

## Lyman Briggs School—LBS

- 336 Gender, Science, Technology (W)**  
Fall, 4(4-0) P:M: Completion of Tier I writing requirement. RB: (LBS 144 and LBS 145) R: Open only to juniors or seniors in Lyman Briggs majors.

Impacts of gender on the development of sciences and technologies; feminist critiques of science and technology; barriers to women's participation in science and technology; scientific constructions of sex, gender, and sexuality.

- 347 Advances in Applied Biology**  
Fall, 3(2-3) P:M: (LBS 145) or (BS 111 or concurrently and BS 111L) or (LBS 149H or concurrently and LBS 159H) and completion of Tier I writing requirement. R: Open only to juniors or seniors in Lyman Briggs School.

Advances in cell and molecular biology and application: plant and animal breeding, environment, and therapeutics.

- 355 Philosophy of Technology**  
Spring, 4(4-0) Interdepartmental with Philosophy. P:M: Completion of Tier I writing requirement. R: Open only to sophomores or juniors or seniors in Lyman Briggs School or the Department of Philosophy.

Examination of the desirability of technology, its social forms, and its alternatives. Conventional productivist, ecological progressive, and radical humanist outlooks.

- 368 Science, Technology and Society**  
Fall, 3(3-0) Interdepartmental with Sociology. Administered by Department of Sociology. RB: (LBS 133) or some familiarity with basic concepts and methods in sociology. R: Not open to freshmen or sophomores.

Role of science and technology in social change. Values and ethics in contemporary perspectives, controversies, and cases. Science and technology as forms of knowledge.

- 425 American and European Health Care since 1800**  
Spring, 4(4-0) Interdepartmental with History. Administered by Department of History. P:M: Completion of Tier I writing requirement. R: Not open to freshmen.

Social and cultural transformation in health care delivery since 1800, primarily in North America and western Europe. Therapeutic revolutions. Medical education and professionalization. Social and alternative medicine. Managed care.

- 483 Literature and Medicine**  
Spring, 3(3-0) Interdepartmental with English. Administered by Department of English. P:M: Completion of Tier I writing requirement. R: Not open to freshmen or sophomores.

Human dimensions of medicine as seen in literature. Health, illness, mortality. Medical dilemmas. Physical and psychological self. Psychological theories used in interpreting literature.

- 490A Advanced Directed Study--Multidisciplinary**  
Fall, Spring, 1 to 4 credits. A student may earn a maximum of 8 credits in all enrollments for this course. R: Open only to juniors or seniors in Lyman Briggs School.

Directed advanced studies involving at least two LBS curricular areas: biology, chemistry, physics, mathematics, science and technology studies, computing.

- 490B Advanced Directed Study--Biology**  
Fall, Spring, 1 to 4 credits. A student may earn a maximum of 8 credits in all enrollments for this course. R: Open only to juniors or seniors in Lyman Briggs School.

Directed advanced studies in biology.

- 490C Advanced Directed Study--Chemistry or Physics**  
Fall, Spring, 1 to 4 credits. A student may earn a maximum of 8 credits in all enrollments for this course. R: Open only to juniors or seniors in Lyman Briggs School.

Directed advanced studies in chemistry or physics.

- 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 or 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: Open only to juniors or seniors in Lyman Briggs School.

Directed advanced studies in science and technology studies.

- 492 Senior Seminar**  
Fall, Spring, 4(4-0) RB: (LBS 239 or LBS 330 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) and completion of Tier I writing requirement. R: Open only to juniors or seniors in Lyman Briggs School.

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: Open only to juniors or seniors in Lyman Briggs School. 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

- 293 Cooperative Education for Business Students**  
Fall, Spring, 1(1-0) A student may earn a maximum of 3 credits in all enrollments for this course. Interdepartmental with Marketing and Supply Chain Management; Accounting; Economics; Finance; Hospitality Business. Administered by Department of Marketing and Supply Chain Management. R: By permission of the Department only.

Integration of pre-professional educational employment experiences in industry and government with knowledge and processes taught in the student's academic program. Educational employment assignment approved by the Department of Marketing and Supply Chain Management.

