

LSC Use Only
Number _____
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Date _____



UWUCC USE Only
Number 94-22
Action App 4/18/95
Date Senate App 5/2/95

CURRICULUM PROPOSAL COVER SHEET
University-Wide Undergraduate Curriculum Committee

I. TITLE/AUTHOR OF PROPOSAL

Course/Program Title: MG 437 Operations Management System
Suggested 20 character course title: Operations System
Department: Department of Management
Contact Person: Dr. Ramesh G. Soni

II. If a course is it being proposed for

- XX Course Approval/Revision Only
- Course Approval/Revision and Liberal Studies Approval
- Liberal Studies Approval Only (course previously approved by Senate.)

III. APPROVALS

S.W. Osh
Department Curriculum Committee
S.W. Osh
College Curriculum Committee

Michael
Department Chairperson
Robert C. Combs
* College Dean

Director of Liberal Studies
(where applicable)

Provost (where applicable)

* EACH COLLEGE DEAN MUST CONSULT WITH THE PROVOST BEFORE APPROVING CURRICULUM CHANGES. APPROVAL BY COLLEGE DEAN INDICATES THE PROPOSED CHANGE IS CONSISTENT WITH LONG RANGE PLANNING DOCUMENTS, ALL REQUESTS FOR RESOURCES IN THE PROPOSAL CAN BE MET, AND THE PROPOSAL HAS THE SUPPORT OF THE UNIVERSITY ADMINISTRATION.

III. TIMETABLE

Date Submitted:
to LSC _____
to UWUCC _____

Semester to be
implemented:
Fall 1994

Date to be
published
in Catalog
Summer 1994

V. DESCRIPTION OF CURRICULUM CHANGE

1. Catalog Description

MG437 Operations Management System

3 credits
3 lecture hours
0 lab hours
(3c-01-3sh)

Prerequisites: MG 330

Corequisites: none

Theoretical and practical understanding of manufacturing and service planning and control, including systems modeling, purchasing and sourcing, information and control including MPS, MRP and MRP-II, scheduling, etc. Manufacturing and service technologies and trends are also emphasized. Computer applications are used for understanding the interrelationships between various components of Operations System.

COURSE SYLLABUS

I. Catalog Description

MG437 Operations Management System

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0 lab hours
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Prerequisites: MG 330

Corequisites: none

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II. Course Objectives

1. The student will develop a theoretical understanding of how does a complex manufacturing or service planning and controlling system work. They will be able to identify the key elements of the system.
2. Through computer applications, the student will learn to apply the following tools in an organizational setting: lot sizing, master production schedule (MPS), materials requirements planning (MRP), manufacturing resource planning (MRP-II), Just-in-Time (JIT) systems, operations scheduling, systems modeling, etc.
3. The student will learn about emerging technologies and hardware for manufacturing and service systems.
4. The students will learn about issues and considerations in purchasing: planning and controlling of purchasing function; purchasing analysis; sourcing and vendor selection, etc.
5. The student will develop an understanding of how does the operations function relate to other functional areas in an organization.

III. Detailed Course Outline

Topics	# of Hours
Operations Strategy: Quality, Productivity, New Products and Processes, Capacity, and Time Horizon.	4
Inventory Models: Traditional Models, ABC Analysis, Aggregate Inventory Management.	3
Master Schedule: Master Production Schedule, the Bill of Materials, the Planning Horizon.	2
Material Requirement Planning and Extensions: Computerized MRP and MRP-II.	6
Just-In-Time: Simulation.	3
Operations Scheduling: Job Shop and Flow Shop	3
Project Scheduling	3
Systems Modeling: Computer Simulation of Service and Manufacturing Systems	6
Purchasing Management: Environmental Influences, Purchasing Planning and Control, Sources of Supply, Purchasing Analysis, Proactive management.	4
Need Assessment and Cost Justification of Emerging Technologies and Hardware: CAD, CAM, CIM, EDI, Bar-coding, etc.;	3
Class Presentations	3
Exams	1+1+2 (2 mid-term and a final)

IV. Evaluation Methods

Grading Method	Description	Weight
2 Mid-terms and Final	Exams will comprise of one or more of the following: objective type questions, short answers, problems, essay, case analysis, computer test, etc.	50%
Cases, projects, etc.	May include computer projects, case analysis, problem formulation and analysis, etc.	20%
Term Paper & Presentation	The student will be required a develop a term paper (about 15 double-spaced typed pages) based on current readings of journals and business periodicals, business survey, and/or interviews. The student will make a class presentation.	20%
Quizzes, Class Participation, etc.	About 5-10 short quizzes will be given throughout the semester.	10%

Final grade will be determined based on the traditional standard. That is, for an A grade, weighted average must be 90% and above; for B, above 80%; and so on.

V. Required Textbook(s), Supplemental Books and Readings:

Nahmias, S., Production and Operations Analysis, Irwin, 1989.

Since there is no text book that covers all the topics included in this course, additional handouts will be developed and be made available to students.

VI. Special Resource Requirements: None

VII. Bibliography

Caddick, J.R. and B.G. Dale, "Sourcing from Less Developed Countries: A Case Study," Journal of Purchasing and Materials, Vol 23 (3), pp. 17-23.

Chang, Y., Quantitative Systems for Operations Management, Prentice Hall, 1991.

Conway, R., Maxwell, W. L., McClain, J. O., and Worona, S. L., User's Guide to XCELL+ Factory Modeling System, The Scientific Press, 3rd Edition, 1990.

Curry, G. L., Deuermeyer, B. L., and Feldman, R. M., Discrete Simulation: Fundamentals and Microcomputer Support, Holden-Day, 1989.

Deming, W. E., Quality, Productivity, and Competitive Position. Cambridge, MA: M.I.T. Center for Advanced Engineering Study, 1982.

Fogarty, D. W., Blackstone, J. H., Jr., and Hoffman, T. R., Production and Inventory Management, 2nd Edition, South-western Publishing Co., 1991.

Garvin, D. A., Operations Strategy: Text and Cases, Prentice Hall, 1992.

Goldratt, Eliyahu M., and Jeff Cox, The Goal: A Process of Ongoing Improvement, revised edition. Croton-on-Hudson, NY: North River Press, 1986.

Klein, J. A., Revitalizing Manufacturing: Text and Cases, Irwin, 1990.

Monczka, R.M. and Trent, R.J., "Global Sourcing: A Development Approach," International Journal of Purchasing and Material management, Spring 1991, pp. 2-8.

Murdick, R. G., Render, B., and Russell, R. S., Service Operations Management, Allyn and Bacon, 1990.

Scheuing, E. E., Purchasing management, Prentice Hall, 1989.

Womack, J. P., Jones, D. T. and Roos, D., The Machine that Changed the World, Harper Perennial, 1991.

COURSE ANALYSIS QUESTIONNAIRE

A DETAILS OF THE COURSE

- A1.** This course will be offered as an elective to Management and other majors in the Eberly College of Business.
- A2.** This course does not require changes in the content of other existing courses or programs in the Department of Management.
- A3.** This course will follow the traditional style of offering by the department; lectures, cases, computer assignments, class discussion, etc. will be used as the main method of teaching.
- A4.** No.
- A5.** This course is not intended to be a dual level course.
- A6.** This course is not to be taken for variable credit.
- A7.** No university offers an exactly same course. However, several universities offer a combination of two or more courses that cover the topical content of the proposed course:

- Michigan State University
- Pennsylvania State University
- Western Kentucky University
- Illinois State University
- Louisiana State University
- The Florida State University
- Case Western Reserve University
- Southwest Missouri State University

Photocopies of appropriate course descriptions and/or course syllabi are attached as an appendix.

- A8.** The American Assembly of Collegiate School of Business (AACSB) recommends this course in its accreditation standards for Operations Management (or Industrial Management, at IUP).

B. INTERDISCIPLINARY IMPLICATIONS

- B1.** This course will be taught by one instructor.
- B2.** It is not anticipated that any additional or corollary courses will be needed, now or later.

B3. The content of this course does not overlap with that of courses offered by other departments. This course provides an advanced treatment of some of the topics covered in the introductory MG330: Production and Operations Management.

B4. Yes.

C. IMPLEMENTATION

C1. No new faculty resources are required. Current faculty complement is sufficient to cover the instruction of this course based on anticipated departmental enrollment patterns in the near future.

No other new resources are needed to teach the course. Current library, microcomputing labs in the College, and space allocations are adequate to offer this course.

C2. No.

C3. This course will be offered once a year.

C4. One section of the course will be offered at a time.

C5. About 30 students will be accommodated in this course. The course will require extensive use of computer facilities. The College has fully equipped labs (3 teaching and one open lab) to meet the computing needs of the students enrolled in this class.

C6. No.

C7. This course will be offered as an elective to Management majors. It will be of special interest to students with Industrial Management concentration. The course will neither affect the number of free electives nor will it necessitate an increase in the 124-credit program.

D. MISCELLANEOUS

No additional information is needed.

APPENDIX: INSTITUTIONS OFFERING SIMILAR COURSES

Michigan State University
Pennsylvania State University
Western Kentucky University
Illinois State University
Louisiana State University
The Florida State University
Case Western Reserve University
Southwest Missouri State University

(Catalog Description/Course Syllabi are attached)

In order to save time and paper, I did not copy
19 pages of catalog descriptions/course syllabi
included with the proposal. They are available in
352 Sutton for review or to make copies. Marcia

94-22

Descriptions — Management
of
Courses

Michigan State University MG 437

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)
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**
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 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. 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 Systems**
Fall, Winter. 4(4-0) Materials and Logistics Management majors: MGT 303. Marketing majors: MTA 301. 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.
345. **Physical Distribution and Channel Strategy**
Fall, Winter. 4(4-0) Materials and Logistics Management majors: MGT 303. Marketing majors: MTA 301. Interdepartmental with and administered by the Department of Marketing and Transportation Administration.
Micro analysis 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 topical coverage of the entire materials and logistics management program.
409. **Business Policy**
Fall, Winter, Spring, Summer. 4(4-0) Seniors in business administration, MGT 302; F 1391; 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. **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 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 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.
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) 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) 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.

(GPA) of 2.0 must be earned in all courses required in management major.

Human Resource Management: MAN 4301 and MAN 4407 are required. Additionally, four of the following courses must be completed: MAN 4201, MAN 4320, MAN 4330, MAN 4350, MAN 4410, and RMI 4135. A minimum grade of "C-" must be earned in all required and elective courses in the human resource management major.

Definition of Prefix

MAN — Management

Undergraduate Courses

MAN 3010. Concepts of Management (3). Prerequisites: MAC 1141, ACG 2001, ECO 2023 and a behavioral science course. Introduction to the nature and process of management, with emphasis upon management of physical and human resources. (Not required for management or human resources management majors.)

MAN 3109. Organizational Behavior (3). Prerequisites: MAC 1141, ACG 2001, ECO 2023, and a behavioral science course. Behavioral concepts, techniques, and applications for managing human resources in all types of organizations.

MAN 3949r. Cooperative Education Work Experience (0). (S/U grade only.)

Business Majors Only

MAN 4201. Organizational Analysis and Change (3). Prerequisite: MAN 3109. Analysis of concepts and processes for developing the human resource in organizations.

MAN 4301. Personnel Management (3). Prerequisite or Corequisite: MAN 3109. Survey of the human resource management function in organizations. Topics include: selection, recruiting, training, compensation, and performance appraisal.

MAN 4320. Staffing (3). Prerequisites: MAN 3109 and MAN 4301. The study of the design and operation of systems for employee recruitment and selection, including current practice and issues.

MAN 4330. Compensation (3). Prerequisites: MAN 3109 and MAN 4301. The study of the methods and implications of making wage and salary decisions for recruiting and retaining employees.

MAN 4350. Training and Development (3). Prerequisites: MAN 3109 and MAN 4301. The study of the various forms of training and development and their implementation both on and off the job.

MAN 4407. Management of Labor & Industrial Relations (3). Corequisite: MAN 3109. A managerial perspective of labor and manpower concepts and issues in industrial and post-industrial society and work organizations.

