT 435. Distribution Channels and Salesforce Management

MKT 448. Brand Strategy Workshop

OPERATIONS MANAGEMENT— MANUFACTURING (OMGM)

(4 courses)

Operations Management is concerned with the management of a firm's physical, financial and human resources with the objective of producing, distributing and selling goods and services. Operations Management has become increasingly important due to renewed interest in productivity and the utilization of operations for competitive advantage. Students may choose one of two tracks—manufacturing management or service management.

The manufacturing management track appeals to students preparing for a career in manufacturing or consulting. This track benefits those managing the manufacturing function, as well as those supporting it in finance, accounting and marketing. The manufacturing track provides training in the latest ideas about production management.*

The faculty in this area make use of computers in the core courses and in elective courses and also allow their use in exams.

Required core courses, plus:

OMG 411. Supply Chain Management

OMG 412. Service Management

OMG 413. International Manufacturing and Service Strategy

OMG 415. Process Improvement

OPERATIONS MANAGEMENT— SERVICES (OMGS)

(4 courses)

Operations Management is concerned with the management of a firm's physical, financial and human resources with the objective of producing goods and services. Operations management is becoming increasingly important due to renewed interest in productivity and the utilization of operations for competitive advantage. Students may choose one of two tracks—service management or manufacturing management.

The service management track appeals to students preparing for a career in service-oriented industries such as finance, consulting and retailing. We recommend this track for those targeting a career with line responsibilities or consulting. The service track will help students receive a general management perspective.*

Required core courses, plus:

OMG 413. International Manufacturing and Service Strategy

OMG 415. Process Improvement

Plus one of these courses:

OMG 412. Service Management OMG 437. Managing Health Care Operations (HSM 437)

Plus one course selected from this list:

CIS 415. Business Process Analysis and Design (ECM 415)

CIS 441. System Simulation (MSM 441) FIN 446. Financial Information Systems (CIS 446)

OMG 412. Service Management OMG 416. Project Management

*Experience has shown that students pursuing a career in Operations Management benefit from taking additional courses such as STR 424 (Managing Human Resources) or STR 427 (Organizational Behavior).

PUBLIC ACCOUNTING (CPA)

(13 courses*)

The Public Accounting concentration offers courses needed toward the requirements for the Uniform Certified Public Accounting (CPA) examination in New York and other states. Assuming that students have met certain undergraduate prerequisite requirements, this program has been designated by the New York State Education Department has fulfilling the 150 credit hour requirements for professional education programs in public accountancy. Students whose undergraduate programs do not satisfy all the assumed prerequisites will be advised of the additional courses that they must complete following a review of the undergraduate transcript. The New York State Department of Education will have final approval upon application for licensure.

Required core courses, plus:

ACC 410.	Accounting for Management and
	Control
ACC 411.	Financial Statement Analysis
ACC 417.	Auditing

ACC 418. Taxes and Business Strategy ACC 423. Financial Reporting I

ACC 424. Financial Reporting II ACC 433. Advanced Business Law

and Ethics (BPP 433)

ACC 436. Advanced Accounting Research

ACC 437. Basic Federal Income Tax Accounting

ACC 438. Auditing II—Auditing and Information Systems

BPP 432. Basic Business Law (ENT 432)

FIN 411. Investments

FIN 413. Corporate Finance

By fulfilling the Public Accounting concentration requirements, students will also fulfill the Finance concentration requirements and the Corporate Accounting concentration requirements.

^{*}This concentration requires 13 electives, 11 of which are included in the requirement for the full-time M.B.A. The final two courses necessary to complete this concentration are offered free of charge.

MASTER OF SCIENCE IN ACCOUNTANCY

Focused Graduate Training in Accountancy

The Master of Science in Accountancy program is designed for students who hold a bachelor's degree in business, economics or accounting and seek to pursue Certified Public Accounting (CPA) licensure. New York State, as well as most other states, has adopted a 150 credit hour educational requirement which can be satisfied with a combination of undergraduate and graduate courses. The courses listed below are those which are required for the M.S. in Accountancy degree. Assuming that students have met certain undergraduate prerequisite requirements, this program has been designated by the New York State Education Department as fulfilling the 150 credit hour requirements for professional education programs in public accountancy. Students whose undergraduate programs do not satisfy all the assumed prerequisites will be advised of the additional courses that they must complete following a review of their undergraduate transcript. The New York State Department of Education will have final approval upon application for licensure. The M.S. in Accountancy program can be completed in nine months of full-time study beginning in the fall. It is also offered on a part-time basis. A 3.0 grade point average is required for graduation.

ACC 411.	Financial Statement Analysis
ACC 417.	Auditing
ACC 423.	Financial Reporting I
ACC 424.	Financial Reporting II
ACC 433.	Advanced Business Law and
	Ethics (BPP 433)
ACC 436.	Advanced Accounting
	Research
ACC 437.	Basic Federal Income Tax
	Accounting
ACC 438.	Auditing II—Auditing and
	Information Systems
BPP 432.	Basic Business Law (ENT
	432)
MGC 401-3	Business
	Communication
Elective	Accounting or Business

MASTER OF SCIENCE IN BUSINESS ADMINISTRATION—FINANCE

Business

Elective

The Master of Science in Business Administration degree with a concentration in Finance is available as follows for full-time study:

- September Start: Students who have already earned an M.B.A. with a general management or non-finance focus, and need additional training in the finance area and/or are considering a career change.
- July Start: Students with a completed Bachelor's degree and a demonstrated quantitative aptitude.

Both options are available for part-time study.

Program Requirements (for those holding an M.B.A.)

The M.S. requires the completion of a minimum of 36 credit-hours. There are five required courses and eight courses which must be chosen from available electives. Students who study on a full-time basis can complete the program in nine months beginning in the fall. A 3.0 grade point average is required for graduation.

Required courses:

ACC 410.	Accounting for Management and
	Control
FIN 402.*	Capital Budgeting and
	Corporate Objectives (can be
	waived by area coordinator)
FIN 411.	Investments
FIN 413.	Corporate Finance
STR 403.	The Economic Theory of
	Organizations

Plus **eight** electives from the following:

ACC 411. Financial Statement Analysis

ACC 423.	Financial Reporting I
ACC 424.	Financial Reporting II
ACC 431.	International Financial Statement
	Analysis
APS 420.	Applied Time Series Analysis
APS 425.	Advanced Managerial Data
	Analysis
BPP 426.	Macroeconomics
CIS 418.	Advanced Business Modeling and
	Analysis Using Spreadsheets
FIN 423.	Corporate Financial Policy and
	Control
FIN 424.	Options and Futures Markets
FIN 430.	Financial Institutions
FIN 433.	Cases in Finance
FIN 434.	Investment Management and
	Trading Strategies
FIN 442.	International Economics and
	Finance
FIN 446.	Financial Information Systems
	(CIS 446)
FIN 448.	Fixed-Income Securities

Finance

Control

Advanced Financial Economics

Advanced Topics in Corporate

Organizational Governance and

FIN 511.

FIN 534.

STR 440.

Program Requirements (for those without a prior M.B.A.)

The M.S. requires the completion of 43 credithours. There are eight required core classes and six additional courses which must be chosen from available electives. Students who study on a full-time basis complete the program in 11 months, beginning in late July each

year. A 3.0 grade point average is required for graduation.

ACC 401. Corporate Financial Accounting

ACC 410. Accounting for Management and

Capital Budgeting and Corporate

Control

Required courses:

FIN 402.

	Objectives
FIN 411.	Investments
FIN 413.	Corporate Finance
GBA 461.*	Core Economics for M.S. Students
GBA 462.*	Core Statistics for M.S. Students
STR 403.	The Economic Theory of
	Organizations

Plus six electives from the following:

ACC 411.	Financial Statement Analysis
ACC 423.	Financial Reporting I
ACC 424.	Financial Reporting II
ACC 431.	
	Analysis
APS 420.	Applied Time Series Analysis
APS 425.	Advanced Managerial Data
	Analysis
BPP 426.	Macroeconomics
CIS 418.	Advanced Business Modeling and
	Analysis Using Spreadsheets
FIN 423.	Corporate Financial Policy and
	Control
FIN 424.	Options and Futures Markets
FIN 430.	Financial Institutions
FIN 433.	Cases in Finance
FIN 434.	Investment Management and
	Trading Strategies
FIN 442.	International Economics and
	Finance
FIN 446.	Financial Information Systems
	(CIS 446)
FIN 448.	Fixed-Income Securities
FIN 511.	Advanced Financial Economics
FIN 534.	Advanced Topics in Corporate
	Finance

^{*}Available only to M.S. students concentrating in Marketing and in Finance.

STR 440. Organizational Governance and

Control

MASTER OF SCIENCE IN BUSINESS ADMINISTRATION—GENERAL **MANAGEMENT**

The program requires completion of 12 classes. Nine of these are required core classes that cover the principles of finance, accounting, marketing, operations, information systems, managerial economics and data-driven managerial decision making. The three remaining classes are electives that students can choose according to their interest. A student pursuing the Master of Science in Business Administration—General Management on a full-time basis completes the program in three

^{*}Twelve courses are required if FIN 402 is waived by the area coordinator.

quarters. Part-time scheduling opportunities are also available. A 3.0 grade point average is required for graduation.

The core curriculum includes:

ACC 401.	Corporate Financial Accounting
CIS 401.	Information Systems for
	Management
FIN 402.	Capital Budgeting and Corporate
	Objectives
GBA 411.	Framing and Analyzing Business
	Problems 1
GBA 412.	Framing and Analyzing Business
	Problems 2
MKT 402.	Marketing Management
OMG 402.	Operations Management
STR 401.	Managerial Economics
STR 403.	The Economic Theory of
	Organizations

MASTER OF SCIENCE IN BUSINESS ADMINISTRATION—INFORMATION SYSTEMS MANAGEMENT

The Information Systems Management concentration appeals to professionals committed to careers in information systems and who need management expertise. The program emphasizes both management principles and an understanding of the modern technical aspects of information systems in an organization.

The concentration is offered on a full-time and part-time basis and requires the completion of a minimum of 39 credit-hours, corresponding to 12 courses. There are eight required courses and four courses to be chosen from nine possible electives. Students who study on a full-time basis complete the program in nine months beginning in the fall. A 3.0 grade point average is required for graduation.

Program Requirements

Requirements for the M.S. concentration in Information Systems Management:

The core curriculum includes:

CIS 401.*	Information Systems for
	Management
GBA 411.	Framing and Analyzing
	Business Problems 1
GBA 412.	Framing and Analyzing
	Business Problems 2
OMG 402.*	Operations Management
STR 401.	Managerial Economics

^{*}The area coordinator may permit substitution of an advanced OMG or CIS course if the student has substantial work experience.

The **Information Systems Management** concentration requires in addition to the core:

CIS 413.	The Economics of Information
	Management
CTC 41F	D ' D A 1 ' 1

CIS 415. Business Process Analysis and Design (ECM 415)

CIS 416. Advanced Information Technology (ECM 416)

plus **four** electives from the list of electives which follows.

Electives

ACC 401.	Corporate Financial Accounting
APS 420.	Applied Time Series Analysis
CIS 440.	Electronic Commerce Strategy
CTC 446	(ECM 440)
CIS 446.	Financial Information Systems (FIN 446)
FIN 402.	Capital Budgeting and Corporate Objectives
OMG 411.	Supply Chain Management
OMG 412.	Service Management
OMG 413.	International Manufacturing and
	Service Strategy
STR 403.	The Economic Theory of

MASTER OF SCIENCE IN BUSINESS ADMINISTRATION— MANUFACTURING MANAGEMENT or SERVICE MANAGEMENT

Organizations

These master's degree programs provide management training for individuals who wish to remain in manufacturing or service management. The programs can help operations managers and industrial or manufacturing engineers gain further expertise in operations management and stay current with the most recent developments in the field. They are designed for individuals involved in operations, in manufacturing or in service firms. More technical than the general M.B.A. degree, they may be earned by someone who already has an M.B.A. without an Operations Management concentration or by someone without an M.B.A. The programs require 12 courses of 39 credit-hours of study with a 3.0 grade-point average, and are offered on a fulland part-time basis.

Program Requirements

Requirements for M.S. concentrations in Manufacturing Management and Service Management:

The core curriculum includes:

CIS 401.*	Information Systems for
	Management
GBA 411.	Framing and Analyzing
	Business Problems 1
GBA 412.	Framing and Analyzing
	Business Problems 2
OMG 402.*	Operations Management
STR 401.	Managerial Economics

The **Manufacturing Management** concentration requires in addition to the core:

OMG 411.	Supply Chain Management
OMG 413.	International Manufacturing
	and Service Strategy

OMG 415.*	Process Improvement
OMG 416.*	Project Management

plus **three** electives from the list of electives below.

The **Service Management** concentration requires in addition to the core:

OMG 412. OMG 413.	Service Management International Manufacturing
OMG 415.*	and Service Strategy Process Improvement
OMG 416.	Project Management

plus **three** electives from the list of electives below.

Manufacturing Management and Service Management Electives:

ACC 401. Corporate Financial Accounting

APS 420.	Applied Time Series Analysis
CIS 415.	Business Process Analysis and
	Design (ECM 415)
CIS 416.	Advanced Information
	Technology (ECM 416)
CIS 440.	Electronic Commerce Strategy
	(ECM 440)
CIS 446.	Financial Information Systems
	(FIN 446)
FIN 402.	Capital Budgeting and Corporate
	Objectives
OMG 411.	Supply Chain Management
OMG 412.	Service Management

^{*}The area coordinator may permit substitution of an advanced OMG or CIS course if the student has substantial work experience.

STR 403. The Economic Theory of

Organizations

Note: Full-time students considering the Manufacturing Management Program must have a previous introductory course in operations management in order to be able to complete the program in three quarters: Fall, Winter and Spring.

MASTER OF SCIENCE IN BUSINESS ADMINISTRATION—MARKETING

Focused Graduate Training in Marketing

The Simon School one-year master's program in marketing was designed to equip students with the skills and experience necessary to excel in marketing jobs in a compact, highly focused program. Students are likely to take a job related to one of the program's three main emphases: advertising, marketing research, and sales.

Program Requirements

The full-time program begins with two fiveweek Foundations Courses that start in late July and finish in late August. Students take nine more classes during the regular academic year, three each during Fall, Winter, and Spring quarters. The program concludes in early June. Study is also offered on a part-time basis. A 3.0 grade point average is required for graduation. Students take the following courses to complete their degree. The M.S. Marketing has a set curriculum with no choice of electives available.

Required courses:

- ACC 401. Corporate Financial Accounting GBA 412 Framing and Analyzing Business
 - Problems 2
- GBA 461. Core Economics for M.S. Students (Foundations Course)
- GBA 462. Core Statistics for M.S. Students (Foundations Course)
- MKT 402. Marketing Management
- MKT 412. Marketing Research
- MKT 414. Pricing Policies (STR 423)
- MKT 433. Advertising and Sales Promotion
- MKT 436. Database Marketing (ECM 436)

plus two of the following courses:

- MKT 431. Consumer Behavior
- MKT 435. Distribution Channels and Salesforce Management
- MKT 437. Marketing on the Internet (ECM 437)
- MKT 442. Special Topics in Marketing

MASTER OF SCIENCE IN BUSINESS ADMINISTRATION—MEDICAL **MANAGEMENT**

Management Tools

The objective of the Simon School's master of science in business administration degree with a concentration in Medical Management is to provide physicians and medical professionals with management tools to enable them to independently manage their health care organizations. The Master's degree teaches practical business skills to enable them to formulate competitive strategy, develop quantifiable business plans and manage their operations and employees toward their desired

Logistics and Time Requirements

The medical management master's is specifically designed to accommodate the busy schedules of physicians and medical professionals. The program consists of 30 credits and is offered on a part-time basis only.

During a typical school quarter, the medical management student enrolls in one of the Simon School M.B.A. core classes that meet one night per week for ten weeks. During the same quarter, the student also takes a class on three separate weekends to cover the health care component of the module.

Curriculum

The curriculum is designed around four core areas of management that are especially relevant to health care:

· Development of business strategy and marketing plans;

- · Quantifying strategy through business plan development (using accounting, finance and spreadsheet skills);
- · Implementing strategy by efficiently managing operations; and
- Building efficient organizations for the long run, through intelligent work design, performance assessment and employee incentives.

The curriculum is presented in a unique format that delivers the necessary depth of core business material while simultaneously applying that material to the health care industry. This is accomplished through the pairing of Simon School core courses with health care management courses that develop applications of the core material. Each pair of courses (module) is delivered and taken simultaneously. The four modules that comprise the program are:

Module 1, Fall Quarter

Business Core Class:

HSM 450. Medical Management Economics, Accounting and Finance

Health Care Management Class: HSM 451. Health Care Marketing and Business Plan Development

Module 2, Winter Quarter

Business Core Class:

HSM 425. Managerial Accounting for Health Care Organizations

Health Care Management Class: HSM 452. Health Care Accounting and Finance

Module 3, Spring Quarter

Business Core Class:

OMG 402. Operations Management

Health Care Management Class: HSM 453. Health Care Operations

Module 4, Summer Quarter

Business Core Class:

STR 403. The Economic Theory of Organizations

Health Care Management Class: HSM 454. Designing and Optimizing Health Care Operations

Module 5, Fall Quarter

Health Care Management Class: HSM 455. Practicum in Medical Management

Health Care Management Class: HSM 456. Practicum in Medical Management 2

MASTER OF SCIENCE IN BUSINESS ADMINISTRATION—TECHNOLOGY TRANSFER AND COMMERCIALIZA-TION

The Technology Transfer and Commercialization concentration appeals to professionals committed to careers in technology transfer who need management expertise. The program emphasizes both management principles and an understanding of the latest issues and methods in the transfer and commercialization of technologies in universities and emerging venture settings. The concentration is offered on a full-time and part-time basis and requires the completion of a minimum of 39 credit hours, corresponding to 12 quarter courses. The program consists of six core courses, four required courses and two electives.

