**BIO740 Neurophysiology**  
*4 Credits*  
Prerequisites: One year of Biology and one year of Chemistry, or permission of the Department Chairperson  
The study of the vertebrate nervous system with emphasis on physiological mechanisms in man. Topical areas include: generation, propagation, and transmission of bio-electricity; reflex facilitation and inhibition; the ascending and descending pathways; coordination of motion; the autonomic nervous system; special senses; and neuroendocrine mechanisms.

**BIO741 Endocrinology**  
*4 Credits*  
Prerequisites: One year of Biology and one year of Chemistry, or permission of the Department Chairperson  
The study of the endocrine glands and their hormones with particular emphasis on mechanisms of hormone action. Topics include normal and abnormal physiology of the endocrine glands, methods of hormone analysis and endocrine control of such phenomena as growth, water and electrolyte balance, sexual differentiation and cellular metabolism.

**BIO760 Immunology**  
*4 Credits*  
Prerequisites: Anatomy and Physiology II and Organic Chemistry II, or permission of Department Chairperson  
An introduction to the structural and functional organization of the immune system and to the interplay of innate and adaptive factors underlying immunity. The relationship between immune responses and diseases will also be examined.

**BIO800 Field Botany**  
*4 Credits*  
Prerequisites: BA or BS in Biology with at least one course in Botany. Others by permission of the Department Chairperson  
A taxonomic study of the local flora with much laboratory and field work. Identification of plants through the use of keys, understanding of phylogenetic arrangements of flowering plants, and herbarium methods will be emphasized.

**BIO801N Workshop in Field Biology**  
*3 Credits*  
Prerequisite: One year of College Biology  
A study of terrestrial and/or aquatic environments and the organisms inhabiting them at selected locations. The focus may include local habitats, other regions in the United States and selected foreign areas.

**BIO875, BIO876 Directed Study**  
*3 Credits*  
An independent research project supervised by a member of the Biology Faculty.

### Business Administration

**ACC703 Financial and Managerial Accounting**  
*3 Credits*  
This course presents the basic concepts and principles of external financial reporting, as well as the nature of management accounting. Topics to be covered include generally accepted accounting principles, financial statement preparation and analysis, cost concepts, budgeting and product pricing.
ACC805 Tax Factors in Business: A Decision Making Approach  
Prerequisites: FIN710 and BUS802N  
This course examines the effects of taxes on business decisions, focusing primarily on planning implications for sole proprietorships, partnerships and corporations. It also includes a general overview of tax laws regarding income, exclusions, deductions and credits.

BUS700 Graduate Business Institute  
Graduate Business Institute will offer lectures, discussions, media presentations and workshops with experts selected from academic, industry and government organizations. One or more business related topics of national and/or international importance will be selected by the instructor in consultation with other faculty, at least a semester prior to the course offering. These topic areas may not be usually found in the conventional classroom course. They will be carefully designed to facilitate the accomplishment of the objectives previously mentioned. It is anticipated that the proximity of the guest speakers and the opportunity for students to interact with their colleagues in a conference type setting will provide a meaningful experience to all.

BUS790 Internship in Business  
An academic work program under the auspices of various business and non-profit organizations in areas directly related to the student’s interests in business administration. The student is also supervised by a faculty member who will maintain contact with the sponsoring organization and with the student during the internship.

BUS802N Legal and Ethical Environment  
A study of the legal and ethical framework within which the formal business organization must operate. Topics included are the law of contracts, sales, negotiable instruments, partnerships, corporations, bankruptcy, consumer protection, and agency. Emphasis will be placed on the rights and liabilities of all parties. Case study method will be used extensively.

BUS840 International Business  
Prerequisites: BUS802N, ECO703, MGT780 and MKT790N  
This course intensively scrutinizes the setting and scope of international business and the dimensions of multi-national enterprise. Readings and examples for analysis from assigned cases are the key tools used. The student is expected to become skilled in the identifications of strategies and adaptations of functional activities in marketing, production and supply, finance and control, human resources, and government and public relations to deal with the differences to be encountered in exporting or making direct investments in foreign business environments.