- 315 Managing Human Resources and Organizational Behavior**  
Fall, Spring, Summer, 3(3-0) R: Open only to juniors or seniors in the College of Business and to students in programs for which MGT 315 is a catalog-listed requirement. Not open to students in The School of Hospitality Business. SA: MGT 310

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.

- 325 Management Skills and Processes**  
Fall, Spring, Summer, 3(3-0) R: Open only to juniors and seniors in programs for which MGT 325 is a catalog-listed requirement. SA: MGT 302

Managerial skills and processes in goal-directed institutions.

- 409 Business Policy and Strategic Management**  
Fall, Spring, Summer, 3(3-0) R: Open only to seniors in the College of Business. Not open to students in The School of Hospitality Business.

Techniques for building and maintaining consistent and effective policy and strategy. Major functions within a firm. Strategic integration, ethics, and international competition.

- 411 Organizational Staffing**  
Fall, 3(3-0) P:M: (MGT 315 or concurrently) R: Open only to juniors or seniors in The Eli Broad College of Business. Not open to students in The School of Hospitality Business.

Job and organizational analysis. Personnel planning, recruitment, selection and placement. Employment interviewing and testing. Validation of selection procedures, equal opportunity employer (EEO) guidelines, and affirmative action. Issues and diversity of ethics.

- 412 Compensation and Reward Systems**  
Spring, 3(3-0) P:M: (MGT 315 or concurrently) R: Open only to juniors or seniors in The Eli Broad College of Business. Not open to students in The School of Hospitality Business.

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:M: (MGT 315 or concurrently) R: Open only to juniors or seniors in The Eli Broad College of Business. Not open to students in The School of Hospitality Business.

Designing and implementing training and development programs. Career stages and career planning. Needs analysis. Experimental design and program evaluation. Learning theories. Issues and diversity of ethics.

- 414 Diversity in the Workplace**  
Fall, 3(3-0) P:M: (MGT 315 or concurrently) R: Open only to juniors or seniors in The Eli Broad College of Business. Not open to students in The School of Hospitality Business.

Problems experienced by racial, ethnic, physically disabled, and other minorities in work organizations. Awareness training for managers. Ethical issues.

**460 Capstone for Management Majors (W)**  
Fall, Spring. 3(2-2) P:M: (MGT 315 or concurrently) R: Open only to seniors in the Human Resource Management or General Management major.

Topics in management and organizational behavior.

**490 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 juniors or seniors. Approval of department.

Supervised program of independent library research designed to supplement classroom study.

**491 Special Topics in Human Resource Management**  
Spring of even years. 3(3-0) A student may earn a maximum of 9 credits in all enrollments for this course. P:M: (MGT 315 or concurrently) R: Open only to juniors or seniors in The Eli Broad College of Business. Not open to students in The School of Hospitality Business.

Topics in human resource management such as advanced organizational behavior, managing labor relations, organizational development, and organizational theory and design.

**300 Managerial Marketing**  
Fall, Spring, Summer. 3(3-0) R: Open only to juniors or seniors in the Eli Broad College of Business. Not open to students in The School of Hospitality Business. SA: ML 300, MTA 300 Not open to students with credit in MSC 327.

Analysis 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.

**302 Consumer and Organizational Buyer Behavior**  
Fall, Spring, Summer. 3(3-0) P:M: (MSC 300) R: Open only to juniors or seniors in the Eli Broad College of Business or Food Industry Management major. SA: ML 302, MTA 302

Application of consumer behavior principles to customer satisfaction, market planning, and marketing mix decisions. Ethical, diversity, and international issues.

**303 Introduction to Supply Chain Management**  
Fall, Spring, Summer. 3(3-0) R: Open only to juniors or seniors in the Eli Broad College of Business and to students in programs for which MSC 303 is a catalog-listed requirement. Not open to students in The School of Hospitality Business. SA: MGT 303, ML 303, MTA 303

Objectives, processes, and functions of supply chain management activities including procurement, manufacturing, and logistics. The role of supply chain processes in creating competitive advantage with respect to quality, flexibility, lead-time, and cost.

**305 Supply Chain Management**  
Fall, Spring, Summer. 4(4-0) P:M: (MSC 303) R: Open only to juniors or seniors in The Eli Broad College of Business or the Business-Supply Chain Management cognate in the Engineering Arts major.