MAN 4410. Collective Bargaining (3). Prerequisites: MAN 4301 and MAN 4407. Analysis of union-management collective bargaining concepts, processes and strategies.

MAN 4701. Business & Society (3). Prerequisite: MAN 3010. Examination of current and future issues in business and society with emphasis on the social responsibility of business and future challenges for business in a pluralistic society.

MAN 4720. Administrative Policies (3). Prerequisites: All business core courses and senior standing. General management problem-solving and decision making, involving case analysis and/or computer simulation.

MAN 4905r. Directed Individual Study (1-3). May be repeated up to three (3) times.

MAN 4930r. Special Studies in Business (1-3). Prerequisite: Consent of Dean. May be repeated up to three (3) times.

MAN 4941. Field Study in Management (1-3). (S/U grade only.) Prerequisite: Consent of instructor. Provides student with on-the-job experience in major area.

Graduate Courses

MAN 5076. Evolution of Administration Management (3).

MAN 5205. Organization Theory (3).

MAN 5206. Organizational Behavior (3).

MAN 5305. Personnel/Human Resource Management (3).

MAN 5411. Management of Labor and Collective Bargaining (3).

MAN 5721. Problems in Policy Formulation (3).

MAN 5840. Organizational Change and Development (3).

MAN 5905r. Directed Individual Study (1-3). (S/U grade only.)

MAN 5907r. Special Studies in Management (1-3).

MAN 5911r. Supervised Research (1-3). (S/U grade only.)

MAN 5935r. Special Topics in Management (1-3).

MAN 5940r. Supervised Teaching (1-3). (S/U grade only.)

MAN 6159r. Seminar in Organizational Behavior (1-3).

MAN 6209r. Doctoral Seminar in Organizational Theory (1-3).

MAN 6715r. Seminar in Strategic Management (3).

MAN 6911r. Supervised Research (1-3). (S/U grade only.)

MAN 6932. Doctoral Seminar in Strategic Management (3).

MAN 6933r. Doctoral Seminar in Organizational Behavior (3).

MAN 6934. Doctoral Seminar in Management Research (3).

MAN 6941r. Supervised Teaching (1-3). (S/U grade only.)

MAN 6979. Seminar in Research (3).

For listings relating to graduate course work for thesis, dissertation, master's and doctoral examinations and defense, consult the *Graduate Bulletin*.

MANAGEMENT INFORMATION SYSTEMS (see Information and Management Sciences)

MARINE BIOLOGY (see Biological Science)

Department of MARKETING

(COLLEGE OF BUSINESS)

Chairperson: Ronald E. Goldsmith; Professors: Phillip Downs, Bruce Gunn, John Kerr, Richard Mizerski, Urban Ozanne, Melvin Stith, Gary Zenz; Associate Professors: Douglas Behrman, Joseph Cronin,

Florida State

MGT 340 Organizational Behavior and Management. 3(3-0) F,S.
Prerequisites: 54 credit hours, including ACC 201, ECO 155 or 165, PSY 121 or SOC 150 or ANT 125, or permission. A study of individual, interpersonal, and group behavior within organizations and the behavioral implications of management processes. The interaction of human, technological, structural, global, ethical, and environmental factors are also discussed. A "C" grade or better is required in this course to take ACC 555. This course may not be taken pass/not pass.

MGT 341 Advanced Organization Behavior and Development. 3(3-0) F,S.
Prerequisite: MGT 340 or permission. An in-depth study of individual and organizational behaviors and processes. Such areas as individual differences, group dynamics, organizational processes, organizational change/development, and culture and ethics will be addressed utilizing a variety of interactive teaching methods.

MGT 342 Organization Theory. 3(3-0) F,S.
Prerequisite: MGT 340. A study of the macro-organization functioning with emphasis on how organization design dimensions interrelate to effect performance. Organization dimensions studied include environment, technology, size, structure, and effectiveness.

MGT 343 Purchasing and Materials Management. 3(3-0) F,S.
Prerequisite: MGT 340 or permission. A study of the processes and problems involved in acquiring and controlling materials and services required for operations management in business, industry, and government. Includes source selection, quality and quantity control, value analysis, and negotiation and legal consideration.

MGT 345 Human Resources Management. 3(3-0) F,S.
Prerequisite: MGT 340 for business majors; other majors by permission. A study of the personnel functions of procurement, development, compensation, integration, and the maintenance of human resources within the framework of total available resources used in the accomplishment of organizational goals.

MGT 346 Compensation Management. 3(3-0) S.
Prerequisite: MGT 345 or permission. Development and management of compensation programs. Equity concepts and methods to establish relationships between compensation rates in an organization are stressed. The use of job evaluations, wage and salary surveys, wage structure, merit and performance appraisal systems, and benefit systems are discussed as integral parts of the compensation plan. Compensation as a profession is studied.

MGT 364 Operations Management. 3(3-0) F,S.
Prerequisites: MGT 340, CIS 237 and completion of student's degree program mathematics requirement, or permission. Forecasting, cost effectiveness, work measurement, work simplification, PERT, heuristic models and other techniques used in planning, coordinating, and controlling business functions.

MGT 368 (360) Management Decision Making. 3(3-0) F,S.
Prerequisites: MGT 364. Quantitative techniques that aid the manager in making rational decisions. A study of the methods used in evaluating and selecting resources relative to achieving organizational objectives.

MGT 384 Entrepreneurship. 3(3-0) F,S.
Prerequisites: ACC 211, MGT 340, MKT 350, or permission. An exposure to the dynamics of identifying opportunities and dealing with the risks of implementing new ideas and ventures. The factors and conditions in initiating a new business venture are studied along with entrepreneurial skills, venture capital formation, and business plan development.

MGT 394 (399) Cooperative Education in Management. 1-3, F,S.
Prerequisites: Acceptance into SMSU Cooperative Education Program and permission of department head. The opportunity to earn academic credit in a planned learning process that integrates academic training with supervised work experience. This is a variable content course that may be repeated to a total of 6 semester hours in Cooperative Education.

MGT 400 Topics in Management. 1-3, D.
Prerequisite: MGT 340 or permission. A variable content course with topics that can change from semester to semester depending upon student and faculty interests. Topics generally require previous study in management. Examples: entrepreneurship, federal regulation of personnel management, designing structure for growth organizations, computerization and human resource management, stress and time management, managing not-for-profit organizations, women in management, and management feasibility studies. May be repeated to a total of 3 hours.

MGT 442 Selected Topics in Organizational Behavior. 3(3-0) D.
Prerequisite: MGT 341 or permission. This course will focus on major current and emerging issues in organizational behavior (OB). Issues include topics such as motivation and leadership, communications, stress and wellness programs, group dynamics, etc. A single or selected set of topics will be dealt with in any given offering of the course. Content, research findings, and practical application of major models and theories will be stressed through a variety of approaches intended to maximize student involvement. The course content will vary as demanded by student interest, faculty expertise, and environmental changes.

MGT 450 Human Resource Development. 3(3-0) D.
Prerequisite: MGT 345 or permission. The design, implementation and evaluation of employee development programs. Topics covered include: training needs, analysis, learning theory, training methods, validity, and legal requirements. Specific employee development programs are discussed as they relate to executives, managers, and supervisors in organizations.

MGT 451 Human Resource Acquisition. 3(3-0) D.
Prerequisite: MGT 345 or permission. An in-depth study of the application of Federal and state laws and regulations to HRM practices regarding the acquisition of human resources, appropriate and effective techniques of job analysis, HR planning, recruitment, and a detailed study of techniques and procedures for ensuring valid and effective selection of employees.

MGT 464 Advanced Operations Management. 4(4-0) S.
Prerequisite: MGT 360, 364, or permission. An in-depth analysis of operation management concepts and techniques. Current theory and specific practices are studied as they exist in organizational settings. Integration of techniques with computer application is emphasized.

MGT 465 Industrial Relations. 3(3-0) F,S.
Prerequisite: MGT 340 or permission. A study of environmental and policy considerations involved between management and labor unions in the industrial relations process. Emphasis is placed on the nature, process, and types of collective bargaining relationships; the interface between parties in preserving effective industrial relations within organizations; and promoting economic stability and growth.

MGT 466 Advanced Issues in Human Resources Management. 3(3-0) D.

Prerequisites: MGT 345, CIS 237, or permission. An in-depth study of practical human resource management issues and the steps involved in the design and implementation of employee selection systems, training programs, and performance appraisal systems. Included are methods of job analysis and the design and utilization of appraisal forms useful to managers. Based on practical considerations, some experiential techniques are used. Recent developments relevant to human resources practices will also be covered.

MGT 487 Strategic Management and Policy. 3(3-0) F,S.
Prerequisites: 102 credit hours, including FGB 380, MGT 364, and MKT 350. Integration of specialized areas of business administration; coordination of various business functions from the standpoint of the formulation, implementation and control of business objectives, strategies and policies.

MGT 494 (499) Internship in Management. 1-6, D.
Prerequisite: permission by department head. Opportunity to obtain simultaneously the practical as well as the theoretical knowledge through internship with cooperating businesses.

MGT 496 (408) Readings in Business Administration—Management. 1-2, D.
Prerequisite: permission. Planned readings designed to intensify and supplement the area of management.

MGT 543 New Venture Management. 3(3-0) S.
Prerequisite: MGT 384. The course provides for extensive research and in-depth analysis in starting a new business venture. Major topics include sources of start-up capital, valuing an ongoing business, and marshalling physical and human assets. Emphasis is placed on student team preparation of a written feasibility study for a hypothetical business start-up.

MGT 547 International Management. 3(3-0) D.
Prerequisite: MGT 340 or permission. A study of management theory and practices as related to international organizations that are multinational in nature. Emphasis is placed on analyzing, understanding, and integrating managerial concepts as they apply to cross-cultural settings.

MGT 560 History of Management Thought. 3(3-0) D.
Prerequisite: MGT 340 or permission. Background and interrelationship of classical, behavioral science, systems and quantitative management schools of thought; works of major contributors to contemporary management concepts, practices and theory.

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Southwest Missouri
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management processes for effective organizational performance. Prereq., ORMG 3300.

ORMG 4810-3. Honors Seminar. Social responsibilities of the business executive, business ethics, business-government relations, and business in literature. Open to seniors who have completed at least 30 semester hours of business courses with not less than a 3.30 grade point average and have instructor consent.

ORMG 4820-variable credit. Topics in Business. Experimental course offered irregularly for purpose of presenting new subject matter in organization management.

ORMG 4900-variable credit. Independent Study. Student must have prior consent of the dean and instructor under whose direction study is taken. Intended only for exceptionally well-qualified business seniors. Departmental form required.

ORMG 5040-3. Fundamentals of Management and Organization. Provides basic understanding of organization theory, personnel management, labor relations, and organizational behavior essential for graduate study in business. Open only to graduate degree candidates.

ORMG 6300-3. Organizational Behavior. Application of behavioral science concepts and research to management of organizations. Open only to business graduate students. Prereq., ORMG 5040 or equivalent.

ORMG 6310-3. Individual Behavior in Work Organizations. Explores impact of key management and behavioral science theories, concepts, and practices on individual productivity, satisfaction, growth, and development. Prereq., ORMG 5040 or equivalent.

ORMG 6320-3. Organization Design. Design of organization structure and its impact on organizational processes. Analysis of alternative organization patterns and factors affecting organization design. Prereq., ORMG 5040 or equivalent.

ORMG 6330-3. The Development of Groups and Organizations. Introductory study of the dynamics involved in managing and facilitating change in groups and organizations by application of behavioral science knowledge. Emphasizes both cognitive and experiential learning and requires a background in organization theory and administrative behavior. Prereq., ORMG 5040 or equivalent.

ORMG 6340-3. Consultation Skills. Seminar for doctoral and advanced master's students, oriented toward theoretical and experiential aspects of organizational entry, contracting, data gathering, and problem diagnosis in an organizational setting. Prereq., ORMG 6330 or instructor consent.

ORMG 6350-3. Dynamics of Interpersonal Behavior. Application of skills in problem diagnosis, empathy, and communications in group and interpersonal settings. Strong emphasis on clear understanding of human behavior and interpersonal dynamics in a laboratory setting. Prereq., ORMG 6330 or instructor consent.

