

Spring 2021 Economics Advanced Courses

ECON 402: American Economic History

 Survey of the history of the American Economy from the colonial era to present. Studies the features and development of the American economy and examines the watershed events that have transformed it over its history. *Prerequisites: ECON 202; ECON 302; MATH 220/221 or other Calculus course are required.*

**CRN 68917; Sect. A3; TR 11:00AM-12:20PM; AUD Foellinger
Professor I. Dilanni**

ECON 411: Public Sector Economics

 Economic analysis of government tax and expenditure policies; topics include public good and externality theory, public choice theory, income distribution, cost-benefit analysis, principles of taxation, tax incidence, economic effects and optimal structures of major taxes, and taxation in developing economies. *Prerequisites: ECON 302 or consent of instructor.*

**CRN 65788; Sect. A3; MW 11:00AM-12:20PM; Online
Professor B. Marx**

ECON 414: Urban Economics

 Analyzes the urban economy. Topics include: economic reasons for the existence of cities; the theory of urban spatial structure; the effects of taxation on housing decisions; the economics of freeway congestion; economic analysis of local public goods and services; economic analysis of rent control, slum policies and land-use controls. *Prerequisites: Econ 302.*

**CRN 52507; Sect. A3; TR 3:30PM-4:50PM; Online
Professor D. Albouy
CRN 65546; Sect. B3; TR 12:30PM-1:50PM; Online
Professor M. Guerra Junior**

ECON 418: Health Economics

 Introduction to the economics of the U.S. health care system. Analyzes the supply of and demand for health care, building upon models of consumer, producer, and insurer behavior. Covers public policy, including regulation and provision of services to the poor and elderly. Emphasizes empirical evidence on these topics. *Prerequisite: ECON 202; ECON 302; MATH 220/MATH 221 or other calculus course are required.*

**CRN 68918; Sect. A3; TR 11:00AM-12:20PM; Online
Professor B. Buckley
CRN 72215; Sect. B3; Arranged; Online
Grad Student G. Amorim**

ECON 420: International Economics

 Introduction to the theory of international trade and finance with selected application to current problems of trade policy, balance of payments adjustment, the international monetary system, and globalization issues. *Prerequisites: ECON 302 or equivalent, or consent of instructor; ECON 303 is recommended.*

**CRN 33600; Sect. A3; MW 9:30AM-10:50AM; THEAT LH
Grad Student M. Arango Isaza**

ECON 426: Monetary Economics and Policy

 Study of a variety of topics on money, banking, and financial markets. In particular, provides an introduction to money and its role in the economy, the bond market and interest rates, the stock market and other financial assets, exchange rates, banks and regulation of the banking industry, the money supply process and monetary policy. *Prerequisites: ECON 202; 303; & MATH 231. ECON 302 recommended; Prior exposure to financial markets encouraged.*

**CRN 69369; Sect. A3; MW 2:00PM-3:20PM; Online
Grad Student A. Grigoryan
CRN 72064; Sect. B3; TR 12:30-1:50PM; Online
Professor R. Zhao**

ECON 437: Game Theory

  Explores game theory and strategic decision-making. Game theory is the study of strategic interaction where one person's actions affect the actions of others. Introduces students to the tools for modeling and solving problems with strategic interaction. Will cover topics such as Nash equilibrium, dominance, voting, bargaining, auction, adverse selection, each of which have broad applications in economics, politics, psychology, & everyday life. *Prerequisites: ECON 202; ECON 302; MATH 220/221. ECON 203; MATH 231 are recommended.*

**CRN 69366; Sect. A3; TR 2:00PM-3:20PM; 100 Noyes Lab
Grad Student M. Arzumanyan**

ECON 440: Economics of Labor Markets

 Studies the microeconomic determinants of labor demand and supply, economic effects of unions, and macroeconomic labor market problems. *Prerequisite: ECON 302 or equivalent.*

**CRN 33610, Sect. A3; TR 2:00PM-3:20PM; Online
Professor M. Borgschulte
CRN 33612; Sect. B3; TR 3:30PM-4:50PM; Online
Professor M. Borgschulte**

ECON 447: Economics of the Workplace

 Application of economic theory to the relationship between workers and firms in the workplace. We will apply important economic concepts and models to issues including recruitment, personnel selection, employee training, managing turnover, job design, performance evaluation, and incentive compensation. *Prerequisites: ECON 202; ECON 302; MATH 220/221 or other Calculus course.*

**CRN 68922; Sect. A3; Arranged; Online
Professor Y. Sun**

ECON 448: Employee Compensation & Incentives

 Employee compensation is a critical tool for organizations to attract, retain, and motivate its employees. Students will be introduced to major principles in compensation design and examine the incentives embedded in various compensation systems. The topics include forms of pay, incentive theory, pay structure, pay-for-performance, and employee benefits. *Prerequisites: ECON 202; ECON 302; MATH 220/221 or other Calculus course.*

**CRN 68923; Sect. A3; Arranged; Online
Professor Y. Sun**

ECON 450: Development Economics

 Analyzes the economic problems associated with newly developing nations; emphasizes their economic structures, their factor scarcities, and their programs for development. Not open for graduate credit to graduate candidates in economics. *Prerequisite: ECON 102 and ECON 103 or equivalent. ECON 302 strongly recommended.*

**CRN 65865; Sect. A3; TR 11:00AM-12:20PM; Online
Professor R. Akresh**

ECON 451: Program Evaluation in Developing

Econ

  Advanced economics course on microeconomic issues in developing countries with particular attention to empirical analyses and methodologies to address fundamental theoretical and policy relevant questions. Focus is on topics within health and education, although papers may cover other topics. An original empirical research paper is required, applying ideas and concepts covered in class. Class alternates between lectures (discussing new ideas or concepts and assigned readings) and lab (applying concepts to actual data using Stata). *Prerequisite: ECON 203 and ECON 302 or equivalents. Completion of campus Composition I general education requirement. Junior Standing Required.*

