Managerial Economics

**MECO 6303 (SYSM 6319)** Business Economics (3 semester credit hours) Foundations of the economic analysis of business problems, with special emphasis on the operation of markets and the macroeconomy. Prerequisite: **OPRE 6303** or equivalent. (3-0) S

**MECO 6311** Economics of Information Goods (3 semester credit hours) Analysis of the creation, production, pricing and distribution of products that are mainly informational in nature such as software, television, and web pages. Network effects, path dependence, the choice of standards, and the problems of public goods will be analyzed. Includes examination of the roles of patent and copyright laws in the creation of these goods and the impacts of unauthorized copying. Several case studies will be examined in detail. Prerequisite: (MECO 6303 or SYSM 6319) or instructor consent required. (3-0) T

**MECO 6312 (BUAN 6312)** Applied Econometrics and Time Series Analysis (3 semester credit hours) A survey of techniques used in analyzing cross-sectional, time series and panel data with special emphasis on time series methods. Prerequisite: **OPRE 6301** or **SYSM 6303** or **FIN 6306** or instructor consent required. (3-0) T

**MECO 6313** The Business of Entertainment (3 semester credit hours) This course examines the economic factors at work in the entertainment industry. The revenue generation models used by the producers of motion pictures, programming for television, radio, and cable TV, as well as videogames and book publishing will be studied in detail. The impact of digitization on costs, the role of copying and copyright, network effects, peer-to-peer file sharing, the labyrinth of property rights, and digital rights management will be examined through the lens of economics. (3-0) T

**MECO 6315** Approaches to Statistical Inference (3 semester credit hours) Theory and methods of statistical inference. Classical estimation theory, classical hypothesis testing, Bayesian and alternative approaches to statistical inference, general linear model with applications, and computational methods. Prerequisite: **OPRE 7310**. (3-0) Y

**MECO 6318** Energy Economics (3 semester credit hours) This course provides students with a comprehensive understanding of energy fundamentals through a detailed examination of the history, structure and functioning of modern energy markets. Topics include models of supply, demand, and transportation; market structure; game theoretic strategies and risk management; environmental issues; and policy and regulation. Prerequisite: **MECO 6303** or **SYSM 6319**. (3-0) R

**MECO 6320** Econometrics (3 semester credit hours) Estimation and testing of multivariate econometric models; sets of regression relationships; simultaneous equation systems; applications of methods and models in the analysis of business and economic data. (3-0) Y

**MECO 6345** Advanced Managerial Economics (3 semester credit hours) Advanced economic analysis of consumer theory, production theory, exchange, and market interactions. Managerial topics such as comparable worth, product standardization, environmental spillover effects, and imperfect competition. Prerequisites: **MECO 6303** or **SYSM 6319** and instructor consent required. (3-0) T

**MECO 6350** Game Theory (3 semester credit hours) This course introduces game theory, a set of analytical tools used to study the strategic interactions of individuals and institutions. The course covers static and dynamic games, both under complete and incomplete information. Applications include cooperation, price setting under imperfect competition, trust and reputation building, bargaining, auctions, signaling, social preferences and matching markets. (3-0) Y
MCO 6352 (HMGT 6324 and OB 6332 and SYSM 6313) Financial Negotiation and Dispute Resolution (3 semester credit hours) This course explores the theories, processes, and practical techniques of negotiation so that students can successfully negotiate and resolve disputes in a variety of situations including interpersonal, group, and international settings. Emphasis is placed on understanding influence and conflict resolution strategies; identifying interests, issues, and positions of the parties involved; analyzing co-negotiators, their negotiation styles, and the negotiation situations; and managing the dynamics associated with most negotiations. Practical skills are developed through the use of simulations and exercises. (3-0) Y

MCO 6355 (OPRE 6355) Experimental Management Sciences (3 semester credit hours) This course introduces the behavioral management science and operations management, with the goal of exposing students to behavioral research and gaining deeper understanding into how to enrich the standard management science paradigm with behavioral insights. The course also covers topics including an introduction to designing and conducting laboratory experiments, individual decision-making, supply chain contracts, and behavioral marked design. (3-0) R

MCO 6360 Topics in Industrial Organization (3 semester credit hours) Issues in current research on the operation of firms and markets. May be repeated for credit as topics vary (6 semester credit hours maximum). Instructor consent required. (3-0) T

MCO 6V99 Special Topics in Managerial Economics (1-4 semester credit hours) May be lecture, readings, or individualized study. May be repeated for credit as topics vary. Instructor consent required. ([1-4]-0) S

MCO 7311 Advanced Game Theory (3 semester credit hours) This course covers the Nash-equilibrium based solution concepts in Nash and Bayesian-Nash games, including sub-game perfection, forward and backward induction, trembling hand perfection, sequential equilibrium, and the intuitive criterion with applications to discrete and continuous action games. Prerequisites: MCO 6345 or equivalent and MCO 6350 or equivalent and instructor consent required. (3-0) Y

MCO 7312 Advanced Statistics and Probability (3 semester credit hours) This course introduces the probability theory, including the laws of large numbers and the central limit theorem, statistical inference, the properties of empirical estimators, and various methods of hypothesis testing. The course emphasizes deep understanding and theoretical foundations of the core topics of probability theory and statistical inference. Instructor consent required. (3-0) Y

MCO 7313 Applied Econometrics (3 semester credit hours) This course covers fundamental econometrics concepts using a software package to help students conduct data analysis while learning the various methods in applied econometrics. Instructor consent required. Prerequisite: MCO 7312, (3-0) Y

MCO 7320 Advanced Econometrics (3 semester credit hours) Rigorous treatment of traditional econometrics methods, and introduction to both modern time-series econometrics and advanced non-linear models. Prerequisite: MCO 6320, (3-0) T

MCO 7360 Topics in Econometrics (3 semester credit hours) Issues in current econometric research and practice. May be repeated for credit as topics vary (6 semester credit hours maximum). Instructor consent required. (3-0) T