ORMG 6360-3. Intervention Theory and Methods. Application of skills in the third party role in analysis and consultation of such

processes as communication, decision making, problem solving, functional roles of group members, and nonverbal behavior in the organizational setting. Prereq., ORMG 6330 or instructor consent.

ORMG 6820-variable credit. Graduate Seminar. Experimental seminar offered irregularly to provide opportunity for investigation of new frontiers in organization management.

ORMG 6900-variable credit. Independent Study. Student must have consent of instructor under whose direction study is taken. Departmental form required.

ORMG 6940-variable credit. Master's Candidate. Departmental form required.

ORMG 6950 (4-6). Master's Thesis.

ORMG 7320-3. Seminar in Organization Theory. Critically investigates major issues in organization theory and provides students with experience in comprehensively surveying literature in subject areas such as organization design, structure, technology, environment, size, and strategy. Prereq., instructor consent.

ORMG 7330-3. Seminar and Practicum in Organization Development. Doctoral-level seminar emphasizing intervention theory and method in effectuating organizational change in a client system. Deals with group development, educational processes, conflict resolution, organizational interventions, change strategies, and ethical and skill requirements of the consultative role. Prereq., instructor consent.

ORMG 7830-3. Doctoral Seminar: Dissertation Research. Designed to assist the doctoral student in integrating courses and fields of study in order to be able to apply knowledge and skills to problems in organization management. Gives special attention to the development of thesis topics.

ORMG 8820-variable credit. Graduate Seminar. Experimental seminar offered irregularly to provide opportunity for investigation of new frontiers in organization management.

ORMG 8900-variable credit. Independent Study. Student must have consent of instructor under whose direction study is taken. Departmental form required.

ORMG 8990 (1-10). Doctoral Thesis.

Personnel-Human Resource Management

PHRM 4400-3. Management of Human Resources. Introduction to modern personnel management policies and practices. Overview of primary issues in managing an organization's human resources, including job analysis and design; planning personnel needs; recruiting, hiring, developing and appraising employees; and discussion of current social and legal issues. A general course emphasizing awareness of issues applicable to managers in all functional areas. Prereq., ORMG 3300 or 5040 or equivalent. Same as PHRM 5400.

PHRM 4410-3. Labor and Employee Relations. Analysis of legal, political, social, and managerial aspects of collective bargaining and employee relations. Prereq., ORMG 3300 or 5040 or equivalent. Same as PHRM 5410.

PHRM 4420-3. Employment Staffing and Development. Examination of issues relating to selection, placement, development, and retention of employees. Advanced treatment of strategies for conducting job analyses, planning staffing needs, evaluating recruitment sources, and using alternative selection techniques. How to develop, implement, and evaluate training programs. Comprehensive review of equal employment opportunity and affirmative action requirements. Prereqs., PHRM 4400 or 5400, and OPMG 2010. Same as PHRM 5420.

PHRM 4430-3. Compensation and Benefits. Analysis of compensation systems and applied motivation theory. Coverage of job evaluation, wage surveys, performance appraisal, and motivational theories. Treatment of social and legal issues pertaining to salary and benefit administration, workers compensation, and pay equity, including comparable worth. Prereqs., PHRM 4400 or 5400, and OPMG 2010. Same as PHRM 5430.

PHRM 4810-3. Honors Seminar. Social responsibilities of the business executive, business ethics, business-government relations, and business in literature. Open to seniors who have completed at least 30 semester hours of business courses with not less than a 3.30 grade point average and have received consent of instructor. Departmental form required.

PHRM 4820-variable credit. Topics in Business. Experimental course offered irregularly for purpose of presenting new subject matter in personnel-human resource management.

PHRM 4900-variable credit. Independent Study. Student must have prior consent of the dean and instructor under whose direction study is taken. Intended only for exceptionally well-qualified business seniors. Departmental form required.

PHRM 5400-3. Management of Human Resources. Same as PHRM 4400.

PHRM 5410-3. Labor and Employee Relations. Same as PHRM 4410.

PHRM 5420-3. Employment Staffing and Development. Same as PHRM 4420.

PHRM 5430-3. Compensation and Benefits. Same as PHRM 4430.

PHRM 6400-3. Seminar: Personnel Administration. Covers issues in all areas of personnel administration. Emphasizes research findings on human resources applications through applied models, survey methods, and other applied behavioral concepts.

PHRM 6410-3. Seminar: Labor and Employee Relations. Covers issues in all areas of industrial, labor, and employee relations. Emphasizes research findings in industrial, labor, and employee relations through applied problems, NLRB and court decisions, arbitration cases, and conflict management models.

PHRM 6820-variable credit. Graduate Seminar. Experimental seminar offered irregularly to provide opportunity for investigation of new frontiers in personnel-human resource management.

PHRM 6900-variable credit. Independent Study. Student must have consent of instructor under whose direction study is taken. Departmental form required.

management functions to library operations; contemporary thinking of library managers; related research.

7505 Analysis of Information Systems (3) Application of systems analysis techniques to management of libraries and information centers; analysis of current operating systems; implementation of more effective manual and/or computerized information processing.

7506 Automation of Bibliographic Control Systems (3) Also offered as CSC 7405. Management of library technical operations—acquisitions, materials organization, serials, and circulation; evaluation and application of integrated automation systems.

7507 Microcomputer Systems for Information Management (3) Use of microcomputers in library processes; use of software, evaluation of user needs, and library management concerns.

7605 Information Science (3) Also offered as CSC 7406. History and philosophy of information science and information retrieval; analysis of existing information retrieval systems; information-system design for library application.

7606 Abstracting and Indexing (3) Also offered as CSC 7407. Abstracting and indexing methods; manual and computerized abstracting and indexing systems; problems controlling abstracting and indexing services; question analysis and search strategies; evaluation of search results.

7607 Online Information Retrieval (3) Also offered as CSC 7408. Development of online systems and services in libraries; in-depth training in their use; impact of online services on libraries and information systems.

7608 Cataloging and Classification (3) Core course. Principles underlying the description, classification, and subject assignment of materials; manual and automated methods: AACR2, DDC, and LCC; overview of technical services; relationship of the catalog to other departments in the library.

7609 Cataloging and Classification: Advanced (3) Prereq: LIS 7608 or consent of instructor. Problems in cataloging and classification for a wide variety of materials; historical and international survey of cataloging codes and classification systems.

7610 Information Retrieval Systems (3) See CSC 7481.

7700 History of Books and Libraries (3) History and cultural relationships of the book and libraries; rise of the modern library since the mid-19th century.

7800 The Art and Practice of Storytelling (3) Role of story telling as a form of communication; preparation and presentation of stories for all age groups; planning story programs for libraries and television.

7807 Library Use Instruction (3) Prereq: LIS 7002 or equivalent. Investigation of the problems encountered by the instructor of user education in the library.

7809 Research in Library and Information Science (3) Research methodology applicable to library and information phenomena; definition of research problems, selection of inquiry tools, and data collection; emphasis on evaluation of research.

7901 Issues in Library and Information Science (1) Pass-fail grading; core course. All graduating students are expected to participate in faculty-directed discussions of contemporary professional issues.

7902 Field Experience in School and Media Centers (3) Prereq: completion of core courses and LIS 7101, 7102, and 7400; or equivalent. Preparation for course begins semester prior to registration. 120 hrs. per semester at field site. Experience in administration and management of school libraries.

7903 Field Experience in Special Libraries and Information Centers (3) Prereq: completion of core courses and LIS 7403; or equivalent. Preparation for course begins semester prior to registration. 120 hrs. per semester at field site. Experience in administration and management of special libraries.

7904 Field Experience in Academic Libraries (3) Prereq: completion of core courses and LIS 7401; or equivalent. Preparation for course begins semester prior to registration. 120 hrs. per semester at field site. Experience in administration and management of academic libraries.

7905 Field Experience in Public Libraries (3) Prereq: completion of core courses and LIS 7405; or equivalent. Preparation for course begins semester prior to registration. 120 hrs. per semester at field site. Experience in administration and management of public libraries.

7906 Field Experience in Health Sciences Information Centers (3) Prereq: completion of core courses and LIS 7204 and 7404; or equivalent. Preparation for course

begins semester prior to registration. 120 hrs. per semester at field site. Experience in administration and management of health sciences libraries.

7907, 7908 Special Topics in Library and Information Science (1-3.1-3) Only 6 sem. hrs. in 7907 and 7908 applicable to M.L.I.S. degree. Areas of current interest.

7909 Directed Independent Study (1-3) May be repeated for a max. of 6 sem. hrs. credit.

8000 Thesis Research (1-12 per semester) "S"/"U" grading.

LINGUISTICS (LING)

4008 History of the German Language (3) See GERM 4601.

4011 Topics in Advanced Logic (3) Prereq: PHIL 4010. See PHIL 4011.

4060 Language and Culture (3) See ANTH 4060.

4064 Pidgin and Creole Languages (3) See ANTH 4064 and FREN 4064.

4150 Phonetics (4) See COMD 4150.

4153 Acoustics of Speech and Hearing (3) See COMD 4153.

4606 Russian Language: Phonetics and Phonemics (3) See RUSS 4002.

4607 German Phonetics (3) See GERM 4002.

4750 Independent Research in Speech Science or Linguistics (1-3) See COMD 4750.

4914 Philosophy of Language (3) See PHIL 4914.

7005 Historical Linguistics (3) See ANTH 7005.

7006 Phonology: Theory & Methods (3) See ANTH 7006.

7060 Conversation and Discourse (3) See ANTH 7060.

7750 Special Topics in Linguistics (3) See COMD 7750.

7752 Seminar in Linguistics (3) See COMD 7752.

7754 Psycholinguistics: Linguistic Perspectives (3) See COMD 7754 and PSYC 7754.

7755 English for Speakers of Other Languages: Methods and Materials (3) See COMD 7755.

7756 Independent Research: Phonetics and Linguistics (1-3) See COMD 7756.

7909 Selected Topics in Anthropology (3) See ANTH 7909.

7910 Seminar (3) See PHIL 7910.

7962 Field Methods in Linguistics (3) See ANTH 7962.

7999 Research in Anthropology (1-6) See ANTH 7999.

8000 Thesis Research (1-12 per sem.) "S"/"U" grading.

9000 Dissertation Research (1-12 per sem.) "S"/"U" grading.

MANAGEMENT (MGT)

3000 Petroleum Land Management Practice (1) V Open only to petroleum land management majors. Required of petroleum land management majors; waived only by consent of department. Pass-fail grading. A minimum of 6 weeks of full-time employment by a firm participating in the program.

3001 Petroleum Land Management (3) V Practical and evidentiary aspects of petroleum land management; principles, and techniques derived from a synthesis of legal and geographical sciences; legal effects of various procedures of boundary locations for petroleum properties; petroleum land practices concerning utilization, a real association, and environmental impacts of drilling activity; use of topographical and historic maps, map compilations, historical cartography, air photos, archival records, and field techniques; some focus on coastal Louisiana and the Gulf South.

3111 Entrepreneurship (3) S Prereq: senior standing. Principles of entrepreneurship; feasibility studies; financial and location analysis; marketing; promotion; management; venture capitalism; legal considerations.

3200 Principles of Management (3) Prereq: admission to the College of Business Administration or approval of the dean. Management functions, including planning, organizing, staffing/human resource management, leading/interpersonal influence, and controlling in both domestic and international spheres.

3203 Independent Study: Advanced Management Topics (1-6) Prereq: consent of instructor. May be repeated for credit for a max. of 6 sem. hrs. Independent research under direction of a faculty member.

3211 Business and Society (3) Prereq: senior standing. Social roles of organizations whose primary function is the accumulation of profits; emphasis on current issues; historical development of business-society relationships.

3280 Management Internship (3) Prereq: junior or senior standing. May be taken for a max. of 6 sem. hrs. of credit. Students supervised by a management faculty member and an approved business executive, will follow a predetermined schedule of activities while working for a business firm. Hands-on experience in the fields of management, human resource management, organizational behavior, small business management, entrepreneurship, and administrative practices.