BUS850 Ethical Issues in Business  
This course explores the delicate balance between business profitability and ethical practice, particularly as it relates to governmental regulation, consumer welfare, employee relations and environmental concerns. Text material and selected case studies will be utilized to provide a vehicle for discussing and understanding the social responsibility of business as inseparable from its economic function.
BUS853 Research Methods in Business 3 Credits
This is a course in real business problem solving. Students are provided with an opportunity to utilize all those skills and techniques acquired over the past few years. The primary responsibility resides in each student. By selecting individual areas of interest, the student can select a specific topic, identify the specific problem, develop and test a strategy designed to contribute significantly to the business world.

BUS855 Mergers and Acquisitions 3 Credits
Prerequisites: ECO715, ACC703, FIN710, MKT790N, MGT780 or permission of the instructor
The course is designed to examine corporate strategy development from an interdisciplinary perspective. Specific topics include: history of merger waves in the United States, global trends; types of mergers; strategic and financial motives for mergers; acquisition processes; post merger integration; empirical evidence of merger success; divestment; takeover defense strategies; and ethical and public policy issues. Pedagogical tools include class lectures, selected readings, case discussions, guest speakers and a term project.

BUS860 Entrepreneurship 3 Credits
Prerequisites: FIN710, MKT790N
This course is designed to examine the entrepreneurial process involved in new venture creation and start-ups. The approach is both conceptual and pragmatic. Students will understand entrepreneurship beyond the functional boundaries as an interdisciplinary, cross-functional activity. The course is ideal for individuals seeking to start their own businesses, and who wish to learn more about the analytic and creative processes involved in developing their ideas into a successful new venture.

BUS870 Business Policy and Strategy 3 Credits
Prerequisites: MGT780, MKT790N, ECO715, BUS802N and FIN710. Students must have successfully completed 36 credit hours prior to taking this course.
Designed as a capstone course for students in the Program, the course studies the strategies employed by corporations in planning, selecting and implementing objectives. Through analysis of various assigned cases, the student is expected to become skilled in the development and analysis of business strategy and policy, which requires familiarity with functional activities such as marketing, production, finance and human resources management.

BUS874 Scenario Planning 3 Credits
Prerequisite: BUS870 or permission of Department Chair
Scenario planning is a strategic planning technique that postulates a range of possible futures for the business environment. Scenario planning provides business leaders with success paths and options that correlate with the evolution of the collective business environments and the business’ internal capabilities.

BUS875, BUS876 Directed Study 3 Credits
An independent research project supervised by a member of the Graduate Business Administration Faculty.
BUS891 Field Based Business Studies I 3 Credits

The Field Based Business Studies course is designed to provide an opportunity for students to participate first hand in an industry/business experience. The business studies program is structured towards students able to observe and study the manufacturing and service sectors of business activities. Site visits will be made to private and government owned enterprises operating in the United States and in foreign countries.

BUS892 Field Based Business Studies II 3 Credits

Prerequisite: BUS891

This is a second course which would conduct additional field work and/or advanced coursework, and is designed for students who want to undertake in-depth case studies, and where constraints of first course BUS891 (such as time, location, and other circumstances) does not provide the student with the opportunity to conduct extensive observations and/or implement outcomes of the analysis of the case studies. Students will further continue to work on their paper/case studies under the directions provided by the instructor.

BUS900 Thesis 6 Credits

Develop a research proposal based upon a critical review of research work performed by others, and identification of areas of knowledge gaps upon which to establish the main purpose of the investigation. Indicate importance and relative contribution that the research will make towards the body of knowledge. Establish research objectives, processes and methodology, information acquisition, techniques of data manipulation, assumptions and limitations, analysis and procedures, results, conclusions, and directions for further studies. Carry out research program, collect data and report on the results in a thesis to be presented orally and in writing.

BUS905 Global Environmental Economics and Management 3 Credits

Through readings, lectures and class presentations and discussions, this course will further develop students’ knowledge and understanding of global environmental economics and management.

FIN710 Applications in Financial Management 3 Credits

Prerequisite: ACC703

A case method course focusing on financial decision making with emphasis on practical application rather than academic examination. Subject areas covered include working capital management, cash flow analysis and management, funds rating, cost of capital, capital budgeting, capital structure, dividend policy, firm valuation, mergers and acquisitions.

