

**899 Master's Thesis Research**  
 Fall, Spring, Summer. 1 to 12 credits. A student may earn a maximum of 36 credits in all enrollments for this course. R: Open only to master's students in the Epidemiology major. Approval of department. SA: HM 899  
 Master's thesis research.

**910 Themes in Contemporary Epidemiology**  
 Fall of odd years. 3(3-0) RB: Master of Science in Epidemiology  
 Discussion and critique of important contemporary themes in epidemiology as reflected in current publications in the field.

**915 Advanced Survival Analysis**  
 Spring of odd years. 3(3-0)  
 Interdepartmental with Statistics and Probability. RB: (EPI 810 and EPI 826 and EPI 852)  
 Methods of analysis of time to event data parametric and nonparametric models, frailty models.

**920 Advanced Methods in Epidemiology and Applied Statistics**  
 Spring of even years. 3(3-0)  
 Interdepartmental with Statistics and Probability. P:M: (EPI 826)  
 Pattern recognition and cluster analysis, longitudinal data analysis, path analysis, repeated measures and time-series analysis.

**925 Modeling in Epidemiology I**  
 Fall of odd years. 3(3-0) P:M: (EPI 910) RB: Experience in statistical analysis of biological data.  
 Critical examination of epidemiological thinking about the determinants of non-communicable diseases.

**930 Modeling in Epidemiology II**  
 Spring of even years. 3(3-0) P:M: (EPI 910 and EPI 925) RB: Mathematics through calculus.  
 Critical examination of epidemiological thinking about the determinants of communicable diseases and illnesses with both communicable and non-communicable causes.

**935 Research Seminar**  
 Spring of even years. 3(3-0) P:M: (EPI 810 and LCS 829 and EPI 812) RB: Master of Science in Epidemiology or equivalent.  
 Conceptualization, development, and writing of research proposals in epidemiology and other forms of clinical field research.

**940 Epidemiological Consultations**  
 Spring of odd years. 3(3-0) P:M: (EPI 810) RB: Master's level training in epidemiology or biostatistics  
 Practical training in providing research consultations in epidemiology and biostatistics.

**945 Molecular Epidemiology**  
 Fall of even years. 3(3-0) P:M: (EPI 910 or concurrently)  
 Strategies for incorporation of genetic and non-genetic biomarkers in epidemiology.

**950 Advanced Biostatistical Methods in Epidemiology**  
 Fall of even years. 3(3-0) P:M: (EPI 920)  
 In-depth study of specific biostatistical methods and epidemiology applications.

**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 Epidemiology.  
 Doctoral dissertation research.

## EXECUTIVE MBA PROGRAM

EMB

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

**801 Business as an Institution**  
 Fall. 2(2-0) R: Open only to students in the Executive M.B.A. Program. SA: MGT 808  
 Institutional goals and control of the business enterprise. Positioning of the firm in the marketplace. Ethical foundations of business.

**802 Accounting and Financial Concepts**  
 Fall. 2(2-0) R: Open only to students in the Executive M.B.A. Program. SA: ACC 802 C: EMB 812 concurrently.  
 Financial statement relationships and analysis. Cash flow and working capital measurement and analysis. Contemporary financial reporting issues.

**811 Organization Design and the Management of Change**  
 Fall. 2(2-0) RB: (EMB 801) R: Open only to students in the Executive M.B.A. Program. SA: MGT 819  
 Alternative methods of organization. Dividing tasks and coordinating divided parts. Strategies for implementing new organizational forms and for changing strategies in general.

**812 Managerial Accounting and Information Systems**  
 Fall. 3(3-0) P:M: (EMB 802 or concurrently) R: Open only to students in the Executive M.B.A. Program. SA: ACC 812  
 Use of accounting data for planning, performance evaluation, and control. Costing and pricing. Relevant revenue and cost-based decision making. Information systems in business operations.

**820 Marketing Management**  
 Spring. 2(2-0) SA: MSC 822, MSC 823, MSC 820  
 Concepts, methods, and applications of decision-making to address marketing issues such as market segmentation and positioning, new product development, promotional and distribution strategies. Techniques to model and analyze marketing decision problems to ensure optimal performance results.

**821 Financial Management**  
 Spring. 3(3-0) RB: (EMB 802) R: Open only to students in the Executive M.B.A. Program. SA: FI 821  
 Managerial finance covering short-, intermediate- and long-term problems. Financial planning and control using financial theory and management techniques. Applications in domestic and international settings.

