

LYMAN BRIGGS SCHOOL

493*. Field Experience
 Fall, Spring. 1 to 10 credits. May reenroll for a maximum of 10 credits.
 R: Not open to freshmen and sophomores.
 Open only to Lyman Briggs School majors.
 Experiential learning related to the public or private practice of science and technology.
 QA: LBS 493

MANAGEMENT MGT

302*. Management and Organizational Behavior
 Fall, Spring, Summer. 3(3-0)
 P: EC 201 or 251H; ACC 201 or ACC 230 or ACC 251H R: Juniors and Seniors Business or Program for which MGT 302 is ctiq-listed requ.
 Managerial roles and functions in goal directed institutions; organization design, analysis of organizational structure; leadership, motivation, work attitudes, conflict management, and managing diversity.
 QP: ACC 201 ACC 230 ACC 251 HEC 201 EC 251H
 QA: MGT 302

303*. Materials and Logistics Management
 Fall, Spring, Summer. 3(3-0)
 Interdepartmental with the Department(s) of Marketing and Transportation Administration.
 P: EC 201 or EC 251H; ACC 202 or ACC 230 or ACC 251H R: Juniors and Seniors Business or program for which MGT 303 is catalog requirement
 Role of manufacturing/operations, purchasing/sourcing and transportation/distribution in determining the competitiveness of manufacturing and service enterprises with respect to quality, flexibility, cost and lead time.
 QP: ACC 202 ACC 230 ACC 251 HEC 201 EC 251H
 QA: MGT 303

304*. Operations and Purchasing Management
 Fall, Spring, Summer. 3(3-0)
 Interdepartmental with the Department(s) of Marketing and Transportation Administration.
 P: MGT 303 or MTA 303 R: Juniors and Seniors Business or program which MGT 304 is catalog requirement
 Overview of Operations and Purchasing Management functions in an organization; materials management tactical issues in implementing internal and external resource plans.
 QP: MGT 303 QA: MGT 304 MGT 305

306*. Decisions Making Models
 Spring. 3(3-0)
 P: MTA 317, MTH 120 or equivalent R: Juniors and Seniors Business
 Basic analytical techniques used for analyzing business decision situations; optimal resource allocation decision models, forecasting and planning, computer simulation decision analysis under risk, project management, use of computer software.
 QP: MTA 317 QA: MGT 306

310*. Human Resource Management
 Fall, Spring, Summer. 3(3-0)
 P: MGT 302 or concurrently R: Juniors and Seniors Business and programs which MGT 310 is catalog requirement
 Formulation and administration of human resource policies in the business enterprise. Manpower plan, job anal./eval., staffing, compensation/labor relations, employee safety. Training, development, performance appraisal. Issues of diversity and ethics
 QP: MGT 302 QA: MGT 310

401*. Procurement and Supply Management
 Fall, Spring, Summer. 3(3-0)
 Interdepartmental with the Department(s) of Marketing and Transportation Administration.
 P: MGT 304 or MTA 304; MTA 345 or MGT 345 R: Juniors and Seniors Business or program for which MGT 401 is catalogue requireme
 Strategic issues in procurement and supply management dealing with management of the purchasing process, the procurement cycle, purchasing research, buyer/supplier relationships, negotiation, commodity planning, cost/price analysis and value analysis.
 QP: MGT 303 QA: MGT 403

402*. Manufacturing Planning and Control
 Fall, Spring, Summer. 3(3-0)
 Interdepartmental with the Department(s) of Marketing and Transportation Administration.
 P: MGT 304 or MTA 304; MTA 345 or MGT 345 R: Juniors and Seniors Business
 Theory and practice for planning and controlling manufacturing operations; production planning, demand mgmt, master scheduling, mat'l requirements and capacity planning, shop floor control, computer integrated manufacturing, and Just-In-Time systems.
 QP: MGT 304 QA: MGT 405

