

**490D. Advanced Directed Study--Mathematics**  
Fall, Spring. 1 to 4 credits. A student may earn a maximum of 8 credits in all enrollments for this course.  
R: Not open to freshmen and sophomores. Open only to Lyman Briggs School majors.  
Directed advanced studies in mathematics.

**490E. Advanced Directed Study--Science and Technology Studies**  
Fall, Spring. 1 to 4 credits. A student may earn a maximum of 8 credits in all enrollments for this course.  
R: Not open to freshmen and sophomores. Open only to Lyman Briggs School majors.  
Directed advanced studies in Science and Technology Studies.

**492. Senior Seminar**  
Fall, Spring. 4(4-0)  
P: LBS 239 or LBS 331 or LBS 332 or LBS 333 or LBS 334 or LBS 335 or LBS 355 or LBS 490E or HST 425 or ENG 483. R: Open only to juniors or seniors in Lyman Briggs School. Completion of Tier I writing requirement.  
Selected problems in the study of science and technology as human activities, using philosophical, historical, literary, social science or interdisciplinary perspectives or methods. Development and defense of thesis paper.

**493. Field Experience**  
Fall, Spring. 1 to 10 credits. A student may earn a maximum of 10 credits in all enrollments for this course.  
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.

## MANAGEMENT

## MGT

### Department of Management The Eli Broad College of Business and The Eli Broad Graduate School of Management

**302. Management and Organizational Behavior**  
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.  
Managerial roles and functions in goal-directed institutions. Organization design, analysis of organizational structure. Leadership, motivation, work attitudes, conflict management, and management of diversity.

**310. Human Resource Management (W)**  
Fall, Spring, Summer. 3(3-0)  
P: MGT 302 or concurrently. R: Open only to juniors and seniors. Completion of Tier I writing requirement.  
Formulation and administration of human resource policies in the business enterprise. Personnel planning, job analysis and evaluation, staffing. Compensation and labor relations. Employee safety. Training, development, and performance appraisal. Issues of diversity and ethics.

**409. Business Policy and Strategic Management**  
Fall, Spring, Summer. 3(3-0)  
P: MGT 302, MGT 303, FI 311, MSC 300. R: Open only to seniors in the College of Business.  
Techniques for building and maintaining consistent and effective policy and strategy. Content cuts across the major functions within a firm. Strategic integration, ethics, and international competition.

**411. Organizational Staffing**  
Fall. 3(3-0)  
P: MGT 310 or concurrently.  
Job and organizational analysis. Personnel planning, recruitment, selection and placement. Employment interviewing and testing. Validation of selection procedures, EEO guidelines, and affirmative action. Diversity and ethics issues.

**412. Compensation and Reward Systems**  
Spring. 3(3-0)  
P: MGT 310 or concurrently. R: Open only to juniors and seniors.  
Designing compensation systems. Job evaluation, internal and external equity. Pay-for-performance plans and financial incentives. Wage and salary surveys. Benefits administration. Diversity and ethical considerations.

**413. Personnel Training and Development**  
Spring. 3(3-0)  
P: MGT 310 or concurrently. R: Open only to juniors and seniors.  
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.

**414. Diversity in the Workplace**  
Fall. 3(3-0)  
P: MGT 310 or concurrently. R: Open only to juniors and seniors.  
Problems experienced in work organizations by racial, ethnic, physically handicapped, and other minorities. Awareness training for managers. Ethical issues.

**491. Special Topics in Human Resource Management**  
Spring of even-numbered years. 3(3-0)  
P: MGT 310 or concurrently. R: Open only to juniors and seniors in the College of Business or in programs for which MGT 491 is a catalog-listed requirement.  
Topics of interest to specialists in human resource management, such as advanced organizational behavior, managing labor relations, organizational development, and organizational theory and design.

**498. Field Studies**  
Fall, Spring, Summer. 1 to 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course.  
R: Open only to seniors.  
Program of observation, study, and work in selected business firms to supplement classroom study. Supervised independent research on special topics in Management.

**806. Management and Organizational Behavior**  
Fall, Spring. 3(3-0)  
R: Open only to graduate students in Business or students in programs for which MGT 806 is a catalog-listed requirement.  
Micro and macro models of organizational behavior applied to the management of organizational processes and design. Motivation, leadership, structural design, and workforce diversity.

**808. Business as an Institution**  
Fall. 1(1-0)  
R: Open only to students in the Advanced Management Program.  
Institutional goals and control of the business enterprise. Positioning of the firm in the marketplace. Ethical foundations of business.