FIN751 Fundamentals of Financial Planning and Insurance 3 Credits

This course introduces students to the financial planning process with an overview of risk management and insurance, income tax planning, investment planning, retirement planning, employee benefits, and estate planning. Students will learn about time value of money, legal/ethical aspects of financial planning. The course also covers details of insurance planning.
FIN753 Retirement and Employee Benefits Planning  3 Credits
Prerequisite: FIN751
The course covers the importance of retirement planning and provide students with knowledge of public plans (Social Security, Medicare, Medicaid, etc.) and retirement plans including DB and DC plans and their regulatory provisions. Individual retirement plans like KEOGH, SRA, IRA etc. are also discussed as will other non-qualified DC plans. Other life changing events and their impact on retirement are addressed.

FIN757 Income Tax Planning  3 Credits
This course examines the Federal Income Tax Statutes as they relate to individuals, partnerships, limited liability companies, corporations, estates and trusts. The course examines how individuals can utilize their understanding of these tax statutes so as to minimize tax liabilities.

FIN759 Estate Planning  3 Credits
Prerequisite: FIN751
The course explores the complex legal, tax and financial issues in transfer of property, wills, trust, gifts, etc. The course introduces students to the areas of wills, probate, marital deductions, charitable contributions, charitable trusts and planning for incapacity. Special attention is given to the use of trusts, insurance and taxation issues in estate planning, etc. The course provides the students with the basic tools necessary to advise clients in estate planning matters.

FIN760 Cases in Financial Decision Making  3 Credits
Prerequisite: FIN710
A case method course focusing on financial decision making with emphasis on practical application rather than academic examination. Subject areas covered include working capital management, cash flow analysis and management, funds rating, cost of capital, capital budgeting, capital structure, dividend policy, firm valuation, mergers and acquisitions.

FIN780 Investment Analysis & Portfolio Management  3 Credits
This course examines key concepts and practices of investments. Included are topics in introduction to security markets; types of investment vehicles such as common and preferred stocks, bonds, mutual funds, and derivatives; investment environment; economy review; industry and security analysis; and portfolio concepts.

FIN810 Financial Markets and Institutions  3 Credits
This course involves studying the operation and management of various financial institutions, and the process of value creation in markets such as money markets, capital markets, and derivative markets. The course will also investigate the involvement of various government agencies in the regulation of the financial institutions.

FIN910 Global Trade and Finance  3 Credits
The course analyzes the effects of such factors as exchange rate fluctuations, currency regulations and other trade barriers on global financial planning of multinationals. This course will help students achieve a better understanding of the complex economic and financial interdependence of nations and thereby widen their intellectual horizons.
MGT780 Management Theory and Application 3 Credits
This course examines the major concepts and findings of the behavioral sciences which have particular relevance to management. Systematic ways of understanding behavior are developed. Topics include human development and motivation, interpersonal perception and communication, and small group processes.

MGT800 Behavior In Organization 3 Credits
Prerequisite: MGT780
As a continuation of the Management Theory and Application course (MGT780), this course focuses on both understanding and coping with the more complex relationships found in larger organizations. An opportunity is provided to apply knowledge about people in organizations to the improvement of organizational systems and to the process of achieving changes in organizations.

MGT804 Human Resource Management 3 Credits
Human resource management is approached from the perspective of the general manager. Managers need to know how to administer the personnel who report to them, and managers need to develop an understanding of the human resource policies of the organization as a whole. The course addresses both concerns. Important topics concerning selection, training, compensation, labor relations, and planning are covered.

MGT805 Leadership Studies 3 Credits
Leadership is presented from both a theoretical and practical point of view. Since there is no comprehensive theory of leadership, the major theories will be studied: Trait theory, behavioral theory, contingency theory and transformational leadership. Several topics are intertwined with leadership but will be studied as independent topics: power, motivation, and management style. Leadership has many practical aspects. Some of those which will be covered: stress, dealing with corporate culture, and gender and race issues.

MGT809 Labor Relations 3 Credits
The course concentrates on the institutional context of management/labor relations including the historic development of trade unions, the labor employment law, the collective bargaining and arbitration process and selected public policy issues.

