495. Independent Study
Fall, Winter, Spring. 1 to 12 credits. May renew for a maximum of 12 credits. Juniors and approval of school.
Student conceived individual courses of study in curricular areas. Preliminary faculty approval and continuing guidance.
A. Independent Study—General
B. Independent Study—Biology
E. Independent Study—Science and Technology Studies

MANAGEMENT MGT

College of Business and Graduate School of Business Administration

302. Organization and Management
Fall, Winter, Spring, Summer. 4(4-0)
Junior Business majors; EC 201, ACC 201.
Executive roles and functions in the business enterprise and other goal directed institutions; organization design; organization/environment interaction; analysis of internal organization structure; leadership, motivation, conflict, organization change and development.

303. Materials and Logistics Management
Fall, Winter, Spring, Summer. 4(4-0)
Junior in the approval of department. Interdepartmental with the Department of Marketing and Transportation Administration.
Management concepts and techniques for purchasing, operations and distribution processes. Productivity and profit contributions. Planning, analysis and control of purchasing, production and transportation distribution.

304. Operations Planning and Control
Winter, Spring. 4(4-0) MGT 303 or approval of department. Interdepartmental with the Department of Marketing and Transportation Administration.
Managing the production system. Product development, process selection, facilities location and layout; staffing; materials, cost and quality control.

305. Purchasing Management
Fall, Winter, Spring. 4(4-0) MGT 303 or approval of department. Interdepartmental with the Department of Marketing and Transportation Administration.

306. Analysis of Processes and Systems
Fall, Winter, Spring. 4(4-0) CPS 115, MTA 317 or concurrently.
Analysis of some fundamental systems and process concepts which are basic to industrial management. The course is oriented toward computer model building, acquainting the student with the use of the computer as an instrument for analysis of complex problems in industry. The student will consider the effect of various criteria for efficiency and optimization and program planning.

310. Fundamentals of Personnel Management
Fall, Winter, Spring, Summer. 4(4-0) Juniors.
Formulation and administration of employee relations policies in the business enterprise; human resource utilization; introduction to personnel staffing, training and development, performance appraisal, compensation, and labor relations.

341. Transportation Systems
Fall, Winter. 4(4-0) MGT 303 or MTA 301. Interdepartmental with and administered by the Department of Marketing and Transportation Administration.
Application of economic and business principles to transportation systems, functional analysis of all major transport modes. Identification of major issues, analysis of alternative solutions and the development of probable future outcomes.

345. Physical Distribution and Channel Strategy
Fall, Winter. 4(4-0) MGT 303 or MTA 301. Interdepartmental with and administered by the Department of Marketing and Transportation Administration.
Microanalysis of private and public physical distribution channel systems. Emphasis on the physical and behavioral components of the channel including analytical tools used in planning, implementing and controlling the system.

403. Research and Negotiation for Purchasing Materials and Management
Fall, Winter, Spring, 4(4-0) MGT 305 or approval of department. Interdepartmental with the Department of Marketing and Transportation Administration.
Applied research and planning focusing on the purchasing and materials management functions in organizations. Preparation for and conducting purchase negotiations. Field research studies. Administration of the research and planning effort.

405. Operations Management Topics
Fall, Winter, Spring. 4(4-0) MGT 304 or approval of department. Interdepartmental with the Department of Marketing and Transportation Administration.
Consideration of current and controversial questions in operations management. Field experience to study operations and policies in business. Industry studies; impact of new technology and government regulations.

407. Materials and Logistics Policy
Winter, Spring. 4(4-0) MGT 303 plus 12 credits in MLM Program. Interdepartmental with and administered by the Department of Marketing and Transportation Administration. Analysis of comprehensive cases incorporating the entire materials and logistics management program.

409. Business Policy
Fall, Winter, Spring. 4(4-0) Seniors in business administration. MGT 302; FT 391; MTA 306.
Problems, methods, and analytical frameworks for building and maintaining consistent and effective policy frameworks in the business enterprise. Written and oral analyses are made of contemporary issues facing the major functions within business organizations. Team and individual reports are required.

411. Staffing the Organization
Fall. 4(4-0) MGT 310; MTA 317.
Job design, job analysis, employment planning, recruitment, selection, and placement, employment interviewing and testing; validation of selection procedures; affirmative action constraints; EEOC guidelines; induction and orientation of employees.

412. Appraisal, Compensation and Benefits
Winter. 4(4-0) MGT 310.
Wage and salary administration; job evaluation; employee motivation; performance appraisal; relating pay to performance; financial and non-financial incentives; equity considerations; employee benefits.

413. Occupational Safety and Health Administration
Fall, Winter. 4(4-0) Juniors; MGT 302 for majors.
Programs and procedures for control of work accidents and maintenance of health in business and other organizations. Analysis of costs related to employee and product safety. Administration of a safety program in compliance with new Federal law.