**822 Supply Chain Management**  
 Spring. 3(3-0) R: Open only to students in the Executive MBA Program. SA: MSC 822, MSC 823, MSC 820  
 Integrative approach to product design, development, and delivery. Flow of products from concept development through delivery to the final user, including product and process development, managing information and product flows, total quality management, and resource and capacity management.

**828 Strategic Planning**  
 Spring. 2(2-0) R: Open only to students in the Executive M.B.A. Program. SA: ML 818, MTA 818, MSC 818  
 Models and methods of business planning. Relationship of strategic intent, business missions and planning hierarchies. Linking marketing, financial, and human resource strategic plans.

**831 Business Legal Environment**  
 Summer. 2(2-0) R: Open only to students in the Executive M.B.A. Program. SA: GBL 859  
 Critical analysis of government regulation of business from legal, political, and social perspectives. An examination of moral concepts and social policy underlying government regulation.

**836 Management in the Global Marketplace**  
 Summer. 4(1-6) R: Open only to students in the Executive M.B.A. Program. SA: MGT 836, MSC 836  
 Global, comparative, and cross-cultural aspects of business. Drivers of global markets and consequences for management. International travel required.

**842 Managerial Economics and Public Policy**  
 Fall. 3(3-0) R: Open only to students in the Executive M.B.A. Program. SA: EC 842  
 Analysis of the firm. Demand and revenues, optimal production, cost minimization, supply, profitability, and pricing. Competitive forces and public policies in the firm's regional and international markets.

**844 Leadership: An Executive Challenge**  
 Fall. 2(2-0) R: Open only to students in the Executive M.B.A. Program. SA: MGT 839  
 Motivating others toward a shared vision. Classic and popular theories of leadership. Fundamental practices of exemplary leadership. Examination of personal leadership styles and development of a personal plan for leadership development.

**845 New Technology and Products Management**  
 Fall. 2(2-0) R: Open only to students in the Executive M.B.A. Program. SA: MSC 832  
 Strategic management of new product development processes. Planning, analytical, and decision-making concepts and tools available to market and brand managers. Global new product management best practices, product strategy and policy, introductions, product portfolio management, and organizational implications.

**847 Managerial Decision Support Models**  
 Fall. 3(3-0) R: Open only to students in the Executive M.B.A. Program. SA: MGT 847, MSC 847  
 Development and application of analytical models to support decision making. Topics include data analysis and multiple regression, linear optimization, decisions under uncertainty, forecasting, risk and decision analysis.

## Executive MBA Program—EMB

**852 Macroeconomics in a Global Economy**  
Spring. 3(3-0) R: Open only to students in the Executive M.B.A. Program. SA: EC 852  
Measurement, determinants, and forecasting of national income, employment, interest rates, and inflation. Analysis of business fluctuations, fiscal and monetary policy, international trade, and capital flows.

**855 Labor and Management Relations**  
Spring. 2(2-0) Interdepartmental with Labor and Industrial Relations. R: Open only to students in the Executive M.B.A. Program. SA: MGT 855

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

**856 Organizational Behavior and Human Resource Management**  
Spring. 3(3-0) R: Open only to students in the Executive M.B.A. Program. SA: MGT 846

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

**858 Financial Strategies**  
Spring. 2(2-0) R: Open only to students in the Executive M.B.A. Program. SA: FI 858  
Formulation and analysis of corporate strategies aimed at the creation and transfer of shareholder value.

Relationship of corporate activities to overall firm performance and valuation.

**891 Special Topics in Executive Management**  
Spring. 2 to 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course. R: Open only to students in the Executive M.B.A. program. Approval of college.

Faculty-supervised study in special topics relevant to business executives.

## FAMILY AND CHILD ECOLOGY

FCE

### Department of Family and Child Ecology College of Human Ecology

**145 The Individual, Marriage and the Family**  
Fall, Spring. 3(3-0) R: Open only to freshmen or sophomores.

Development of the young adult in the human ecological context. Issues of sexuality, gender, parenting, work and family interface, communication, and resource use. Diversity in relationships and families.

**211 Child Growth and Development: Conception Through Early Childhood**  
Fall, Spring. 3(3-0) R: Not open to freshmen.

Physical, cognitive, social, emotional, and ecological aspects of human growth and development from conception through early childhood.

**212 Children, Youth and Family**  
Fall, Spring. 3(3-0)  
An ecosystems perspective on development during childhood and adolescence emphasizing family and community contexts.