MGT820 Innovation and Megatrends 3 Credits
The course includes the study of how innovations are developed and diffused and how significant demographic and psychographic trends can be anticipated and capitalized upon. The course examines how individuals and groups become effective idea generators, what organizational culture attributes help or hinder innovation, the role of leadership in innovation and how each functional area (such as marketing and manufacturing) plays a part in the innovative organization. The impact of innovation in the international marketplace will be examined. In addition to lecture and class discussion, the course will rely heavily on case analysis.
MGT830 Graduate Seminar—Current Issues in Business
This course is a critical study of current concepts and issues facing corporate America today. Major emphasis is placed on the administrative and managerial implications of the new trends and opportunities in the business world. This course is offered in a seminar format and is designed to update the knowledge of professional executives.

MIS701 Computers In Business Management
An analysis data processing functions and systems in business, as well as history, terminology, technology, and economics of data processing hardware and software. The course treats management issues in the design, selection, evaluation, and use of computers and computer services. It also familiarizes the student with elementary programming through the solution of simple business-oriented exercises.

MIS702 Computers in Public Organization
This course provides an understanding of the basic functions of information processing in the public sector. The course focuses on the design, selection, evaluation, and use of computers and computer services in public policy studies. It also familiarizes the student with various computer applications using time shared networks and micro-computer applications.

MIS710 Statistical Methods
Prerequisite: MIS 701
This course focuses on the process of statistical inference whereby the analyst is able to infer or draw conclusions about the parameters of a large data set on the basis of statistics derived from sampling. Other topics include hypothesis testing, data organization, estimation techniques, analysis of variance, linear regression analysis, variance, linear regression analysis, correlation analysis, and a detailed treatment of probability theory as applied to the decision-making process.

MIS800 Operations Management
Prerequisites: MIS701 and ACC 703
The course deals with concepts and principles related to the conversion process: the inputs of materials, investment, and labor producing finished goods and services. Taught from a management point of view. Topics include product/process design, capacity planning, plant layout, production scheduling, quality control, demand forecasting, human engineering, job design and inventory management. Relationships to other major business functions are explored.

MIS801 Applied Operations Research I
Prerequisites: MIS 710 and ACC 703
The course deals with the theory and application of management science, to include such topics as simple and complex decision theory, graphical and simplex linear programming, transportation and assignment algorithms, deterministic and stochastic inventory control models, and PERT/CPM network models. Emphasis is placed on problem definition, relevant cost determination, and solution generation, via examination, casework, and computer application.
MIS811 Management Information Systems I  
Prerequisite: MIS701  
This course focuses on the problem of identifying an organization’s recurring data requirements which facilitate the decision-making process. The course then covers in detail the methodology used in analyzing and designing an information system from an organizational point of view. In addition, the course covers the vital area of how an information system is effectively implemented and maintained by an existing organization.

MIS812 Service Sector Systems  
Prerequisite: MIS800  
This course explores the application of operations management to the design and management of service delivery systems. The case method is employed to identify potential uses of factory derived techniques as well as to identify the key issues in evaluation and implementing alternative equipment and processes. Various frameworks for classifying service systems will also be introduced.

MIS813 Applied Operations Research II  
Prerequisite: MIS801  
A continuation of the study of the theory and application of management science to include such topics as time series and causal forecasting methods, utility theory, decision making with marginal analysis, integer, goal, and dynamic-programming and game theory. Emphasis is placed on problem definition, relevant variable identification, and solution generation, via examination, casework and computer application.

MIS825 Manufacturing Systems  
Prerequisites: MIS 701, MIS800 and MIS801  
This course emphasizes management of the production process in detail, development of an analytical ability, and an understanding of the newer quantitative techniques, systems and technical developments in manufacturing. Topics include MRP I & II, Just-In-Time and Flexible Manufacturing systems, robotics, CAD/CAM, simulation modeling and manufacturing strategies. Conceptual development and applicability are stressed through the use of text, readings and cases.

MIS840 Quality and Reliability Systems  
Prerequisites: MIS710 and MIS 800  
This course provides a practical overview of quality and reliability systems in the industrial and service sectors. Topics include concepts and history, acceptance sampling techniques, statistical tolerancing, process control charts, quality assurance, life testing, economics of quality, quality design, Asian quality methods, computer-generated simulation techniques, and the integration of quality and reliability programs and strategies.

