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**. (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. Credit cannot be received for both courses, **FIN 6318** and **MECO 6312** and **BUAN 6312**. Prerequisite or Corequisite: **OPRE 6301** or **SYSM 6303** or **FIN 6306**. (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 and The Cost of Regulation (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 6340** Thinking Strategically (3 semester credit hours) This course examines managerial decisions that require consideration of how shareholders, competitors, customers, or employees are going to act or react. Using case studies from various business disciplines, students learn how to apply analytical frameworks from decision analysis, game theory, and psychology to make strategically savvy business decisions. Topics include reflexive thinking about a rival's response, how to make a commitment credible,
inducing cooperation, and recognizing the information in others' actions. Prerequisite: **MECO 6303**. (3-0) Y

**MCO 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. Instructor consent required. (3-0) T

**MCO 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 6351** Data Science Decision Making (3 semester credit hours) This course prepares students to extract knowledge from data utilizing various statistical and scientific methods. The course explains how to manipulate and analyze data and how to incorporate it into the business decision process. Topics include analyzing the decision to determine what data is needed, evaluating the accuracy of data, structuring a decision problem, and measuring risk and the overall trade-offs. Students will learn a systematic approach to analyze complex decisions and techniques for communicating decision problems and solutions to data savvy business managers. Prerequisite: **OPRE 6301**. (3-0) Y

**MCO 6352** (HMTG 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) Deal Making Strategies (3 semester credit hours) This course uses experiential hands-on learning to develop students' skills in effectively managing competitive and collaborative business situations. Students will learn: (1) Behavioral principles for effective bargaining. (2) The principles for designing, conducting, and participating in procurement auctions. (3) Methods for increasing cooperation and trust in competitive and collaborative settings. (4) Behavioral principles for designing trading. Each topic in the course will be centered around a set of hands-on business simulations and case studies, in which students will take on the role of market participants working through a business problem. (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 (1-6 semester credit hours) May be lecture, readings, or individualized study. May be repeated for credit as topics vary (6 semester credit hours maximum). Instructor consent required. ([1-6]-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: MECO 6345 or equivalent and MECO 6350 or equivalent and instructor consent required. (3-0) Y

MECO 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

MECO 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: MECO 7312. (3-0) Y

MECO 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: MECO 6320. (3-0) T

MECO 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