

495. Independent Study

Fall, Winter, Spring. 1 to 12 credits. May reenroll 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
- C. Independent Study--Chemistry/Physics
- D. Independent Study--Mathematics
- E. Independent Study--Science Studies

MANAGEMENT**MGT****College of Business****101. Introduction to Business**

Fall, Winter, Spring. 4(4-0) University College students or approval of department.

Functions performed by business and the role of administration in our economy as a whole and in the operation of a specific business. Four major objectives: to aid students in choosing a vocation, to help business majors select a field of concentration, to show the place of specialized techniques presented in more advanced business courses, and to give some familiarity with common business practices and terminology.

302. Organization and Management

Fall, Winter, Spring, Summer. 4(4-0) Junior Business majors; EC 201, AFA 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

(300.) Fall, Winter, Spring, Summer. 4(4-0) Juniors in the College of Business or 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

(301.) 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.

Planning, organizing and controlling the purchasing function within organizations. Purchasing responsibilities, objectives and policies. Source selection and evaluation. Price, cost and value analysis. Negotiation. Managing purchase inventories.

306. Analysis of Processes and Systems

Fall, Winter, Spring. 4(4-0) CPS 110, 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. Course includes consideration of 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 Distribution Systems

Fall, Winter, Summer. 4(4-0) MGT 303 or approval of department. Interdepartmental with and administered by the Department of Marketing and Transportation Administration.

Application of economic and business principles to transportation and distribution systems, functional analysis of all major transport modes. Identification of major issues, analysis of alternatives and discussion of probable future outcomes.

342. Traffic Management

Winter, Spring, Summer. 4(4-0) MGT 303 or approval of department. 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.

403. Research and Negotiation for Purchasing Materials and Management

Winter. 4(4-0) MGT 303 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

Spring. 4(4-0) MGT 303 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.

406. Introduction to Management Science

Winter. 4(4-0) MGT 306.

Quantitative models and techniques applied to various business problems integrating the computer into the problem solving process. Topics include linear programming, integer programming, dynamic programming, queuing problems, Bayesian Decision Theory, theory of games.

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 topical coverage of the entire materials and logistics management program.

409. Business Policy

Fall, Winter, Spring, Summer. 4(4-0) Seniors in business administration and MGT 302; AFA 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 comprehensive cases cutting across 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; manpower 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 strategy 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 Department of Racial and Ethnic Studies and 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, guests, subgroup 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 356.

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.