**225 Ecology of Lifespan Human Development in the Family**  
Fall, Spring. 3(3-0) R: Not open to seniors.  
Human development across the lifespan with an ecological perspective. Relationships between human resource professionals and family systems.

**238 Personal Finance**  
Fall, Spring, Summer. 3(3-0)  
Strategies, techniques and resources useful in the management of personal finance.

**270 Introduction to Family Community Services**  
Fall, Spring. 4(3-2)  
Family community services from an ecological perspective. Professional orientation and factors influencing the field. Participation in community agency required.

**280 Community as Context for Individual and Family Development**  
Fall, Spring. 3(2-2)  
Families' and individuals' fit within a community over their life span from an ecological perspective. Analysis of change. Influence of context on development and its implications for family community services. Community observations required.

**320 Interaction Processes with Children in Groups**  
Fall, Spring. 3(3-0) P:M: (FCE 211) R: Open only to students in the Department of Family and Child Ecology or Graduate Lifelong Education students pursuing additional endorsement in Early Childhood Education. C: FCE 320L concurrently.  
Principles of verbal and non-verbal interaction in relation to children's behavior in groups. Focus on young children in early childhood programs.

**320L Interaction with Children-Laboratory**  
Fall, Spring. 1(0-4) R: Open only to students in the Department of Family and Child Ecology or Graduate Lifelong Education students pursuing additional endorsement in Early Childhood Education. C: FCE 320 concurrently.  
Practice applying principles of interaction to individuals and small groups in early childhood programs.

**321 Curriculum for Early Childhood Programs**  
Fall, Spring. 3(3-0) P:M: (FCE 320L) and (MTH 106 or MTH 110 or MTH 114 or MTH 116 or MTH 124 or MTH 132 or MTH 201 or STT 200 or STT 201) and completion of Tier I writing requirement. R: Open only to students in the Department of Family and Child Ecology or Graduate Lifelong Education students pursuing additional endorsements in Early Childhood Education. C: FCE 321L concurrently.  
Child development principles and accreditation standards for designing curricula for early childhood programs. Planning and evaluating learning activities and programs.

**321L Curriculum for Early Childhood Programs: Laboratory**  
Fall, Spring. 1(0-4) P:M: (FCE 211 and FCE 320 and FCE 320L) and (MTH 106 or MTH 110 or MTH 114 or MTH 116 or MTH 124 or MTH 132 or MTH 201 or STT 200 or STT 201) R: Open only to students in the Department of Family and Child Ecology or Graduate Lifelong Education students pursuing additional endorsement in Early Childhood Education. C: FCE 321 concurrently.

Supervised practice in providing learning activities for individual children and small groups. Planning, implementing and evaluating activities. Field trips may be required.

**345 Principles of Family Studies**  
Fall, Spring. 3(3-0) P:M: (FCE 145) and (FCE 211 or FCE 212 or FCE 225) R: Not open to freshmen.

Historical, social, cultural, and economic perspectives on contemporary families. Approaches to studying families. Role of communication, resources, and decision making in family systems.

**346 Helping Skills in Family Community Services**  
Fall, Summer. 3(2-2) P:M: (FCE 270) and (FCE 280 or PSY 270 or SOC 361 or concurrently) R: Open only to juniors or seniors.

Foundational skill development necessary for the delivery of services to diverse families, including communicating, interviewing, problem solving, and assessment. Application of skills in a field experience.

**347 Programming in Family Community Services**  
Fall, Summer. 4(3-3) P:M: (FCE 270) and (FCE 280 or PSY 270 or SOC 361 or concurrently) and completion of Tier I writing requirement. R: Open only to sophomores or juniors or seniors. Not open to students with credit in FCE 370.

Analysis of youth and adult service programs. Program planning processes involved in delivering services to clients and learners. Application of program planning skills. Field experience.

**350 Management and Decision Making in the Family**  
Fall. 3(3-0) P:M: Completion of Tier I writing requirement. R: Open only to juniors or seniors.

Management for the realization of values and goals through decision making about resources in the family.

**405 Work and Family**  
Spring. 3(3-0) P:M: Completion of Tier I writing requirement. R: Open only to juniors or seniors or graduate students.

Historical perspectives on work and family. Effects of work on family members across life cycle, and employer and public policy response.

**411 Developmental Study of a Child**  
Fall, Spring. 2(1-3) P:M: (FCE 320 and FCE 320L) and completion of Tier I writing requirement. R: Open only to juniors or seniors or graduate students.

Ecological analysis of developmental behavior. Application of research findings to observations of a child.