3320 Personnel: Human Resources (3) Prereq: MGT 3200. Personnel functions, including planning, recruitment, selection, development, maintenance, and reward of employees; relationships with environment and employee associations.

3321 Cases in Personnel and Labor Relations (3) S Prereq: MGT 3500 and 3320. Recruitment, selection, training and development, compensation, labor relations, personnel planning, performance appraisal, and job analysis; emphasis on interrelationships among the various personnel functions.

3500 Management and Organized Labor Relationships (3) Impact of organized labor on personnel and management practices; emphasis on the nature of union organizations, union certification and decertification elections, contract administration, and government regulation of labor-management relationships.

3511 Collective Bargaining in the Private Sector (3) F Prereq: MGT 3500. Limitations placed on managerial prerogatives by collectively bargained agreements in the private sector.

3512 Collective Bargaining in the Public Sector (3) S Issues in public sector bargaining; aspects different from private sector bargaining.

3830 Strategic Management (3) Prereq: FIN 3715, MGT 3200, and MKT 3401. May be taken only during the final semester of course work. Non-business majors must have instructor's permission. Formulation of consistent business policies; maintenance of an efficient organization; actual cases used as basis for discussions and preparation of reports which call for executive decision making.

4000 Analysis and Design of Management Information Systems (3) F See QBA 4125.

4113 Small Business Management (3) F Prereq: senior standing. A multidisciplinary approach to small business; business start-ups, accounting, finance, marketing, management, promotion, layout, retail management, location analysis, and international small business.

4114 Franchising Management (3) S Prereq: senior standing. Understanding the franchising process; becoming a franchisor or franchisee; franchisor start-up, venture capitalist, finance, legal compliance, disclosure documents, franchise agreements, franchise start-ups, franchisor-franchisee relationships, anti-trust laws, and international franchising.

4322 Employee Selection and Placement (3) F Prereq: QBA 2000; or equivalent. Staffing requirements, recruitment strategies, development and validation of selection procedures, classification and placement of personnel; problems associated with person-job matching; socialization of new employees.

4323 Compensation Administration (3) S Prereq: MGT 3320. Quantitative and nonquantitative methods of job evaluation; wage level, wage structure, incentive plans; issues of employee compensation.

4420 Multinational Management (3) Prereq: MGT 3200 or equivalent. Management concepts and philosophical bases for international management operations; environmental dynamics, multinational business organizations, cultural constraints, organizational structures and processes, and conceptual systems of international operations.

4523 Government Regulation of Human Resource Management (3) F Prereq: MGT 3320. Impact of federal legislation on human resource managers; hiring, retention, and promotion policies of employers.

4620 Human Behavior in Organizations (3) Prereq: MGT 3200. Behavioral sciences applied to understanding human dynamics in organizations; individual, interpersonal, group, and intergroup behavior as organizational variables; impact of human behavior on organizational dynamics and success.

Michigan State
1994-92

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)
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

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 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. 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 Systems

Fall, Winter. 4(4-0) Materials and Logistics Management majors; MGT 303, Marketing majors; MTA 301. 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.

345. Physical Distribution and Channel Strategy

Fall, Winter. 4(4-0) Materials and Logistics Management majors; MGT 303, Marketing majors; MTA 301. Interdepartmental with and administered by the Department of Marketing and Transportation Administration. Micro analysis 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 topical coverage of the entire materials and logistics management program.

409. Business Policy

Fall, Winter, Spring, Summer. 4(4-0)
Seniors in business administration, MGT 302; F 1391; 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. 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 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 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.

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) 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) 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.

- 468. Field Studies**
Fall, Winter, Spring, Summer. 1 to 4 credits. 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 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, design strategies (product, function, matrix, other), organization-environment interface, motivation, leadership, group processes, conflict management, the managerial role.
- 807. Administrative Policy**
Fall, Winter, Spring, Summer. 4(4-0) MGT 806, MTA 805, F 1 889. 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.
Management of the personnel function; personnel policy formulation; the role of the personnel executive; personnel staffing, training and development, performance appraisal, compensation and benefits; labor relations; relevant legislation and judicial decisions.
- 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.
- 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.
- 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 relationships; 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 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.
- 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 development 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.
- 832. 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 831, MGT 832, ACC 840 or concurrently.
Normative decision analysis in business under different assumptions of information availability.

**Descriptions — Management
of
Courses**

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

Basic experimental design. Non-parametric and multivariate methods. Elementary sampling theory. Response surface methodology. Data analysis using BMD and SPSS.

841. Materials and Logistics Management Policy
Spring, Summer. 4(4-0) MGT 800 plus 30 credits in the MBA Program. Interdepartmental 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 systems performance.

848. 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 autocracy, corporate government, stockholder and director relationships. Examination of ethics of decision making, strategic values and priorities basic to resource allocation decisions.

890. Special Problems
Fall, Winter, Spring, Summer. 1 to 4 credits. May reenroll for a maximum of 12 credits. Approval of department.

906. 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 reenroll 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.

Current research in Operations Management. Research methods and strategies. Preparation and presentation of student papers.

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

**MARKETING AND
TRANSPORTATION
ADMINISTRATION MTA**

College of Business and Graduate
School of Business
Administration

300. Marketing Management in Business and Society I
Fall, Winter, Spring, Summer. 4(4-0) EC 202. ACC 291 or ACC 230.

Marketing management including an analytical focus on buyer behavior, demand, measurement, segmentation, targeting, positioning, product development, pricing, channels of distribution, physical distribution, and promotion.

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

Market planning and control within the context of international and domestic environments with an emphasis on industrial applications. Includes market selection, competitive analysis, distribution strategy and market information systems.

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

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
(MGT 301.) Winter, Spring. 4(4-0) MGT 303 or approval of department. Interdepartmental with and administered by the Department of Management.

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 and administered by the Department of Management.

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.

311. Personal Selling
Fall, Winter, Spring, Summer. 3(3-0) MTA 300.

Theories, principles, methods and techniques of personal selling with application to different buyer-seller situations. Development of interpersonal communication skill. Career opportunities in selling.

313. Sales Management
Fall, Winter, Spring, Summer. 4(4-0) MTA 300.

Organization and administration of the firm's personal selling. Topics include: recruitment, selection, training, compensation, evaluation, development, and motivation of the sales force; market assessment, territory alignment, and quotas; segmental analysis and budgeting.

PHILOSOPHY

415. FACILITIES MANAGEMENT (3:3:0) Decision-making methods in the design, selection, replacement, maintenance, planning, and control of capacity. Prerequisite: OPMGT 301.
416. OPERATIONS PLANNING AND CONTROL (3:3:0) Analysis of optimal planning, scheduling, and control methods of business operations. Prerequisite: OPMGT 301.
419. MATERIALS MANAGEMENT (3:3:0) Design of planning and control procedures for managing the flow of materials. Prerequisite: OPMGT 301.
496. INDEPENDENT STUDIES (1-18)

PETROLEUM AND NATURAL GAS (P N G)

PROFESSOR TURGAY ERTEKIN, *in charge*

029. INTRODUCTORY PETROLEUM ENGINEERING (3:3:0) Introduction to fluid transfer operations of the earth; production of petroleum, natural gas, and water; storage of natural gas. Covers conservation implications.
382. SEMINAR (1:1:0) Discussions and presentations of current problems and literature as related to technological and economic aspects of the petroleum industry. Prerequisites: PHYS 203, fifth-semester standing.
405. ROCK AND FLUID PROPERTIES (2:2:0) Reservoir rock and fluid properties, flow behavior in reservoir rocks, and behavior of gas in underground storage caverns. Prerequisite: PHYS 203.
406. ROCK AND FLUID LABORATORY (1:0:4) Systematic study of oil reservoir rocks and fluids; their interrelation applied to petroleum engineering. Prerequisite: PHYS 203. Concurrent: P N G 405.
410. APPLIED RESERVOIR ENGINEERING (3:3:0) Analysis and prediction of reservoir performance by use of material balance and steady and nonsteady state flow equations. Prerequisites: PHYS 203, P N G 405, 406.
420. APPLIED RESERVOIR ANALYSIS (2:2:0) Water influx theory. Application of principles of reservoir analysis to the determination of reservoir behavior and education. Prerequisites: P N G 410, CMPSC 201.
425. PRINCIPLES OF WELL TESTING AND EVALUATION (3:3:0) Mathematical basis for pressure analysis. Theory and practice of pressure testing techniques. Prerequisites: MATH 251, P N G 420.
430. RESERVOIR MODELING (3:3:0) The numerical simulation of petroleum reservoir processes by the use of models; scaling criteria and network flow. Prerequisites: CMPSC 201, MATH 251, P N G 410.
440. FORMATION EVALUATION (3:3:0) Study of those methods used to evaluate the engineering properties of oil and gas bearing reservoir formations. Prerequisites: P N G 405, 406.
450. DRILLING DESIGN AND PRODUCTION ENGINEERING (3:3:0) Design and analysis of oil-field drilling operations and equipment. Prerequisites: P N G 405, C E 261, E MCH 210.
451. OIL WELL DRILLING LABORATORY (1:0:4) Practice in well-control procedures. Measurement of drilling fluid properties. Prerequisites: P N G 405, C E 261, E MCH 210. Concurrent: P N G 450.
475. PETROLEUM ENGINEERING DESIGN (3:3:0) Design and selection of mechanical components used in the production of fluids from subsurface reservoirs. Prerequisites: E MCH 210. Concurrent: P N G 450.
480. PRODUCTION PROCESS ENGINEERING (3:3:0) Analysis and evaluation of surface production processes, fluid separation, storage, measurement, treating, custody transfer, transmission, disposal, corrosion, and other operations. Prerequisites: C E 261, M E 023, P N G 475.
481. NATURAL GAS (3:3:0) Design and analysis of subsurface natural gas production facilities. Principles of measurement and transmission of natural gas. Prerequisites: C E 261, M E 023.
482. PRODUCTION ENGINEERING LABORATORY (1:0:4) Measurement and analysis of the physical and chemical properties of hydrocarbon fluid systems in a production environment. Prerequisites: C E 261, M E 023.
485. SECONDARY RECOVERY ENGINEERING (2:2:0) Engineering appraisal of secondary recovery methods; emphasis on evaluation of field prospects, prediction of recoveries, and design of facilities. Prerequisite: P N G 410.
486. TERTIARY OIL RECOVERY METHODS (3:3:0) Presentation of theory of tertiary methods of oil recovery, current field applications, future engineering potential. Prerequisite: P N G 485.
493. ENGINEERING EVALUATION OF OIL AND GAS PROPERTIES (3:3:0) Application of reservoir engineering techniques: reserve calculations, decline curve analysis, rate-of-return calculations to project design and evaluation. Prerequisites: ECON 002, P N G 420, 475.
494. THESIS (1-6) A problem in petroleum engineering involving review of the literature and experimental data obtained in the field or laboratory.

NOTE: Courses in the use of X-ray diffraction, electron microscopy, and spectroscopy in petroleum and natural gas studies are listed under MATERIALS SCIENCE and GEOLOGICAL SCIENCES.

PHILOSOPHY (PHIL)

PROFESSOR CARL G. VAUGHT, *in charge*

- *001. (GH) BASIC PROBLEMS OF PHILOSOPHY (3:3:0) Issues such as the foundations of knowledge, the existence of God, the problem of freedom, and the nature of reality.
003. (GH) MORAL VALUE (3:3:0) Freedom, choice, and obligation in conduct; values and the foundations of ethics.
- *004. (GH) MAJOR FIGURES IN PHILOSOPHY (3:3:0) Introduction to philosophy through the study of the writings of representative thinkers in the history of philosophy.

*Students may take only one course for General Education credit from PHIL 001 or 004.

Western Kentucky University

1992-93

COURSE OUTLINE

POM 410 (Production Systems)
Spring, 1993

Instructor: Dr. K. Anthony Rhee
Grise Hall, Rm. 219
745-5319

Office Hours: As posted on office door

Course Materials:

Text:

Manufacturing Planning and Control Systems
by Vollmann, Berry, and Whybark,
Third Edition, Irwin Press, 1992.