403*. Topics in Purchasing/Sourcing Management
 Fall of even-numbered years. 3(3-0)
 Interdepartmental with the Department(s) of Marketing and Transportation Administration.
 P: MGT 304 or MTA 304; MTA 345 or MGT 345 R: Juniors or Seniors Business
 Advanced coverage of sourcing and negotiation strategy development processes, sourcing strategies, price and cost analysis, purchasing research techniques and other current issues and trends.
 QP: MGT 305

404*. Topics in Operations Management
 Spring of odd-numbered years. 3(3-0)
 Interdepartmental with the Department(s) of Marketing and Transportation Administration.
 P: MGT 304 or MTA 304; MTA 345 or MGT 345 R: Juniors or Seniors Business
 Advanced coverage of operations management topics of current interest such as total quality management, computer integrated manufacturing, simultaneous engineering, and other current issues and trends.
 QP: MGT 304

409*. Business Policy and Strategic Management(W)
 Fall, Spring, Summer. 3(3-0)
 P: MGT 302, MGT 303, FI 311, and MTA 300 R: Senior Business
 Techniques for building and maintaining consistent and effective policy/strategy frameworks in the business enterprise, cutting across the major functions within a firm: strategic integration, ethics, and international competition.
 QP: MGT 302 FI 391 MTA 300 QA: MGT 409

411*. Organizational Staffing
 Fall. 3(3-0)
 P: MGT 310 or concurrently R: Juniors and Seniors Business and programs which MGT 411 is catalogue requirement
 Job and organizational analysis, manpower planning, recruitment, selection and placement, employment interviewing and testing; validation of selection procedures, EEO guidelines, affirmative action, diversity, and ethics issues.
 QP: MGT 310 QA: MGT 411

412*. Compensation and Reward Systems
 Spring. 3(3-0)
 P: MGT 310 or concurrently R: Juniors and Seniors Business and programs which MGT 412 is catalogue requirement
 Designing compensation systems; job evaluation, internal and external equity, pay-for-performance plans, financial incentives, intrinsic and extrinsic motivation, wage/salary surveys, benefits administration; diversity and ethical considerations.
 QP: MGT 310 QA: MGT 412

413*. Personnel Training and Development
 Spring. 3(3-0)
 P: MGT 310 or concurrently R: Juniors and Seniors Business and programs which MGT 413 is catalogue requirement
 Designing and implementing training and development programs; career stages and career planning; needs analysis; experimental design and program evaluation; learning theories; diversity and ethics issues.
 QP: MGT 310 QA: MGT 426

414*. Diversity in the World of Work
 Fall. 3(3-0)
 P: MGT 310 or concurrently R: Juniors and Seniors Business and programs which MGT 414 is catalogue requirement
 Racial, ethnic, sexual, physically handicapped, and other minority experiences and problems in work organizations. Awareness training for managers of a diverse work force. Ethical issues.
 QP: MGT 310 QA: MGT 417

415*. Special Topics in Human Resource Management
 Spring of even-numbered years. 3(3-0)
 P: MGT 310 or concurrently R: Juniors and Seniors Business and programs which MGT 415 is catalogue requirement
 Undergraduate seminar on topics of interest to specialists in human resource management. Topics will include advanced organizational behavior, managing labor relations, organizational development, organizational theory and design.
 QP: MGT 310 QA: MGT 419 MGT 415 MGT 413

493*. Field Studies
 Fall, Spring, Summer. 1 to 3 credits.
 May reenroll for a maximum of 6 credits.
 R: Seniors Management Approval of Department
 Planned program of observation, study, and work in selected business firms, to supplement classroom study contributing to total overall educational experience. Independent research on special topics in Management.
 QA: MGT 468

800*. Materials and Logistics Management
 Fall, Spring. 3(3-0)
 Interdepartmental with the Department(s) of Marketing and Transportation Administration.
 R: Graduate Business
 Fundamentals of materials and logistics management, emphasizing the strategic impact of the transformation process in a global economy. Topics: quality, inventory mgmt., logistics strategy, customer service, international procurement, mgmt of technology.
 QA: MGT 800