Program Requirements

Requirements for the M.S. concentration in Technology Transfer and Commercialization:

The core curriculum includes six courses:

ACC 401. Corporate Financial Accounting

FIN 402. Capital Budgeting and Corporate **Objectives**

GBA 411. Framing and Analyzing Business Problems 1

GBA 412. Framing and Analzying Business Problems 2

MKT 402. Marketing Management

STR 401. Managerial Economics

Two required courses:

ENT 426. Technology Transfer and Commercialization

ENT 427. Practicum in Technology Transfer and Commercialization

Two of the following three courses:

BPP 431. Legal and Tax Considerations of New Ventures (ENT 431)

ENT 422. The Role of Entrepreneurship in Value Creation

GBA 486. Management of Technology

Two electives from the following:

ACC 410. Accounting for Management and Control

ACC 411. Financial Statement Analysis

ACC 418. Taxes and Business Strategy

BPP 440. Evolving Medical Markets (same as HSM 440)

CIS 401. Information Systems for

Management The Economics of Information CIS 413.

Management

MKT 412. Marketing Research

MKT 414. Pricing Policies (same as STR 423)

MKT 432. Product Planning and Development

OMG 402. Operations Management

OMG 416. Project Management

STR 403. The Economic Theory of Organizations

STR 421. Economics of Competitive Strategy

STR 430. Health Sciences Management and Strategy (same as HSM 430)

JOINT- AND SPECIALIZED-DEGREE PROGRAMS

The Simon School offers programs that allow students to receive a first-rate business education tailored to their specific needs. In addition to the Full- and Part-Time M.B.A. Programs, a few other opportunities are available to students who wish to pursue coursework within a more specialized context of business management. These include the Joint- and Specialized-Degree Programs and a 3-2 M.B.A. Program.

The following is a list of the Joint- and Specialized-Degree Programs offered at the Simon School. Each specific entry includes a brief program description and contact details for further information.

M.B.A./Master of Public Health

The three-year M.B.A./M.P.H. program is a cooperative approach offered by the Simon School and the Department of Community and Preventive Medicine in the University of Rochester's School of Medicine and Dentistry. Students will receive two degrees (M.B.A. and Master of Public Health). Students take courses both at the Simon School and within the Department of Community and Preventive Medicine on the adjacent Medical Center campus.

Students in the M.B.A./M.P.H. program may choose any concentration at the Simon School. Required courses include:

- All core courses in the full-time M.B.A. program
- Eight elective M.B.A. courses
- A core of required courses for the M.P.H. program

A 3.0 grade-point average is required for graduation.

For application information, contact the Simon School or:

Pattie Kolomic Administrator
School of Medicine and Dentistry
University of Rochester
601 Elmwood Avenue
Box 644
Rochester, N.Y. 14642-8644
(585) 275-7882
E-mail: pattie_kolomic@urmc.
rochester.edu

M.D./M.B.A. Program

Along with the Simon School, the School of Medicine and Dentistry offers a combined M.D./M.B.A. degree program in Health Sciences Management. This program is designed to prepare physician managers who can respond intelligently, effectively and creatively to the changing health care services industry. Only candidates with exceptional promise and academic records will be considered.

To participate in this program, students must apply to and be accepted by both the School of Medicine and Dentistry and the Simon School. Students are also required to take both the M.C.A.T. and G.M.A.T. exams. The program takes five years to complete—taken separately, the M.D. is four years and the M.B.A. is two years. Students start the program at the Simon School for the first-year core courses, and then move to the M.D. program on a full-time basis, completing the remaining Simon electives in their third and fourth years of medical school.

For application information, contact the Simon School or:

John Hansen
Associate Dean for Admissions
University of Rochester
School of Medicine and Dentistry
601 Elmwood Avenue
Box 601A
Rochester, N.Y. 14642-8603
(585) 275-4606
E-mail: john_hansen@urmc.
rochester.edu

or

Rebekah Lewin Director of Admissions Simon Graduate School of Business 305 Schlegel Hall Rochester, N.Y. 14627-0107 (585) 275-3533

E-mail: rebekah.lewin@simon.rochester.edu

The 3-2 Program

In this program, students earn both a bachelor's degree in an undergraduate major from the University of Rochester and a master of business administration degree in five years.

In three years of undergraduate study at the University, students complete their majors and distribution requirements. Between January and March of their junior year, qualified students apply to the Simon School. The first year of the M.B.A. program is substituted for the senior year. No merit-based scholarships are available to 3-2 students. However, during the final year as an undergraduate, students maintain any undergraduate financial assistance that is offered by the College. Visit www. simon.rochester.edu/apply-now/index.aspx for application details.

Technical Entrepreneurship And Management (T.E.A.M.) Master Program

The one-year T.E.A.M. master's degree program is offered jointly by the Simon School and the Edmund A. Hajim School of Engineering and is administered by the University of Rochester Center for Entrepreneurship. This program is designed

for students with an engineering, science, or mathematics undergraduate degree, who wish to pursue a master's level technical education in combination with business and leadership courses. T.E.A.M. could also be considered a 4-1 program for University of Rochester undergraduate engineering students.

Students accepted into the T.E.A.M. program may choose any technical cluster, such as optics, energy and the environment, computer science, biomedical engineering, chemical engineering, electrical and computer engineering, or mechanical engineering. Students will simultaneously be taking courses at the Simon School and the Hajim School of Engineering.

Requirements include:

- Four core management courses in the Simon School (one of which is a business plan development course)
- Three technical courses
- One additional course: either a technical class or a business elective

To be considered for this program, students must take either the G.R.E. or G.M.A.T. exam. The master's degree will be awarded through the Office of Graduate Studies within the College of Arts, Sciences, and Engineering.

For application information, contact the Simon School or:

Andrea Galati
Program Coordinator
University of Rochester
Center for Entrepreneurship
1-211 Carol Simon Hall
Box 270360
Rochester, N.Y. 14627-0360
(585) 276-3500
E-mail: andrea.galati@rochester.edu

Web site: www.rochester.edu/team

All courses under the quarter system carry three hours of credit, unless otherwise indicated. A few exceptions are MGC courses; MKT 501 (Workshop in Marketing); MSM 501 (Quantitative Methods Colloquium); the one-credit-hour labs required for ACC 401 (Corporate Financial Accounting), GBA 411 (Framing and Analyzing Business Problems 1), CIS 401 (Information Systems for Management), and STR 401 (Managerial Economics). Also, courses offered jointly with the University of Rochester's Department of Economics or Statistics and the School of Medicine and Dentistry vary in credit hours.

Faculty whose biographies appear in the Administration and Faculty sections teach courses in the M.B.A. program on a regular basis. The faculty described in this guide teach over 90 percent of all 400-level and 500-level Simon School courses.

In addition, one or two faculty members are visitors from other institutions. Carefully selected Simon School doctoral students teach a small number of graduate courses, typically summer offerings. Such students assume all of the responsibilities of regular faculty instructors. Executives from corporations, as well as local business owners, also serve as an additional faculty resource at the School for selected master's-level courses.

A course schedule showing offerings, times and instructors for each quarter is available from the Registrar's Office prior to the start of each quarter.

■ ACCOUNTING

Charles E. Wasley, Area Coordinator

MASTER'S-LEVEL COURSES

ACC 401. Corporate Financial Accounting

Credit—four hours

Corporate financial accounting is concerned with the form and content of the information firms disclose to external parties (e.g., shareholders). In the United States, financial reporting is based on generally accepted accounting principles (GAAP) set by the Financial Accounting Standards Board (FASB). GAAP define the accounting methods and disclosure practices that firms select from when providing financial statements to external parties. This course covers these principles and other important financial reporting practices. The primary focus of the course is developing the skills required to interpret and analyze financial information, rather than the skills required to prepare financial statements. Upon completion of the course, students will appreciate how financial accounting information is used in contracts between parties (e.g., lenders and the firm) and to evaluate a firm's past performance and potential future performance.

ACC 410. Accounting for Management and Control

By examining the tension between decision making and control in organizations, the course examines a variety of questions such as: Why do managers allocate fixed costs, transfer goods between sub-units at full cost, and use other accounting policies that deviate from marginal cost? What are activity-based costing, normal costing, and economic value added (EVA), and why are managers adopting these techniques? Topics include: analyzing traditional costing systems, divisional performance measurement, transfer pricing, cost allocations, opportunity cost, budgeting and standard costing. The course provides students with a framework to understand and productively use accounting systems. Emphasis is placed on the problems of motivation and control in organizations and the role of accounting information in this context.

Prerequisites: ACC 401 and STR 401; STR 403 (may be taken concurrently)

ACC 411. Financial Statement Analysis

An objective of this course is to develop students' ability to use financial statement information (broadly defined) in various decision-making settings. The uses of financial statement information include: 1) evaluation of managerial performance; 2) analysts use financial statement information to perform prospective analysis, which serves as an input into the valuation of a firm's equity. Analysts make buy, sell, and hold recommendations based on analysis of financial information; 3) creditors and lenders use financial statement information as input into lending decisions. Lenders use financial information to determine the type, amount and terms of a loan, and also the nature of any covenants, and 4) corporations and investment bankers use financial statements to value companies that might be takeover targets. The primary objective is to develop and sharpen students' analytical ability to analyze financial statements and draw inferences about a firm's performance and future prospects. Cases and analysis of actual reporting practices are used to achieve the course objectives.

Prerequisites: ACC 401 and FIN 402

ACC 417. Auditing

Auditing principles and procedures are examined. This course includes analysis of auditing and its relationship to financial reporting, with emphasis on the independent accountant's attest function and consideration of ethical and legal responsibilities and regulatory influences. Statistical sampling, the role of the internal auditor, and compilation and review reports are discussed.

Prerequisite: ACC 401

ACC 418. Taxes and Business Strategy

The objectives of this course are to help students develop the tools required to identify, understand and evaluate tax-planning opportunities and to develop a framework for understanding how taxes affect business decisions. Effective tax planning requires the planner to consider the tax implications of a proposed transaction for all of the parties to the transaction. Effective tax planning requires the planner, in making investment and financing decisions, to consider not only explicit taxes (tax dollars paid directly to taxing authorities), but also implicit taxes (taxes paid indirectly in the form of lower before-tax rates of return on tax-favored investments). Effective tax planning requires the planner to recognize that taxes represent only one among many business costs. In the planning process, all costs must be considered, including the costly restructuring of the business necessary to implement some tax plans. The framework is operationalized by applying it to a variety of settings such as investments, compensation policy, organizational form, regulated industries, financial instruments, tax-sheltered investments, multinational ventures, mergers and acquisitions and tax arbitrage.

Prerequisites: ACC 401 and FIN 402

ACC 423. Financial Reporting I

This course acquaints students with the conceptual and practical problems in measuring revenues and expenses, assets and liabilities. The principal objective is to make students proficient in assessing the financial position of a company, its cash flow, liquidity, capital structure, hidden liabilities and reserves through an understanding of generally accepted accounting principles (GAAP). The course provides a practical overview of the structure of accounting and its relation to finance and economics that should continue to be valuable as the accounting environment changes.

Prerequisites: ACC 401 and FIN 402

ACC 424. Financial Reporting II

This course addresses the accounting for mergers and acquisitions, foreign operations and derivative financial instruments. Emphasis is placed on developing an appreciation of the forces shaping accounting, including the effects of organizational arrangements, information and taxes. The interdependency of the accounting methods, organizational structure and tax decisions are investigated.

Prerequisites: ACC 401 and FIN 402

ACC 431. International Financial Statement Analysis

The objective of this course is to prepare students for the analysis of financial statements in an international context. Cross-border

transacting is an increasingly important component of business. Consequently, corporate financial statements are used in increasingly international settings by shareholders, lenders, creditors, managers, employees, suppliers, customers and governments. Because the course aims to develop skills in international financial analysis, it adopts a case format. The course addresses the economic and political determinants of: 1) similarities in accounting practices among countries; 2) differences in accounting practices among countries; 3) similarities and differences in the properties of reported accounting numbers among countries; and 4) the strong trend toward reducing differences in accounting practices among countries.

Prerequisites: ACC 401 and FIN 402

ACC 433. Advanced Business Law and Ethics

(Same as BPP 433)

A continuation of BPP 432, which is a prerequisite)

Topics include: bankruptcy, real property, personal property, sales, secured transactions, negotiable instruments, insurance, trusts and estates and consumer protection This course also includes discussions of ethics and professional responsibilities.

ACC 436. Advanced Accounting Research

This course will cover the conceptual framework for standard setting established by the Financial Accounting Standards Board (F.A.S.B.). It will also review how to research financial accounting and reporting issues using the Financial Accounting Research System (F.A.R.S.). In addition, positive theories of accounting and the applicable evidence are presented to provide an understanding of why corporate managers choose particular accounting procedures, why they lobby standard setting bodies (F.A.S.B.) to change accounting procedures, the role of accounting numbers in a firm's debt agreements and executive compensation plans, the roles of auditing and accounting in capital markets, and conflicts between the public and private sectors over the determination of accounting standards.

Prerequisites: ACC 401, ACC 423 and FIN 402

ACC 437. Basic Federal Income Tax Accounting

This course will introduce the federal tax system in the United States and will focus on specifics of federal tax code. It will provide an overview of individual, partnership, corporate, gift and estate taxes. Detailed topics will include, but are not limited to, gross income, deductions for adjusted gross income, deductions from adjusted gross income, taxable income, alternative minimum tax, certain tax credits, recognition of gains and losses, transactions between partners, Subchapter S Corporations, gift tax and estate tax. Skills

will be developed to research the tax code and I.R.S. rulings to solve tax issues.

Prerequisite: ACC 401

ACC 438. Auditing II—Auditing and Information Systems

This course will focus largely on Sarbanes-Oxley compliance and internal control systems. Internal control systems will be covered in depth, with focus on internal controls in an information technology (IT) environment. The IT environment will be discussed from the perspectives of designing effective internal controls and auditing in an IT environment. The function of the internal audit department will be covered, as well as how external auditors can work with internal auditors.

Prerequisites: ACC 401 and ACC 417

ACC 445. Managerial Accounting for Health Care Organizations

(Same as HSM 425)

Costs for health services continue to rise faster than overall economic growth, drawing ever greater attention from employers, governments and consumers. The front line of the cost battle is within the health services entities, where decision making depends on accurate reporting of internal costs. This cost will allow the student to understand how costs are reported and how to use this information to make decisions within the health services entity. The following topics will be examined within a health services setting: cost allocation, cost-volume-pricing analysis, budgeting and variance analysis, and activity-based costing.

PH.D. COURSES

ACC 501. Seminar in Accounting

(Offered each quarter, 1 credit. First-year Ph.D. students are graded on a P/F basis. Second-year and later students receive a letter grade.)

A forum for the presentation, discussion and critique of current accounting research papers where accounting faculty, Ph.D. students and outside speakers present working papers on current research topics. Students are expected to actively participate in the discussion and critique of the papers presented. In weeks when accounting workshops/seminars are scheduled, accounting Ph.D. students will meet as a group with a member of the accounting faculty before the seminar to discuss the paper. Since such meetings are designed to facilitate students' active participation in the seminars, students are required to circulate a brief set of comments to the other class participants in advance of the meeting. Grading will be based on the quality of students' contributions to the preseminar meetings as well as their contributions and participation in the actual workshops. An additional requirement for first-year students is that each must replicate and update an existing paper and present the results in the

Winter or Spring Quarter in ACC 501 or AEC 501. The paper to be replicated and updated, as well as the completed project, must be approved by two accounting faculty members.

ACC 510. Accounting Research I

(Offered Fall Quarter, 3 credits.)

The natural starting point for the study of capital markets research in accounting begins with the relationship between accounting earnings and security returns. This course covers the evolution of research on the earnings/return relation from the seminal papers up through current research. Topics covered include the fundamental features of the contemporaneous earnings/return relation, the nature of association-type and event study-type investigations of the contemporaneous earnings/return relation, theoretical and empirical evidence on the lead/lag relation between security returns and accounting earnings, the asymmetric timeliness of accounting earnings, theoretical and empirical research on the role of conservatism in accounting earnings, pro-forma earnings and international research on the characteristics and properties of the earnings/return relation. The course also covers capital market research on analysts' earnings forecasts including the properties of such forecasts (e.g., optimism, pessimism, rationality) and the relation between analyst earnings forecasts and stock prices.

ACC 511. Accounting Research II

(Offered Winter Quarter, 3 credits.)

This course turns the focus from aggregate accounting earnings (which is studied in ACC 510), to the components of earnings; accruals and cash flow. Given the central role of accruals in the measurement of accounting earnings, the initial focus of the course is on the fundamental properties of accruals and the importance of accruals to accounting earnings central role as a summary measure of firm performance. The course also covers the relation between cash flow and accruals and the market pricing of accruals and the components of accruals. The study of accruals naturally leads to research on earnings management that focuses on how and why earnings are managed. Research on how earnings are managed focuses on managers' opportunistic manipulation of accounting accruals and/or via altering real activities while research on the managerial incentives to manage reported earnings focuses on (among other topics) the literature on meeting or beating earnings expectations and earnings thresholds. The course also covers the topic of voluntary disclosure. In particular, the incentives managers have to voluntarily disclose earnings and/or cash flow forecasts and the properties and stock price effects of such forecasts. Other voluntary disclosure literature studied includes the effect of voluntary disclosure on the cost of capital and the effect of the legal environment on firms' voluntary disclosure practices.

Prerequisite: ACC 510

ACC 512. Advanced Topics in Accounting Research

(Offered Spring Quarter and alternates with ACC 513, 3 credits.)

This course covers advanced topics in accounting research including the role of accounting numbers in debt contracts and lending agreements, the role of accounting numbers in executive compensation contracts and corporate governance, the economic consequences of accounting regulation, the use of accounting-based measures of the cost of capital and empirical tax research in accounting.

Prerequisites: ACC 510 and ACC 511

ACC 513: Contemporary Topics in Accounting Research

(Offered Spring Quarter and alternates with ACC 512, 3 credits.)

This course covers topics including value relevance, accounting-based valuation models, earnings quality, the impact of earnings and accrual quality on firm valuation, the impact of real activity management on firm performance, market efficiency with respect to accounting numbers, the economic consequences of fraudulent financial reporting and the effects of accounting restatements.

Prerequisites: ACC 510 and ACC 511

■ APPLIED ECONOMICS

John M. Long Jr., Area Coordinator

PH.D. COURSES

AEC 501. Applied Economics Seminar I

The seminar is a forum for recent and current research. Ph.D. students, faculty and outside speakers present papers on their current research and/or discuss recent work by others in the field.