Readings (to be supplied in class):

- #1 "Management's Guide to Group Technology" by Nancy Lea Hyer, Operations Management Review, Winter 1984.
- #2 "Toyota vs. Nissan: two Approaches to Resource Planning and Scheduling" by Walter E. Goodard, from Just-In-Time Reprints, APICS 1989.
- #3 "Transportation Planning" by Andre Martin, from Chapter 5, DRP.

Course Objectives:

The goals of the course are to give students both a theoretical understanding of how a complex manufacturing planning and control system (MPC) works and a realistic experience with such a system. The course examines the role of computerized information and control systems in manufacturing. Manufacturing planning and control includes master scheduling, materials and capacity planning, activity control, and demand management. We will examine each of these activities in some detail, emphasizing their interrelationships, and their integration through computer systems. In addition, discussion of quality assurance will be included.

Specifically, upon the completion of the course students should be able to:

1. Identify the key elements of MPC systems,
2. Describe the analytical tools available for planning and controlling the flow of materials,
3. Make important MPC system design decisions,
4. See the wide perspective regarding the management of a manufacturing process,
5. Understand the interrelationships of the operating system with other functional areas of the firm.

Computer Assignments:

There will be individual computer work through MRP system. This assignment not only includes computer routine but also managerial problems which can be answered aside from the quantitative perspective.

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This is another
course outline
I got access to.
See if it helps.
Index

Other Instructions

- * Homework will be assigned during class periods, and will be typically due one week after they are assigned. Homework should be turned in on the announced due dates. No late homework will be accepted.
- * Homework should be prepared and written in a professional style, and must be submitted in the following manner: 1) Each set of homework should be stapled together (or use paper clips), 2) Each problem must start with problem number clearly specified at the top of each problem and solved consecutively as assigned, and 3) Show all the necessary work for each problem (No problem without detailed analyses will be accepted as a legitimate effort).
- * Students are expected to be well prepared for each class and contribute to class discussions. Class participation will be used as part of the final grade. Desirable contributions include asking intelligent questions over the material, answering questions over the material, and presenting solutions.
- * No make-ups will be considered without a prior consent with the instructor. A proper communication with the instructor must be made in far advance regarding the possible absence from the scheduled exam.
- * Class attendance is strongly advised. Students are encouraged to discuss readings and the concepts covered in the course. However, problem sets must be the work of each individual student submitting it.
- * Your active participation in all aspects of the course is essential for your success in this course. Outside help can be useful but you should rely on your own efforts in learning the course material and solving problem sets.

Grading Policy

Each exam score weighs 25% of the final grade.

Exam #1	35%
Exam #2	35%
Homework & Computer Work	20%
Quizzes &	
<u>Case Presentation</u>	<u>10%</u>
Total	100%

- * Final exam will not be comprehensive and will be only one hour long.

Course Outline

- Chapter 1 Introduction to Manufacturing Planning and Control Systems
- Chapter 5 Production Activity Control (PAC)
- Additional Topic:
Quality Assurance (Readings will be supplied)
Hank Kolb (Case to be supplied)
- Case :
Plant tours (To be supplied in class)
Group Technology (Read #1)
- Chapter 3 JIT: A Manufacturing Philosophy
JIT (Read #2)
- Exam I
- Chapter 2 Fundamentals of MRP Systems
Video Presentation
- Chapter 4 Capacity Planning: CRP
- Chapter 6 MPS and MRP Dynamics
- Chapter 18 Intro. to Distribution Requirements Planning
DRP and Transportation Planning (Read #3)
- Chapter 11 Single Item Lot Sizing
Variations on EOQ
Family Lot Sizing
Multi-level Lot Sizing
- Chapter 7 Production Planning
Exam II (Final)

PROFESSIONAL electives**-6 hours; approved **ARTS AND SCIENCES electives***-7-9 hours.

*300- and 400-level course in AFAM, ANTH, ART, ASTR, BIOL, CHEM, CS, DANC, ENG, FOREIGN LANGUAGES, GEOG, GEOL, GOVT, HIST, JOUR, MATH, MUS, PHIL, PHYS, PSY, RELS, SCOM, SOCL, and THEA are approved as **ARTS AND SCIENCES electives**.

300- and 400-level courses in ACCT, ECON, FIN, CIS, MGT, and MKT are approved as **PROFESSIONAL electives.

HUMAN RESOURCE/PERSONNEL MANAGEMENT OPTION

FRESHMAN AND SOPHOMORE YEARS (67 hours): See College introductory section, Typical Program of Study.

JUNIOR YEAR (30 hours): CIS 481-3 hours; ENG 300 (A)-3 hours; FIN 330-3 hours; CIS 343-3 hours; MGT 300, 310, 311, 313, 314-15 hours; MKT 320-3 hours.

SENIOR YEAR (31 hours): Three courses selected from the following: MGT 411, 414, 418, 473-9 hours; MGT 417, 418-6 hours; approved 400-level MGT elective-3 hours; ECON 305-3 hours; approved **PROFESSIONAL electives****-3 hours; approved **ARTS AND SCIENCES electives***-7-9 hours.

*300- and 400-level course in AFAM, ANTH, ART, ASTR, BIOL, CHEM, CS, DANC, ENG, FOREIGN LANGUAGES, GEOG, GEOL, GOVT, HIST, JOUR, MATH, MUS, PHIL, PHYS, PSY, RELS, SCOM, SOCL, and THEA are approved as **ARTS AND SCIENCES electives**.

300- and 400-level courses in ACCT, ECON, FIN, CIS, MGT, and MKT are approved as **PROFESSIONAL electives.

Students enrolling in upper division College of Business classes must meet certain eligibility requirements including 60 earned hours and must be approved to take upper division classes. At least one week prior to the day of registration, students who desire to major in the College and who have not been admitted to the College, students who desire to minor in the college, and other students whose programs require upper division classes in the College must apply to enroll in upper division classes. Applications are available in the Office of the Dean of the College of Business, the Departmental Office in the College of Business, and in the University Advising Center. Students who enroll in upper division business classes and who do not meet eligibility requirements will be removed from those classes.

COURSES OF INSTRUCTION

MANAGEMENT (MGT)

300 Legal Environment of Business. 3 hours.

Prerequisite: Junior standing.

An introduction to the American public law system; use of law to achieve economic and social goals; legal responsibilities of the business manager. (fall, spring, summer)

301 Business Law. 3 hours.

Prerequisite: Junior standing.

A basic course in commercial law covering contracts, property, creditor rights, torts and other bases for liability and the Uniform Commercial Code. (on demand)

302 Advanced Business Law. 3 hours.

Prerequisite: MGT 300.

Designed to prepare accounting majors for the legal portion of the C.P.A. exam. Contracts, U.C.C., sales, debtor-creditor relationships, security regulation, property, estates, and trusts. (on demand)

310 Organization and Management. 3 hours.

Prerequisite: Junior standing.

An introduction to organization theory and organizational behavior. The course focuses on managing people and material resources to enhance organizational productivity and effectiveness. Attention is given to the managerial functions of planning, organizing, leading and controlling. (fall, spring, summer)

311 Human Resource Management. 3 hours.

Prerequisite: Completion of, or concurrent with, MGT 310.

Personnel recruitment, selection, development, appraisal, and compensation; manpower planning; labor-management relations; employment law; employee health and safety; the personnel specialist-line manager relationship. (fall, spring)

313 Quantitative Methods. 3 hours.

Prerequisite: ECON 206, CIS 241.

Quantitative methods teaches a logical approach to problem solving. The problem is viewed as the focal point of analysis, and appropriate quantitative models are applied to obtain a solution. Microcomputers and quantitative methods software are used to solve complex problems that are similar to those faced by business managers. (fall, spring, summer)

314 Production Management. 3 hours.

Prerequisite: MGT 313.

The management of the direct resources required to produce goods and services. Operations objectives are cascaded through the organization and are translated into measurable terms that become part of the operating goals for production-related departments and their managers. (fall, spring, summer)

403 International Business. 3 hours.

Prerequisite: MGT 310.

Fundamentals of international business particularly in planning, organizing, and control aspects of the multinational enterprise. Roles of government, culture, foreign currency, taxes, political risk, and legal formalities for small and large firms entering new markets are emphasized. (on demand)

410 Senior Seminar-Management. 3 hours.

Prerequisites: MGT 310 and senior standing.

A special topics course covering subjects of current interest in management. (Can be repeated for a total of 6-9 hours). (on demand)

411 Personnel Selection and Performance Appraisal. 3 hours.

Prerequisite: MGT 311 or PSY 370.

The study and development and utilization of various employee assessment methods. Specifically covers fair recruitment, hiring, and performance appraisal practices including application processes, interviews, assessment centers, and employee testing. (fall, on demand)

412 Entrepreneurship. 3 hours.

Prerequisite: MKT 320 and FIN 330.

A study of the entrepreneurial process. Topics include new business opportunities, market entry, access to resources, start-up steps, acquisition, franchising, and careers. Text, cases and hands-on business projects are used. (fall)

414 Compensation Administration. 3 hours.

Prerequisite: MGT 311.

An investigation of the concepts and practices affecting compensation decisions in organizations, with emphasis on job analysis and evaluation, external competitiveness, employee motivation, legal requirements, and benefit administration. (spring)

418 Management of Labor Relations. 3 hours.

Prerequisite: MGT 311.

Legal and social context of the labor-management relationship in union and non-union environments; formation, structure and functioning of labor unions; union elections; collective bargaining; contract administration; dispute settlement; impasse resolution; and union avoidance. (spring, on demand)

417 Organizational Behavior. 3 hours.

Prerequisite: MGT 310.

An advanced course designed to develop an understanding of managing behavior in organizations. (fall and spring)

418 Strategy and Policy. 3 hours.

Prerequisites: Senior standing and ACCT 201, CIS 348, FIN 330, MGT 310, MGT 314, MKT 320.

How to survive and prosper in the changing business environment; the development and application of contemporary competitive strategies at mid and upper managerial levels. Use cases and/or simulation to integrate materials from prerequisite courses. (fall, spring, summer)

419 Management of Organizational Conflict. 3 hours.

Prerequisite: Junior standing.

Designed to develop skills needed to manage intrapersonal, interpersonal, intragroup, and intergroup conflict in organizations. (on demand)

420 Manufacturing Planning and Control Systems. 3 hours.

Prerequisite: MGT 314.

Examines the role of computerized information and control systems in manufacturing. Manufacturing planning and control includes master scheduling, materials and capacity planning, activity control, and demand management. Manufacturing Planning and Control (MPC) systems incorporate Just-in-Time philosophy and practice. (on demand)

435 Managing Process Control. 3 hours.

Prerequisite: MGT 314.

Review of basic statistics, control charts, process capability, conformances, power and oc curves, tolerance intervals, robustness, training, implementation strategies, managing the SPC function, Deming philosophy. (fall)

473 Training in Business and Industry. 3 hours.

Prerequisites: MGT 311 or PSY 370 or permission of the instructor.

