

# Economics Courses

## (ECON)

ECON 690

**Workshop 1-3 u**

ECON 691

**Travel Study 3 u**

ECON 694

**Seminar 1-3 u**

ECON 696

**Special Studies 1-3 u**

ECON 703

**Statistics Foundations 2 u**

Introduction to descriptive statistics and basic statistical methods as applied to scientific problem solving and decision making. Topics covered include: descriptive statistics, elementary probability theory, theoretical distributions, inferences about a single population (sampling distributions, estimation, tests of hypothesis), and regression analysis.

ECON 704

**Economic Foundations 2 u**

A study of micro and macro economic tools of analysis. The functioning of a market economy in product and factor markets under alternative market structures. National income, fiscal policy, and the role of the money supply.

ECON 731

**Microeconomic Theory I 3 u**

This course presents advanced topics in microeconomic theory, including consumer behavior, the firm and market structure, equilibrium conditions, and welfare economics. Students will learn important techniques and theories including multivariate optimization, fundamentals of general equilibrium theory and game theory, which form the building blocks of modern microeconomics analysis.

Prerequisite: Entry into MS Economics Program.

ECON 732

**Macroeconomic Theory 3 u**

Macroeconomics is concerned with the behavior of aggregate economic variables such as GDP or unemployment and the relationship between these variables. This course provides a rigorous introduction

to the techniques and models required for these analyses, which form the building blocks of modern macroeconomics as practiced by researchers today.

Prerequisite: Entry into MS Economics Program.

## ECON 733

### **Econometrics I 3 u**

Econometrics I will focus on the estimation of models using various computer programs and understanding these models from an intuitive perspective. It introduces students to Regression methodology, focusing on assumptions of the framework, correcting for violations of the assumptions and examines the possibility of determining causality with observational data.

Prerequisite: Entry into MS Economics Program; ECON 245 or equivalent.

## ECON 736

### **Business Conditions Analysis 2 u**

A study of the macroeconomic structure and operations of the economic system. Analysis of fluctuations in national income, output, employment, prices and exchange rates and the implication of such changes for business decisions. Evaluation of the influence of monetary policy, fiscal policies, and other macroeconomic events on economic activity. Assessment of the various approaches and methodologies available for forecasting business conditions.

Prerequisite: ECON 704 or ECON 211 or ECON 202 or equivalent.

## ECON 737

### **Managerial Economics 2 u**

Applications of micro-economic theory to problems of formulating managerial decisions. Emphasis on economics as a science that facilitates decision making. Topics considered include optimization techniques, risk analysis and estimation of demand and costs of production, market structures and pricing practice, and antitrust economics. Integrates theory and practice.

Prerequisite: ECON 703 or ECON 245 or ECON 212 or equivalent and ECON 704 or ECON 201 or equivalent.

## ECON 738

### **Quantitative Methods in Economics 3 u**

This course will provide students with the mathematical methods and tools used in modern economic analysis. Linear algebra, multivariable calculus, and optimization theory are the main topics of the course and applications to simple economic models will be emphasized. Pre-requisites are entry into the MS Economics program.

Prerequisite: Entry into MS Economics Program

## ECON 740

### **Research Methods and Data Handling 3 u**

This course provides an introduction for students on how to conduct empirical and applied economic research. It focuses on the basic approaches of research design and methodology within the Economics discipline. It introduces students to data handling and management, and to a variety of software packages used in economic research.

Prerequisite: ECON 738 - Quantitative Methods in Economics; ECON 733 - Econometrics.

## ECON 741

### **Advanced Topics in Microeconomics 3 u**

This is the second course in the graduate microeconomics sequence. It extends the theories and techniques introduced in Econ 731. Specifically, the many different fields of study in microeconomics are introduced and explored such as: industrial organization, game theory and managerial, international, public, environmental, development, labor, health and urban economics.

Prerequisite: ECON 738 and ECON 731

## ECON 742

### **Advanced Topics in Macroeconomics 3 u**

This course covers advanced topics in macroeconomics. Its purpose is to expose students to recent developments in the study of business cycles, and the effect and conduct of macroeconomic policies in open economies.

Prerequisite: ECON 732

## ECON 743

### **ECONOMETRICS II 3 u**

Econometrics II introduces students to advanced techniques in modeling. In the course, students will study applied methods for model selection, implementation, and inference for cross sectional, time series, and panel data. The major emphasis will be on understanding these models from an intuitive perspective and estimating these using computer programs.

Prerequisite: ECON 733 - Econometrics I and ECON 738 - Quantitative Methods in Economics

## ECON 745

### **Economics of Health Care 3 u**

Economics of Health Care is concerned with the provision and distribution of health care across the country and the allocation of resources within the health care sector of the economy. Various measures will be examined to establish the impact of health care on individual, national, and international economic policy concerns.