AEC 502. Applied Economics Seminar II

A continuation of AEC 501.

AEC 503. Organizational and Competitive Strategy Seminar

(Same as STR 501)

A continuation of AEC 501 and AEC 502.

AEC 504. Fundamentals of Economics

This is a course meant for entering doctoral students with insufficient background in economics. Topics covered include markets and prices, consumer behavior, individual and market demand, choice under uncertainty, production, competitive markets, monopoly and monopsony, competitive strategy, markets with asymmetric information, externalities and public goods. Offered in the summer, primarily for entering doctoral students.

AEC 505. Mathematical Techniques in Economics

The course introduces mathematical tools especially useful in economics, econometrics and finance. Topics include a basic topology of the real line, sequences and series, limits, continuity, differential and integral calculus. Offered in the summer, primarily for entering doctoral students.

AEC 510. Ph.D. Workshop in Applied Economics

The workshop provides a forum for the presentation of ongoing and completed research projects by Ph.D. students in the economics core. Third- and fourth-year Ph.D. students are expected to participate actively.

Prerequisite: permission of the instructor

AEC 511. Advanced Price Theory I

The first of a three-course sequence providing a survey of the substance and methods of contemporary price theory for students preparing to do research. Generally, the first course covers the economic behavior of individuals and firms in a competitive market setting. Individual behaviors examined include responses to price and income changes, intertemporal planning (e.g., saving), household production, labor supply, investment in human capital, search, and reactions to uncertainty about future assets and goods prices. For firms, the implications of valuemaximization for input demands and output supplies are explored thoroughly. Managerial choices related to multiple products, intertemporal production planning and uncertainty are explicitly modeled. Some extensions to monopoly behavior are considered. Finally, some implications of consumer and competitive firm behavior for industry (single market) and general equilibrium are examined. These include (for industry equilibrium) the technological determinants of industry responses (entry-exit, quantity changes, price changes) to economic shocks such as shifts in demand for the industry's product. For general equilibrium, the first and second welfare theorems will be covered.

AEC 512. Advanced Price Theory II

This course teaches the tools of game theory and contract theory, and applies them to topics in industrial organization, organizational economics and other areas. Game theory is the study of strategic interaction among a small number of decision-makers. It is nowadays applied in almost any area of economics, as well as in related disciplines such as finance, accounting, marketing and operations research. Contract theory is concerned with the optimal design of contracts (and at a larger scale, organizations) that define the "rules of the game" under which agents (such as a firm's employees) interact. In this sense, it can be thought of as an extension of game theory. Contract theory is the methodological basis of much of modern organizational economics, but its methods are applied in many other

contexts, too, notably finance. The course is organized by concepts and methods, but most time will be spent on applying them to a large variety of topics. While this is a theory course, the instructor will also occasionally refer to relevant empirical work.

AEC 513. Advanced Price Theory III

This course provides an introduction to the theory and practice of industrial organization. Broad areas of application include static oligopoly models, two-stage games and games with infinite horizons. Concepts from game theory such as Nash equilibria, subgame perfect equilibria, and perfect Bayesian equilibria will be used as needed. Special topics may include: contracts, patents, licensing, bundling, tying, buyer-seller networks, switching costs, price discrimination, mergers and entry barriers. Students will read and critique journal articles, and areas for future research will be highlighted.

AEC 516. Analysis of Economic Policy

(Offered at the discretion of the instructor)

AEC 521. Advanced Topics in the Organization of Industry

The course concentrates on unsettled areas in industrial organization, exposing students to potential thesis and research projects. Specific topics vary from year to year. Typical current topics are theory of conglomerate mergers, analysis of advertising and scale as barriers to entry, quality competition and market responses to costly information.

AEC 525. Mathematical Economics I

(Same as ECO 481)

(Offered at the discretion of the instructor) Credit—four hours

This course covers the use of optimization theory in economic analysis. The topics covered include finite-dimensional optimization (unconstrained optimization, Lagrange's Theorem, the Kuhn-Tucker Theorem), the role of convexity in optimization, parametric continuity of solutions to optimization problems, and finite- and infinite-horizon dynamic programming.

Prerequisite: AEC 505

■ APPLIED STATISTICS

Rajiv M. Dewan, Area Coordinator

MASTER'S-LEVEL COURSES

APS 425. Advanced Managerial Data Analysis

The objective of this course is to provide a systematic way to organize and make use of quantitative information in business decision-making. The course builds on what students have learned in introductory statistics, extending that knowledge to include the situations frequently encountered in decision-making.

Prerequisites: GBA 411 and GBA 412

PH.D. COURSES

APS 511. Introduction to Mathematical Statistics

A more theoretical treatment of the subject matter of APS 411, offered in the summer, primarily for entering doctoral students.

APS 514. Introduction to Econometrics

(Same as College course ECO 484) Credit—two hours

The course is for students intending to do research in quantitative areas. Topics include: estimation and hypothesis testing in the standard linear model, weighted least squares, transformations, constraints, analysis of variance and covariance and problems of model specification.

Prerequisites: AEC 505 or equivalent and APS 511 or equivalent

APS 515. Elements of Econometrics

(Same as College course ECO 485) Credit—four hours

The study of the specification of econometric models in which economic theory, stochastic disturbances and the link between conceptual variables and observable economic data are combined. Topics include: estimation of single-equation linear and nonlinear econometric models by least squares and other methods, and estimation of time-series models and simultaneous-equation models. Particular attention is given to specification problems such as heteroskedasticity, multicollinearity, qualitative dependent variables and specification error.

Prerequisite: APS 514

APS 519. Topics in Microeconometrics

The course content varies from year to year. Panel data, cross-section time series, qualitative dependent variables and duration analysis are possible topics discussed.

Prerequisite: ECO 517 or permission of the instructor

APS 523. Advanced Econometrics

(Same as College course ECO 517) Credit—five hours

The course covers advanced topics in econometrics, including maximum likelihood methods and methods of moment estimation. Also discussed are asymptotic theory, and semiparametric and nonparametric estimation.

Prerequisite: APS 515

APS 524. Topics in Macroeconometrics

(Same as College course ECO 518) Credit—five hours

The course focuses on the econometric techniques and problems associated with particular

fields in economics, such as the econometrics of labor economics and the econometric issues in macroeconomics or finance.

Prerequisite: APS 523 or permission of the instructor

APS 528. Sampling Techniques

(Same as Medical School course BST 421; APS 528 is offered in alternate years) Credit—four hours

The course is for students with a primary interest in applied statistics or research in quantitative areas. Topics include: design and analysis of simple random, stratified, cluster and systematic sampling; multistage and multiphase sampling; and nonresponse and measurement errors.

Prerequisites: GBA 411, GBA 412 and differential calculus

APS 529. Applied Multivariate Analysis

(Same as Medical School course BST 441; APS 529 is offered in alternate years) Credit—two hours

This course examines the theory and applications of multivariate methods often used in economics, marketing and finance. Topics include: multivariate normal distributions, sampling distributions, tests of hypotheses, multivariate analysis of variance, canonical correlation, principal components and factor analysis.

Prerequisite: APS 514

APS 531. Applied Econometrics

The course aims at providing Ph.D. students with a broad set of applied econometric skills. The contents of the course have been designed as to provide the broadest group of students fairly in-depth exposure to key topics in Panel Data methods that would be useful in their research endeavor. These methods have applications in accounting, corporate finance, marketing, and more recently in operations management and information systems.

The course will be broken up into four modules. The first module is a refresher to topics already covered in the introductory sequence of econometrics courses. The focus, however, would be for students to grasp the idea behind the methods in a more applied setting. The second module introduces students to Panel Data and the issues involved with the estimation of models based on such data. The third module forms the core of the course and focuses on simulation-based econometric methods. In this module, the models discuss both reduced form and structural models applied to cross sectional as well as Panel Data. The course concludes with a quick introduction to Bayesian ideas and methods.

■ BUSINESS COMMUNICATIONS

Daniel H. Struble, Area Coordinator

MGC 401. Communicating Business Decisions (Module 1)

MGC 402. Communicating Business Decisions (Module II)

MGC 403. Communicating Business Decisions (Module III)

Strong communication skills are essential for future leaders. The goal at Simon is to establish principles and standards for written and oral communication that will apply not only to Simon coursework but throughout the student's business career. Students are encouraged to think strategically about business communication, and the emphasis on *applied* communication integrates effective writing and presentation skills with practical, handson projects.

Because the job search incorporates many key communication skills, the first module of instruction focuses on cover letters, résumés, interviewing, networking and e-mail protocol. In the second module, business problems assigned in other core courses are structured to take various forms, such as a 10-minute presentation to the board of directors or a one-page exective memo, which are then evaluated by the faculty to reinforce the importance of the "Communicate" (Ct.) element of the School's new F.A.Ct. initiative. The final module concludes with a school-wide case competition that takes place at the end of the first year.

■ BUSINESS ENVIRONMENT AND PUBLIC POLICY

Ronald W. Hansen, Area Coordinator

MASTER'S-LEVEL COURSES

BPP 426. Macroeconomics

Macroeconomics is the study of how economies grow and fluctuate over time and how they interact with one another. In this course, we discuss economic measurement, economic growth and the business cycle. We also discuss the implication of modern theories of growth and fluctuation for the conduct of monetary policy and fiscal policy. There is a strong emphasis on the international linkage among economies and the implications of macroeconomics for the business environment.

Prerequisite: STR 401

BPP 431. Legal and Tax Considerations of New Ventures

(Same as ENT 431)

(Offered at the discretion of the instructor)

This course surveys, from the entrepreneur's perspective, legal and tax considerations that impact strategic choices in organizing, funding, staffing, governing, and operating new ventures. The course's principal focus is on how to create and retain competitive advantage through the skillful ordering of legal affairs. Emphasis will be transactional and include analysis of such issues as the creation and protection of intellectual property, technology licensing, global expansion, and internet commerce. The course will include, as a context for applied learning, a term project involving the creation and evolution of a selected new venture opportunity.

BPP 432. Basic Business Law

(Same as ENT 432)

This course surveys the law of contracts, agency, and business associations - with the objective of developing familiarity with selected laws, regulations, legal principles, and legal processes that govern (a) efficient exchange, generally; and (b) how and in what ways managers and entrepreneurs organize and interact to facilitate exchange. Although emphasis will be on United States law, there will be selected reference throughout the course to issues related to international transactions and to pertinent differences in legal systems of countries outside the United States. The course has a distinct transactional focus, with heavy reliance upon contemporary cases, commercial practices, and issues. Particular attention will be given to the impact of the legal framework upon sound managerial decision-making, business risk management, commercial rights and responsibilities, and ultimately business valuation.

BPP 433. Advanced Business Law and Ethics

(Same as ACC 433)

A continuation of BPP 432, which is a prerequisite)

Topics include: bankruptcy, real property, personal property, sales, secured transactions, negotiable instruments, insurance, trusts and estates and consumer protection This course also includes discussions of ethics and professional responsibilities.

BPP 440. Evolving Medical Markets

(Same as HSM 440)

Firms supplying products and services to the health care industry face a variety of regulatory and marketing challenges that will be explored in this course. Topics include: the economics of developing and marketing new medical technologies, regulations affecting market structure, health and safety regulations and insurance markets. The course will cover evaluation tools frequently used in public policy debates and in marketing medical technologies including cost-benefit and cost-effectiveness analysis and quality of life indices.

BPP 442. International Economics and Finance

(Same as FIN 442)

Topics include: theories of international trade; exchange-rate regimes; the determination of exchange rates in a world of flexible exchange rates; the Euromarkets; the pricing of assets in open economies; international financial management and the theory of multinational corporations; foreign exchange exposure; analysis of currency forward, future, option and swap contracts; capital budgeting for foreign projects; and financing international trade.

Prerequisite: FIN 402 Recommended: FIN 411

■ COMPETITIVE AND ORGANIZATIONAL STRATEGY

James A. Brickley, Area Coordinator

MASTER'S-LEVEL COURSES

STR 401. Managerial Economics

Credit—four hours

This core course applies the fundamental tools of price theory—consumer and firm behavior, demand and supply, the allocation of resources, competition and monopoly—to management decision making. Interaction of the firm with its customers, competitors and markets is discussed.

STR 403. The Economic Theory of Organizations

The course combines basic economic concepts introduced in STR 401 with agency theory and the concept of specific knowledge to develop a framework for addressing and solving important organizational problems. Key elements include: the assignment of decision rights, the performance-evaluation system and the compensation/incentive system. Each of these elements is analyzed in detail. The framework is applied to analyze a variety of contemporary managerial topics such as total quality management, business-process reengineering, outsourcing, transfer pricing, leadership and business ethics.

Prerequisite: STR 401

STR 421. Economics of Competitive Strategy

Competitive strategy deals with the most significant decisions that companies make in the marketplace, including entry into a market, product positioning, pricing, investments, technology choice and acquisitions. This course provides tools and concepts for analyzing these decisions and for designing business strategies that help firms make above-normal profits in the long run. Throughout the course, there is an emphasis on how firms interact with existing or potential competitors and other parties in the market. The tools and

concepts used to understand this interaction are partly those of the traditional field of Strategic Management, but more importantly those of modern microeconomics, especially the field of Industrial Organization.

The first half of the course looks at the "big picture" and covers industry analysis, value creation and competitive advantage, and integration and diversification decisions. The second half of the course focuses on strategic interaction among firms, and covers specific topics such as the dynamics of price competition in oligopolies, commitment strategies of firms, entry and exit, networks and standards, and technological competition.

The course is largely case-based. About one third of all classes are lectures; the other two thirds are case discussions.

For students who plan to take both STR 421 and STR 422, the instructors of both courses recommend taking STR 422 first. Each course can be taken independently of the other, but students planning to take both courses will benefit from learning the tools of game theory in STR 422 *before* applying them to competitive strategy decisions in STR 421. Students planning to take only STR 421, on the other hand, may want to consider taking the course in their first year because of its broad scope.

Prerequisite: STR 401

STR 422. Strategic Decision Making: Theory and Practice

This course develops game-theoretic tools that can be used to provide both quantitative and qualitative prescriptions for profit-maximizing behavior in a variety of strategic settings. The basic concepts are introduced through applications to strategic settings that one encounters in typical business situations. However, the game-theoretic concepts themselves are quite general, as the goal of the course is provide students with both an understanding of these concepts and a tool kit with which to evaluate a broad range of strategic problems.

The set of strategic problems specifically discussed includes the pricing of new and existing goods in the presence of substitutes and complements, determining advertising and R&D expenditures, analyzing market entry, exit, and entry deterrence opportunities, and evaluating bargaining and auction environments. Extensive use is made of examples from both private- and public-sector analyses of strategic interactions among firms.

For students who anticipate taking both STR 421 and STR 422, the instructors of both courses recommend taking STR 422 first. Each course can be taken independently of the other, but students planning to take both courses will benefit from learning the tools of game theory in STR 422 before applying them to competitive strategy decisions in STR 421.

Prerequisite: STR 401

STR 423. Pricing Policies

(Same as MKT 414)

This course prepares future managers to analyze the environment in which their firm operates and to arrive at an appropriate pricing policy for the product or service. There are several components: cost definition and measurement; measurement of price sensitivity and the implied market segmentation; strategic analyses vis-à-vis competitors and distributors; and the legal aspects of pricing. The course builds on STR 401, MKT 402 and APS 411, but goes further in discussing specific pricing policies used by firms. Topics include: quantity discounts, bundling and tie-in sales, productline pricing, pricing via distribution channels, cooperative versus opportunistic pricing and competitive bidding.

Prerequisites: STR 401 and MKT 402

STR 424. Managing Human Resources

This course analyzes human resource management within the framework of economic theory. It focuses primarily on the implementation of compensation and incentive structures in organizations. Topics include: selection and hiring of employees, measurement and appraisal of employee performance, promotion-based incentive systems, managing workforce diversity, employee relations, and the coordination of human resource policies and business strategy.

Prerequisite: STR 401 Recommended: STR 403

STR 425. Organization of Industry and Markets

(Offered at the discretion of the instructor)

This course analyzes the structure of industries and markets and considers how firms act strategically to influence the evolution of the environment in which they operate. It also examines the impact of government regulations and the types of strategies that firms use to influence their regulatory environment. The material of STR 401 and 403 is extended to include the interaction among firms and the impact of government policies on the firm.

Prerequisite: STR 401

STR 426. Property Rights and the Law

(Offered at the discretion of the instructor)

This course examines how property right assignments affect individual behavior and the use of resources. The analysis provides useful managerial insights into how the legal system affects private contracting, economic activity and the structure of organizations.

Prerequisite: STR 401

STR 427. Organizational Behavior

The course analyzes behavioral approaches to organizations, stressing implications for managerial practice. Topics include: organization

and job design, group dynamics, motivation and leadership.

STR 430. Health Sciences Management and Strategy

(Same as HSM 430)

This course applies the principles of organizational economics and strategy to the institutional setting of health sciences. The course focuses on the interdependence between the delivery, financing, and technology sectors of the health care marketplace. It discusses how management and strategy choices within each sector are responses to the unique institutional factors in the health care marketplace and how the strategies of each sector affect the behavior of the others. Students will leave the course with an ability to think productively about management and strategy challenges within each of the three health science sectors.

Prerequisite: STR 401

Recommended: STR 403, STR 421

STR 431. Practicum on Competitive Strategy

(Offered at the discretion of the instructor)

This course provides students with hands-on experience in running a consulting project. It develops skills in formulating a problem, working with data, finding possible solutions and delivering recommendations, all within a fixed time frame. Students will learn to produce analysis, but also have to argue persuasively that the recommendations based on the analysis are valuable and should be implemented.

The projects in this course have a broader orientation than the functional area projects, and are geared toward the integration of different topics as well as toward more strategic thinking. Teams of four to five students will be responsible for the individual projects, and will meet with the instructor individually every week. The organizations submitting projects must be willing to spend time with students and to provide appropriate data.