An introduction to theories, research and methods of training needs analysis, program design, implementation, and evaluation. (fall)

- 220 BUSINESS ORGANIZATION AND MANAGEMENT 3 F,S
ECO 101 and 102 req.
Organization theories and the role of managers as leaders. Planning and control systems, decision-making, and human considerations.
- 221 ORGANIZATIONAL BEHAVIOR AND ADMINISTRATION 3 F,S
MQM 220 req. Not for credit if had PSY 376.
Organization analysis focusing on motivation, perception, communication, coordination, and change. Administrative problems examined by theories of individual and group behavior.
- 226 ENTREPRENEURSHIP 3 S
MQM 220; FAL 240; MKT 230.
How to start a business, with emphasis on the assessment of business opportunities and on the development of operating plans.
- 227 PRODUCTION MANAGEMENT 3 F,S
MQM 100, 220 req.
Operations of production plants. Methods analysis and work measurement, inventory control, quality control, facilities layout, machines and maintenance.
- 298.01 PROFESSIONAL PRACTICE: INTERNSHIP/COOPERATIVE EDUCATION IN MANAGEMENT 1-6 F,S
Internship experiences in general management, human resource management, production/operations management or management information systems, arranged through the dept coord.
- 298.02 PROFESSIONAL PRACTICE: INTERNSHIP/COOPERATIVE EDUCATION IN BUSINESS ADMINISTRATION 1-6 F,S
Internship/cooperative education experiences for business administration majors related to students' career interests arranged through dept coord.
- 300 INTERMEDIATE BUSINESS STATISTICS 3 F,S
MQM 100, MAT 121 or equiv.
Techniques used in modern business analysis. Topics include multiple regression and analysis of variance for applications in management, marketing, finance, and accounting.
- 301 DECISION THEORY 3 F
MQM 100 req.
Behavioral and quantitative factors in business decision-making. Emphasis on quantitative methods of making decisions under conditions of uncertainty.
- 319 SEMINAR IN QUANTITATIVE METHODS 3 S
MQM 215, 227 and Sr stand req. May be repeated once if content different.
Specialized study of a selected topic in the field of quantitative methods for advanced students.
- 323 HUMAN RESOURCES MANAGEMENT 3 F,S
MQM 220 req.
Principles and procedures relating to human resources management, including staffing, appraisal, training, compensation, and other programs for business and other organizations.
- 324 INDUSTRIAL RELATIONS MANAGEMENT 3 F,S
MQM 220 and ECO 102 req.
Managing employment relations and work conditions. Emphasis on negotiating, administering labor agreements, and impact of collective bargaining on managerial practice.
- 325 MANAGERIAL PLANNING AND DECISION MAKING 3 F,S
MQM 220 plus 3 additional hrs of Management req. Bus maj only.
A consideration of managerial decision making in organizations. Specific emphasis on strategic, program, and operational level planning decisions, techniques, and systems.
- 326 SMALL BUSINESS MANAGEMENT 3 F,S
Sr or grad stand. Bus maj only.
Field program designed to familiarize the student with the problems of small business owners and/or operators. The student acquires firsthand knowledge and experience by dealing with on-going businesses.
- 327 OPERATIONS MANAGEMENT 3 S
MQM 227; MAT 121 req.
Advanced consideration of decision making tools applied to manufacturing and other operational areas. Case analyses place emphasis on production management problems.
- 333 PRODUCTION/INVENTORY CONTROL MANAGEMENT 3 S
MQM 227 req. Not for grad cr.
Management systems (structures, functions, interfaces), issues, and decision models in the Production Control/Inventory Control sub-function. Emphasizes both theory and actual practice in the field.
- 335 QUALITY CONTROL MANAGEMENT 3 F
MQM 227 req. Not for grad cr.
Management systems (structures, functions, interfaces), issues, and decision models in the Quality Control sub-function. Emphasizes management theory and actual practice in the field.
- 340 SEMINAR IN MANAGEMENT 3 F,S
MQM 220, 221, 227, ACC 166. May be repeated once if topic different. Not for grad cr.
Specialized study of a selected topic in the field of management for advanced students.
- 350 INTERNATIONAL MANAGEMENT 3 F,S
MQM 220; FAL 240; MKT 230. Not for grad cr.
Managerial decision making for planning, organizing, and controlling the functions, operations, and resources of multinational corporations.
- 353 HUMAN RESOURCE PLANNING AND DEVELOPMENT 3 F
MQM 323 req.
Human resource planning as the base for organizational human resource programs, and management of personnel development in organizations.
- 354 COMPENSATION MANAGEMENT 3 F,S
MQM 323 req.
Compensation subsystem as a vital component in establishing a workplace system that stimulates employee performance.

- 3002 Conceptual Foundations for Operations Research (3) Prereq: MATH 1021 or equivalent. Not open to undergraduate students in the College of Business Administration. Foundations for work in operations research: fundamentals of analysis, systems of linear equations, selected topics from matrix algebra.
- 3070 Independent Reading and Research in Quantitative Business Analysis (1-4) Prereq: senior standing. May be taken for a max. of 4 sem. hrs. of credit. Student is responsible for registering with a faculty member and selecting an area of reading and/or research.
- 3100 Data Organization and MIS Applications (3) Prereq: QBA 3100. Information storage and effective manipulation and processing of data structures with reference to business applications.
- 3110 Database Processing for Management (3) Prereq: QBA 3100. Structure and function of managerial databases; design options and implementation of database management systems in the firm; laboratory practice includes use of a particular software system.
- 3115 Operations/Production Management (3) Prereq: QBA 2001. Designing, operating, and controlling productive systems; product design, facility location and layout, inventory control, forecasting, material requirements planning, aggregate planning, scheduling, and quality control; emphasis on applications in manufacturing and service organizations.
- 3200 Advanced Business Programming (3) Prereq: CSC 2270. Computer programming methods for business systems using COBOL; advanced features of the language; emphasis on programming applications for large-scale business systems.
- 4000 Introduction to Statistical Theory (3) Prereq: proficiency in basic statistical methods and MATH 1552; or consent of instructor. Concepts of probability distribution and statistical inference; theoretical foundations for estimating and testing hypotheses about means, proportions, and variances; chi-square and F tests.
- 4010 Basic Forecasting Models (3) Prereq: QBA 3000 or equivalent. Single-equation multiple regression and time series modeling procedures for business and economic forecasting; using time series data in regression models; time series modeling, including classical decomposition procedures and exponential smoothing; use of computer programs for regression and time series modeling and forecasting.
- 4011 Sample Survey Methods (3) Prereq: QBA 3000 or equivalent. Designing sampling systems; alternative sample designs; problems of bias; techniques of inference from alternative designs; criteria for selecting optimal sampling plans; methods and applications of sample surveys.
- 4012 Applied Nonparametric Statistics (3) Prereq: QBA 3000 or equivalent. Applied nonparametric statistics including techniques for one-sample problems, comparison of two treatments, paired comparisons, randomized complete blocks, comparison of more than two treatments, tests of randomness and independence, and measures of correlation.
- 4013 Bayesian Probability and Statistical Methods (3) Prereq: QBA 3000 or equivalent. Assessment of subjective probability distributions; Bayesian estimation and inference; application of Bayesian techniques to business problems.
- 4020 Fundamentals of Operations Research (3) Prereq: QBA 2001. Continuation of QBA 2001; classical optimization, queuing, and extensions of linear programming including integer and mixed-integer algorithms; applications of operations research techniques to complex management systems; use of computer models.
- 4021 Foundations of Mathematical Programming (3) Prereq: credit or registration in QBA 4020. Theoretical foundations of linear programming in single and multiple objectives; classical nonlinear optimization of unconstrained and constrained functions; Kuhn-Tucker conditions and quadratic programming.
- 4031 Applied Linear Models (3) Prereq: QBA 3000 or equivalent. Development of a unified approach to estimation and hypothesis testing in linear statistical models; emphasis on appropriate specification and interpretation of models and statistical hypothesis; use of available computer routines and interpretation of results; unbalanced analysis of variance models, linear regression models, and analysis of covariance models.
- 4110 Database Administration (3) Prereq: QBA 3110 or equivalent. Information resources management; database management systems; data dictionary/directory systems; database control and protection; distributed databases; laboratory practice includes use of a particular software system.
- 4120 Business Data Communications (3) Prereq: QBA 2100 or equivalent. Telecommunications in business, including both voice and data communication, technical details (hardware, software, protocols, network configurations), network management, and security issues.
- 4125 Analysis and Design of Management Information Systems (3) Prereq: QBA 3110, 3200. See also MGT 4000. Design philosophies and techniques for the creation of information systems for management decision making; conceptual design of actual information systems.
- 4165 Operation of Service and Distribution Systems (3) Prereq: QBA 3115 or equivalent. The operations management function in service and distribution organizations; location, sizing and layout planning; economy of waiting lines; staffing, work force, capacity utilization; distribution system structure and operation; interfaces with other functional areas; emphasis on application of quantitative techniques.
- 4167 Operations Planning and Control (3) Prereq: QBA 3115 or equivalent. Planning and control of operations in manufacturing and service organizations; aggregate planning, master scheduling, requirements planning, and activity control; emphasis on developing skills through case studies and computer models.
- 4168 Management and Operation of Inventory Systems (3) Prereq: QBA 3115. Management and operation of independent demand inventory systems, short-term demand forecasting, fixed-order size systems, fixed-order interval systems, single-period order systems, and inventory control systems.
- 4200 Quality Assurance and Control (3) Prereq: QBA 2000 or equivalent. Credit will not be given for both this course and IE 4453. Principles of quality management; design and application of control charts and acceptance sampling plans for attributes and variables; methods for design quality; basic concepts of reliability.
- 4501 Management Systems Simulation I (3) Prereq: QBA 2001, CSC 1240 or 1248. Computer simulation; modeling on-going systems and using simulation for problem solving; theory of simulation; logic for queueing and inventory applications; simulation languages and SLAM, a network simulation language.
- 4502 Management Systems Simulation II (3) Prereq: QBA 3000 and 4501. Advanced computer simulation; design for using simulation models to solve managerial problems; discrete event simulation; validation of simulation models; variance reduction techniques; SLAM simulation language.
- 4511 Industrial Simulation (3) Prereq: QBA 4020. See IE 4511.
- 5010 Statistical Methods for Public Administration (3) Prereq: college algebra. 2 hrs. lecture; 2 hrs. lab. Open only to students in the M.P.A. program. Also offered as PADM 5010.
- 5014 Managerial Statistics (3) Prereq: QBA 3002 or equivalent; and knowledge of a programming language. Open only to students in the M.B.A. program. Statistical description and inference; data distributions, descriptive measures, index numbers, time series analysis; review and extension of probability theory; probability distributions; standard distributions, including normal, binomial, Poisson, and hypergeometric; sampling distributions; estimation of means, proportions, and totals; applications in management.
- 7000 Statistical Theory (3) Prereq: QBA 4000 or equivalent; and consent of instructor. Continuation of QBA 4000; theoretical basis for topics in statistical inference including tests of hypotheses, experimental design, regression analysis, general linear models, nonparametric statistics, sequential tests of hypotheses, and complex sample designs.
- 7009 Simulation of Stochastic Processes (3) Prereq: fundamental knowledge of computer programming, statistics, and operations research; and consent of instructor. Simulation models, methodologies, and languages; development of complex models; validation of results; completion of several large-scale projects involving extensive use of digital computer required.
- 7010 Decision Models for Public Administration (3) Prereq: QBA 5010. 2 hrs. lecture; 2 hrs. lab. Open only to students in the M.P.A. program. Also offered as POLI 7010 and PADM 7010.
- 7020 Theory of Stochastic Processes (3) Prereq: QBA 4000 or equivalent. Joint, marginal, and conditional probability distributions treated in detail; stochastic processes, including random walks, Markov processes, birth-death processes, stationary stochastic processes, and renewal processes; statistical inference based on stochastic processes.
- 7021 Sample Design and Analysis (3) Prereq: QBA 5014 or equivalent. Methodology of designing sampling systems; alternative sample designs; relative efficiency of sampling systems; problems of bias; techniques of estimation; criteria for selecting optimal sampling plans; emphasis on applications with theoretical foundations.
- 7022 Multivariate Data Analysis (3) Prereq: QBA 5014 or equivalent. Multivariate methods, including principal components, canonical correlation, factor analysis, discriminant analysis, classification procedures.
- 7024 Advanced Statistical Analysis for Research I (3) Prereq: proficiency in calculus, linear algebra, basic statistical methods, and computer programming. Methods of statistical inference; statistical estimation; testing hypotheses about single and multiple means and proportions; simple and multiple linear regression; design of simple random, stratified, and cluster samples; extensive use of statistical computer programs.
- 7025 Advanced Statistical Analysis for Research II (3) Prereq: QBA 7024 or equivalent. Continuation of QBA 7024; advanced regression analysis; experimental design and analysis of variance; nonparametric methods; multivariate techniques; extensive use of statistical computer programs.
- 7027 Advanced Forecasting Models (3) Prereq: QBA 5014 or equivalent. Advanced topics in forecasting; time-series analysis; emphasis on stochastic parameter models and autocorrelated error structures; univariate autoregressive integrated moving average (ARIMA) models; multivariate models and transfer functions; extensive use of computer programs.
- 7070 Seminar in Advanced Business Problems (3) May be taken twice for credit when topics vary. Special topics in statistics and quantitative methods.
- 7101 Introduction to Operations Research Methods (3) Prereq: proficiency in basic statistical methods, calculus, linear algebra, and computer programming. Nature of operations research; general decision models, classical optimization, linear programming, duality and sensitivity analysis, parametric programming, multiple objective programming, network analysis, and simulation; computer used to solve large-scale problems; emphasis on most widely used techniques.
- 7102 Survey of Operations Research: Deterministic Models (3) Prereq: QBA 4021. Integer and mixed-integer programming, extensions of classical optimization, quadratic programming, separable programming, and dynamic programming; applications of more advanced mathematical programming; techniques with some theory.
- 7103 Survey of Operations Research: Stochastic Methods (3) Prereq: QBA 7101 or 4021. Extensions of decision theory, game theory, dynamic programming, Markovian decision processes, reliability models, and queuing models; probabilistic methods in operations research.
- 7105 Digital Methods (3) Prereq: QBA 7102 and working knowledge of FORTRAN. Numerical problem solving in operations research and statistics; Monte Carlo methods, numerical solution of systems of equations, search techniques, and heuristics.
- 7106 Multiple Criteria Decision Making (3) Prereq: QBA 7103. Theory of the displaced ideal, linear multi-objective programming, goal programming, compromise programming, and multi-attribute utility measurement.
- 7107 Dynamic Programming (3) Prereq: QBA 7102. Theory and computational techniques of dynamic programming; single and multidimensional problems; relationship to classical optimization techniques.
- 7111 Theoretical Foundations of Operations Research (3) Prereq: QBA 7101 and 7102. Properties and theoretical foundations for operations research methods.
- 7268 Operations Management (3) Prereq: QBA 5014 and 7101. Also offered as MGT 7000. Major problems and decision processes of operations management: design, resource allocation, activity planning, systems control, process and facility planning, quality control, scheduling, production and inventory control, and planning and control of aggregate output.
- 7272 Operations Strategy (3) Prereq: QBA 7268. Capabilities, characteristics, and configuration of facilities, process/technologies, aggregate capacity, vertical integration, operations infrastructure, organizational structure, and jobs; case analyses drawn from service and manufacturing industries.
- 7275 Advanced Operations Management (3) Prereq: QBA 7268. Topics such as material requirements planning, inventory control, scheduling, facilities location and layout,