Descriptions – Management

of

Courses

- 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.
- 445. Physical Distribution Management**
Fall, Winter, Spring. 4(4-0) MTA 303 or approval of department. Interdepartmental with and administered by the Department of Marketing and Transportation Administration.
Micro analysis of private and public physical distribution systems. Emphasis on component parts of the movement system; analytical tools used in planning, implementing and controlling the system.
- 468. Field Studies**
Fall, Winter, Spring, Summer. Variable credit. May reenroll for a maximum of 8 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.
- 800. Materials and Logistics Management**
Fall, Winter, Spring, Summer. 4(4-0) Graduate students. Interdepartmental with the Department of Marketing and Transportation Administration.
Management concepts of 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.
- 801. Operations Management**
Winter. 4(4-0) MGT 800 or approval of department. Interdepartmental with the Department of Marketing and Transportation Administration.
Managing the production system. Strategies of product and process selection. Design of production facilities: location, layout and capacity. Organizing and staffing operations and work measurement. Controlling quality and costs.
- 803. Purchasing Administration**
Winter, Spring. 4(4-0) MGT 800. Interdepartmental with the Department of Marketing and Transportation Administration.
Purchasing objectives, responsibilities, policies and organization. Source selection, evaluation and development. Negotiations. Purchase planning and evaluation.
- 806. Organization and Administration**
Fall, Winter, Spring, Summer. 4(4-0) Approval of department.
Dynamics of organization: the organization seen as an open system interacting with a rapidly changing environment, as a structure of organized human cooperation, as an instrument of managerial strategy; current theory and research applied to organizational process and design.
- 807. Administrative Policy**
Fall, Winter, Spring, Summer. 4(4-0) MGT 806, MTA 805, AFA 889. 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.
- 808. Seminar in Management, Organization, and Administration**
Fall, Winter, Spring, Summer. 4(4-0) May reenroll 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.
- History of Management Thought**
Fall.
Development of management concepts as evidenced in the writings of major contributors. Environment factors and relation of early ideas to current thought.
- Contemporary Issues in Administration**
Spring.
Recent and current developments in the administration of business enterprises. Examination of theory and practice.
- Organization Theory**
Winter, Summer.
Critical and comparative consideration of organization theory with special reference to industrial organizations. Problems of organization structure and administrative practice in the management of business concerns are analyzed in the light of objectives, environment, and current theories.
- 809. Transportation Distribution Strategies**
Fall, Winter. 4(4-0) MGT 800. Interdepartmental with and administered by the Department of Marketing and Transportation Administration.
Planning and control of the enterprise's transportation and physical distribution system. Emphasis on detailed examination of component parts of the movement storage system.
- 810. Personnel Management**
Fall, Winter, Summer. 4(4-0) MGT 806.
Principles and methods of recruiting, selecting, training, evaluating, motivating, and rewarding personnel. Fringe benefits, retirement, absenteeism, and other employee benefit problems.
- 811. Advanced Problems in Personnel Management**
Fall, Spring, Summer. 4(4-0) May reenroll for a maximum of 8 credits. MGT 810.
Advanced studies in selected administrative and technical policies and practices in employee relations, with individual and group project work and research.
- 812. Systems Design Modeling**
Spring. 4(4-0) MGT 800. Interdepartmental with and administered by the Department of Marketing and Transportation Administration.
Research procedure and planning models for design of the firm's logistical system. Emphasis on situational analysis, research methodology, data analysis, analytical techniques and implementation.
- 813. Human Relations in Management**
Fall, Spring. 4(4-0) Approval of department.
The executive role: Theories and techniques of leadership, communications, conflict management, morale, motivation, authority, power, examined by means of cases, role playing, laboratory exercises, and study of behavioral science research findings.
- 814. Occupational Safety and Health Management**
Spring. 4(4-0) Graduate students or approval of department.
Objectives and procedures for managerial control of work injuries and illness in business and other organizations. Complying with federal and state law, correcting hazards, analyzing costs, modifying behavior. Product safety.
- 815. Materials Forecasting**
(802.) Fall, Spring. 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.
- 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 potentiality; 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.
- 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.
- 832. Statistical Methods for Business**
Fall, Spring. 4(4-0) MTH 111, STT 315. 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 831, MGT 832; AFA 840 or concurrently.
Normative decision analysis in business under
different assumptions of information availabil-
ity.

834. Linear Optimization Models
Fall, Spring. 4(4-0) MGT 833; MTH
334 or EC 480.

Linear Programming; basic concepts and ter-
minology. Model building with LP with appli-
cations to problems from business. The simplex
method. Introduction to dual problems. Eco-
nomic interpretations of duality. Post-optimality
analysis.

835. Nonlinear Optimization Models
Winter, Summer. 4(4-0) Students may
not receive credit for both SYS 835 and MGT
835, MTH 215 or MTH 228; MGT 834 or CHE
465. Interdepartmental and jointly adminis-
tered with Systems Science. Interdepartmental
with the Department of Chemical Engineering.
Nonlinear optimization-examples and applica-
tions. Kuhn-Tucker Theory. Saddle point opti-
mality conditions. Algorithms for problems with
constraints. Unconstrained optimization; intro-
duction to search methods.

**836. Applied Stochastic Processes for
Business**
Spring. 4(4-0) MGT 833, MTH 228,
STT 423.

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 queuing, reliability, mainte-
nance and inventory.

837. Systems Simulation
(937.) Fall. 4(4-0) MGT 833. Inter-
departmental with the Department of Statistics
and Probability.

The concept of a model, model building, charac-
teristics of simulation models. Techniques of
computer simulation. Simulation models in re-
search and management planning/control. Vali-
dation and experimental design. Special pur-
pose languages.

**841. Materials and Logistics
Management Policy**
Spring, Summer. 4(4-0) MGT 800 plus
30 credits in the MBA Program. Inter-
departmental with 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 total sys-
tems performance.

**848. Management Science
Applications**
Summer. 4(4-0) MGT 833.

Analysis of cases utilizing techniques of man-
agement science. Problem definition, data col-
lection, and problem solving and implementa-
tion.