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801* **Materials Management: Tactical & Strategic Perspective (MLM)**
 Fall, Spring. 3(3-0)
 Interdepartmental with the Department(s) of Marketing and Transportation Administration.
 P: MGT 800 R: Graduate Business
 Integration of procurement and operations management activities for competitive advantage. Strategic/tactical approaches to customer requirements, supply chain mgmt, procurement, process assessment, quality, mfg planning/control, and mgmt of technology.
 QP: MGT 800 QA: MGT 803 MGT 821

802* **Procurement/Sourcing Strategy**
 Fall, Spring. 3(3-0)
 Interdepartmental with the Department(s) of Marketing and Transportation Administration.
 P: MGT 800 R: Graduate Business
 Procurement/sourcing strategy development processes. Specific sourcing strategies and applications. Negotiation planning and execution.
 QP: MGT 800 QA: MGT 803 MGT 815

803* **Operations Management Strategy (MLM)**
 Fall. 3(3-0) Interdepartmental with the Department(s) of Marketing and Transportation Administration.
 P: MGT 800 and MGT 801 R: Graduate Business
 Advanced study of issues in operations management, including quality, management of technology, group technology, computer integrated manufacturing and Just-In-Time manufacturing.
 QP: MGT 800 QA: MGT 801

806* **Organizational Behavior and the Management of People**
 Fall, Spring. 3(3-0)
 R: Graduate Business
 Micro and macro models of organizational behavior applied to the management of organizational processes and design. Topics include: motivation, leadership, structural design, and workforce diversity.
 QA: MGT 806

810* **Human Resources Management**
 Fall, Spring. 3(3-0)
 P: MGT 806 or concurrently R: Graduate Business
 Design, administration, and evaluation of human resources functions; job analysis, human resource planning, staffing, training, performance appraisal, career development, labor relations, safety and health programs, and international human resource mgmt.
 QP: MGT 806 CONCUR QA: MGT 810

811* **Organizational Staffing**
 Spring. 3(3-0)
 P: MGT 806; MGT 810 or concurrently R: Graduate Business
 Scientific, legal and administrative issues associated with the selection, placement and promotion of individuals in organizations. Topics include job analysis, recruitment, testing, interviewing, performance appraisal, and affirmative action.
 QP: MGT 806 MGT 810ORCONCUR QA: MGT 811

812* **Compensation and Reward Systems**
 Fall. 3(3-0)
 P: MGT 810 or concurrently R: Graduate Business
 Designing compensation systems; job evaluation, internal and external equity, pay-for-performance plans, financial incentives, motivation, wage/salary surveys, benefits, benefits administration.
 QP: MGT 810 CONCUR

813* **Human Resource Training and Individual Development**
 Spring. 3(3-0)
 P: MGT 810 R: Graduate Business & programs for which MGT 813 is a catalogue elect.
 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 develop needs.
 QP: MGT 810 QA: MGT 826

815* **Special Topics in Human Resource Management**
 Spring of even-numbered years. 3(3-0)
 P: MGT 806; MGT 810 or concurrently R: Graduate Business
 Master's seminar on topics of interest to specialists in human resource management such as: advanced organizational behavior, organizational theory and design, labor relations, organizational development.
 QP: MGT 806 ANDMGT 810CONCUR

833* **Decision Support Models**
 Fall, Spring. 3(3-0)
 R: Graduate Business
 Development and application of analytical models to support decision making. Topics include: multiple regression; linear optimization; decisions under uncertainty; forecasting.
 QA: MGT 833

834* **Optimization Models I**
 Fall of odd-numbered years. 3(3-0)
 P: MGT 833 or prior exposure to linear programming R: Graduate
 Introduction to linear optimization models and algorithms. Theory of linear programming. Simplex algorithm and variations. Duality theory and sensitivity analysis. Linear programs with special structure.
 QP: MGT 833 QA: MGT 834

835* **Optimization Models II**
 Spring of even-numbered years. 3(3-0)
 P: MGT 834 R: Graduate
 Advanced optimization techniques. Network and integer programming models and algorithms. Dynamic programming. Analysis of computational complexity. Heuristic procedures.
 QP: MGT 834 QA: MGT 835