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business and government organizations. Specific programs are developed to solve typical management and data processing problems. Structured approaches to problems and design solutions are discussed in detail. Also taught by the Department of Computer Science.

ISM 3000. Introduction to Business Information Processing (1). Introduction to information processing concepts and technology; familiarization with and use of current hardware, software, and information processing procedures.

ISM 3001. Information Processing for Business (3). Prerequisite: MAC 1141. Prerequisite or Corequisite: ISM 3000. Information processing applications in business using microcomputers; emphasis on computers and information systems technology, and use of spreadsheet and data base software.

ISM 3011. Introduction to Management Information Systems (3). Prerequisite: ISM 3001. Introduction to management information systems concepts, with emphasis on describing information requirements, managing information resources, and applying information processing technology to business and management.

MAN 3010. Concepts of Management (3). Prerequisites: MAC 1141, ACG 2601, ECO 2023. Introduction to the nature and process of management, with emphasis upon management of physical and human resources.

MAN 3504. Operations Management (3). Prerequisites: ISM 3001, MAC 3233, QMB 3200. Quantitative concepts, techniques and applications for managing physical resources in the production of goods and services.

MAN 3590. Principles of Procurement (3). Introduction to the concepts, principles and techniques of purchasing physical resources for all types of organizations.

QMB 3200. Quantitative Methods for Business Decisions (3). Prerequisites: MAC 1141 and STA 3014. An examination of classical and modern decision making techniques based on probabilistic concepts. Emphasizes applications to all areas of business.

Business Majors Only

CGS 4404. Advanced COBOL Programming for Business Applications (3). Prerequisite: CGS 3403. This course covers the use of advanced COBOL concepts for data management and problem solving. Systems of programs and programs as application interfaces to data base management systems are covered in detail. Advanced file organization and file processing techniques are used in solving data processing problems. Report writing and on-line applications are stressed as features of COBOL.

ISM 4030. Management Information Systems Analysis and Design (3). Prerequisite: ISM 3001. In-depth treatment of the theory and practice of management information systems including information requirements analysis, design methodology, and system implementation considerations. For MIS majors only.

ISM 4113. Information and Communications Systems Management (3). Prerequisite: ISM 4030. An introduction to the design, operation, and management of telecommunication systems including electronic data interchange, office support, transborder information flow, and management support for networking. For MIS majors only.

ISM 4117. Decision Support and Expert Systems Management (3). Prerequisites: ISM 4113, 4212, QMB 4700. The design, development, implementation, and management of decision support and expert systems; includes concepts of data management, modeling decision support systems, and decision-making. For MIS majors only.

ISM 4212. Information for Operating Control and Data Management (3). Prerequisite: ISM 4030. Covers the theory, techniques, and applications of information management and control including organizations as information processing systems and executive support systems. For MIS majors only.

ISM 4905r. Directed Individual Study (1-3). May be repeated up to twelve (12) semester hours.

MAN 4521. Distribution and Logistics Management (3). Prerequisite: ISM 3001. The study of distribution and logistics systems which move physical

resources from production to consumers; includes emphasis on both products and services.

MAN 4570. Materials Management (3). Prerequisite: MAN 3504. Examination and analysis of materials management concepts and techniques, with emphasis on production and inventory planning and control.

MAN 4599. Seminar in Purchasing & Materials Management (3). Prerequisites: ISM 3001, MAN 3590. Advanced concepts in purchasing and materials management, with emphasis on recent research and current practices.

MAN 4941. Field Study in Management (1-3). (S/U grade only.) Prerequisite: Consent of instructor. Provides student with on-the-job experience in a major area.

QMB 4700. Operations Research for Managerial Decisions (3). Prerequisites: QMB 3200, MAC 3233, ISM 3001. Quantitative analysis for management decisions involving such topics as linear programming, inventory control, queuing, and project management.

Graduate Courses

ISM 5021. Management Information Systems (3).

ISM 5024. Management of Technical Issues in IS Design and Development (3).

ISM 5906r. Directed Individual Study (1-3). (S/U grade only.)

ISM 5907r. Special Studies in Management (1-3).

ISM 5935r. Special Topics in Information and Management Sciences (1-3).

ISM 6886. Doctoral Seminar in General Systems Theory (3).

ISM 6887. Doctoral Seminar in Decision Processes and Structures (3).

ISM 6888. Doctoral Seminar in Management Information Systems.

ISM 6917r. Supervised Research (1-3). (S/U grade only.)

ISM 6919r. Supervised Teaching (1-3). (S/U grade only.)

ISM 6979. Doctoral Seminar in Research Methods and the Philosophy of Science (3).

MAN 5501. Operations Management (3).

MAN 6930. Doctoral Seminar in Productive Systems Management: Planning and Control (3).

MAN 6931. Doctoral Seminar in Productive Systems Management: Strategy and Design (3).

QMB 5355. Quantitative Methods for Managerial Decisions (3).

QMB 5755. Studies in Operations Research (3).

QMB 5845. Simulation of Dynamic Systems (3).

QMB 5906r. Directed Individual Study (1-3). (S/U grade only.)

QMB 5907r. Special Studies in Management (1-3).

QMB 5935r. Special Topics in Quantitative Methods (1-3).

For listings relating to graduate course work for thesis, dissertation, master's and doctoral examinations and defense, consult the *Graduate Bulletin*.

INSTITUTIONAL RESEARCH (see Educational Research)

INSTRUCTIONAL SYSTEMS (see Educational Research)

Course Offerings

Case Western Reserve Univ. 1988-89

transportation planning, vehicle scheduling and routing, facility layout, assembly line balancing, forecasting, production scheduling, inventory management, manufacturing resource planning, purchasing, quality assurance, job shop scheduling and facilities maintenance. Computerized solution procedures for many of these subjects will be stressed, and students may use university computing facilities to solve sample problems. A solid technical background is required prior to enrolling in this course. Prerequisite: Consent of instructor. (Fall.)

423. Operations Management - E.M.B.A. (2). Participants study the processes by which goods and services are supplied, produced, and distributed in organizations, with emphasis on systems for analyzing design and operational problems in the production/operations function. Open only to students in the Executive M.B.A. program. (Spring.)

441. Systems Analysis in Hospitals and Outpatient Clinics (3). See OPRE 441.

445. Decision Theory (3). See OPRE 445.

450. Project Management (3). See OPRE 450.

452. Materials Management in the Health Care Services (3). See OPRE 452.

475. Logistics/Physical Distribution Management (3). Effective management of the distribution of goods and services as they flow from plants/ports/vendors to customers is the focus of this course. Concepts and methods, some computerized, are presented that can lead to improved physical distribution customer service and/or to lower costs in a variety of manufacturing and service company settings. Key topics include transportation, inventories, warehousing, materials handling, order processing, packaging, pricing, customer service standards, and warehouse and retail location. Offered by Marketing as MKMR 475. A companion course to OPMT MKMR 476. Prerequisite: OPMT 405 or consent of instructor. (Fall.)

476. Purchasing/Materials Management (3). Effective management of the physical supply of goods and services to manufacturing and service companies is the focus of this course. The course is designed (1) to provide an overview of the management problems associated with acquiring and maintaining the flow of material supplies to a firm, and (2) to sharpen decision-making skills as related to materials supply within the broader scope of logistics and the firm as a whole. Topics include purchasing, inventory control, and supply scheduling. Offered by Marketing as MKMR 476. A companion course to OPMT MKMR 475. Prerequisite: OPMT 405 or consent of instructor. (Spring.)

477. Production Planning and Inventory Control (3). The production control system of a manufacturing organization provides the focus for the course. The primary subjects of forecasting, production scheduling, and manufacturing resource planning for dependent demand inventory management are emphasized via computer methods. Quantitative modeling and managerial analysis

for these production control problems are also thoroughly discussed. Prerequisite: OPMT 405 or consent of instructor. (Spring.)

478. Operations Design and Quality Control (3). The primary thrust of this course is statistical applications in manufacturing. The areas of acceptance sampling, process control, total quality control and an introduction to industrial research are included in the course. Methods engineering is introduced as an important underpinning of the quality control system. Prerequisite: OPMT 405 or consent of instructor. (Fall.)

479. Computers in Operations Management (3). The use of computerized quantitative models for the analysis and solution of operations management problems is the focus of this course. Students will gain hands-on experience with a wide variety of such models available on the University's computer system. Problems which may be addressed by such models are facilities maintenance, job shop scheduling, facilities layout, distribution planning, production and inventory management, facility capacity planning, assembly line balancing, project planning and scheduling, facility location, vehicle scheduling and routing, forecasting, quality control, production scheduling and lot sizing, and equipment investment and replacement. Prerequisite: OPMT 405 or consent of instructor. (Spring.)

480. Operations Technologies and Strategy (3). This course is divided into a review of operations technologies available to the operations manager and considerations of how to combine such technologies into an operations strategy to fulfill the needs of the market-place. Operations technologies include a review of topics such as computer-aided design (CAD), computer-aided manufacturing (CAM), automated order entry and inventory control, computer-aided product tracing systems, computer-aided truck dispatching, rating and routing, group technology, flexible manufacturing systems, automated transfer lines, automatic storage/automatic retrieval (AS/AR) systems, and robotics from an operations management (as opposed to engineering) perspective. The operations strategy part of the course focuses on analyzing the organization and developing policy so as to match operations technologies to the particular set of problems and opportunities in the marketplace. Prerequisite: OPMT 405 or consent of instructor. At least two advanced OPMT courses are recommended. (Fall.)

601. Special Problems and Topics (credit as arranged). This is a course of flexible design in which a student, with the agreement of an instructor in operations management, may pursue a special topic or problem. Prerequisite: Consent of instructor. (Every semester.)