Supply chain operating practices and principles. Strategies for customer service, quality, procurement, manufacturing, logistics, and integrated supply chain management.

**310 International and Comparative Dimensions of Business**  
Fall, Spring, Summer. 3(3-0) R: Open only to juniors or seniors in The Eli Broad College of Business. Not open to students in The School of Hospitality Business. SA: ML 310, MTA 310

International and cross-cultural study of business decisions, enterprises, markets, and institutions. Globalization of industries and firm competitiveness. International business transactions and entry strategies.

**313 Personal Selling and Buying Processes**  
Fall, Spring. 3(3-0) SA: ML 313

The nature of channel relationships. Buying behavior and sales processes. Applications to differing industries and kinds of channel relationships.

**317 Quantitative Business Research Methods**  
Fall, Spring, Summer. 3(3-1) Interdepartmental with Statistics and Probability. P:M: (STT 315) R: Open only to juniors or seniors in The Eli Broad College of Business. Not open to students in The School of Hospitality Business. SA: ML 317, MTA 317

Application of statistical techniques, including forecasting, to business decision making. Includes applications of linear regression and correlation, analysis of variance, selected non-parametric tests, time series, and index numbers.

**319 Marketing Research**  
Fall, Spring. 3(3-0) P:M: (MSC 300 and MSC 317 or concurrently) R: Open only to juniors or seniors in The Eli Broad College of Business. SA: ML 319, MTA 319

Research methods designed to obtain information for marketing decisions. Research design, data collection, and interpretation of information to provide a customer orientation.

**327 Introduction to Marketing**  
Fall, Spring, Summer. 3(3-0) R: Open only to juniors or seniors in programs for which MSC 327 is a catalog-listed requirement. Not open to students with credit in MSC 300.

Survey of marketing topics - buyer behavior, segmentation, positioning, demand analysis, information, pricing, promotion, channels, product policies, and ethics in consumer, reseller, industrial, and service markets.

**351 Retail Management**  
Fall, Spring, Summer. 3(3-0) Interdepartmental with Food Industry Management. P:M: (MSC 300 or MSC 327) R: Open only to juniors or seniors in the Eli Broad College of Business or the Food Industry Management or Merchandising Management major. SA: ML 351, MTA 351

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.

**401 Procurement and Supply Management**  
Fall, Spring, Summer. 3(3-0) P:M: (MSC 305 and MSC 317) R: Open only to juniors or seniors in The Eli Broad College of Business. SA: MGT 401, ML 401, MTA 401

Strategic issues in procurement and supply management. Purchasing process, procurement cycle, purchasing research, relationships with suppliers, negotiation, and commodity planning. Cost, price, and value analysis.

**402 Manufacturing Planning and Control**  
Fall, Spring, Summer. 3(3-0) P:M: (MSC 305 and MSC 317) R: Open only to juniors or seniors in The Eli Broad College of Business. SA: MGT 402, ML 402, MTA 402

Production planning, demand management, master scheduling, materials requirements, and capacity planning. Shop floor control, computer-integrated manufacturing, and just-in-time systems.

**410 Product Innovation and Management**  
Fall. 3(3-0) P:M: (MSC 300 and MSC 317) R: Open only to juniors or seniors in The Eli Broad College of Business. SA: ML 410

Analytic, decision-making, and planning concepts and tools available to product managers. New product policy and development, organizational issues, and product modification and deletion.

## MARKETING AND SUPPLY CHAIN MANAGEMENT MSC

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

**101 Introduction to Business**  
Fall, Spring. 3(3-0) R: Not open to juniors or seniors in the College of Business. SA: ML 101

Role of business in society. Activities and functions of business organizations. Major issues and challenges facing business: globalization, social responsibility, diversity. Contemporary management practices.

**293 Cooperative Education for Business Students**  
Fall, Spring. 1(1-0) A student may earn a maximum of 3 credits in all enrollments for this course. Interdepartmental with Accounting; Economics; Finance; Management; Hospitality Business. R: Approval of department.

Integration of pre-professional educational employment experiences in industry and government with knowledge and processes taught in the student's academic program. Educational employment assignment approved by the Department of Marketing and Supply Chain Management.