Prerequisite: completion of core courses

STR 440. Organizational Governance and Control

New organizations have to choose their initial organizational design and associated control mechanisms. Organizations also frequently restructure. For example, entrepreneurial firms become publicly traded, partnerships convert to corporations, closed-end funds become open-end mutual funds, nonprofits convert to for-profit status, mutual insurance companies convert to publicly traded corporations, franchise companies buy back units, and so on. Organizations also frequently change their basic control mechanisms such as their voting rules and board structure. Management succession is an important consideration in most firms.

These organizational choices affect value and the associated prices of the stocks and

bonds issued by organizations. For example, a 1999–2000 survey by McKinsey & Company of leading institutional investors indicates that over three quarters of these investors consider governance practices at least as important as financial performance when evaluating companies for investment. Institutional investors (such as TIAA-CREF) have dedicated staffs to analyze and promote effective governance. Senior and financial managers, consultants and investment bankers involved in issuing securities, making or defending (for example, in a court of law) organizational decisions, and interacting with institutional investors benefit from knowing the relevant trade-offs and related empirical literature.

This course builds on STR 403 (The Economic Theory of Organizations) to provide a more in-depth analysis of organizational choice and governance mechanisms. Topics include: the choice of organizational form; corporate charter (voting rules, anti-takeover provisions, and so on); proxy process; board of directors; ownership structure; banks and other financial institutions as organizational monitors; CEO selection, retention and succession; and governance in entrepreneurial firms. The class presents the important issues relating to these topics and examines the relevant empirical research. Emphasis is placed on how optimal practices can vary across industry, strategy and country and on how they might evolve through time. The course complements FIN 411 (Investments) and FIN 423 (Corporate Financial Policy and Control) in helping students understand how corporate policies affect security prices and value.

Prerequisites: STR 401 and STR 403

STR 441. Executive Strategy Seminar

(Offered at the discretion of the instructor)

In this course, students apply skills acquired in earlier courses to a variety of case-like strategic settings. It thus contributes to the transition from student to manager. An experienced member of the business community staffs the course and provides the necessary integration with the rest of the curriculum.

Prerequisite: completion of core courses

STR 442. Special Topics in Strategy

(Not offered every year)

Special topics are generally those which are not well covered in the other courses, or they may deal with strategy in selected industries (e.g., financial services, high-tech marketing, etc.). The specific content of the course varies, depending on faculty interests.

Prerequisite: permission of the instructor

PH.D. COURSES

STR 501. Organizational and Competitive Strategy Seminar

(Same as AEC 503)

A continuation of AEC 501 and AEC 502

STR 510. Research in Organizational and Competitive Strategy

This course provides a forum for discussing theoretical and empirical research on organizational and competitive strategy, and it contains the core material for preparing for a minor exam in STR. The course covers topics similar to those in STR 403. However, students study more advanced papers and analyze the material with more depth and rigor. Depending on the backgrounds and interests of the students, likely topics include: why firms exist; why organizations take the form that they do; the motivations for change within organizations; incentive problems and contracting; the factors that determine the allocation of decision rights within an organization; how agency problems are mitigated by the market for corporate control; the managerial labor market; compensation plans; the ownership structure of residual claims and the court system; and why "hybrid" organizations such as franchises and joint ventures exist.

Prerequisite: STR 403 or permission of the instructor

■ COMPUTERS AND INFORMATION SYSTEMS

Abraham Seidmann, Area Coordinator

MASTER'S-LEVEL COURSES

CIS 401. Information Systems for Management

Credit—four hours

This course focuses on the theoretical foundations underlying management information systems and their vital role in the modern business environment. Topics include: information economics; innovative models of e-business and the impact of the Web on organizational transformation; the nature and operation of large-scale-enterprise information systems; database and knowledge management systems; data communications; electronic commerce; business process reengineering; and information-systems analysis, design and control. The strategic and economic impacts of competitive information systems are emphasized. Assignments and cases introduce students to modern quantitative business modeling concepts and analysis, and to sophisticated business applications of the Web and databases.

CIS 413. The Economics of Information Management

This course covers economic approaches to the management of information systems (IS). Topics include: the value of information in an organizational setting; cost trends in hardware and software; the nature and implications of information asymmetries and objective conflicts in the IS setting, such as introducing new technology in an organization, the use of pricing and other control mechanisms such as budgets and corporate standards to manage

IS resources; analysis of peak-load problems; outsourcing and EDI issues; and the effects of queuing and its associated externality. Several business cases are used to illustrate the issues.

Prerequisites: CIS 401 and STR 401

CIS 415. Business Process Analysis and Design

(Same as ECM 415)

This course studies the analysis, design and automation of business processes. The course teaches system-modeling tools appropriate for the analysis and design of business processes and information systems. These tools are applied to electronic commerce ventures, the design of various service processes, logistics and R&D activities. Key features of the course are: object-oriented systems analysis techniques, the study of cutting edge research results on work organization and design, and an introduction to the Visual Basic programming language for rapid prototyping of new information systems. The course includes a comprehensive team-based field project involving a real business process. This project requires the application of the concepts and techniques taught in the course.

Prerequisite: CIS 401

CIS 416. Advanced Information Technology

(Same as ECM 416)

Information has become increasingly important to the modern corporation for conducting operations, improving efficiency and maintaining competitiveness in rapidly changing markets. Effective use of information technology (IT) involves knowledge of the existing capacities, awareness of how information technology is changing and imaginative use of the technology to enhance business performance.

The course contains a broad coverage of trends in IT development (e.g., hardware, software, systems architecture, networks, security, etc.), and how these components can be used for new business applications. The emphasis is not on the technology, but rather on managerially evaluating its usefulness for solving business problems.

Topics to be covered include: client-server architecture, data warehousing, data mining, decision support, enterprise resource planning, knowledge-based systems/artificial intelligence, networks and security, object-oriented and Web-based programming languages, and technology for project managers. All students are required to complete a group project on the business implications of these technologies. They have to look at these technologies from the perspective of a business consultant who needs to understand how to match the right technology with his or her customers' business problems.

Prerequisite: CIS 401

CIS 418. Advanced Business Modeling and Analysis Using Spreadsheets

The course expands and develops students' analytical tool kit through "hands on" training in the effective use of spreadsheet-based tools for advanced managerial analysis. Students perform quantitative analysis of advanced problems in options pricing, investments, corporate finance, marketing and operations. The course enhances and reinforces the analytical skills developed in earlier M.B.A. classes such as formulating and solving large-scale business problems using quantitative models, risk simulation and sensitivity analysis. Spreadsheet tools introduced in this class include Visual Basic for Applications (V.B.A.) and stochastic optimization using Optquest. Students who successfully complete the course should possess cutting-edge skills in spreadsheet business modeling and analysis.

Prerequisite: GBA 411 or equivalent

CIS 440. Electronic Commerce Strategy (Same as ECM 440)

This course covers electronic strategies for business to business and consumer e-commerce. This includes strategies for protecting market share by going online, ameliorating online competition using network effects and customer lock-in, positioning against other online presences, dealing disintermediation and re-intermediation, developing online communities for business or consumer e-commerce, and managing supply chain and customer relationships.

Prerequisite: CIS 401

CIS 446. Financial Information Systems (Same as FIN 446)

This course examines the role that advances in telecommunications, the Internet, and information systems play in the financial markets and the financial services industry. An in-depth understanding of operations of industry is developed while studying technology's transformative role. The class explores subjects such as electronic trading systems competing with traditional exchanges and Internet brokerage firms challenging full-service brokerage firms and banks for customers. How trends in these areas will appear in other kinds of electronic commerce are discussed, the latest developments in financial markets and the financial services are examined, and case studies are used in many classes.

Prerequisites: CIS 401 and FIN 402

CIS 461. Strategy and Business Systems Consulting Practicum

(Same as OMG 461)

This course provides M.B.A. students with an introduction to strategy and business systems consulting. It is aimed at students who wish to explore career opportunities within the major consulting firms, but is also relevant for stu-

dents considering a career as an independent consultant, or within a corporation's internal consulting group. The course focuses on three areas:

- The Consulting Industry: Students will examine several types of consulting (e.g., strategic, operations, systems, human resource and marketing) and understand where the major consulting firms position themselves. The career paths for M.B.A.'s entering the industry, and the skills and values necessary for success as a consultant will be scrutinized.
- The Business Systems Consulting Process: The creation of proposals, the winning of consulting engagements, and the preparation of contracts will be discussed. The typical stages of a business systems consulting engagement (e.g., problem framing, analysis design, gathering data, interpreting results, architectural solution, and presentation of recommendations) and managing different sorts of consulting projects (e.g., operational improvement, supply-chain optimization, quality improvement, strategy formulation, and organization design) will be examined.
- Consulting Skills: The role of the consultant and the human dimension will be discussed (e.g., personal attributes of consultants, relationship building, and team building). Diagnostic tools and data gathering techniques (e.g., questionnaires and interviews) will be presented. Frameworks for problem solving, and communicating recommendations will also be introduced.

The course examines a wide range of modern global business challenges and opportunities from both the consultant's and the manager's perspectives and provides a learning platform to integrate and practice the skills and knowledge learned.

PH.D. COURSES

CIS 501, 502, 503, 521, 522, 523. Ph.D. Seminars in Computers and Information Systems

These six Ph.D. seminars are offered in the fall, winter and spring quarters, with topics selected from the following: decision-support systems, economics of information and the valuation of information systems, issues in the management of information systems and the economics of computing, advanced topics in systems analysis and design, organizational aspects of information systems, logical and physical database design and topics discussed in the joint CIS/OMG Ph.D. seminars.

Prerequisite: permission of the instructor

CIS 512. Advanced Topics in Database Design

This course examines current research issues in database management systems. Topics include: database-design methodologies, semantic models, semantic integrity constraints, object-oriented approaches and applications of artificial intelligence to database management systems.

Prerequisite: CIS 415 or permission of the instructor

■ ELECTRONIC COMMERCE

Abraham Seidmann, Area Coordinator

MASTER'S-LEVEL COURSES

ECM 415. Business Process Analysis and Design

(Same as CIS 415)

This course studies the analysis, design and automation of business processes. The course teaches system-modeling tools appropriate for the analysis and design of business processes and information systems. These tools are applied to electronic commerce ventures, the design of various service processes, logistics and R&D activities. Key features of the course are: object-oriented systems analysis techniques, the study of cutting-edge research results on work organization and design, and an introduction to the Visual Basic programming language for rapid prototyping of new information systems. The course includes a comprehensive team-based field project involving a real business process. This project requires the application of the concepts and techniques taught in the course.

Prerequisite: CIS 401

ECM 416. Advanced Information Technology

(Same as CIS 416)

Information has become increasingly important to the modern corporation for conducting operations, improving efficiency and maintaining competitiveness in rapidly changing markets. Effective use of information technology (IT) involves knowledge of the existing capacities, awareness of how information technology is changing and imaginative use of the technology to enhance business performance.

The course contains a broad coverage of trends in IT development (e.g., hardware, software, systems architecture, networks, security, etc.) and how these components can be used for new business applications. The emphasis is not on the technology, but rather on managerially evaluating its usefulness for solving business problems.

Topics to be covered include: client server architecture, data warehousing, data mining, decision support, enterprise resource planning, knowledge-based systems/artificial intelligence, networks and security, object oriented and Web-based programming languages, and technology for project managers. All students are required to complete a group project on the business implications of these technologies. They have to look at these technologies from the perspective of a business consultant who needs to understand how to match the right technology with his or her customers' business problems.

Prerequisite: CIS 401

ECM 436. Database Marketing

(Same as MKT 436)

Advances in information technology have created opportunities for firms to gather more detailed information on their customers and competitors. The enormous volume of information which companies now collect poses many new challenges.

The basic question we address in this course is: "What can one do with all of this data?" Our goal is to integrate statistical models and marketing models with data and decisions.

In this course, students will learn how database marketing provides management with specific information needed to identify the target customer and to retain her or him for a lifetime, if possible. In the absence of database marketing philosophy, managers would be left with mass marketing and segmented marketing techniques that are not effective and efficient in today's information intensive, high-tech global markets.

What is database marketing (DM)? How is it different from traditional marketing methods? Database marketing is a segmentation process that utilizes state-of-the-art statistical methods and computerized databased of customers to reach the individual consumer.

This course also examines direct marketing in depth, since the roots of database marketing are in direct marketing. Direct marketing is the type of marketing that recognizes the individual as the target rather than the entire market. Direct mail, telemarketing, catalog shopping, Web-based marketing and relationship marketing are related topics that will be covered in this course.

Prerequisites: MKT 402, GBA 411 and GBA 412

ECM 437. Marketing on the Internet

(Same as MKT 437)

This course examines the major issues involved in marketing on the Internet. Among the topics studied are: new product opportunities on the Internet; the changed role of advertising; the Internet as a two-way communication medium with consumers; targeting individual consumers; word-of-mouth among consumers on the Internet; the Internet as a distribution channel; and marketing research on the Internet.

Prerequisite: MKT 402

ECM 440. Electronic Commerce Strategy

(Same as CIS 440)

This new course covers electronic strategies for business to business and consumer e-commerce. This includes strategies for protecting market share by going online, ameliorating online competition using network effects and customer lock-in, positioning against other online presences, dealing dis-intermediation and re-intermediation, developing online

communities for business or consumer e-commerce, and managing supply chain and customer relationships.

Prerequisite: CIS 401

■ ENTREPRENEURSHIP

Duncan T. Moore, Area Coordinator

MASTER'S-LEVEL COURSES

ENT 422. Generating and Screening Entrepreneurial Ideas

(Same as GBA 422)

As the foundation course in Entrepreneurship, ENT422 covers:

- Idea Generation
- Opportunities Screening
- Entrepreneurial Characteristics

This course outlines a critical evaluation process used by successful entrepreneurs to prioritize new venture ideas. The focus of this course is on the technical and market evaluation of very early-stage ideas when information is greatly lacking and the time and money to research such answers is also limited.

Students, in group format, will generate and filter their own ideas and evaluate them based upon technical merit, business challenges, and early market indicators. Teams will present their idea-filtering rationale to a panel for review and feedback.

Behind this evaluation process, the class will review reference material on the subject and several accomplished entrepreneurs will share their personal experiences.

While the nomenclature will align most directly to high-technology for-profit start-up companies, parallels to low-tech-no-tech, intra-preneurship, non-profits, and social entrepreneurship will be discussed.

ENT 423. New Venture Development and Managing for Long Term Success

(Same as GBA 423)

The focus of ENT 423 is learning how to prepare an effective business plan that will communicate the inherent value of the concept.

Among the critical issues that will be addressed are:

- Competitive conditions and industry trends
- Sustainable competitive advantages
- Management team
- Marketing plan
- Financial plan
- Exit possibilities
- Franchising
- Legal Entities

The approach used is appropriate for startups and for corporate venturing. It is also suitable for both for-profit and for non-profit organizations. Also included is a social entrepreneurship module.

At the same time plans are prepared, other entrepreneurial issues are studied, such as assembly resources, launching and building new ventures and harvesting results.

Lectures, cases and guest speakers are utilized. The speakers will address a range of new venture topics from the development of management teams, marketing, finance, venture capitalists and legal issues. The completion of a business plan for a proposed new venture is required.

Prerequisite: Completion of core courses and ENT 422 (after the Fall Quarter 2007)

ENT 424. Projects in Entrepreneurship

(Same as GBA 424)

Available to a limited number of students (10–15), this course combines a supervised internship with a start-up firm with lectures and in-class discussion on the management of new ventures. The internship places second-year M.B.A. students, to be known as Simon Interns, with Rochester-area firms where they will work closely with senior managers for approximately 120 hours over a 10-week quarter. In their internship, students will focus on the commercial viability of the firm's offerings. This will be accomplished through shadowing management, reviewing reports, participation in meetings and work assignments.

Complementing this hands-on entrepreneurial experience will be weekly classes held to discuss student experiences. In addition, there will be lectures on pertinent entrepreneurial subjects as well as guest speakers.

Prerequisites: Completion of core courses, and either ENT 422, 423 or 425. Permission of the instructor MUST be secured prior to registration.

ENT 425. Technical Entrepreneurship

This course provides an opportunity to examine the management practices associated with technical innovation and new business development. The analysis of entrepreneurship is evaluated primarily from the perspective of a start-up venture that requires equity capital investment. Management issues discussed include organizational development, analysis of market opportunities, market engagement, financial planning and control, capitalization, sources of funds, the due-diligence process and valuing the venture.

An important reason for taking this course is to learn how to develop a business plan. Therefore, a significant component of a student's final grade will be based on this. In too many instances, a new venture does not become a viable entity because either there is no plan, or if there is, it is poorly conceived. Furthermore, a good plan is an effective communications tool for the investment community. An additional benefit is learning to work in multidisciplinary teams.

Teams of three to four students will collaborate in the preparation of a business plan. The course will include time for students to share business ideas and identify possible team members. In general, each team will include two M.B.A. students and two science/technology graduate students. Other team configura-

tions are possible with instructor approval. Each team's business plan will receive a grade and that grade will apply to each individual on the team.

Each team will have a coach who is an experienced businessperson. The coach will be available to provide feedback to the team. This course is cross listed at OPT 481 and is taught by a faculty member in the Simon School and who is from Engineering.

ENT 426. Technology Transfer and Commercialization

(Same as GBA 426)

The creation of value in today's globally competitive environment is increasingly driven by technology. Corporations are reaching out for new technologies, and start-up companies with the highest potential are being formed around novel disruptive technologies. Radical innovation creates a "gale of creative destruction" which transform industries. The identification and evaluation of technologies with high potential is today a key to success. With the decline of corporate research functions, novel technologies are increasingly sourced from other firms and universities. This course will examine the overall technology commercialization process, with an emphasis on the processes by which intellectual property is protected, valued and transferred from one organization to another. The course addresses the strategic decisions involving novel technology: the identification of target markets, the economic valuation along the phases of the commercialization process and the assessment of alternative commercialization strategies including licensing, startup company formation and venture capital funding. The course will be taught by a combination of lectures and real-world case studies of current technologies, primarily from the University of Rochester in science, engineering and medi-

ENT 427. Practicum in Technology Transfer and Commercialization

(Same as GBA 427)

Students in this course will work in the Office of Technology Transfer on projects which are a best fit to the student's background and the range of inventions from the University of Rochester in science, engineering and medicine. Projects can include either marketing to existing companies or work on catalyzing a startup company. Either type of project will require assessments of novel concepts based on discussion with the inventors and direct market research and interactions with potential customers. The skills required are primarily those of marketing and business assessment, but some facility with technical content will be helpful. The students will prepare a technology commercialization and/or new venture plan and assist the licensing executives in the University's Office of Technology Transfer in the negotiation process to implement the plan.