Prerequisite: Graduate standing or the consent of the instructor.

## ECON 747

### **GAME THEORY 3 u**

Game Theory provides a formal language for the description of games and offers a certain amount of guidance on their solution, i.e., a prediction or a rationalization of their outcome. This course emphasizes tools, techniques, and applications of non-cooperative game theory. The course is devoted to study different types of games, including static games, dynamic games, repeated games, and Bayesian games.

Prerequisite: Econ 731

## ECON 749

### **Development Economics 3 u**

This course will give students an outlook into the field of Development Economics. Topics covered include role of credit markets, agriculture, health and education, property rights and institutions in growth and development. On the empirical side, we will examine econometric techniques such as panel data, instrumental variables and randomized experiments, used in the field to establish causal relationships. Prerequisite: ECON 738 - Quantitative Methods and ECON 731 - Microeconomic Theory

## ECON 751

### **Economics of Regulation 3 u**

The rationale for government regulation and intervention in different situations. Antitrust policy. Several different models of regulation. The economic effects of regulation on public utilities, transportation, pollution control, and protection of consumers.

Prerequisite: ECON 704 or ECON 212 or ECON 201 or equivalent.

## ECON 752

### **Resource Economics 3 u**

Resource Economics provides an in-depth examination into the field of environmental and natural resource economics. It is designed to provide insight into economic aspects of a wide range of environmental issues such as optimal fishery and forestry management, energy provision, population dynamics, air and water pollution, climate change, and sustainability.

Prerequisite: Econ 738 and Econ 731 OR Econ 703, Econ 704 and Econ 737 OR Equivalent.

## ECON 757

### **Industrial Organization 3 u**

Industrial Organization is the study of imperfect competition. We will explain why imperfect competition is pervasive, discuss how to describe imperfectly competitive industries, consider alternative strategies in such industries, evaluate the implications for profitability and welfare, and assess the impacts of public policies on firm strategy and industry performance.

Prerequisite: Entry into MS Economics Program.

## ECON 758

### **Advanced International Economics 3 u**

A study of international trade and finance issues; multinational enterprises, international investments, currency problems, and balance of payments issues. Analyzes the structure and scope of world trade and international financial markets in developed and developing countries.

Prerequisite: ECON 704 or ECON 211 or ECON 202 and ECON 201 and ECON 212 or equivalent.

## ECON 760

### **ECONOMETRIC THEORY 3 u**

This course is intended for those students who want to develop a greater understanding of the underlying theory utilized in the first two econometric classes in our program. Key topics include investigating distributional properties and asymptotic theory.

Prerequisite: ECON 733 - Econometrics I and ECON 743: Econometrics II with a B- or higher.

## ECON 761

**Business and Economic Forecasting 3 u**

Techniques for operational business forecasting with emphasis on time-series methods. Topics covered include single and multi-equation regression models; trend analysis; smoothing techniques, decomposition methods; Box-Jenkins time series methods; evaluation of forecasts; and the integration of forecasting in the decision making process.

Prerequisite: ECON 703 or ECON 245 or equivalent.

**ECON 773****International Macroeconomics 3 u**

This course focuses on macroeconomic issues and policies in open economies and surveys selected current research topics in the field. Topics treated include the intertemporal approach to the current account, international financial integration, international and domestic asset markets, sovereign debt crises, business cycle synchronization and transmission of shocks.

Prerequisite: Econ 732.

**ECON 775****Monetary Economics 3 u**

This course focuses on monetary theory and policy. It surveys selected current research topics in the field. Topics studied include alternative models of money, the transmission mechanism of monetary policy, the persistence of inflation, and the conduct of monetary policy in a New Keynesian environment.

Prerequisite: ECON 738 - Quantitative Methods in Economics; ECON 732 - Macroeconomic Theory; Econ 733 - Econometrics I.

**ECON 789****Readings and Research in Economics 3 u**

Directed readings in current research and literature selected to apply to a contemporary economic field, problem or issue.

Prerequisite: Graduate standing and consent of instructor.

**ECON 790****Workshop 1-6 u****ECON 794****Seminar 1-3 u****ECON 796****Special Studies 1-3 u****ECON 798****Individual Studies 1-6 u****ECON 799****Thesis Research 1-6 u**

Students must complete a Thesis Proposal Form in the Graduate Studies Office before registering for this course.

Prerequisite: Graduate standing and 28 credits in undergraduate and graduate economics courses. Some of these may be taken concurrently with approval of adviser.