MIS850 Management Information Systems II  
Prerequisite: MIS811  
This course embraces two major topics. The first is an introduction to the database approach for design of integrated information applications. It covers data base design, data structures, data definition and manipulation languages, and data base implementation and evaluation. The second is advanced systems management. It covers personnel career planning and turnover, capacity planning, standards development, software conversion problems and disaster recovery.
MIS901 Global Operations Management 3 Credits
Using a combination of cases and readings, this course will present a strong conceptual framework for helping students recognize and meet the challenges of international operations management. The course emphasizes innovative projects undertaken to realize the promise of global competitive advantage.

MIS905 Global Information Systems Management 3 Credits
Through readings, lectures and industry field visits, this course will further develop students’ knowledge and understanding of the stochastic dynamic nature of information systems in the operation of global business enterprise. Particular attention will be paid to the design, planning, development and implementation of integrative strategic management information systems.

MKT790N Marketing Decision Making 3 Credits
Prerequisite: FIN710
This course analyzes the marketing activities of an organization and will examine the role marketing plays in society and within the organization, the structure of the marketing system, basic marketing concepts, and of marketing management. Topics include customer/client analysis, market research, product/service policy, pricing policy, distribution policy, communications policy, and the development of strategies. Profit and nonprofit organizations, domestic and international marketing organizations are looked at. The course relies mainly on case-study discussions of actual marketing decisions, supplemented by lectures and readings.

MKT800 Consumer Behavior 3 Credits
This course is designed to analyze the role of the consumer in the economy drawing upon general and social psychology, sociology, philosophy, anthropology, and economics. Integration of conventional concepts with marketing to better understand consumer choices. The course examines marketing opportunities through a better understanding of the consumer.

MKT810 Sales Management 3 Credits
Designed to develop decision-making skills necessary to build and maintain effective sales organization. Utilizes cases and readings to examine strategic and operating problems of the sales manager. Major topics are the selling function, sales management at the field level, the sales executive, and sales and marketing management.

MKT820 Global Marketing Management 3 Credits
This course will present an overview of the unique aspects of marketing in the international business environment and provide the framework upon which multinational marketing management can be based. Emphasis will be placed on the role of the international marketing manager in the development of marketing strategies for a variety of markets in diverse cultural, political and economic situations. Focus will be on the decision making process in the areas of foreign market analysis, target identification, product planning, promotion and channels of distribution.
MKT830 Promotional Policy 3 Credits
This course examines the various forms of promotion used as components of promotional programs of organizations. Topics include the methods of promotion in advertising, personal selling, sales promotion, public relations and other forms of communication. It emphasizes the managerial aspects of the decisions made in promotional planning, development and appraisal.

MKT840A Special Topics in Marketing 3 Credits
One or more special topics related to marketing will be selected by the instructor in consultation with other faculty, at least a semester prior to the course offering. The topic area may not be usually found in the conventional classroom course. The course syllabus will be carefully designed to facilitate the accomplishment of the marketing program objectives.

MKT901 Global Marketing Strategy 3 Credits
This course provides students with an understanding of the principles and practices of global marketing by examining the several market systems which exist in the world, the institutional structure which exists to serve these market systems, and the marketing administration practices by business enterprises operating within these market systems.

Chemistry

CHE710 Advanced Topics in Inorganic Chemistry 3 Credits
Prerequisites: Organic Chemistry and Inorganic Chemistry. Physical Chemistry is recommended but not required.
This course involves a theoretical, chemical, and physical study of the following selected topics; electron configuration of atoms; the qualitative aspect of bonding in inorganic compounds and metal complexes, coordination chemistry, mechanism of inorganic reaction; period table; transition metal chemistry; and acid-base and non-aqueous chemistry.

CHE711 Chemical Bonding 3 Credits
Prerequisites: Advanced Topics in Inorganic Chemistry and Physical Chemistry II
This course will involve a qualitative and quantitative study of chemical bonding. The following topics will be discussed: electrostatic (ionic) bonding and crystal formation metallic bonding; valence bond and molecular orbital approaches to bonding in inorganic molecules, valence bond, molecular orbital, crystal field and ligand field approaches to bonding in coordination compounds; molecular orbital and ligand field approaches to bonding in organic metallic compounds.

CHE715 Chemistry of the Elements 3 Credits
Prerequisites: General Chemistry, Organic Chemistry and Physical Chemistry are recommended but not required.
This course involves a detailed study of the physical and chemical properties of selected elements and their compounds. Particular emphasis will be placed upon the study of those inorganic chemicals of commercial, environmental and ecological significance.