ENT 431. Legal and Tax Considerations of New Ventures

(Same as BPP 431)

(Offered at the discretion of the instructor)

This course surveys, from the entrepreneur's perspective, legal and tax considerations that impact strategic choices in organizing, funding, staffing, governing, and operating new ventures. The course's principal focus is on how to create and retain competitive advantage through the skillful ordering of legal affairs. Emphasis will be transactional and include analysis of such issues as the creation and protection of intellectual property, technology licensing, global expansion, and internet commerce. The course will include, as a context for applied learning, a term project involving the creation and evolution of a selected new venture opportunity.

ENT 432. Basic Business Law

(Same as BPP 432)

This course surveys the law of contracts, agency, and business associations - with the objective of developing familiarity with selected laws, regulations, legal principles, and legal processes that govern (a) efficient exchange, generally; and (b) how and in what ways managers and entrepreneurs organize and interact to facilitate exchange. Although emphasis will be on United States law, there will be selected reference throughout the course to issues related to international transactions and to pertinent differences in legal systems of countries outside the United States. The course has a distinct transactional focus, with heavy reliance upon contemporary cases, commercial practices, and issues. Particular attention will be given to the impact of the legal framework upon sound managerial decision-making, business risk management, commercial rights and responsibilities, and ultimately business valu-

ENT 435. Negotiation Theory and Practice: Bargaining for Value

(Same as GBA 435)

This course surveys the theoretical and behavioral underpinnings of negotiation practices and develops skills that enhance the ability to capture value in cooperative and competitive bargaining scenarios. Students will participate in and evaluate several cooperative and competitive negotiation simulations. Grades will depend, in large part, on performance in these exercises.

ENT 444. Entrepreneurial Finance

(Same as FIN 444)

This course provides an introduction to financial theories and tools an entrepreneur needs to start, build and harvest a successful venture. Cases and lectures will cover business evaluation and valuation, including the venture capital and the real option approach, financing, venture capital funds, compensation structures and exit strategies.

Prerequisites: FIN 402, FIN 411, FIN 413

■ FINANCE

Jerold B. Warner, Area Coordinator

MASTER'S-LEVEL COURSES

FIN 402. Capital Budgeting and Corporate Objectives

This course provides an introduction to financial analysis and capital budgeting with an emphasis on the valuation of real investment projects. Topics discussed include an analysis of the firm's choice among alternative investment projects, the term structure of interest rates, modern portfolio theory and the valuation of risky assets, the estimation of free cash flows, capital structure choices, and the cost of capital.

Prerequisites: ACC 401, STR 401, GBA 411 and GBA 412 (may be taken concurrently or you must have previous exposure to probability and regression analysis)

FIN 411. Investments

Investments includes discussion of the efficient-markets theory of the dynamic behavior of prices in speculative markets, along with empirical evidence for the validity of the theory; evaluation of the implications of the efficient-markets theory for the profitability of alternative investment strategies; exploration of the implications of portfolio theory for equilibrium asset prices and the measurement of risk; emphasis on the empirical evidence for various mean-variance and multifactor models of asset pricing and the use of these models for evaluating portfolio performance; and introduction to special topics in financial markets, such as arbitrage pricing theory, options and futures contracts.

Prerequisites: GBA 411, GBA 412 (corequisite) and FIN 402

FIN 413. Corporate Finance

This course provides an intensive analysis of the effects of various corporate financial policy decisions on the value of the firm, including a discussion of the effects of taxes, bankruptcy costs and agency costs on these decisions. It then examines the interrelation of financing policy with executive compensation, leasing, hedging and payout policies. The course provides an understanding of the theoretical issues involved in the choice of these policies.

Prerequisite: FIN 402

FIN 423. Corporate Financial Policy and Control

This course examines the theory and empirical evidence for models of corporate financial policy; analysis of new issues of securities, recapitalizations, stock repurchases, and the market for corporate control (tender offers, mergers, proxy fights and corporate voting rights); and emphasizes critical evaluation of

the evidence for different models of corporate financial policy.

Prerequisites: FIN 402 and FIN 411, FIN 413 (may be taken concurrently)

FIN 424. Options and Futures Markets

This course provides intensive study of the fundamental ideas of option-pricing theory and their application to options, financial futures and other securities; analysis of hedging with forward and futures contracts; development of the Black-Scholes option-pricing formula, its uses and modifications, and generalizations of the model; and discussion of the structure and organization of options and futures markets and the exploration of empirical evidence on the validity of option-pricing models. Analyses of the pricing of options on futures, foreign currency, portfolios and indexes, commodity prices, bond prices and interest rates are included as time permits.

Prerequisites: FIN 402 and FIN 411

FIN 430. Financial Institutions

This course focuses on analysis of the mutual fund, investment banking, commercial banking and insurance industries. Particular emphasis is placed on the effects of contracts and organizational structure on the incentives of the participants in these industries.

Prerequisites: FIN 402; FIN 411 and FIN 413 (may be taken concurrently)

FIN 433. Cases in Finance

This course provides intensive exercise in valuation methods and the economic analysis of problems of corporate financial policy. A variety of other topics, including insider trading, portfolio performance and asset allocation, are also explored. Specific case topics include: corporate valuations; M&A transactions (tender offers, mergers, proxy fights); recapitalizations; stock repurchases; and novel securities. Case reports are done in teams and judged on clarity and usefulness to practitioners in understanding and resolving strategic problems.

Prerequisites: FIN 402 and FIN 413

FIN 434. Investment Management and Trading Strategies

This course explores selected topics in the management of equity portfolios. Course content may vary from year to year. Topics include: active portfolio management with particular emphasis on risk analysis, multifactor risk/return models and performance evaluation and style analysis. The course also considers issues and evidence on different forms of market structure and trading systems, including the role of specialists/dealers, optimal trading behavior for institutions, price impact of trades, and related information technology. Extensive use is made of investment software.

Prerequisite: FIN 411

FIN 441. Special Topics in Finance

(Not offered every year)

Special topics are generally those which are not well covered in other courses. The specific content varies, depending on faculty interest.

Prerequisite: Established by the instructor

FIN 442. International Economics and Finance

(Same as BPP 442)

Topics include: exchange-rate regimes; the determination of exchange rates in a world of flexible exchange rates; speculation in foreign exchange markets; the Eurocurrency and measurement of foreign exchange exposure; analysis of currency forward, future, option, bond, and swap contracts; hedging of foreign exchange exposure.

Prerequisite: FIN 402 Recommended: FIN 411

FIN 444. Entrepreneurial Finance

(Same as ENT 444)

This course provides an introduction to financial theories and tools an entrepreneur needs to start, build and harvest a successful venture. Cases and lectures will cover business evaluation and valuation, including the venture capital and the real option approach, financing, venture capital funds, compensation structures and exit strategies.

Prerequisites: FIN 402, FIN 411, FIN 413

FIN 446. Financial Information Systems

(Same as CIS 446)

This course examines the role that information systems and telecommunications play in various aspects of financial markets, financial service organizations, and corporate finance. Technology's transformation of financial markets is studied from the perspectives of electronic trading systems competing with exchanges; Internet brokerage firms attracting trading and IPO's and making markets; firms supplying company and market information, managing risk, and providing custodial and management services. The course covers financial services issues such as electronic banking, automated personal financial management, electronic payment systems, and digital cash. Case studies are used in many classes.

Prerequisites: CIS 401 and FIN 402

FIN 448. Fixed-Income Securities

The objective of this course is to undertake a rigorous study of fixed-income securities and markets. A variety of fixed-income securities will be discussed including coupon bonds, callable and putable bonds, sinking fund provisions, and floating rate notes. Interest rate derivatives such as forwards and futures on fixed-income securities, bond options, options on bond futures, caps, floors, and collars will

also be discussed. In addition, we will study some tools that are useful in bond portfolio management including horizon analysis, duration, optimization techniques for constructing bond portfolios and modes for pricing fixed-income securities. While the perspective of this course is from the viewpoint of a bond investor, a person in corporate finance needs to understand similar material. Evaluating an investment in a fixed-income security is the mirror image of the problem faced by a corporation in deciding whether or not to issue a bond.

Prerequisites: FIN 402 and FIN 411

PH.D. COURSES

FIN 501. Workshop in Finance

Seminars discussing current research in finance by faculty, students and guest speakers. Ph.D. students are expected to participate actively.

Prerequisite: permission of the instructor

FIN 505. Theory of Finance

The goal of this course is to present the theory of asset pricing and portfolio selection in multiperiod settings under uncertainty. The asset pricing results are based on three increasingly restrictive assumptions: single-agent optimality, absence of arbitrage and equilibrium. These results are unified with two key concepts: pricing kernels and martingales. The course draws connections between these concepts and makes plain the similarities between discrete and continuous time models. Applications include term structure models, portfolio choices and the pricing of corporate securities.

FIN 511. Advanced Financial Economics

(Alternates with FIN 534)

The course builds on the basic theory presented in FIN 505 Theory of Finance. FIN 511 will emphasize some relatively advanced mathematical methods that are used in the research literature of financial economics. The objective of the course is to provide the student with enough knowledge of these methods that he or she can begin to use them in nontrivial ways in his or her research. Particular emphasis is given to topics that are costly or difficult to learn on an individual basis.

Recommended: FIN 505

FIN 532. Advanced Topics in Capital Markets

This course covers classic contributions and recent developments in capital markets research, both applied theoretical and empirical, in relation to corporate policies, business cycle and economic growth. Specific topics incude time-series predictability of stock market returns, empirical methods and evidence on the cross-section of returns, evidence on mutual fund performance and the closed-end fund puzzle, event studies and the empirical relations between stock returns and corporate

policies, consumption-based asset pricing, applied equilibrium modeling of asset pricing anomalies and behavioral finance.

Prerequisites: FIN 402 and FIN 411

FIN 534. Advanced Topics in Corporate Finance

This course examines the determinants and consequences of corporate financial policy choices. Topics include: capital structure, bankruptcy and financial distress, payout policy, corporate control, leasing, hedging and insurance, raising capital, concentrated ownership, board structure, and executive compensation. Specific topics will vary from year to year. The course will investigate both the theoretical and empirical literature on these topics.

■ GENERAL BUSINESS ADMINISTRATION

Rajiv M. Dewan, Area Coordinator

MASTER'S-LEVEL COURSES

GBA 411 and GBA 412. Framing and Analyzing Business Problems 1 and 2

Framing and Analyzing Business Problems is a two-quarter sequence. Both courses focus on teaching students how to approach unstructured business problems logically and empirically with the goal of informing business strategy and operational decisions. Issues stressed throughout the two courses include: 1) framing the relevant business question; 2) hypothesis formulation; 3) searching for relevant information and data; 4) describing data and graphical analysis; and 5) communicating the analysis. While the courses are not meant to be "run of the mill" statistics courses, they introduce important statistical concepts and tools including basic statistical concepts (random variables, probability, basic descriptive statistics, expectations and variances); probability density and distribution functions (continuous and discrete distributions, joint and marginal distributions, binomial distribution and normal distribution); decision, risk and sensitivity analysis (risk and risk attitudes, decision trees, value of information, Bayes' rule); estimation (sampling, parameter, estimates, and confidence intervals); hypothesis testing (tests of means and proportions and of differences) and regression analysis.

GBA 422. Generating and Screening Entrepreneurial Ideas

(Same as ENT 422)

As the foundation course in Entrepreneurship, ENT422 covers:

- Idea Generation
- Opportunities Screening
- Entrepreneurial Characteristics

This course outlines a critical evaluation process used by successful entrepreneurs to prioritize new venture ideas. The focus of this course is on the technical and market evalua-

tion of very early-stage ideas when information is greatly lacking and the time and money to research such answers is also limited.

Students, in group format, will generate and filter their own ideas and evaluate them based upon technical merit, business challenges, and early market indicators. Teams will present their idea-filtering rationale to a panel for review and feedback.

Behind this evaluation process, the class will review reference material on the subject and several accomplished entrepreneurs will share their personal experiences.

While the nomenclature will align most directly to high-technology for-profit start-up companies, parallels to low-tech-no-tech, intra-preneurship, non-profits, and social entrepreneurship will be discussed.

GBA 423. New Venture Development and Managing for Long Term Success

(Same as ENT 423)

The focus of GBA 423 is learning how to prepare an effective business plan that will communicate the inherent value of the concept.

Among the critical issues that will be addressed are:

- Competitive conditions and industry trends
- Sustainable competitive advantages
- Management team
- Marketing plan
- Financial plan
- Exit possibilities
- Franchising
- Legal Entities

The approach used is appropriate for startups and for corporate venturing. It is also suitable for both for-profit and for non-profit organizations.

Also included is a social entrepreneurship module.

At the same time plans are prepared, other entrepreneurial issues are studied, such as assembly resources, launching and building new ventures and harvesting results.

Lectures, cases and guest speakers are utilized. The speakers will address a range of new venture topics from the development of management teams, marketing, finance, venture capitalists and legal issues. The completion of a business plan for a proposed new venture is required.

Prerequisite: Completion of core courses and ENT 422 422 (after the Fall Quarter 2007)

GBA 424. Projects in Entrepreneurship

(Same as ENT 424)

Available to a limited number of students (10–15), this course combines a supervised internship with a start-up firm with lectures and in-class discussion on the management of new ventures. The internship places second-year M.B.A. students, to be known as Simon Interns, with Rochester-area firms where they will work closely with senior managers for approximately 120 hours over a 10-week

quarter. In their internship, students will focus on the commercial viability of the firm's offerings. This will be accomplished through shadowing management, reviewing reports, participation in meetings and work assignments.

Complementing this hands-on entrepreneurial experience will be weekly classes held to discuss student experiences. In addition, there will be lectures on pertinent entrepreneurial subjects as well as guest speakers.

Prerequisites: Completion of core courses, and either ENT 422, 423 or 425. Permission of the instructor MUST be secured prior to registration.

GBA 426. Technology Transfer and Commercialization

(Same as ENT 426)

The creation of value in today's globally competitive environment is increasingly driven by technology. Corporations are reaching out for new technologies, and start-up companies with the highest potential are being formed around novel disruptive technologies. Radical innovation creates a "gale of creative destruction" which transform industries. The identification and evaluation of technologies with high potential is today a key to success. With the decline of corporate research functions, novel technologies are increasingly sourced from other firms and universities. This course will examine the overall technology commercialization process, with an emphasis on the processes by which intellectual property is protected, valued and transferred from one organization to another. The course addresses the strategic decisions involving novel technology: the identification of target markets, the economic valuation along the phases of the commercialization process and the assessment of alternative commercialization strategies including licensing, startup company formation and venture capital funding. The course will be taught by a combination of lectures and real-world case studies of current technologies, primarily from the University of Rochester in science, engineering and medi-

GBA 427. Practicum in Technology Transfer and Commercialization

(Same as ENT 427)

Students in this course will work in the Office of Technology Transfer on projects which are a best fit to the student's background and the range of inventions from the University of Rochester in science, engineering and medicine. Projects can include either marketing to existing companies or work on catalyzing a startup company. Either type of project will require assessments of novel concepts based on discussion with the inventors and direct market research and interactions with potential customers. The skills required are primarily those of marketing and business assessment, but some facility with technical content will be helpful. The students will prepare a technol-

ogy commercialization and/or new venture plan and assist the licensing executives in the University's Office of Technology Transfer in the negotiation process to implement the plan.

GBA 435. Negotiation Theory and Practice: Bargaining for Value

(Same as ENT 435)

This course surveys the theoretical and behavioral underpinnings of negotiation practices and develops skills that enhance the ability to capture value in cooperative and competitive bargaining scenarios. Students will participate in and evaluate several cooperative and competitive negotiation simulations. Grades will depend, in large part, on performance in these exercises.

GBA 442. Improving the Simon School

(Not offered every year)

This course is an applied consulting class and is being offered to provide students with an insight to the "industries" within which the University of Rochester and its Simon School of Business operate while generating significant ideas for improvement for the Simon School.

Prerequisite: permission of the instructor

GBA 450. Accounting, Economics and Finance for M.S. Students*

(Same as HSM 450)

*Available only to M.S. students concentrating in Marketing and Health Sciences Management

This course is designed to present the fundamentals of economic analysis, financial accounting and financial analysis that will serve as a foundation for concepts developed throughout subsequent courses in the M.S. Program. The objectives of this course are to enable participants to understand and productively use the principles of managerial economics and accounting information to better structure business decisions. In addition, the course will address the principles of capital budgeting. The first five weeks of the course will be an economics and statistics module. Basic concepts of managerial economics will be covered including demand and demand elasticity, marginal revenue, key cost concepts (fixed costs, variable costs, marginal costs, sunk costs) and profit maximization. The module will also introduce basic statistical concepts such as probability distribution functions, estimation (sampling, estimates and confidence intervals) and hypothesis testing.

The remaining six weeks of the course—the accounting and finance module—will present skills required to interpret and analyze common financial statements and evaluate a company's past performance and potential future performance. Specific topics of discussion will include differences in financial statements of for-profit vs. not-for-profit entities, financial statement analysis, development of pro-forma financial statements, cash vs. accrual accounting, depreciation methodolo-

gies, introduction of management accounting concepts and capital budgeting. Capital budgeting will include net present value (NPV), pay-back, accounting rate of return (ARR) and internal rate of return (IRR).

GBA 461. Core Economics for M.S. Students*

*Available only to M.S. students concentrating in Marketing and in Finance.

This course covers the fundamentals of economic theory, and discusses marketing-relevant applications. Specific concepts include understanding demand and demand elasticity, marginal revenue, key cost concepts (fixed costs, variable costs, marginal costs, sunk costs), profit maximization, understanding the competitive environment and strategic decision making, and net present value calculations.

GBA 462. Core Statistics for M.S. Students*

*Available only to M.S. students concentrating in marketing and in finance.

This course will be taught to equip students with the statistical skills necessary for success in marketing positions. The course covers central tendency and variability, probability, binomial and normal distributions, standard scores, hypothesis testing, z and t tests, ANOVA, correlation and regression, and non-parametric tests.

