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 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 more than one of the following: **BUAN 6312** or **FIN 6318** or **MECO 6312**. Prerequisite or Corequisite: **OPRE 6301** or **OPRE 6359** or **BUAN 6359** or **FIN 6306** or **FIN 6307** or **SYSM 6303**. (3-0) T

**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

**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. 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

**MECO 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
MECO 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

MECO 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

MECO 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

MECO 6368 Advanced Comparative Institutions of Production and Distribution (3 semester credit hours) Economic history of civilization and history of political-economic-business ideas as they impact production and distribution systems. Related examination of the ideas and canonical texts in the development of classical liberalism and its critics. Critical analysis of the principles and methods of current mainstream economics in understanding the business world. (3-0) Y

MECO 6V99 Special Topics in Managerial Economics (1-6 semester credit hours) May be repeated for credit as topics vary (6 semester credit hours maximum). Instructor consent required. ([1-6]-0) S

MECO 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 nonlinear models. Prerequisite: MECO 6320. (3-0) T