701. Dissertation (Ph.D.) (credit as arranged). Open to Ph.D. candidates who are preparing dissertations in some field of operations management. Prerequisite: Consent of instructor. (Every semester.)

Operations Research (OPRE)

Undergraduate

201. Introduction to Operations Research I (3). Philosophy, concepts, methods, and techniques of operations research. Several of the classical problems and some contemporary case studies. Topics include linear programming, the transportation and assignment problems, integer programming, PERT/CPM, inventory models, simulation, and the use of analytical techniques in portfolio management. (Fall, spring.)

202. Introduction to Operations Research II (3). A continuation of OPRE 201. Topics include duality in linear programming, nonlinear programming, decision theory, network models, scheduling and sequencing techniques, and game problems. Prerequisite: OPRE 201 or consent. (Offered as needed.)

300. Undergraduate Projects in Operations Research (1-6). Individual operations research projects are carried out by qualified students. Prerequisite: Consent of department chairman. (Fall, spring.)

341. Systems Analysis in Hospitals and Outpatient Clinics (3). This course is divided into three parts: (1) introduction to the basic methods of systems analysis; (2) discussion of systems analysis actually used in describing, modifying, and designing systems and procedures in primary (including dental care), secondary, and acute health-care delivery institutions; (3) hands-on problem-solving experience in local hospitals and outpatient clinics. This course is intended for practicing or prospective health-care practitioners and/or administrators. The knowledge of mathematics is not presumed. Prerequisite: Consent of instructor. (Spring.)

345. Decision Theory (3). This course takes a unified approach to decision-making involving tangible and intangible criteria under certainty, risk, and uncertainty. Applications are drawn from governmental, industrial, social agency, and educational establishments as well as private life. Prerequisite: Consent of instructor. (Fall, Spring)

348. Personal Investment Strategies (3). An introduction to the world of personal investing. In the framework of personal investment objectives and alternatives, topics include: stocks, bonds, convertibles, warrants, options, and mutual funds. Discussions of contemporary factors driving stock and bond prices such as international currency and interest rate implications. Practical money management programs to meet different investment objectives and levels of wealth are explored. Offered by the Department of Banking & Finance as BAFI 356. Prerequisites: ACCT 102 or equivalent; BAFI 355 is recommended but not required. (Spring.)

Graduate

401. Survey of Operations Research Methods (3). This course surveys important operations research methods that are not covered in the required courses of the M.S. program. It begins with a brief coverage of ele-

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MGT 340 Organizational Behavior and Management. 3(3-0) F.S.
Prerequisites: 54 credit hours, including ACC 201, ECO 155 or 165, PSY 121 or SOC 150 or ANT 125, or permission. A study of individual, interpersonal, and group behavior within organizations and the behavioral implications of management processes. The interaction of human, technological, structural, global, ethical, and environmental factors are also discussed. A "C" grade or better is required in this course to take ACC 355. This course may not be taken pass/not pass.

MGT 341 Advanced Organization Behavior and Development. 3(3-0) F.S.

Prerequisite: MGT 340 or permission. An in-depth study of individual and organizational behaviors and processes. Such areas as individual differences, group dynamics, organizational processes, organizational change/development, and culture and ethics will be addressed utilizing a variety of interactive teaching methods.

MGT 342 Organization Theory. 3(3-0) F.S.

Prerequisite: MGT 340. A study of the macro-organization functioning with emphasis on how organization design dimensions interrelate to effect performance. Organization dimensions studied include environment, technology, size, structure, and effectiveness.

✓ **MGT 343 Purchasing and Materials Management.** 3(3-0) F.S.

Prerequisite: MGT 340 or permission. A study of the processes and problems involved in acquiring and controlling materials and services required for operations management in business, industry, and government. Includes source selection, quality and quantity control, value analysis, and negotiation and legal consideration.

MGT 345 Human Resources Management. 3(3-0) F.S.

Prerequisite: MGT 340 for business majors; other majors by permission. A study of the personnel functions of procurement, development, compensation, integration, and the maintenance of human resources within the framework of total available resources used in the accomplishment of organizational goals.

MGT 346 Compensation Management. 3(3-0) S.

Prerequisite: MGT 345 or permission. Development and management of compensation programs. Equity concepts and methods to establish relationships between compensation rates in an organization are stressed. The use of job evaluations, wage and salary surveys, wage structure, merit and performance appraisal systems, and benefit systems are discussed as integral parts of the compensation plan. Compensation as a profession is studied.

✓ **MGT 364 Operations Management.** 3(3-0) F.S.

Prerequisites: MGT 340, CIS 237 and completion of student's degree program mathematics requirement, or permission. Forecasting, cost effectiveness, work measurement, work simplification, PERT, heuristic models and other techniques used in planning, coordinating, and controlling business functions.

MGT 368 (360) Management Decision Making. 3(3-0) F.S.

Prerequisites: MGT 364. Quantitative techniques that aid the manager in making rational decisions. A study of the methods used in evaluating and selecting resources relative to achieving organizational objectives.

MGT 384 Entrepreneurship. 3(3-0) F.S.

Prerequisites: ACC 211, MGT 340, MKT 350, or permission. An exposure to the dynamics of identifying opportunities and dealing with the risks of implementing new ideas and ventures. The factors and conditions in initiating a new business venture are studied along with entrepreneurial skills, venture capital formation, and business plan development.

MGT 394 (399) Cooperative Education in Management. 1-3, F.S.

Prerequisites: Acceptance into SMSU Cooperative Education Program and permission of department head. The opportunity to earn academic credit in a planned learning process that integrates academic training with supervised work experience. This is a variable content course that may be repeated to a total of 6 semester hours in Cooperative Education.

MGT 400 Topics in Management. 1-3, D.

Prerequisite: MGT 340 or permission. A variable content course with topics that can change from semester to semester depending upon student and faculty interests. Topics generally require previous study in management. Examples: entrepreneurship, federal regulation of personnel management, designing structure for growth organizations, computerization and human resource management, stress and time management, managing not-for-profit organizations, women in management, and management feasibility studies. May be repeated to a total of 3 hours.

MGT 442 Selected Topics in Organizational Behavior. 3(3-0) D.

Prerequisite: MGT 341 or permission. This course will focus on major current and emerging issues in organizational behavior (OB). Issues include topics such as motivation and leadership, communications, stress and wellness programs, group dynamics, etc. A single or selected set of topics will be dealt with in any given offering of the course. Content, research findings, and practical application of major models and theories will be stressed through a variety of approaches intended to maximize student involvement. The course content will vary as demanded by student interest, faculty expertise, and environmental changes.

MGT 450 Human Resource Development. 3(3-0) D.

Prerequisite: MGT 345 or permission. The design, implementation and evaluation of employee development programs. Topics covered include: training needs, analysis, learning theory, training methods, validity, and legal requirements. Specific employee development programs are discussed as they relate to executives, managers, and supervisors in organizations.

MGT 451 Human Resource Acquisition. 3(3-0) D.

Prerequisite: MGT 345 or permission. An in-depth study of the application of Federal and state laws and regulations to HRM practices regarding the acquisition of human resources, appropriate and effective techniques of job analysis, HR planning, recruitment, and a detailed study of techniques and procedures for ensuring valid and effective selection of employees.

✓ MGT 464 Advanced Operations Management. 4(4-0) S.

Prerequisite: MGT 360, 364, or permission. An in-depth analysis of operation management concepts and techniques. Current theory and specific practices are studied as they exist in organizational settings. Integration of techniques with computer application is emphasized.

MGT 465 Industrial Relations. 3(3-0) F.S.

Prerequisite: MGT 340 or permission. A study of environmental and policy considerations involved between management and labor unions in the industrial relations process. Emphasis is placed on the nature, process, and types of collective bargaining relationships; the interface between parties in preserving effective industrial relations within organizations; and promoting economic stability and growth.

MGT 466 Advanced Issues in Human Resources Management. 3(3-0) D.

Prerequisites: MGT 345, CIS 237, or permission. An in-depth study of practical human resource management issues and the steps involved in the design and implementation of employee selection systems, training programs, and performance appraisal systems. Included are methods of job analysis and the design and utilization of appraisal forms useful to managers. Based on practical considerations, some experiential techniques are used. Recent developments relevant to human resources practices will also be covered.

MGT 487 Strategic Management and Policy. 3(3-0) F.S.

Prerequisites: 102 credit hours, including FGB 380, MGT 364, and MKT 350. Integration of specialized areas of business administration; coordination of various business functions from the standpoint of the formulation, implementation and control of business objectives, strategies and policies.

MGT 494 (499) Internship in Management. 1-5, D.

Prerequisite: permission by department head. Opportunity to obtain simultaneously the practical as well as the theoretical knowledge through internship with cooperating businesses.

MGT 496 (498) Readings in Business Administration—Management. 1-2, D.

Prerequisite: permission. Planned readings designed to intensify and supplement the area of management.

MGT 543 New Venture Management. 3(3-0) S.

Prerequisite: MGT 384. The course provides for extensive research and in-depth analysis in starting a new business venture. Major topics include sources of start-up capital, valuing an ongoing business, and marshalling physical and human assets. Emphasis is placed on student team preparation of a written feasibility study for a hypothetical business start-up.

MGT 547 International Management. 3(3-0) D.

Prerequisite: MGT 340 or permission. A study of management theory and practices as related to international organizations that are multinational in nature. Emphasis is placed on analyzing, understanding, and integrating managerial concepts as they apply to cross-cultural settings.

MGT 560 History of Management Thought. 3(3-0) D.

Prerequisite: MGT 340 or permission. Background and interrelationship of classical, behavioral science, systems and quantitative management schools of thought; works of major contributors to contemporary management concepts, practices and theory.

MGT 561 Practicum in Small Business Operations. 3-6, D.

Prerequisite: permission. Experience in solving real problems within the actual business environment. Students provide counseling to small business firms. Cases are referred through the Small Business Administration. Course may be repeated to a total of 6 hours.

MGT 596 (500) Research Issues and Problems: Management. 1-3, D.

Prerequisite: 60 hours or permission. Research issues and projects growing from particular needs which may require additional depth or breadth of study. Outline of study must be approved prior to enrolling. Undergraduates only may repeat to a total of 6 hours.

The following courses are open only to graduate students.

MGT 660 Selected Topics in Management. 3(3-0) D.

Prerequisite: MGT 340. Variable topics course in Management. Areas studied will be announced each semester in the class schedule. Course requirements include extensive readings, a paper, and, when appropriate, field trips. Maximum credit for course is 3 hours.

MGT 661 Operations Management: Comparative Theory and Practice. 3(3-0) D.

Advanced study of the operations function in organizations. Emphasis is placed on operations management, planning and controlling techniques as they apply to all types of domestic and international organizations. Cost output-profit decisional techniques and productivity issues are studied as they relate to managerial goals, environmental conditions, and economic developments.

MGT 664 Organizational Behavior. 3(3-0) F.S.

Prerequisite: MGT 340 or permission. Study of individual and group behavior viewed from a managerial perspective within the organizational setting. Attention is focused on applications by managers of theory and research about the interaction between human beings and the formal organization, with emphasis on individual differences, interpersonal relations, and small group dynamics.

MGT 665 Organization Theory. 3(3-0) D.

An intensive macro approach to the study of the organization with emphasis on the interrelationships of organizational dimensions as they interact to effect organization design. Topics covered include environment, technology, work flows, structure, size, power, objectives, managerial philosophies, and effectiveness.

MGT 666 Problems in Human Resources Management and Industrial Relations. 3(3-0) D.

Prerequisite: MGT 340 or permission. Intensive examination of the institutional, legal, and policy considerations of the parties involved in human resources management and labor relations with an emphasis on current issues.

MGT 667 Organization Strategy and Policy. 3(3-0) F.S.

Prerequisite: 18 graduate hours in business administration and economics. Integration of the functional areas of business via the strategic planning process. Emphasis is placed upon the formulation, implementation, and control of an organization's mission, objectives, strategies, and policies as determined by external and internal analyses.