GBA 482. Business Policy

(Offered at the discretion of the instructor)

This capstone course focuses on how corporations and other forms of enterprise establish aims and goals, determine strategies to achieve those aims and goals and, subsequently, how those strategies are executed. Emphasis is given to the concerns of top management leaders in anticipating and reacting to changes in the economic environment, changes in the nature of market competition and how action is stimulated to produce desired responses in the enterprises they govern. The course consists of lectures and discussions supplemented by the analysis of recent complex cases involving well-known international corporations in contemporary situations. Both individual and team reports are required, and students are expected to use computer-based market forecasting and financial-simulation techniques to analyze the "what if" problems faced by senior managers in these cases. Oral and written reports are graded on the clarity of presentation as well as the quality of analysis.

Prerequisite: completion of core courses

GBA 486. Management of Technology

(Offered at the discretion of the instructor)

This capstone course focuses on the strategies of international corporations that seek a sustainable competitive advantage through technological innovation. Instruction consists

of lectures, guest speakers from the business community and case presentations. Topics include: the definition of corporate strategy; the C.E.O.'s role as leader as well as manager; the analysis of the firm's competitive position; the development of the firm's core competencies; the management of research and development; fast-cycle product development; cross-functional teams; achieving product quality through technology; a comparative analysis of patent law in the U.S. and other countries; structuring strategic alliances between large and small firms; international joint ventures; and the acquisition of small, high-tech firms by large corporations. Student teams play the role of principals in a manage-ment consulting firm ("Simon Associates") that has been retained by the C.E.O. of a technology-based corporation to develop strategic options and recommendations for the solution of a complex business problem with marketing, operations and financial implications. Oral presentations, management memos and written reports are graded on the clarity of presentation as well as the quality of analy-

Prerequisite: completion of core courses

GBA 490. American Business Practice

Credit—one hour

This course is designed to give non-U.S. students an opportunity to apply business-management theories they have learned in their Simon School studies while they are assigned as interns (minimum of six weeks) with U.S. companies. Internships allow students to work in business settings/situations in which they receive on-the-job training from management personnel and gain valuable practical experience in performing professional-level tasks in their area(s) of concentration. GBA 490, which cannot be used to complete a concentration in the M.B.A. program, is open only to non-U.S. students who are eligible to work in the United States. An eligible student, as defined by the Immigration and Naturalization Service, is a degree candidate who has lawfully resided in the United States on visa status for at least one academic year (eight to nine months) prior to starting an internship position. Students who plan to enroll in GBA 490 must communicate with the University of Rochester's International Services Office (ISO) regarding the submission of proper documentation for employment. They should inform Simon School Career Management of their plans to seek a business internship, and they should schedule an appointment with Career Management to discuss career interests and employment-search strategies. When/if an internship is obtained, the student must meet with a GBA 490 faculty advisor to prepare a proposal describing the location and nature of the assignment and the planned functional area of study. The proposal, which will include specific learning objectives, must be approved by the faculty advisor prior to the student's acceptance of the internship. Upon completion of the internship assignment, the

student must prepare a 10- to 12-page report detailing its outcome(s) and stating whether the proposed learning objectives were met.

Prerequisite: completion of all core courses

GBA 491. Reading Course

(Offered at the discretion of individual faculty)

Supervised reading and study on topics beyond those covered in existing formal courses.

GBA 492/493. International Exchange Programs

(Open to full-time and part-time M.B.A. students; GBA 492—six credits; GBA 493—nine credits)

The International Management–Exchange option of the International Management concentration gives students opportunities to participate in one of several exchange programs. See the chart on page 43 of this guide for details.

GBA 494. Foreign Language Transfer Credit

Credit—three hours

PH.D. COURSES

GBA 591. Ph.D. Reading Course

GBA 594. Ph.D. Independent Study

GBA 595. Ph.D. Research

GBA 995. Continuation of Doctoral Enrollment

GBA 999. Writing Dissertation

■ HEALTH SCIENCES MANAGEMENT

Ronald W. Hansen, Area Coordinator

MASTER'S-LEVEL COURSES

HSM 420. Business Economics of the Health Care Industry

This course aims to educate students about the unique business institutions and problems of the health care industry so that students can be prepared to apply their core business knowledge to solve managerial problems in the health care industry. The course will consist of an overview of the major institutions of the U.S. health economy as well as an economic analysis of these institutions.

HSM 425. Managerial Accounting for Health Care Organizations

(Same as ACC 445)

Costs for health services continue to rise faster than overall economic growth, drawing ever greater attention from employers, governments and consumers. The front line of the cost battle is within the health services entities, where decision making depends on accurate reporting of internal costs. This cost will allow the student to understand how costs are reported and how to use this information to make decisions within the health services entity. The following topics will be examined within a health services setting: cost allocation, cost-volume-pricing analysis, budgeting and variance analysis, and activity-based costing.

HSM 430. Health Sciences Management and Strategy

(Same as STR 430)

This course applies the principles of organizational economics and strategy to the institutional setting of the health sciences. The course focuses on the interdependence between the delivery, financing, and technology sectors of the health care marketplace. It discusses how management and strategy choices within each sector are responses to the unique institutional factors in the health care marketplace and how the strategies of each sector affect the behavior of the others. Students will leave the course with an ability to think productively about management and strategy challenges within each of the three health science sectors.

Prerequisite: STR 401

Recommended: STR 403, STR 421

HSM 431. Applications of Corporate Finance and Governance to Health Care

This course applies the principles of corporate finance and governance to the institutional setting of health care. It draws on the principles of financial valuation, investments and corporate financing, as well as the economics of organizations and corporate governance, to analyze current management problems in the health care sector. The primary purpose of the course is to gain an understanding and comfort level with applying economic and financial theories within the unique institutional setting of health care.

Prerequisites: STR 403, ACC 410. In addition, it is strongly recommended that students complete FIN 413 and HSM 430 before taking this course.

HSM 437. Managing Health Care Operations

(Same as OMG 437)

The health care industry is undergoing rapid growth as well as rapid structural changes. New technology, changing reimbursement mechanisms, and increased competition create many interesting management problems, not in the least in the area of health care operations. In this course, we will study the operations of various types of health care provider organizations (such as hospitals, HMO's, group practices, nursing homes, etc.) and other participants in the industry (such as insurance

companies, pharmaceutical companies, suppliers and consulting companies). Topics that will be studied include: patient and provider scheduling, capacity management, providing services and supplies to health care providers, new product development and integrated delivery systems.

Prerequisite: OMG 402 or an equivalent

HSM 440. Evolving Medical Markets

(Same as BPP 440)

Firms supplying products and services to the health care industry face a variety of regulatory and marketing challenges that will be explored in this course. Topics include: the economics of developing and marketing new medical technologies, regulations affecting market structure, health and safety regulations and insurance markets. The course will cover evaluation tools frequently used in public policy debates and in marketing medical technologies including cost-benefit and cost-effectiveness analysis and quality of life indices.

SPECIALIZED COURSES

The courses below are only available to students in the Master of Science in Business Administration with a concentration in Medical Management program.

HSM 450. Accounting, Economics and Finance for M.S. Students*

(Same as GBA 450)

*Available only to M.S. students concentrating in Marketing and Health Sciences Management

This course is designed to present the fundamentals of economic analysis, financial accounting and financial analysis that will serve as a foundation for concepts developed throughout subsequent courses in the M.S. Program. The objectives of this course are to enable participants to understand and productively use the principles of managerial economics and accounting information to better structure business decisions. In addition, the course will address the principles of capital budgeting. The first five weeks of the course will be an economics and statistics module. Basic concepts of managerial economics will be covered including demand and demand elasticity, marginal revenue, key cost concepts (fixed costs, variable costs, marginal costs, sunk costs) and profit maximization. The module will also introduce basic statistical concepts such as probability distribution functions, estimation (sampling, estimates and confidence intervals) and hypothesis testing.

The remaining six weeks of the course—the accounting and finance module—will present skills required to interpret and analyze common financial statements and evaluate a company's past performance and potential future performance. Specific topics of discussion will include differences in financial statements of for-profit vs. not-for-profit entities, financial statement analysis, development of pro-forma financial statements, cash vs.

accrual accounting, depreciation methodologies, introduction of management accounting concepts and capital budgeting. Capital budgeting will include net present value (NPV), pay-back, accounting rate of return (ARR) and internal rate of return (IRR).

HSM 451: Health Care Marketing and Business Plan Development

Basic marketing concepts are integrated with the unique institutional features of health care markets to develop a framework for producing a marketing and business plan for a health care organization. A special focus is placed on the practical elements of learning how to produce business plans.

HSM 452: Health Care Accounting and Finance

Basic concepts in finance and financial accounting are combined with material developed in ACC 410 to develop a framework for financial decision making, financial planning, assessment and control. The goal of the class is to provide students with a set of tools to first make financial decisions about programmatic development. In addition, students will be taught to assess and control programs toward specified financial goals.

HSM 453: Health Care Operations

This is an advanced course on operations management for health delivery organizations. We will study the application of operations management concepts to the management of health care provider organizations (such as hospitals, group practices, HMO's, nursing homes, etc.), and other participants in the health industry (such as insurance companies, pharmaceutical companies, consulting businesses, etc.). Applications will include both medical and administrative operations. The course will use a mixture of cases, lectures, inclass exercises, and guest lecturers.

Part of this course will be closely integrated with Operations 402, extending and applying concepts from the introductory course to practical problems in health care administration. However, a significant part of the course will focus on quality and process improvement, a topic that is not covered in Operations 402

HSM 454: Designing and Optimizing Health Care Organizations

Concepts developed in STR 403 are applied within a health care setting to teach the student: 1) how to design compensation plans that attract, retain and motivate medical professionals; and 2) how to organize tasks within (and outside) the organization to achieve coordination and efficiency.

HSM 455. Practicum in Medical Management

This course provides students with handson experience with a medical management project. It develops skills in formulating a problem, working with data, finding possible solutions and delivering recommendations, all within a fixed time frame. Students will learn to produce analysis, but also have to argue persuasively that the recommendations based on the analysis are valuable and should be implemented.

Projects require that students not only apply analyses learned in the classroom, but also that they argue persuasively that the recommendations based on the analyses are valuable and should be implemented. Teams of three to four students will be responsible for the individual projects, and will meet with the instructor individually. The organizations submitting projects must be willing to spend time with students and to provide appropriate data.

HSM 456: Practicum in Medical Management 2

A continuation of the project from HSM 455.

Prerequisite: HSM 455

■ MANAGEMENT SCIENCE METHODS

Edieal J. Pinker, Area Coordinator

MASTER'S-LEVEL COURSES

MSM 400. Mathematics Review

Non-credit

Review of mathematical concepts prerequisite to the M.B.A. program. Topics include: sets, vectors and matrices, functions and relations, linear equations, laws of exponents, limits and continuity, differentiation, maxima-minima, partial derivatives and simple integration.

MSM 491. Math for Management

Credit-two hours

This is a master's level math class that is more intensive than MSM 400. Analysis and concepts in modern business analysis rely heavily on quantitative methods. The objective of this course is to bring incoming M.B.A. or M.S. students "up to speed" with respect to the mathematical and statistical knowledge expected of them. The complexity of the course is on part with (college) freshman-year calculus, algebra and introduction to probability and statistics. Necessary theories and intuition behind them will be covered. The focus of the course is primarily on applications in business, economics and related areas.

Math for Management is offered in the summer quarter only. While it is not a required course for the credits required for the M.B.A. or M.S. degree, it will be a graded class to give students an assessment of their mathematical skills. The G.P.A. will appear on the official transcript, but will not be included in the cumulative G.P.A. for the M.B.A. or M.S. program.

PH.D. COURSES

MSM 501. Quantitative Methods Colloquium

Non-credit

This is a forum for the presentation of ongoing and recently completed work by students, faculty and guest lecturers.

MSM 502. Linear Algebra and Linear Programming

This course provides an introduction to linear algebra and linear programming. The topics covered are: definitions and examples, introduction to linear algebra, the simplex method, starting solution and convergence, the revised simplex method, duality and sensitivity analysis, and (if time permits) the structure of convex polyhedral sets. Offered in the summer, primarily for entering doctoral students.

MSM 504. Theory of Probability and Stochastic Processes I

The course will study probability spaces; univariate and multivariate distributions; moments; transforms and generating functions; univariate and multivariate central limit theorems; Markov chains and processes in discrete and continuous time; autoregressive and moving average time series; Poisson process; Wiener process; discrete and continuous time renewal theory; and properties of Markov chains.

MSM 505. Theory of Probability and Stochastic Processes II

The course will study birth-death processes; M/M/1 and M/M/S queuing systems; transient behavior in time-reversible chains; stochastic systems; delay and loss in M/G/1; queues with interrupted service; Markov diffusion processes; and applications.

MSM 509. Informational Sciences and Large-Scale Algorithms

This course examines recent methodological and modeling advances for solving large business problems. It includes summaries of numerical analysis techniques, artificial intelligence and heuristic optimization techniques (neural networks, genetic algorithms, tabu search and simulated annealing), and modeling techniques (decomposition, aggregation, scaling and dimensional analysis). The advances in optimization techniques include primal and dual decomposition, distributed algorithms, various projection and relaxation approaches, inner and outer linearization, aggregation and bounds.

Prerequisite: MSM 535 or permission of the instructor

MSM 522. Optimization

This course introduces unconstrained and constrained optimization in RN. Theoretical topics include: convexity, Kuhn-Tucker conditions and Lagrangian duality. Algorithms include: equation solving (Newton), primal methods (gradient, variable metric, penalty and barrier, and successive quadratic programming), dual-ascent methods, and primal-dual methods (augmented Lagrangian).

Prerequisites: MSM 502; and College courses MTH 235 and MTH 265

MSM 535. Network and Integer Programming

This course covers the solution of network problems and integer programs. Shortest path, minimum spanning tree, maximum flow, minimum-cost flow and matching are some of the network problems covered. Algorithms for linear-integer and mixed-integer problems include branch and bound, implicit enumeration, primal and dual cutting planes, group theoretic methods, Lagrangian relaxation and surrogate relaxation. These algorithms are illustrated on classical integer problems such as the knapsack, set covering/partitioning and traveling salesman.

MSM 542. Queuing Theory and Applications

The course offers in-depth study of queues and networks of queues, including single- and multiserver-queues; Markovian models of phase-type systems; open-and-closed networks of queues; product-form solutions and local balance; bottleneck-analysis approximations and computational aspects. It also covers applications to scheduling, resource allocation and capacity-expansion decisions in service systems, computer systems and job shops.

Prerequisite: MSM 504 or Medical School course BST 402, or permission of the instructor

MSM 549. Stochastic Models

This course reviews applications of stochastic processes to business problems drawn from reliability, inventory and production control, and queuing models of computers, telecommunications, manufacturing and service systems; applications of stochastic-control theory and Markov decision processes; modeling techniques including aggregation, hierarchical modeling, decomposition, approximations, bottleneck detection and elimination, simulation and sensitivity analyses; and economic issues in the design, performance evaluation and management of stochastic systems.

Prerequisite: MSM 504 or Medical School course BST 402, or permission of the instructor

■ MARKETING

Dan Horsky, Area Coordinator

MASTER'S-LEVEL COURSES

MKT 402. Marketing Management

This course is our introduction to marketing. The viewpoint is that of a manager making marketing decisions in a variety of competitive and institutional settings. Considered are: consumer behavior, marketing research, product design, advertising, salesforce management, pricing and distribution channels.

Prerequisites: STR 401, GBA 411 and GBA 412 (may be taken concurrently)

MKT 412. Marketing Research

This course deals with the collection and use of data to support marketing decisions. The first part of the course teaches the student how to formulate the research problem, design the research and collect the data. Among the data-collection techniques discussed are: questionnaire design; telephone, mail and electronic surveys; and laboratory and field experiments. The second part of the course examines various techniques for analyzing data: cross-classification analysis, factor analysis, multidimensional scaling, conjoint analysis, etc. As part of the course requirements, teams of students design, administer, analyze and report on an actual marketing-research study. Prerequisites: MKT 402, GBA 411 and GBA

MKT 414. Pricing Policies

(Same as STR 423)

Pricing is one of the most important, least understood, and most controversial decisions a manager has to make. These decisions often have significant long-term implications for a firm's bottom line. The purpose of this course is to help future managers make good decisions by preparing them to analyze the environment in which their firm operates and to arrive at an appropriate pricing policy for their product or service. More specifically, the objectives of the course are: 1) to develop an understanding of the relationship between a firm's environment (e.g., cost, demand, competition, and legal aspects) and its optimal pricing strategy, and 2) to develop skills in applying this understanding.

There are several components to the course: elasticity of demand and relevant costs, price discrimination and market segmentation, and competitive pricing. Students will learn the fundamentals of economic-value analysis and break-even analysis, and will be made familiar with strategies such as bundling, tie-in sales, quantity discounts, product-line pricing, and demand buildup. The course will cover ways of predicting competitor-pricing responses, and it will discuss a firm's legal environment as it pertains to pricing.

Prerequisites: STR 401 and MKT 402 (may be taken concurrently)

MKT 431. Consumer Behavior

The course studies buyer behavior in consumer and industrial markets. Topics include: culture, social class, consumer involvement, motivation, knowledge, attitudes and group decision making. Besides theory, the course also covers applications to product, advertising and pricing decisions.

Prerequisite: MKT 402

MKT 432. Product Planning

This course examines the issues involved in the planning and introduction of new brands and the management of existing brands. The approach taken is analytical and consistent with some of the more up-to-date methods used by companies. The course starts by examining the product class in which the firm is considering either repositioning an existing brand or introducing a new brand. We study how consumers choose a brand within the product class. This includes the theory and estimation of the multiattribute utility model. Leading on from this, we study how to reposition an existing brand and optimally design a new brand or a line of brands. Procedures for lab and market testing of a new brand are reviewed. We proceed by evaluating the current and future sale of the product class through the diffusion model. A discussion is held on the marketing mix policies for brands over the product life cycle. The course concludes with an evaluation of the portfolio of product classes in which the firm ought to compete. A group project involving the development of a marketing strategy for an existing brand with emphasis on its repositioning is required.

