

**490. Specid Problems**

Fall, Vinter, Spring, Summer. 1 to 6 credits. May re-enroll for a maximum of 6 credits. Approval of department.

**491. Senior Seminar I**

Fall, Vinter, Spring. 3(3-0) Seniors or approval of college.

Selected interdisciplinary problems concerned with the interfae between science and society or science and nan are identified and formulated. A bibliography is generated and an outline for a thesis prepared.

**492. Senior Seminar II**

Fall, Vinter, Spring. 3(3-0) 491. The thesis planned in 491 is written and evaluated.

**495. Independent Study**

Fall, Vinter, Spring, Summer. 1 to 12 credits. May re-enroll for a maximum of 12 credits. Juniors.

**MANAGEMENT**

**MGT**

**College of Business**

**101. Introduction to Business**

Fall, Vinter, 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.

**300. Operations Planning**

Fall, Spring. 4(4-0) CPS 110, STT 315, AFA 202.

Operations Management—functions and technologies. Planning and acquiring physical facilities, work design and work measurement, acquisition and management of materials.

**301. Operations Control**

Winter. 4(4-0) 300. Analysis and control of operations. Production control, product reliability, maintenance, cost control and management information systems.

**302. Organization and Administration**

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

Analysis of the internal organization structure and of executive roles and functions in the business enterprise and other goal-directed institutions. Examines administrative and managerial concepts in the context of behavioral research in business. Cases and outside research reports are used for specific analyses.

**305. Materials and Purchasing Management**

Fall, Vinter. 4(4-0) 302 or MTA 300 or Juniors; non-majors.

Planning, organizing and controlling materials; acquisition in industrial enterprises, institutions, and government. Management of purchasing, materials movement, storage and control. Value analysis, purchasing research, vendor relations and purchase forecasting.

**306. Analysis of Processes and Systems**

Fall, Vinter, Spring. 4(4-0) CPS 110, STT 316.

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 Administration**

(303.) Fall, Vinter, Spring, Summer. 4(4-0) Juniors.

Organization, functions, and policy administration of employee relations activities in the business enterprise; consideration of new techniques of employment, training, wage payment, morale-building, and employee security.

**405. Operations Management: Current Topics**

Spring. 4(4-0) 301, 302. Consideration of current and controversial questions in the operations area. Field experience to study operations and policies in industrial, institutional, and service organizations.

**406. Introduction to Management Science**

Winter. 4(4-0) 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.

**409. Business Policy**

Fall, Vinter, Spring, Summer. 4(4-0) Seniors in business administration and 302; AFA 391; MTA 300.

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. Personnel Selection and Development**

Winter. 4(4-0) 310; MTA 317.

Manpower input problems of business organizations — manpower planning, recruitment, selection, placement, training and development at all levels. Focus is on policy issues, research findings, and advanced techniques.

**412. Compensation and Motivation**

Spring. 4(4-0) 310. Manpower motivation and compensation problems in business organizations — performance appraisal, job evaluation, wage and salary administration, non-financial incentives and the impact of job content and job context factors on performance.

**413. Occupational Safety and Health Administration**

(403.) Fall, Vinter. 4(4-0) Juniors; 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.

**414. Human Relations in Business**

(404.) Fall, Vinter, Summer. 4(4-0) 302; approval of department.

Human problems in business administration: examination of the empirical research dealing

with organizational and administrative problems in business, including morale, motivation, authority, power, centralization, commitment, and mobility.

**415. Managerial Approaches to Collective Bargaining**

Winter, Spring. 4(4-0) 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.

**420. Problems of Small Business Enterprise**

Fall. 4(4-0) Approval of department. For College of Business Seniors, or non-business majors enrolled in AFA 315 concurrently. For students participating in Lansing Entrepreneurial Assistance Service (LEASE).

Analysis of problems of establishing, financing, and managing a small business enterprise. Emphasis on minority entrepreneurship. Students will prepare a proposal for establishing a small business enterprise.

**421. Small Business Counseling**

Winter, Spring. 1 to 3 credits. May re-enroll for a maximum of 6 credits. 420, and approval of department.

Planned program of business counseling with small businesses in the Lansing area in need of management assistance. Students will meet bi-weekly to share experiences and discuss problems.

**468. Field Studies**

Fall, Vinter, Spring, Summer. Variable credit. May re-enroll 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.

**499. Senior Seminar**

Spring. 4(4-0) Senior majors; approval of department.

Directed reading and student research in contemporary management problems.

**801. Work Design and Administration**

Fall. 4(4-0) Design, improvement, and problems in the administration of work systems with emphasis on repetitive operations. Criteria for evaluating systems. Tools for developing, analyzing, and improving procedures. Cases and projects.

**802. Materials Management**

Spring. 4(4-0) Advanced study of the policies, practices and problems relating to the procurement and control of materials in business organizations.

**803. Seminar in Industrial Relations**

For course description, see Interdisciplinary Courses.

**806. Organization and Administration**

Fall, Vinter, Spring, Summer. 4(4-0)

830. 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)  
833; MTA 804; AFA 889; plus 30 credits in  
the MBA core program.

Application of administrative theory and tech-  
niques to business situations through cases cut-  
ting 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 re-enroll for a maximum of 12 credits.

Philosophy, practice, research, and current prob-  
lems in management, organization, and admin-  
istration. 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 evi-  
denced in the writings of major contributors. En-  
vironment factors and relation of early ideas to  
current thought.