415. Managerial Approaches to Collective Bargaining
Winter, Spring. 4(4-0) MGT 302 or Junior non-business majors.
Union-management problems and managerial strategies and tactics in collective bargaining—the union challenge, legal constraints, negotiations and operating under the contract, dimensions of cooperation and conflict.

417. Minorities and Women in the World of Work
Fall, Spring. 4(4-0) Senior majors or approval of department. Interdepartmental with the School of Social Work.
Racial, ethnic, sexual and other minority experiences and problems in the world of work. Awareness training approach (what it's like to be ...) featuring movies, case studies, group discussions and encounter-type exercises.

419. Group Dynamics and Organization Development
Spring. 4(4-0) MGT 302. Students may not receive credit in both MGT 419 and PSY 358.
Group dynamics and development; organizational diagnosis; assessment of work attitude and organization climate; organization development goals and methods; action research, survey feedback, team building, conflict management, evaluating organization development activities.

426. Personnel Training and Individual Development
Fall. 4(4-0) MGT 310.
The training and development function; career stages and career planning; needs analysis; training and individual development techniques; evaluation of training and employee development programs.

442. Traffic and Transportation Management
Winter, Spring. 4(4-0) MGT 303, MTA 341, MTA 345. Interdepartmental with and administered by the Department of Marketing and Transportation Administration.
Basic practices related to purchasing and operating transportation services for private and public enterprises.
446. Physical Distribution Operations
Winter, Spring. 4(4-0) MGT 303, MTA 341, MTA 345. Interdepartmental with and administered by the Department of Marketing and Transportation Administration.
Distribution operations activities emphasizing distribution facility management and customer based information systems management. Field trips required.

465. Field Studies
Fall, Winter, Spring, Summer. 1 to 4 credits. May be repeated for a maximum of 6 credits. Business administration majors and approval of department.
Planned program of observation, study, and work in selected business firms. Designed to supplement classroom study in such a way as to make maximum contribution to students' total educational experience. Field work may be arranged in finance, insurance, marketing, personnel management, production management, purchasing, real estate, retailing, transportation and banking.

500. Materials and Logistics Management
Fall, Winter, Spring, Summer. 4(4-0) Graduate students. Interdepartmental with the Department of Marketing and Transportation Administration.
Management concepts and frameworks for acquisition, conversion and distribution processes. Impact on business and social systems, productivity and profits. Emphasis on planning, analysis and control of purchasing, production and physical distribution.

501. Operations Management
Winter, Spring. 4(4-0) MGT 800 or approval of department. Interdepartmental with the Department of Marketing and Transportation Administration.

503. Purchasing Administration
Winter, Spring. 4(4-0) MGT 800. Interdepartmental with the Department of Marketing and Transportation Administration.

506. Organization and Management
Fall, Winter, Spring, Summer. 4(4-0) Approval of department.
Macro and micro models of organizational behavior applied to organizational process and design. Topics include: organization planning and design strategies (product, function, matrix, other), organization-environment interface, motivation, leadership, group processes, conflict management, the managerial role.

507. Administrative Policy
Fall, Winter, Spring, Summer. 4(4-0) MGT 806, MTA 805. P 1893. Last term MBA students or approval of dean.
Application of administrative theory and techniques to business situations through cases cutting across major functions within business organization. Cases viewed from standpoint of general management with consideration of social and physical environmental forces surrounding the firm.

805. Seminar in Management, Organization, and Administration
Fall, Winter, Spring, Summer. 4(4-0) May receive credit for a maximum of 12 credits.
Philosophy, practice, research, and current problems in management, organization, and administration. Historical and current literature, lectures, discussion, individual research, cases and plant visits are methods of study used in various terms.

811. Organizational Staffing
Fall. 4(4-0) MGT 810.
Job design and analysis, recruitment selection and placement; employment interviewing and testing; validation of employment criteria and selection procedures; induction and orientation of employees; equal opportunity and affirmative action requirements are stressed.

815. Business and Material Forecasting
Fall. 4(4-0) MGT 800 or approval of department. Interdepartmental with the Department of Marketing and Transportation Administration.
Causes and consequences of supply dynamics. Analyses and forecasts of national and international materials and purchasing business trends. Influences of material resource problems on policies, strategies and behaviors.

816. Transportation Policy and Plans
Fall, Winter. 4(4-0) MGT 800. Interdepartmental with and administered by the Department of Marketing and Transportation Administration.
An operational model and theoretical perspective on national policies that are apt to shape the future of the transportation system. Interaction of government, carrier, and user logistics and distribution strategies.

817. Women, Minorities and Management
Spring. 4(4-0) MGT 806
Women and minorities in the world of work: management issues specific to race and sex; entry, training, staff/line relationship, peer relations; legal, environmental, behavioral aspects; marriage and dual careers; implications for the individual and the organization.

818. Supervisory and Executive Development
Fall, Spring, Summer. 4(4-0) MGT 806 or MGT 808.
Theory and research of developmental stages of executive careers. Special emphasis on: impact of organization on executive potential; forces influencing development of executive skills and abilities; studies of antecedents of executive role performance; role of training programs.