837* **Introduction to Computer Simulation**
 Fall of even-numbered years. 3(3-0)
 P: STT 442 or equivalent R: Graduate
 Discrete computer simulation and its use in research and planning. Types of simulation approaches, use of computer simulation languages, design of simulation experiments and analysis of the resulting data. Internal mechanics of simulation programs.
 QP: STT 443 QA: MGT 837

838* **Design and Analysis of Statistical Experiments**
 Spring of odd-numbered years. 3(3-0)
 P: STT 442 or COM 905 R: Graduate
 Basic experimental design. Non-parametric and multivariate methods. Elementary sampling theory. Response surface methodology. Data analysis using BMD and SPSS.
 QP: COM 905 ORSTT 443 QA: MGT 838

860* **Principles and Cases in Strategic Management**
 Spring. 3(3-0)
 R: Graduate Business
 Principles of strategic management applied to contemporary functional, business unit, and corporate problems. Strategic positioning, strategy formulation and strategy implementation. Cases drawn from industrial and service sectors.
 QA: MGT 860

870* **Strategic Management**
 Fall, Spring. 3(3-0)
 R: Masters Business MBA Second Year
 Status in MBA program
 Determination (general manager's perspective) of the strategic direction of the firm and management of strategic processes in the firm. Integration of environmental factors and organizational functions in the analysis/solution of strategic mgmt problems.
 QP: MTA 805FI 889 QA: MGT 807

890* **Special Problems**
 Fall, Spring, Summer. 1 to 3 credits.
 May reenroll for a maximum of 6 credits.
 R: Graduate Business Approval of department
 Independent study of special topics in management
 QA: MGT 890

906* **Seminar in Organizational Research Methods**
 Spring. 3(3-0)
 R: Ph.D. students
 Methods for scientific research in the areas of organizational behavior, personnel and organizational theory. Theory building, hypothesis formation and testing, reliability theory, construct validity, external validity, research design.
 QA: MGT 906

907* **Seminar in Organizational Behavior**
 Fall of even-numbered years. 3(3-0)
 R: Ph.D. students
 Directed readings on the behavior of individuals within organizations, theory and empirical research on perception, decision-making, work motivation, work attitudes, leadership and group dynamics.
 QA: MGT 907

908* **Seminar in Organizational Theory**
 Fall of odd-numbered years. 3(3-0)
 P: MGT 906 R: Ph.D. students
 Formal organizations viewed as rational, natural and open systems. Survey of contemporary theory and empirical research concerning the nature and functioning of formal organizations.
 QP: MGT 906 QA: MGT 908

909* **Seminar in Human Resource Management**
 Spring of odd-numbered years. 3(3-0)
 R: Ph.D. students
 Research in human resource management. Job analysis, personnel selection, training, incentive systems are covered with emphasis on classic and current empirical research.
 QA: MGT 911

910* **Seminar in Strategic Management**
 Fall of even-numbered years. 3(3-0)
 R: Ph.D. students
 Recent research literature in Strategic Management is reviewed. Topics include recent developments in strategic types, identification of strategic groups, strategy formulation, implementation, and decision making.
 QA: MGT 912

912* **Special Topics Research Seminar**
 Spring of even-numbered years. 3(3-0)
 P: MGT 906 R: Ph.D. students
 Research in timely and specialized topics in the area of organizational behavior, organization theory, human resource management, organizational policy and strategy.
 QP: MGT 906 QA: MGT 912

918* **Procurement and Sourcing Theory**
 Fall of even-numbered years. 3(3-0)
 R: Ph.D. students
 Development of procurement/sourcing concepts in theory. Theoretical models explaining procurement/sourcing strategy. Development of frameworks to guide research.
 QP: MGT 801

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919*. **Procurement and Sourcing Management Strategy**
 Spring of odd-numbered years. 3(3-0)
 P: MGT 918 R: Ph.D. students
 Procurement/sourcing management concepts and underlying theory. Complex management issues affecting the contribution of the function/process to competitiveness of the firm.