**810. Human Resource Management**  
Fall, Spring. 3(3-0)  
P: MGT 806 or concurrently. R: Open only to graduate students in the College of Business or in programs for which MGT 810 is a catalog-listed requirement.  
Design, administration, and evaluation of the human resource function. Job analysis, planning, staffing, training, performance appraisal, and career development. Labor relations, safety and health programs. International human resource management.

**811. Organizational Staffing**  
Spring. 3(3-0)  
P: MGT 806; MGT 810 or concurrently. R: Open only to graduate students in the College of Business or in programs for which MGT 811 is a catalog-listed requirement.  
Scientific, legal, and administrative issues in the selection, placement and promotion of individuals in organizations. Topics include job analysis, recruitment, testing, interviewing, performance appraisal, and affirmative action.

**813. Human Resource Training and Individual Development**  
Spring. 3(3-0)  
P: MGT 810. R: Open only to graduate students in the College of Business or in programs for which MGT 813 is a catalog-listed requirement.  
Planning, implementing and evaluating training programs. Career stages and career planning. Matching individual and organizational development needs.

**815. Special Topics in Human Resource Management**  
Spring of even-numbered years. 3(3-0)  
P: MGT 806; MGT 810 or concurrently. R: Open only to graduate students in Business.  
Advanced organizational behavior, organizational theory and design, labor relations, and organizational development.

**819. Organization Design and the Management of Change**  
Fall. 2(2-0)  
P: MGT 808. R: Open only to students in the Advanced Management Program.  
Alternative methods of organization. Dividing tasks and coordinating divided parts. Strategies for implementing new organizational forms and for changing strategies in general.

**820. Managing the Internetworked Firm**  
Spring, Summer. 2(2-0)  
R: Open only to MBA students.  
Managing the domestic and international uses of the Internet. History, technology, ownership, and regulation of the Internet. Modes of communication via the Internet. Legal and technical suitability of the Internet. Privacy, security, and access issues.

**822. Management of Compensation**  
Fall. 3(3-0)  
P: MGT 810 or concurrently. R: Open only to graduate students in the College of Business or in programs for which MGT 812 is a catalog-listed requirement.  
Application of compensation principles to organizational objectives. Strategic use of compensation systems for attracting, motivating, and retaining employees. Managerial aspects of paying employees at all organizational levels. Course stresses policy as distinct from statistical and computer applications.

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

**Descriptions —Management  
of  
Courses**

**846. Organizational Behavior and Personnel Administration**  
Fall. 3(3-0)  
*R: Open only to students in the Advanced Management Program.*

Management of human resources. Leadership, motivation, communications, employee perceptions, individual and organizational learning. Staffing, interviewing, training, development, appraisal, termination, and legal issues.

**855. Labor and Management Relations**  
Spring. 2(2-0) *Interdepartmental with Labor and Industrial Relations.*  
*R: Open only to students in the Advanced Management Program.*

Industrial relations in American union and management collective bargaining. Compensation issues. Grievance concepts and arbitration. Dispute resolution.

**858. Applied Strategic Management**  
Spring. 2(2-0)

*R: Open only to students in the Advanced Management Program.*  
Capstone integration and application of previous course work from the general manager's perspective. Topics include environmental analysis, competitive strategies, and strategy formulation and implementation.

**870. Strategic Management**  
Fall, Spring. 3(3-0)

*R: Open only to second-year M.B.A. students.*  
Determination 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 and solution of management problems.

**890. Independent Study**

Fall, Spring, Summer. 1 to 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course.

*R: Open only to graduate students in Business. Approval of department.*  
Faculty-supervised independent study.

**906. Seminar in Organizational Research Methods**  
Spring. 3(3-0)

*R: Open only to 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.

**907. Seminar in Organizational Behavior**  
Fall of even-numbered years. 3(3-0)

*R: Open only to 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.

**908. Seminar in Organizational Theory**  
Fall of odd-numbered years. 3(3-0)

*P: MGT 906. R: Open only to Ph.D. students.*  
Formal organizations viewed as rational, natural and open systems. Survey of contemporary theory and empirical research.

**909. Seminar in Human Resource Management**  
Spring of odd-numbered years. 3(3-0)

*R: Open only to Ph.D. students.*  
Classic and current empirical research. Job analysis, personnel selection, training, and incentive systems.

**910. Seminar in Strategic Management**  
Fall of even-numbered years. 3(3-0)

*R: Open only to Ph.D. students.*  
Review of recent research literature. Topics include developments in strategic types, identification of strategic groups, strategy formulation, implementation, and decision making.