Prerequisites: MKT 402, GBA 411 and GBA 412

MKT 433. Advertising and Sales Promotion

This course explores the tools available to marketers for the promotion of products and services. The integrated marketing communications philosophy is stressed, and principles of consumer behavior are discussed as the starting point for the analysis of promotion decisions. Advertising is the main focus of the class, and issues such as the setting of campaign objectives, segmentation and targeting, budgeting, media placement, message strategy, creative development, persuasion and measurement of advertising effectiveness are discussed. More specialized units consider Internet and global/cross-cultural advertising. Sales promotion techniques are also discussed, including consumer promotions (e.g., sampling, coupons, premiums, contests) and trade promotions (e.g., buying allowances, cooperative advertising). Other elements of promotion discussed include public relations, sponsorships and personal selling.

Prerequisite: MKT 402

MKT 435. Distribution Channels and Salesforce Management

This course deals with the issues that arise in designing and managing distribution channels and salesforces. A central theme of the course is that these entities perform both a tactical/operational function as well as a strategic function and that both aspects need to be considered in their design and management. The course looks at a number of design options, ranging from direct distribution through a salesforce to a complex, multi-layered channel consisting of several layers of intermediaries such as wholesalers and retailers.

Managing a channel requires an understanding of the competitive and cooperative aspects of manufacturer-distributor relationships. The course evaluates the efficiency of contractual arrangements like exclusive territories, exclusive dealing requirements and resale-price maintenance from the manufacturer's and the distributor's point of view. Finally, an assortment of contemporary issues in channels—such as everyday low pricing versus promotional pricing, slotting allowances, the shift in bargaining power from manufacturers to retailers for consumer goods, growth of store-labeled brands, the role of the Internet and new forms of retailing-are discussed. In addition, a number of modeling and quantitative techniques are studied that help implement the strategies discussed in the course.

On the salesforce front, the course delves into a number of critical issues such as performance measurement, territory decision, quotas and compensation design.

Prerequisite: MKT 402

MKT 436. Database Marketing

(Same as ECM 436)

Advances in information technology have created opportunities for firms to gather more detailed information on their customers and competitors. The enormous volume of information which companies now collect poses many new challenges. The basic question we address in this course is: "What can one do with all of this data?" Our goal is to integrate statistical models and marketing models with data and decisions.

In this course, students will learn how database marketing provides the management with specific information needed to identify the target customer and to retain her or him for a lifetime, if possible. In the absence of database marketing philosophy, managers would be left with mass marketing and segmented marketing techniques that are not effective and efficient in today's information intensive, high-tech, global markets.

What is database marketing (DM)? How is it different from traditional marketing methods? Database marketing is a segmentation process that utilizes state-of-the-art statistical methods and computerized databases of customers to reach the individual consumer.

This course also examines direct marketing in depth, since the roots of database marketing are in direct marketing. Direct marketing is the type of marketing that recognizes the individual as the target rather than the entire market. Direct mail, telemarketing, catalog shopping, Web-based marketing and relationship marketing are related topics that will be covered in this course.

Prerequisites: MKT 402, GBA 411 and GBA 412.

MKT 437. Marketing on the Internet

(Same as ECM 437)

This course examines the major issues involved in marketing on the Internet. Among the topics studied are: new product opportunities on the Internet; the changed role of advertising; the Internet as a two-way communication medium with consumers; targeting individual consumers; word-of-mouth among consumers on the Internet; the Internet as a distribution channel; and marketing research on the Internet.

Prerequisite: MKT 402

MKT 441. Brand Management Workshop

This course is the capstone course of the Brand Management Track. Lectures focus on scanner data analysis, and guest speakers discuss timely brand management topics. The main focus is a team project performed for a major consumer packaged goods firm, requiring the analysis of various current data sources, most notably scanner data. The major deliverable is a presentation to the client by each team of their findings. Typically, this amounts to performing a brand review.

Prerequisite: MKT 412 (may be taken concurrently)

MKT 442. Special Topics in Marketing

(Not offered every year)

Special topics are generally those which are not well covered in othe other courses, or they may deal with marketing in selected industries (e.g., financial services, high-tech marketing, etc.). The specific content of the course varies, depending on faculty interests.

Prerequisite: permission of the instructor

MKT 448. Brand Strategy Workshop

In this project-based course, students consult with the senior leadership teams of local companies that are in need of a brand strategy. In doing so, students address the following questions:

- What is the firm's desired brand strategy?
- How does the firm currently see its brand?
- How does the marketplace perceive the firm? (Internal and external perceptions rarely match.)
- What can the firm do organizationally (hiring, structure, incentives, etc.) to move toward providing the desired brand?
- What can the firm do using marketing activities, including product and service

experiences, to move consumer perceptions toward this desired positioning?

The course introduces students to an intuitive framework in which to develop answers to these questions and a series of research tools to collect the needed information. Students then actually use these tools to help a local company design brand strategy.

Students in this course realize several meaningful benefits:

- Greater preparedness to add immediate
 value in the corporate workforce, where they
 are sure to come across the topic of brand
 building. This class provides them with practical exposure to a proven methodology and
 an array of appropriate tools for aligning
 organizations going through a brand transformation or engaging in a brand-related
 project.
- Access to senior level leadership challenges.
 This course provides an opportunity for
 students to interact regularly with the upper
 management of the participating company,
 thereby enabling them to learn from reallife, demanding experiences.

Class sessions consist of lectures relating to brand strategy development methodologies and tools and discussions pertaining to the course project. Multiple team meetings with the client firm outside of the scheduled class times are required. Grading is based on peer, professor and client evaluations of team success.

Prerequisite: MKT 402

MKT 449. Global Marketing Strategy

This course will develop the concepts of marketing strategy in the context of the resourcebased view of the firm and the market focus view of the firm. Marketing strategy formulation and implementation will be related to strategies at the corporate and business unit level as well as other functional areas of the organization. The analytical tools and concepts for strategic analysis will be developed from basic economic principles. Core M.B.A. subject matter will be integrated in the course as a part of the analysis and construction of a marketing strategy. The course examines the importance of bilateral information flows between the firm and the marketplace in defining new product requirements, changing competitive conditions, product advertising, and strategic commitment.

The course consists of lectures and classroom discussion of contemporary cases in services and tangible products. The case discussions will illustrate how the entire organization is affected by strategic marketing decisions. The definition of new core capabilities and the use of existing unique resources in creating competitive advantage will be explored. Special emphasis will be given to the impact of globalization and technology on the formulation and implementation of marketing strategy.

Prerequisite: MKT 402

MKT 451. Computation and Analysis of Advanced Quantitative Marketing Models

The course is primarily designed for students (both M.B.A. and Ph.D.) who have a quantitative inclination towards marketing and strategy but will also be useful for students in other areas looking to hone their quantitative skills. The course will guide students through various aspects of data related issues, problem framing, programming and computational analysis and the communication and presentation of managerially relevant findings. The course relies heavily on using SAS® as a computational engine and MS® EXCEL® as a presentation and simulation device. All instruction is "hands-on" and students should expect to be proficient in SAS® by the end of the quarter. The course will have some assignments and a "real-world" consulting project.

Students will be exposed to the theoretical underpinnings and practical applications of various analytical and econometric models. These include, but are not limited to:

- Linear and Nonlinear Regression (Demand/ Share Estimation)
- Systems of Equations Estimation (Market Equilibrium Models)
- Models for Binary and Ordered Responses (Scale Responses)
- Multinomial Discrete Choice Models (Consumer and Brand Choice)
- Other Limited Dependent Variable Models including Count, Censored and Duration models. (Interpurchase time, Selectivity etc.)
- Multivariate Methods (Factor Analysis, Cluster Analysis etc.)

This course is not for everyone and requires some proficiency in (or aptitude for) math/statistics and programming. There is also a limit (15) on the number of M.B.A. students who can register for this class.

PH.D. COURSES

MKT 501. Workshop in Marketing

Non-credit

This workshop provides a forum for the presentation of ongoing and completed research by students, faculty and visiting scholars. Ph.D. students are expected to participate actively.

Prerequisite: permission of the instructor

MKT 511. Advanced Topics in Marketing I

This course is the first leg of a two-part sequence that prepares Ph.D. students for research in marketing. The presentation of topics between the two parts may vary from year to year, but typically, the first part discusses theoretical and empirical issues in consumer behavior, product planning and advertising. The aim is to survey the literature, assess progress and identify opportunities for future research.

Prerequisite: permission of the instructor

MKT 512. Advanced Topics in Marketing II

In this second part of a two-part sequence that prepares Ph.D. students for research in marketing, topics such as product strategy, pricing and distribution channels are discussed in a format similar to MKT 511.

Prerequisite: permission of the instructor

■ OPERATIONS MANAGEMENT

Abraham Seidmann, Area Coordinator

MASTER'S-LEVEL COURSES

OMG 402. Operations Management

Operations Management introduces the concepts and skills needed to design, manage and improve service and manufacturing operations. The course develops a managerial perspective of the operations function and an appreciation of the role that operations plays in creating and maintaining a firm's competitive edge. The course introduces process analysis, performance measurement systems for operations and production control systems.

Quantitative models and case studies apply these skills to service process management, manufacturing, inventory control, supply chain management and project management. The course highlights the role of effective operations management in the strategic direction of the firm as well as the connections between operations and other functional areas.

Prerequisites: CIS 401, GBA 411 and GBA 412

OMG 411. Supply Chain Management

This course gives an overview of supply chain management in a wide variety of industries such as: groceries, style goods, consumer electronics and services. The impact of shifts from traditional channels to e-commerce will be emphasized. New initiatives introduced to address these new challenges, such as vendor managed inventory (VMI), variety postponement, cross docking, real options contracts and quick response, will be studied and applied both in class and assignments. Supporting software, such as Enterprise Resource Planning (ERP) and supply chain tools, will also be discussed. After completing this course, the student should be able to characterize the supply chain issues in an industry/ firm, and evaluate current practice as well as identify improvement opportunities.

Prerequisite: OMG 402

OMG 412. Service Management

Success of service management critically depends on managing the integration of business processes with customers as well as all related support systems (technology, human resources, information flow). This integration presents a challenge to service managers who need to address significant variation in customer expectations and requirements while

controlling costs and remaining competitive. This course provides a foundation for the analysis and improvement of businesses, paying particular attention to the service sector. The type of analysis learned in this course is required in virtually every industry as companies work to improve their bottom-line performance. The best way to improve performance is through a holistic approach, where the structure of processes, information and technological requirements, and the managerial implications, are considered concurrently. The methodologies developed in this course will provide a framework for analysis that will remain constant amid the many different types of services analyzed. Please note that this course is case intensive.

Prerequisite: OMG 402

OMG 413. International Manufacturing and Service Strategy

Operations strategy describes how a firm's long-term operations decisions affect its ability to compete. Areas of critical importance to firms often include: location and distribution policy; management and global networks; outsourcing and vertical integration decisions; coordination of operations with other functions such as finance; accounting and finance; technology acquisition; and new product development. Special emphasis is placed on the impact of international issues on operations strategy. A variety of cases is used to demonstrate applications.

Prerequisite: OMG 402

OMG 415. Process Improvement

This course will teach a systematic method for understanding and improving ongoing business processes. The techniques you learn in this class provide a systematic method of asking questions, collecting data, and analyzing that data to learn how processes work (or are failing) and what can be changed to improve them. The statistical techniques you will learn are SPC (Statistical Process Control, used as a proactive tool for investigation rather than its traditional role as a reactive tool), MSA (Measurement Systems Analysis, for determining if your measurement system is capable), FMEA (Failure Modes and Effects Analysis), and DOE (Design of Experiments). In addition to these analysis tools, there will be a strong emphasis on the process of data acquisition. To support the process of acquiring the right data and learning the analysis tools, you will do a small outside project for the class and a series of in-class simulations. You will learn to use two additional tools that support the questioning that leads to good data acquisition: process mapping (of the process you will be improving) and thought process mapping (of the process you use to solve the client's problem).

Prerequisite: OMG 402

OMG 416. Project Management

The topics treated in this course span a wide spectrum of issues, concepts, systems and techniques for managing projects effectively in today's complex business environment. Students are led through a complete project life cycle, from requirements analysis and project definition to start-up, reviews, and phaseout. Important techniques for controlling project costs, schedules, and performance are studied. The course employs a combination of lectures, case analyses, business/project simulations, videos, Internet resources, and group discussions to develop the conceptual understanding and operational skills needed for effective managerial role performance.

Prerequisite: OMG 402

OMG 437. Managing Health Care Operations

(Same as HSM 437)

The health care industry is undergoing rapid growth as well as rapid structural changes. New technology, changing reimbursement mechanisms, and increased competition create many interesting management problems, not in the least in the area of health care operations. In this course, we will study the operations of various types of health care provider organizations (such as hospitals, HMO's, group practices, nursing homes, etc.) and other participants in the industry (such as insurance companies, pharmaceutical companies, suppliers and consulting companies). Topics that will be studied include: patient and provider scheduling, capacity management, providing services and supplies to health care providers, new product development and integrated delivery systems.

Prerequisite: OMG 402 or an equivalent

OMG 460. Special Topics in Operations Management

This course provides a critical study of selected topics in operations management focusing on best practice and the status of research efforts to date. Potential topics are: yield management, operations and information management issues in retail fashion and media, transportation management, or customers' relationship management.

Prerequisite: OMG 402

OMG 461. Strategy and Business Systems Consulting Practicum

(Same as CIS 461)

This course provides M.B.A. students with an introduction to strategy and business systems consulting. It is aimed at students who wish to explore career opportunities within the major consulting firms, but is also relevant for students considering a career as an independent consultant, or within a corporation's internal consulting group. The course focuses on three areas:

• The Consulting Industry: Students will examine

- several types of consulting (e.g., strategic, operations, systems, human resource and marketing) and understand where the major consulting firms position themselves. The career paths for M.B.A.'s entering the industry, and the skills and values necessary for success as a consultant will be scrutinized.
- The Business Systems Consulting Process: The creation of proposals, the winning of consulting engagements, and the preparation of contracts will be discussed. The typical stages of a business systems consulting engagement (e.g., problem framing, analysis design, gathering data, interpreting results, architectural solution, and presentation of recommendations) and managing different sorts of consulting projects (e.g., operational improvement, supply-chain optimization, quality improvement, strategy formulation, and organization design) will be examined.
- Consulting Skills: The role of the consultant and the human dimension will be discussed (e.g., personal attributes of consultants, relationship building, and team building). Diagnostic tools and data gathering techniques (e.g., questionnaires and interviews) will be presented. Frameworks for problem solving, and communicating recommendations will also be introduced.

The course examines a wide range of modern global business challenges and opportunities from both the consultant's and the manager's perspectives and provides a learning platform to integrate and practice the skills and knowledge learned.

PH.D. COURSES

OMG 501, 502, 503, 521, 522, 523. Ph.D. Seminars in Operations Management

These six Ph.D. seminars are offered in the fall, winter and spring quarters, with major topics such as the following: distribution/inventory theory; flexible-manufacturing systems; (production) batching, scheduling and sequencing; reliability/maintenance management; design/strategy; routing/vehicle scheduling; quality; production-control systems; and planning models. Topics for the joint CIS/OMG seminars include: computer-integrated manufacturing, network-based industries, performance evaluation of dynamic systems, business expert systems and artificial intelligence.

OMG 531. Analysis of Production Systems

The course introduces the theory of production and inventory systems, and discusses mathematical models used in designing and managing real-world systems. Topics include: aggregate production planning, static and dynamic approaches to operations scheduling, inventory control with known and uncertain demand, flexible and high-volume manufacturing systems, hierarchical production planning systems and manufacturing resource planning.

INTERNATIONAL EXCHANGE PROGRAMS

BUSINESS SCHOOL	UNIVERSITY	LOCATION	PROGRAM OBJECTIVE	SPECIAL EMPHASIS	LANGUAGE
ARGENTINA Centro de Estudios Macroeconomicos de Argentina	Universidad del CEMA	Buenos Aires, Argentina	International business with programs in firm management and banking	Entrepreneurship, strategic planning, financial analysis, finance, macroeconomics, international banking	Primarily Spanish, some English
AUSTRALIA Australian Graduate School of Management	University of Sydney and University of New South Wales	Sydney, Australia	International scope; strong focus on financial management and logi- cal decision making	Policy analysis and public-sector manage- ment; interdisciplinary approach combines economics, quantitative methods, politics and management	English
BELGIUM Vlerick Leuven Gent Manage- ment School	Katholicke Universiteit Leuven	Leuven, Belgium	Stresses analytical techniques and rigor in management. In-depth understanding of concepts and techniques necessary in modern management	An analytical and often quantitative approach to the study of managerial problems; learning principles of problem solving which lead to effective decision making	English
FINLAND Helsinki School of Economics and Business Administration		Helsinki, Finland	International business	Intensive modules of study concentrated over three weeks	English
GERMANY Otto Beisheim Graduate School of Management	WHU— University of Koblenz	Vallendar, Germany	Business administration, policy, strategic and situational manage- ment	Accredited to award the Diplom-Kaufmann, the Habilitation and the doctoral degree, Dr.rer.pol.	Primarily German, some English
HONG KONG School of Business and Management	Hong Kong University of Science and Technology	Kowloon, Hong Kong	To cultivate students able to handle the challenges and opportunities presented by the continuing glo- balization and development in the Asia-Pacific region	Expertise in China business, electronic commerce, information technology management and financial services	English
JAPAN Graduate School of International Management	International University of Japan	Niigata, Japan	To prepare specialists with a broad international outlook and an understanding of management practices in international cultures	Invites foreign scholars as professors and lecturers	English
NORWAY Norwegian School of Management BI		Sandvika, Norway	Functional business, economics, international strategy, Euro-management	Subspecialization in environmental management	English

ADMISSIONS AND FINANCIAL AID

The Simon School encourages applications from men and women with diverse educational, professional, cultural and geographic backgrounds. This rich mix of educational backgrounds and experiences greatly enhances classroom interaction and social life at the School.

Criteria for Selection

Admission to the Simon School is very competitive. The selection process emphasizes evaluating the applicant as an individual and determining potential contributions to the School and to the world's business community. The Admissions Committee looks carefully for predictors of success in both the academic setting and the business world. In selecting students, the committee considers the following criteria: evidence of leadership and initia-

tive, the nature and scope of prior work experience, teamwork and communication skills, undergraduate grade-point average, G.M.A.T. score, recommendations and the applicant's career focus. The applicant is encouraged to prepare a careful and thoughtful application.