920*. **Seminar in Manufacturing Strategy**
 Fall of even-numbered years. 3(3-0)
 P: MGT 801 and MGT 803 R: Ph.D. students
 Seminar on research in manufacturing strategy. Quality, technology, flexibility, innovation, and theory building in manufacturing strategy.
 QP: MGT 801 MGT 821 QA: MGT 920

921*. **Seminar in Inventory Management**
 Fall of odd-numbered years. 3(3-0)
 P: MGT 801 and MGT 803 R: Doctoral Business
 Research literature in inventory management. Classical inventory control models, just-in-time, multi-echelon inventory control, and forecasting.
 QP: MGT 801 MGT 821 QA: MGT 921

922*. **Seminar in Production Planning & Scheduling**
 Spring of even-numbered years. 3(3-0)
 P: MGT 801, MGT 803, MGT 834 R: Ph.D. Business
 Research literature in Production Planning and Scheduling. Aggregate and disaggregate planning, master scheduling, material requirements planning, lot-sizing, short-term capacity planning, and scheduling.
 QP: MGT 801 MGT 821 MGT 834 QA: MGT 922

923*. **Topics in Operations Management**
 Spring of odd-numbered years. 3(3-0)
 P: MGT 801, MGT 803 R: Doctoral Business
 Current research in the field of operations management. Topics will vary in order to allow the course to focus on current issues.
 QP: MGT 801 MGT 821 QA: MGT 923

999*. **Doctoral Dissertation Research**
 Fall, Spring, Summer. 1 to 24 credits.
 May reenroll for a maximum of 99 credits.
 R: Ph.D. Business Management
 QA: MGT 999

MARKETING AND TRANSPORTATION ADMINISTRATION MTA

300*. **Managerial Marketing**
 Fall, Spring, Summer. 3(3-0)
 P: EC 201 or EC 251H; ACC 201 or ACC 230 or ACC 251H. R: Open only to juniors and seniors in Business and in other programs that list MTA 300 as a catalog requirement.
 Analysis of and strategic integration of buyer behavior, segmentation, positioning, demand analysis, information, pricing, promotion, channels, product policies, and ethics in consumer, reseller, industrial, and service markets.
 QP: EC 201 OREC 251H ACC 201OR QA: MTA 300

302*. **Consumer and Organizational Buyer Behavior**
 Fall, Spring, Summer. 3(3-0)
 P: MTA 300. R: Open only to the juniors and seniors in the College of Business.
 Application of consumer behavior principles to customer satisfaction, market planning, and marketing mix decisions. Ethical, diversity, and international issues.
 QP: MTA 300 QA: MTA 302

310*. **International and Comparative Dimensions of Business**
 Fall, Spring, Summer. 3(3-0)
 P: EC 202 or EC 251H; MGT 302 or concurrently, MTA 300 or concurrently. R: Open only to juniors and seniors in the College of Business, and in other programs that list MTA 310 as a catalog requirement.
 International and cross-cultural study of business decisions, enterprises, markets, and institutions. Globalization of industries and firm competitiveness. International business transactions and entry strategies.
 QP: MTA 300 EC 202OREC 251H MGT 302 QA: MTA 301

317*. **Quantitative Business Research Methods**
 Fall, Spring, Summer. 3(3-0)
 Interdepartmental with the Department(s) of Statistics and Probability.
 P: STT 315 R: Juniors and Seniors Business
 Application of statistical techniques including forecasting, to business decision making. Included are applications of linear regression and correlation, analysis of variance, selected non-parametric tests, time series, and index numbers.
 QP: STT 315 ORSTT 201ORSTT 421 QA: MTA 317

319*. **Marketing Research**
 Fall, Spring. 3(3-0)
 P: MTA 300, STT 315. R: Open only to juniors and seniors in the College of Business.
 Research methods designed to obtain information for marketing decisions. Research design, data collection, and interpretation of information to provide a customer orientation.
 QP: MTA 300 MTA 317 QA: MTA 319