**CONTEMPORARY ISSUES IN ADMINISTRATION.**  
Spring.  
Recent and current developments in the admin-  
istration of business enterprises. Examination of  
theory and practice.

**ORGANIZATION THEORY.** Winter, Summer.  
Critical and comparative consideration of organ-  
ization theory with special reference to indus-  
trial organizations. Problems of organization  
structure and administrative practice in the man-  
agement of business concerns are analyzed in  
the light of objectives, environment, and current  
theories.

**810. Personnel Management**

Fall, Winter, Summer. 4(4-0) 806.  
Principles and methods of recruiting, selecting,  
training, evaluating, motivating, and rewarding  
personnel. Fringe benefits, retirement, absentee-  
ism, and other employee benefit problems.

**811. Advanced Problems in Personnel  
Management**

Fall, Spring, Summer. 4(4-0) May re-  
enroll for a maximum of 8 credits. 810.  
Advanced studies in selected administrative and  
technical policies and practices in employee rela-  
tions, with individual and group project work and  
research.

**813. Human Relations in  
Management**

Fall, Spring. 4(4-0) 830 or approval  
of department.  
The executive role: Theories and techniques of  
leadership, communications, conflict manage-  
ment, morale, motivation, authority, power, ex-  
amined by means of cases, role playing, labora-  
tory exercises, and study of behavioral science  
research findings.

**818. Supervisory and Executive  
Development**

Fall, Spring, Summer. 4(4-0) 806 or  
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 Control**

Winter. 4(4-0) 801.  
Planning and control of production operations.  
Inventory management, production and work

force smoothing, job shop scheduling and project  
scheduling.

**830. Fundamentals of Management**

Fall, Winter. 4(4-0) Open only to  
selected MBA candidates.  
The managerial process: planning, organization,  
measurement, and control of work and work  
flow; recruitment, placement, motivation, de-  
velopment, and assessment of organizational  
manpower. Management theory and practice  
illuminated by managerial and behavioral sci-  
ence research.

**831. Computers and Systems Analysis  
for Business**

Fall, Spring. 4(4-0) 832 or concu-  
rently; MTH 111 and STT 315 or concu-  
rently or 12 credits of college mathematics. Open  
only to selected MBA candidates.  
Computer programming and systems analysis in  
business administration.

**832. Statistical Methods for Business**

Fall, Spring. 4(4-0) 831 or concu-  
rently; MTH 111 and STT 315 or concu-  
rently or 12 credits of college mathematics.  
Open only to selected MBA candidates.  
Statistics for analysis and research in business.

**833. Decision Making Models**

Fall, Winter, Spring, Summer. 4(4-0)  
831, 832; AFA 840 or concurrently.  
Normative decision analysis in business under  
different assumptions of information availability.

**834. Linear Optimization Models**

Fall, Spring. 4(4-0) 833, MTH 228,  
STT 423.  
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. 4(4-0) 834.  
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) 835.  
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 ex-  
amples from queuing, reliability, maintenance  
and inventory.

**860. Corporation Management and  
Society**

Spring. 4(4-0) 806.  
Analysis of the emerging character of admini-  
strative structure of the large corporation. Admini-  
strative autocracy, corporate government, stock-  
holder and director relationships. Examination  
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. 4(4-0) Interdepartmental with  
and administered by the Economics Department.  
Organization and technique in choice and im-  
plementation of economic, especially planning  
and programming, functions of political au-  
thority.

**881. Organization and Control in the  
Political Economy: Selected  
Problems**

Spring. 4(4-0) Approval of instructor.  
Interdepartmental with 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 organ-  
ization as a strategic device in the development

**907. Behavioral Research: Business  
Executive**

Spring. 3 credits. 906.  
Concepts and methods of behavioral science re-  
search in the study of the agents of enterprise  
decision-making and action. Attention is focused  
on the way in which decisions are made in busi-  
ness organizations and the multiple influences  
operating on the executive. Modes of adjust-  
ment to the decision environment are examined.

**908. Seminar in Organization Theory**

Winter. 4(4-0) 806; doctoral candi-  
dates; master's candidates with approval of  
department.

**911. Seminar in Personnel Research**

Spring. 4(4-0) 810; doctoral candi-  
dates; master's candidates with approval of de-  
partment.

**937. Systems Simulation**

Fall. 4(4-0) 836, STT 423, MTH  
228. Interdepartmental with the Statistics and  
Probability Department.  
The concept of a model, model building,  
characteristics of simulation models. Techniques  
of computer simulation. Simulation models in  
research and management planning/control.  
Validation and experimental design. Special  
purpose languages.

**948. Mathematical Programming For  
Business**

Spring. 4(4-0) 836, MTH 334, 426,  
STT 863. Interdepartmental with the statistics  
and Probability Department.  
Large mathematical programs with special struc-  
ture. Duality and decomposition in mathe-  
matical programming. Basic theory of dynamic  
programming; multistage decision processes and  
the principle of optimality. Risk, uncertainty,  
and introduction to stochastic and adaptive con-  
trol processes.

**949. Advanced Applied Stochastic  
Processes**

Winter. 4(4-0) 836, 937. Interde-  
partmental with the Statistics and Probability  
Department.  
Selected topics from the following areas: Semi-  
Markov, Markov-renewal and regenerative pro-  
cess models; Markov and semi-Markov decision  
processes; decision theory, applications from  
production, inventory, reliability, queuing, and  
gaming theory.

**999. Research**

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