**912. Special Topics Research Seminar**  
Spring of even-numbered years. 3(3-0)

*P: MGT 906. R: Open only to Ph.D. students.*  
Research in timely and specialized topics in organizational behavior, organization theory, human resource management, organizational policy and strategy.

**922. Seminar in Production Planning and Scheduling**

Spring of even-numbered years. 3(3-0)  
*P: MGT 801, MGT 803, MGT 834. R: Open only to Ph.D. students in Business.*

Aggregate and disaggregate planning, master scheduling, material requirements planning, lot-sizing, short-term capacity planning, and scheduling.

**999. Doctoral Dissertation Research**

Fall, Spring, Summer. 1 to 24 credits. A student may earn a maximum of 99 credits in all enrollments for this course.

*R: Open only to Ph.D. students in Management.*

**MASTER OF BUSINESS  
ADMINISTRATION MBA**

**The Eli Broad College of Business  
and The Eli Broad Graduate  
School of Management**

**800. The Global Organization and the Firm's Strategic Position**

Fall, Spring. 3(3-0)  
*R: Open only to MBA students.*  
Organizational goals, design, and control of the global business enterprise. Strategies for implementing new organizational forms. Defining the value chain, competitive positioning, and sustainable competitive advantage.

**802. Accounting and Financial Strategies**

Fall, Spring. 5(5-0)  
*R: Open only to MBA students.*  
Financial accounting model, valuation, and reporting concepts and uses. Time value of money, interest rates, valuing securities, financial statement analysis, and cash flows. Budgeting, decision analyses, cost estimation and accumulation, capital budgeting, and international financial concepts.

**804. Applied Data Analysis for Managers**

Fall, Spring. 2(2-0)  
*P: STT 315. R: Open only to MBA students. Not open to students with credit in MSC 833.*  
Analysis of business and economic data to support managerial decision-making. Building, interpreting, and applying regression models. Time series and forecasting. Offered half of semester.

**806. Business Ethics and Critical Thinking Concepts**

Fall, Spring. 1(1-0)  
*R: Open only to MBA students.*  
Creating a critical thinking approach to business problem solving. Developing a framework for identifying, analyzing, and resolving ethical dilemmas in business. Offered half of semester.

**814. Applied Economics**  
Fall, Spring. 2(2-0)

*R: Open only to MBA students.*  
The economic view of the firm. Modeling market mechanics in supply and demand, marginal concepts, elasticity, market characteristics, pricing with market power, and strategic behavior. Applications to business problems and situations. Principal-agent relationships and wealth maximization. Offered half of semester.

**816. Business Presentations**  
Fall, Spring. 1(1-0)

*R: Open only to MBA students.*  
Development of effective interpersonal communications skills. Emphasis is on oral communications in business settings. Offered half of semester.  
*SA: MSC 850*

**820. Managing the Firm's Value Chain**  
Spring, Summer. 5(5-0)

*P: MBA 800. R: Open only to MBA students.*  
Integration of product innovations, marketing strategies, supply chain strategies, and regulatory environment. Global marketing strategies and consumer behaviors. Coordination of purchasing, manufacturing, operations, and logistics to enhance competitiveness.

**822. Financial Management**  
Spring, Summer. 2(2-0)

*P: MBA 802. R: Open only to MBA students.*  
Investment decisions by firms. Value creation, risk and return, pricing models, and financial markets. Financing alternatives, market efficiency, capital budgeting, and leverage and risk relationships. Optimizing firm value. Agency problems and effects on investment and financing decisions. Offered half of semester.

**824. Managing the Workforce**  
Spring, Summer. 3(3-0)

*R: Open only to MBA students.*  
Role of workforce management in carrying out the goals and mission of the organization. Theories and applications of management principles to acquiring, motivating, and rewarding employees and structuring their work. Legal, domestic, and international issues in the workplace.

**826. International, Comparative, and Cross-Cultural Business**  
Spring, Summer. 2(2-0)

*R: Open only to MBA students.*  
Defining international businesses' approaches to global markets, economic trade issues, methods of entry, and organizational alternatives. Cross-cultural differences and their impacts on business practices. Trade agreements, strategic alliances, negotiations, and cultural consequences. Offered half of semester.

**840. Applied Business Experience**  
Fall, Summer. 3 credits.

*R: Open only to MBA students.*  
Student teams work on projects in organizations identified by a company sponsor and approved by a faculty adviser.

**850. Integrative Case Experience and Future Global Strategies**  
Fall, Spring. 2(2-0)

*R: Open only to MBA students.*  
Future trends in management. Strategic positioning of organizations for success. An integrative case experience focusing on a specific corporate situation. Use of library and computer network sources. Case presentation to faculty and business managers.