335*. **Food Marketing Management**
 Spring. 3(3-0) Interdepartmental with the Department(s) of Agricultural Economics.
 P: FSM 200 or MTA 300 R: Juniors and Seniors Business & programs for which MTA 335 is catalog requirement
 Management decision-making in food industry organizations (processors, wholesalers, retailers). Topics: marketing and sales in response to customer and consumer needs, distribution, and merchandising systems in domestic and international contexts.
 QP: MTA 300 ORFSM 200 QA: MTA 335

345*. **Logistics Management**
 Spring. 3(3-0) Interdepartmental with the Department(s) of Management.
 P: MGT 303 R: Juniors and Seniors Business
 Analysis of the activities and decisions necessary to plan, implement, and control private and public physical distribution and transportation channel systems. Emphasis on physical, human, informational, and organizational system components.
 QP: MGT 303 ORMTA 301 QA: MTA 345

351*. **Retail Management**
 Fall, Spring, Summer. 3(3-0)
 P: MTA 300. R: Open only to juniors and seniors in the College of Business and in other programs that list MTA 351 as a catalog requirement.
 Domestic and international retailing structure, environment, and development. Managerial strategy. Locational, purchasing, organizational, personnel and promotional techniques. Retail budgeting and control. Social and ethical considerations.
 QP: MTA 300 QA: MTA 351

400H*. **Honors Work**
 Fall, Spring. 1 to 3 credits. May reenroll for a maximum of 12 credits.
 R: Juniors and Seniors Honors Permission of the Department
 Investigates models, concepts, and research findings of particular significance to effective decision making in administration of marketing and transportation systems.
 QA: MTA 400H

413*. **Personal Selling and Sales Management**
 Fall. 3(3-0)
 P: MTA 302 R: Juniors and Seniors Business
 Planning, implementing, and controlling the firm's personal selling function. Analysis of sales territories; mgmt of recruitment, selection, training, and motivation of sales personnel; evaluation of sales performance. Diversity and ethical issues.
 QP: MTA 302 QA: MTA 413

415*. **International Marketing Management**
 Fall, Spring. 3(3-0)
 P: MTA 300, MTA 310. R: Open only to juniors and seniors in the College of Business.
 Marketing decisions, strategies, and operations of the firm involved in international business. Researching global market opportunities and formulating market entry strategies. Developing and implementing the international marketing program.
 QP: MTA 300 ANDMTA 301OREC 428 QA: MTA 415

439*. **Food Business Analysis and Strategic Planning**
 Fall. 3(3-0) Interdepartmental with the Department(s) of Agricultural Economics.
 P: MTA 335 or FSM 335; STT 201 or STT 200 or STT 315 R: Juniors and Seniors Business and programs which MTA 439 is catalog requirement
 Principles and techniques of business analysis and planning applied to food firms. Topics developed in written projects: food trend forecasts, market potential, competition and cost analyses, business and strategic planning.
 QP: MTA 335 STT 201STT 315 QA: MTA 439

442*. **Traffic and Transportation Management**
 Fall. 3(3-0) Interdepartmental with the Department(s) of Management.
 P: MGT 304 and MTA 345 R: Juniors and Seniors Business
 Micro analysis of purchasing and operating transportation services including carrier selection, pricing/rates, negotiation. Managing the transp. function including consolidation, fleet mgmt, transp. strategies; international and intermodal distribution.
 QP: MGT 303 MTA 341MTA 345 QA: MTA 442

446*. **Physical Distribution Operations**
 Spring. 3(3-0) Interdepartmental with the Department(s) of Management.
 P: MGT 304 and MTA 345 R: Juniors and Seniors Business
 Micro analysis of distribution operations from a firm and facility perspective. Emphasis on customer service strategy, information and order processing systems, warehouse design and operations, material handling systems, and assessment of performance.
 QP: MGT 303 MTA 341MTA 345 QA: MTA 446