**860. Corporation Management and
Society**
Spring. 4(4-0) MGT 806.

Analysis of the emerging character of adminis-
trative structure of the large corporation. Ad-
ministrative autocracy, corporate government,
stockholder and director relationships. Exami-
nation of ethics of decision making, strategic
values and priorities basic to resource allocation
decisions.

**880. Organization and Control in the
Political Economy: Institutions
and Theory**
Winter of even-numbered years. 4(4-0)
Interdepartmental with and administered by
the Department of Economics.

Organization and technique in choice and im-
plementation of economic, (especially planning,
programming) functions of political authority.

**881. Organization and Control in the
Political Economy: Selected
Problems**
Winter of odd-numbered years. 4(4-0)
Approval of instructor. Interdepartmental with
and administered by the Department of Eco-
nomics.

Analysis of role and tasks, appropriate tech-
niques and organizational structures of political
agencies in planning and management of com-
plex programs.

890. Special Problems
Fall, Winter, Spring, Summer. Vari-
able credit. Approval of department.

**906. Behavioral Research:
Organization**
Winter. 3 credits. MTA 905.

Concepts and methods of behavioral science re-
search that are applicable to the study of organi-
zation as a strategic device in the development
of tangible and intangible values and in the con-
trol 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 re-
search in motivation, leadership, and group
dynamics are covered.

908. Seminar in Organization Theory
Winter. 4(4-0) MGT 806; doctoral candi-
dates; master's candidates with approval of
department. Interdepartmental with the De-
partment of Psychology.

Directed reading and research on issues in con-
temporary organization theory.

911. Seminar in Personnel Research
Spring. 4(4-0) MGT 810; doctoral candi-
dates; master's candidates with approval of
department.

Directed reading and research on issues in con-
temporary personnel administration theory and
practice.

**948. Mathematical Programming For
Business**
Spring of even-numbered years. 4(4-0)
MGT 835. Interdepartmental with the Depart-
ment of Statistics and Probability.

Large mathematical programs with special
structure. Duality and decomposition. Dynamic
programming; multistage decision processes
and the principle of optimality. Integer pro-
gramming.

**949. Advanced Applied Stochastic
Processes**
Spring of odd-numbered years. 4(4-0)
MGT 836. Interdepartmental with the Depart-
ment of Statistics and Probability.

Selected topics from the following areas:
Semi-Markov, Markov-renewal and regenera-
tive process models; Markov and semi-Markov
decision processes; decision theory, applica-
tions from production, inventory, reliability,
queuing, and gaming theory.

999. Doctoral Dissertation Research
Fall, Winter, Spring, Summer. Vari-
able credit. Approval of department.

MARKETING AND TRANSPORTATION ADMINISTRATION MTA

College of Business

292. Selected Topics
Fall, Winter, Spring. 3(3-0) or 4(4-0)
May reenroll for a maximum of 8 credits when a
different topic is taken.

Selected subject matter of current interest in
marketing: social, institutional, and managerial,
etc., topics. Subject varies by terms.

**300. Marketing Management in
Business and Society I**
Fall, Winter, Spring, Summer. 4(4-0)
EC 200, AFA 201 or AFA 330.

Firm and consumer roles in the exchange sys-
tem for goods and services. Competitive
analysis of market structures and marketing
management. Fitting product-service offerings
to various customer group needs.

**301. Marketing Management in
Business and Society II**
Fall, Winter, Spring, Summer. 4(4-0)
Juniors, MTA 300.

Development of distribution, communication
and pricing policies. Integration of product, dis-
tribution, communication and price policies into
a marketing plan. Emphasis on financial aspects
of marketing and impact on society.

**303. Materials and Logistics
Management**
(MGT 300.) Fall, Winter, Spring,
Summer. 4(4-0) Juniors in the College of Busi-
ness or approval of department. Inter-
departmental with and administered by the
Department of Management.

Management concepts and techniques for pur-
chasing, operations and distribution processes.
Productivity and profit contributions. Planning,
analysis and control of purchasing, production
and transportation-distribution.

**304. Operations Planning and
Control**
(MGT 301.) Winter, Spring. 4(4-0)
MGT 303 or approval of department. Inter-
departmental with and administered by the
Department of Management.

Managing the production system. Product de-
velopment, 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 and administered by the Department of
Management.

Planning, organizing and controlling the pur-
chasing function within organizations. Purchas-
ing responsibilities, objectives and policies.
Source selection and evaluation. Price, cost and
value analysis. Negotiation. Managing purchase
inventories.