Preparation for Graduate Studies

Applicants from all undergraduate majors are considered for admission to the M.B.A. program. M.S. study in some areas may have specific course or major prerequisites. Check our Web site at www.simon.rochester.edu for details. Undergraduate backgrounds of current students are distributed evenly across business, engineering/math/ sciences, economics, and other social sciences and the humanities. The curriculum is designed to be managed suc-

cessfully by students without prior business coursework. However, for applicants planning to take additional courses prior to entering the Simon School, economics, accounting and statistics are recommended. An elementary knowledge of calculus is required.

Full-Time Entrance Dates: September and January

The Simon School admits full-time students at two times during the academic year to accommodate individual scheduling needs. Two-thirds of the full-time graduating class start in September; the remaining third starts in January.

September cohorts complete the first year during the fall, winter and spring quarters. The January cohort completes the first two

terms of the core curriculum in the winter and spring quarters. January entrance is usually appealing to individuals who 1) are not interested in completing a summer internship, 2) wish to accumulate more resources for graduate school, 3) must remain at their jobs longer than expected, 4) are sponsored by their employers or 5) wish to accelerate the process of earning an M.B.A. degree. Students complete the program in 15 to 18 months, but degree requirements and the length of courses are the same as for fall entrants.

Part-Time Entrance Dates

The criteria for admission are the same for full-time and part-time M.B.A. and M.S. students. Applicants to the Part-Time M.B.A./ M.S. Program may matriculate in any quarter and application instructions and deadlines can be found on the Simon Web site. Part-time M.B.A. students may also take up to four courses before matriculating in the program. Grades received in non-matriculated courses automatically become part of the application for students who plan to matriculate in the part-time program. Part-time M.B.A. students who complete the first four courses (ACC 401, GBA 411, FIN 402 and STR 401) with a cumulative grade-point average of 3.5 or higher will not be required to take the Graduate Management Admission Test. The non-matriculated start option is not available for the part-time M.S. program.

The Office of Admissions offers day and evening appointments for part-time applicants desiring admissions counseling. Quarterly evening information sessions are offered to provide prospective students with additional information about the School. Please refer to our Web site for upcoming events.

All part-time students must complete an orientation/registration session prior to beginning classes at the Simon School. We offer one evening session prior to the start of each quarter. The orientation provides details on Simon and University of Rochester student services, and the transition into the business school, while also allowing the student to complete course registration. Please check our Web site at www.simon.rochester.edu/ptevents for details on upcoming part-time registration sessions.

Application Procedures

Applications must be complete before being considered by the Admissions Committee.

A complete application consists of the following:

- the online application form, including essays;
- an uploaded, scanned official transcript from each college attended (undergraduate and graduate);
- two online letters of recommendation;
- a non-refundable application fee;
- · a current résumé;
- Uploaded scanned official scores reported from the Graduate Management Admission

- Test (G.M.A.T.) or Graduate Record Exam (G.R.E.) (M.S. students only);
- Uploaded scanned Test of English as a Foreign Language (T.O.E.F.L.) for international applicants who are non-native English speakers (see details in the Online Application available through our Web site)

M.B.A. or M.S. applicants are expected to apply online through our Web site at www. simon.rochester.edu. Additional details on the admissions process and requirements are available by reviewing the application.

Interviews

The Admissions Committee may request an interview with prospective candidates. Applicants selected for an interview will be notified by the Office of Admissions after a preliminary review of his or her application. The interview is regarded as an important two-way communication channel for both the School and the applicant. M.S.-based candidates are expected to visit campus for their interviews. A telephone interview with a member of the Simon School Admissions Committee is available for candidates outside of North America.

Campus Visits

Prospective M.B.A. and M.S. students are strongly encouraged to visit the Simon School. First- and second-year students volunteer as Simon Ambassadors to conduct individual tours of Schlegel and Gleason Halls and the University of Rochester campus. They also escort visitors to classes, treat them to lunch and provide information about the Simon experience from a student perspective. Visits usually include an interview with a member of the Admissions staff. To make the most of your visit, it is recommended that visits be scheduled between Monday and Thursday, when classes are in session. We will make an attempt to accommodate those who request to visit on Friday, provided that sufficient notice is given for this preference. Scheduling priority is given to those candidates who have already submitted an application to the Simon School and who have been invited to interview by the Admissions Committee. However, the Office of Admissions will consider all requests to visit, provided a current résumé and G.M.A.T./T.O.E.F.L. scores are submitted at the time of the request.

International Students

The interactive M.B.A. and M.S. programs in Rochester rely on the breadth of experience of its students. The international student population adds an especially valuable dimension to discussions on current business practices in a global marketplace. Applicants from outside the U.S. are expected to be comfortable with conversational English since active participation both in and out of the classroom is integral to success at the Simon School.

Transfer Credit

Students may petition to receive transfer credit

for graduate courses taken at other universities within five years of the date of Simon School matriculation. A maximum of three courses (nine credit hours) may be transferred to the Simon School M.B.A. program. A maximum of two courses (six credit hours) may be transferred to an M.S. program. Students taking approved courses for transfer credit to the Simon School must earn a grade of B or better in those courses. Requests for transfer of course credit are made by submitting a petition for transfer credit to the associate dean for M.B.A. programs. Only petitions from students already matriculated into a program will be considered. Course descriptions and syllabi should accompany the request.

Because of the integrated nature of the cohort system, no transfer credit is granted for core courses for full-time students. Part-time students, however, may petition for the transfer of core courses. Grades for transferred courses are not calculated into a student's cumulative G.P.A. There is a \$600 course-transfer fee for each course taken outside the University of Rochester and transferred for credit to the Simon School. An official transcript is required for credit to be awarded.

Expenses

The tuition for the 2009–2010 academic year is \$1,366 per credit hour. The average tuition for a full-time M.B.A. student is \$40,980 per year. For first-year M.B.A. students, who generally take 11 courses, tuition is \$45,078. For second-year M.B.A. students, who generally take nine courses, tuition is \$36,882. M.S. students pay \$1,366 per credit hour. There is no charge for the credits associated with labs for matriculated students, and there is no charge for the Management Communication sequence. All students are charged tuition by the credit hour.

All full-time graduate students pay an annual health fee of approximately \$1,500. This covers use of the University Health Service and provides medical insurance coverage for the student. The health fee is reduced if the student has medical insurance coverage from another source. Medical insurance for students' families is also available.

Part-time students may opt to take advantage of the Employer-Sponsored Payment Plan (ESP Plan). Through this plan, employer-sponsored matriculated students may defer payment of tuition until the 10th day of the month immediately following the end of the quarter.

Student Ownership of Laptop Computers (Required)

It is required that students acquire a laptop computer to support their class and course work. It is the responsibility of each student to acquire one; the School will not supply equipment to students.

Students who purchase computers may include the cost when calculating their eligibility for loan program.

When considering the purchase of a laptop computer, Dell is the preferred brand. Simon

School IT staff members have in-depth experience with Dell models, features and troubleshooting. Most laptops manufactured today have the basic requirements (network cable connection, high speed processor, wireless B/G adapter, Microsoft operating system), but purchasers should consider investing in at least 1 GB of memory/RAM (more if budget allows). Investments in additional features are at the purchaser's budgetary discretion. Students are free to choose equipment that meets their individual needs and budgets, but must bear in mind that the further they deviate from the recommendation, the more likely they are to face difficulties. Mac/Apple computers are not at all recommended.

Merit-Based Financial Aid

The Simon School assists qualified full-time students in financing their management education and has been relatively generous in awarding merit-based scholarships to those who show promise of achieving excellence at the School and in their careers. In awarding merit-based aid, primary emphasis is given to academic excellence, professional development and demonstrated qualities of leadership.

These awards are renewed in the second year, provided first-year academic performance has been satisfactory. Consideration for Simon School merit-based financial aid does not require a separate application.

Financial aid for international students is available, but limited, and such candidates must consider the costs of financing a two-year academic program in the United States. International students are also encouraged to investigate funding sources in their home countries as early as possible.

Loan Programs

The University of Rochester administers the full range of federal and private financial aid programs. International students may borrow, provided they have a co-signer who is a citizen or permanent resident of the United States.

To apply for student loans, students should submit a Free Application for Federal Student Aid (F.A.F.S.A.). To receive a timely response, a completed F.A.F.S.A. should be on file in the University of Rochester Financial Aid Office at least 12 weeks prior to the start of the quarter in which a student intends to enroll. The University of Rochester requires parental information of dependent students only.

For further information on student loans, please contact:

University Financial Aid Office Box 270261 University of Rochester Rochester, N.Y. 14627-0261 (585) 275-3226 (800) 881-8234 (toll free within the U.S.)

International Financial Aid Opportunities

The organizations listed below offer financial assistance to international students.

American Association of University Women (AAUW) International Fellowships AAUW Educational Foundation 1111 Sixteenth Street, NW Washington, D.C. 20036 (800) 326-2289 (202) 785-7700 www.aauw.org

Edmund S. Muskie/FSA Graduate Fellowship American Councils ACTR/ACCELS 1776 Massachusetts Avenue, NW, Suite 700 Washington, D.C. 20036 Contact: Andrew Segars (202) 833-7522 www.actr.org or www.americancouncils.org

Institute of International Education 809 United Nations Plaza New York, N.Y. 10017-3580 (212) 883-8200 www.iie.org

The Rotary Foundation Ambassadorial Scholarship Rotary International One Rotary Center 1560 Sherman Avenue Evanston, Ill. 60201 (847) 866-3000 www.rotary.org Contact: inquiries@rotary-intl.com

2009–2011 SIMON MANAGEMENT PROGRAMS INFORMATION GUIDE

The information contained in the 2009–2011 Simon Management Programs Information Guide is current as of **November 9, 2009.**

Provisions of this publication are not to be regarded as an irrevocable contract between the student and the William E. Simon Graduate School of Business Administration. The Simon School reserves the right to make changes in its course offerings, degree requirements, regulations and procedures, and fees and expenses as educational and financial considerations require.

The Simon School encourages the application of all qualified persons interested in the study of management at the master's and doctoral levels. The University of Rochester values diversity (see www. rochester.edu/diversity) and is committed to equal opportunity for all persons regardless of age, color, disability, ethnicity, marital status, national origin, race, religion, sex, sexual orientation or veteran status. Further, the University complies with all applicable nondiscrimination laws in the administration of its policies, programs and activities. Questions on compliance should be directed to the particular school and department and/or to the University's Equal Opportunity Coordinator, University of Rochester, Box 270501, Rochester, N.Y. 14627-0501. Phone: (585) 275-4321.

Campus Crime Statistics

The Advisory Committee on Campus Safety will provide upon request all campus crime statistics as reported to the United States Department of Education (U.S.D.O.E.). The statistics are available on the U.S.D.O.E.'s Web site (http://ope.ed.gov/security/) and on the University's site at (http://www.security.rochester.edu/). You can also obtain a hard copy of the report, titled *Think Safe*, by contacting University Security Services at (585) 275-3340.

STUDENT SERVICES

Athletic Facilities

Simon students have access to University facilities such as the Robert B. Goergen Athletic Center, which is well equipped for a wide variety of individual and group athletic activities. In addition to multipurpose areas for volleyball, basketball and exercise, the facilities include indoor and outdoor tennis courts, a modern 25-meter pool with a separate diving area, and a Cybex fitness center. A comprehensive intramural athletic program is also open to Simon School students.

Barnes and Noble Bookstore

The Barnes and Noble Bookstore on the University of Rochester River Campus is located in the Frederick Douglass Building across from the Goergen Athletic Center and next door to Wilson Commons, the student center.

All textbooks for Simon School courses are available. In addition to course materials, the store also carries an assortment of Simon School merchandise and apparel.

For information, call (585) 275-4012, or visit the Web site at www.urochester.bncollege. com.

Dining Services

Many dining options are available on the University's River Campus. Meals may be purchased with cash or a prepaid dining plan.

Espresso, cappuccino, sushi, sandwiches, soup, salads and baked goods are available at Schlegel Hall's coffee counter.

The Douglass and Danforth Dining Centers each serve a wide variety of foods for breakfast, lunch and dinner. Kosher meals are also offered daily.

Food options available at Wilson Commons include: Starbucks, the Common Ground coffeehouse, which serves Java City coffee, espresso, cappuccino, lattes, specialty drinks, gourmet baked goods and Freshëns Fruit Smoothies; and the Wilson Commons Snack Bar, which houses takeout and a made-to-order grill as well as pasta, subs, salads and wraps.

The Corner Store, located in the Frederick Douglass Building, provides a selection of snacks, beverages, grocery items, fresh produce and kosher selections.

A coffee cart is provided in Hutchison Hall during the weekday lunch period.

Sophisticated fine dining in the Meliora is open to the community weekdays for lunch and Friday night dinner. Private dining rooms and catered cuisine are also available.

For more information, call dining services at (585) 275-0171, or visit our Web site at www.rochester.edu/studentlife/dining.html.

Health Services

The University Health Service (UHS) provides a comprehensive, prepaid health care program for all full-time graduate students. Students pay a mandatory health fee that entitles them to use the University Health Service throughout the academic year and the following summer, as long as they are enrolled on a full-time basis. The health plan offers students a wide variety of high quality, affordable and accessible health care services. UHS staff supports preventive medicine and encourages students to take an active role in their health care. All full-time students must have health insurance. An Excellus Blue Cross/Blue Shield insurance plan is available for individual students through UHS. Students with equivalent insurance can waive the Excellus Blue Cross/Blue Shield insurance. A family insurance plan is available for students who want coverage for themselves and their dependent children.

For more information, call (585) 275-2662, or visit www.rochester.edu/uhs/.

Housing

The University owns several housing facilities specially reserved for graduate students. These include:

- furnished or unfurnished one- and two-bedroom apartments in Goler House;
- unfurnished studios with kitchenettes, and one- and two-bedroom apartments at University Park;
- unfurnished two-bedroom garden apartments and two- and three-bedroom town-houses surrounded by woods at Whipple Park, perfect for families;
- unfurnished two-bedroom bungalows across from University Park;
- furnished suites at University Towne House, a short walk to campus;
- · and a community-living facility that houses

40 single graduate students at the River Road Residence.

All University apartments have reserved off-street parking and are served by frequent runs of the University shuttle bus.

Eligibility for housing is contingent on current enrollment status, and all applicants must be registered as full-time graduate students of the Simon School. Because applications for housing always exceed available facilities, a lottery system, usually held in early May, is used to establish priority among qualified applicants. Graduate students from outside the Rochester area are advised to make specific housing arrangements in advance of coming.

For more information, call (585) 275-3166, or visit our Web site at www.rochester.edu/reslife/graduate/index.html.

ID Cards

University of Rochester ID cards are required to obtain after-hours access to Schlegel and Gleason Halls. ID cards are also required to use the library and sports complex. For information, contact the River Campus Identification Card Office, located in the Susan B. Anthony Residence Hall, at (585) 275-3975, or visit our Web site at www.rochester.edu/living/services/onecard/ID1.htm.

Immunizations

All entering matriculated full-time and parttime students must submit a University Health History Form that includes immunization information. Under New York State law, students who do not show proof of immunity to measles, mumps and rubella before classes begin will not be allowed to attend the Simon School.

Interfaith Chapel

As the center for spiritual life on the River Campus, the Interfaith Chapel offers graduate students opportunities for worship, meditation, social service, and cultural and social events. Roman Catholic, Protestant, Muslim and Jewish clergy are available for personal counseling. In addition, there are resource staff members available to assist students from the Buddhist, Jain, Hindu, Sikh, Universalist Unitarian and Latter-Day Saints traditions.

INFORMATION

Admissions (M.B.A. and M.S. Programs)

Phone: (585) 275-3533 Fax: (585) 271-3907

E-mail: admissions@simon.rochester.edu

Advancement

Phone: (585) 275-7563 Fax: (585) 756-8053

E-mail: alumni@simon.rochester.edu

Career Management Center

Phone: (585) 275-4881 Fax: (585) 473-9604

E-mail: career@simon.rochester.edu

Executive M.B.A. Programs

Phone: (585) 275-3439 Fax: (585) 244-3612

E-mail: emba@simon.rochester.edu

Financial Aid Office

Phone: (585) 275-3226, (800) 881-8234

Fax: (585) 756-7664

E-mail: help@finaid.rochester.edu

Information Technologies

Phone: (585) 275-4409 Fax: (585) 271-8752

E-mail: ssit@simon.rochester.edu

Marketing and Communications

Phone: (585) 275-3736 Fax: (585) 275-9331

E-mail: marketing@simon.rochester.edu

Off-Campus Living Information Center

Phone: (585) 275-1081

Ph.D. Program

Phone: (585) 275-2959 Fax: (585) 276-1965

E-mail: phdoffice@simon.rochester.edu

Registrar's Office

Phone: (585) 275-3580 Fax: (585) 271-3907

E-mail: registrar@simon.rochester.edu

Student Services

Phone: (585) 275-8163 Fax: (585) 271-3907

E-mail: studentservices@simon.rochester.edu

University Apartments Office

Phone: (585) 275-5824

2009-2011 Calendar

First Day Classes Final of Classes End Exams

FallMonday,Thursday,Saturday, December 5, through2009September 21December 3Thursday, December 10

Winter Monday, Tuesday, Wednesday, March 17, through
2010 January 11 March 16 Sunday, March 21

Spring Monday, Wednesday, Thursday, June 3, through
2010 March 29 June 2 Monday, June 7

Commencement—Sunday, June 13, 2010

Summer Monday, Monday, Tuesday, August 17, through 2010 June 21 August 16 Saturday, August 21 Fall Monday, Thursday, Monday, December 6, through 2010 September 20 December 2 Saturday, December 11

WinterMonday,Tuesday,Wednesday, March 16, through2011January 10March 15Sunday, March 20

SpringMonday,Wednesday,Thursday, June 2, through2011March 28June 1Monday, June 6

Commencement—Sunday, June 12, 2011

SummerMonday,Monday,Tuesday, August 16, through2011June 20August 15Saturday, August 20