821. Production and Inventory Planning and Control
Winter, Spring. 4(4-0) MGT 800 or approval of department. Interdepartmental with the Department of Marketing and Transportation Administration.
Theory and practice of production and inventory planning and control. Focus on computer based planning systems for material requirements including aggregate planning, master scheduling, capacity planning, shop floor control and inventory planning.

826. Personnel Training and Individual Development
Winter. 4(4-0) MGT 810.
Training and development of personnel at all levels of the business enterprise; planning, implementing and evaluating training programs; career stages and career planning; matching individual and organizational developmental needs.

831. Computers and Systems Analysis for Business
Fall, Spring. 4(4-0) MTH 111, STT 315 or concurrently or 12 credits of college mathematics. Open only to MBA candidates without background in computer usage and systems analysis.
Computer programming and systems analysis in business administration.

532. Statistical Methods for Business
Fall, Spring. 4(4-0) MTH 111. Open only to MBA candidates without background in statistics.
Statistics for analysis and research in business.
833. Decision-Making Models
Fall, Winter, Spring, Summer. 4(4-0)
MGT 832; ACC 840 or concurrently.
Normative decision analysis in business under different assumptions of information availability.

834. Linear Optimization Models
Fall. 4(4-0) MGT 833 or MTH 324 or MTH 480.
Basic linear optimization techniques, linear programming techniques, sensitivity analysis, parametric procedures, duality theory, large scale programming procedures, special LP problems. The literature of linear models applications in production.

835. Advanced Optimization Models
Winter. 4(4-0) MGT 834.
Optimization models with emphasis on integer and dynamic programming, network models, heuristic methods.

836. Applied Stochastic Processes for Business
Spring. 4(4-0) STT 441; MTH 113 or MTH 123.
The structure and analysis of stochastic models common to business and economics. Topics may include the Poisson process, renewal-reward processes, discrete Markov processes, with examples from queueing, reliability, maintenance and inventory.

837. Operations Systems Simulation
Winter. 4(4-0) Approval of department.
Simulation models in research and operations planning and control. Construction, validation and experimentation. Special purpose languages.

838. Design and Analysis of Statistical Experiments
Winter. 4(4-0) COM 905.

841. Materials and Logistics Management, with a special emphasis on transportation and distribution
Spring, Summer. 4(4-0) MGT 300 plus 30 credits in the MBA Program, Interdepartmental and administered by the Department of Marketing and Transportation Administration.
Case course that integrates the materials and logistics management program. Emphasis on problem recognition, applying course materials and preparation of plans that improve the total systems performance.

849. Management Science Applications
Summer. 4(4-0) MGT 833.
Analysis of cases utilizing techniques of management science. Problem definition, data collection, and problem solving and implementation.

860. Corporation Management and Society
Spring. 4(4-0) MGT 806.
Analysis of the emerging character of administrative structure of the large corporation. Administrative authority, corporation government, stockholder and director relationships. Examination of ethics of decision making, strategic values and priorities basic to resource allocation decisions.

905. Behavioral Research: Organization
Winter. 3 credits. MTA 905.
Concepts and methods of behavioral science research that are applicable to the study of organization as a strategic device in the development of tangible and intangible values and in the control of elements of business enterprise.

907. Seminar in Organizational Behavior
Fall. 4(4-0) MGT 806.
Directed reading on the behavior of individuals within business organizations. Theory and research in motivation, leadership, and group dynamics are covered.

908. Seminar in Organization Theory
Winter. 4(4-0) MGT 806; doctoral candidates: master's candidates with approval of department. Interdepartmental with the Department of Psychology.
Directed reading and research on issues in contemporary organization theory.

911. Seminar in Personnel Research
Spring, 4(4-0) MGT 810; doctoral candidates: master's candidates with approval of department.
Directed reading and research on issues in contemporary personnel administration theory and practice.

912. Special Topics Research Seminar
Fall, Winter, Spring. 2 to 4 credits. May retake for a maximum of 12 credits. Approval of department.
Specialized topics in management.

920. Manufacturing Strategy
Winter. 4(4-0) MGT 801, MGT 821.
Strategic planning in manufacturing. The corporate, national and international environments of operations management. Formulating and evaluating manufacturing strategy and policies vis-a-vis corporate and other functional strategies.

921. Inventory Theory
Spring, 4(4-0) MGT 920 or approval of department.
Classical and neoclassical inventory models under various conditions of uncertainty and organizational complexity. Evaluation of large planning systems for manufacturing and distribution inventory.

922. Production Planning and Scheduling
Fall. 4(4-0) MGT 921 or approval of department.
The hierarchy of strategic and operational production planning and scheduling.

923. Topics in Operations Management
Spring, 4(4-0) MGT 922 or approval of department.

999. Doctoral Dissertation Research
Fall, Winter, Spring, Summer. Variable credit. Approval of department.