**CRN 66926; Sect. A3; TR 11:00AM-12:20PM; 70B WH
Professor R. Thornton**

ECON 455: Econ of Poverty Alleviation in Developing Countries

 This course examines which policies are effective for alleviating poverty, which are not, and why. The course will have a strong methodological and analytical component, focus on why interventions and policies work, and how to establish evidence on the effectiveness of specific interventions and policies. *Prerequisite: ECON 202; ECON 302; MATH 220/MATH 221 or other Calculus course are required.*

**CRN 68908; Sect. A3; MW 12:30PM-1:50PM; Online
Professor A. Osman**

ECON 471: Intro to Applied Econometrics

 Introduction to specification, estimation, prediction and evaluation of econometric models, emphasizing the interplay between statistical theory and economic applications. *Prerequisites: ECON 203 or equivalent; ECON 302 or ECON 303.*

**CRN 33635; Sect. A3; TR 9:30AM-10:50AM; Online
CRN 65791; Sect. B3; Arranged; Online
Professor H. Arvin-Rad**

ECON 472: Financial Econometrics

 Examines the econometric modeling applied to empirical and computational finance. Explains the empirical properties of financial data as well as the statistical models behind these stylized facts from the data. Explains the statistics and time series concepts that will be useful to understand financial market dynamics, and investigates some popular econometric models and estimation methods. *Prerequisite: ECON 203; ECON 302; MATH 220/MATH 221 are required. MATH 231; ECON 471 are recommended.*

**CRN 68911; Sect. A3; MW 9:30AM-10:50AM; Online
Professor J. Lee**

Key for Course Area(s) of Focus:

 Microeconomics  Macroeconomics
 Econometrics/Quantitative Economics

ECON 474: Econometrics of Policy Evaluation

 Develops the basic tools to understand and use modern econometric methods for estimating and making inference of causal effects. The topics include randomized experiments, natural experiments, matching methods, instrumental variables, and regression discontinuity. Focuses on topics which are relevant for policy problems. *Prerequisites:* ECON 203; ECON 302; MATH 220/221. MATH 231; ECON 471 are recommended.

CRN 68915; Sect. A3; TR 9:30AM-10:50AM; Online
Professor E. Chung

ECON 475: Economic Forecasting

 Overview of modern, quantitative, statistical and econometric methods for forecasting and evaluating forecasts. Topics include linear regressions; modeling and forecasting trends and seasonality; characterizing and forecasting cycles; MA, AR, and ARMA models; forecasting with regressions; evaluating and combining forecasts. Advanced topics include unit roots, stochastic trends, ARIMA models, and smoothing will be covered as time permits. *Prerequisites:* ECON 203; ECON 302; MATH 220/221. MATH 231 is recommended.

CRN 68921; Sect. A3; MW 12:30PM-1:50PM; Online
Professor X. Sie
CRN 69334; Sect. B3; TR 12:30PM-1:50PM; 112 GH
Grad Student C. Philipps

ECON 480: Industrial Comp and Monopoly

 Analyzes the ways firms and markets are organized, how they interact, outcomes of various types of firm behavior and performance of markets, and causes and types of market failure. Particular emphasis on the contribution of game theory as the equilibrium concept in oligopoly settings. *Prerequisite:* ECON 302.

CRN 65782; Sect. A3; TR 11:00AM-12:20PM; Online
Professor A. Toossi

ECON 483: Econ of Innovation and Tech

 Examines the economic factors shaping innovation and technical change since the industrial revolution with emphasis on the economic relationship between science and technology and the role of government in technical change. *Prerequisite:* ECON 102 or equivalent; ECON 302 or consent of instructor.

CRN 43680; Sect. A3; MW 9:30AM-10:50AM; Online
Professor J. Lemus Encalada

ECON 484: Law and Economics

 Applications of economic theory to problems and issues in both civil and criminal law and the effect of legal rules on the allocation of resources; includes property rights, liability and negligence assignment, the use of administrative and common law to mitigate market failure, and the logic of private versus public law enforcement. *Prerequisites:* ECON 302 or equivalent.

CRN 33650; Sect. A3; Arranged; Online
Professor C. Schultz

ECON 490: Consumer & Investor Protection

 Course Description Coming Soon!

CRN 61881; Sect. A3; TR 12:30PM-1:50PM; Online
Professor M. Perry

ECON 490: Brazilian Multinat'l Companies

 The objective of this course is to explore the participation of Brazilian multinationals in the economic development of Brazil between 1970 until 2018. The course is about Multilatinas, companies from Latin American countries that have entered the international market. After analyzing the theories, the stages of the internationalization process of Brazilian companies will be presented, whose main expansion started in the 1970s and 1980s, but intensified in the first decades of the 21st century. Finally, cases of Brazilian companies that have gone international will be presented.

CRN 67468; Sect. B3; TR 9:30AM-10:50AM; Online
Professor A. Dalla Costa

ECON 490: Numerical Methods in Economics

 Learn to combine the computational power of open source platforms and the inferential power of econometric methods to construct large scale datasets and do economic analysis on them. An intermediate knowledge of statistical and econometrics methods is required. Part 1: Students will construct large datasets from publicly available administrative healthcare, public health, and corporate finance data. Part 2: Students will apply standard econometric methods to these datasets. Students will also learn to apply some of the newly developed classification methods, such as random forests, and neural networks.

CRN 64032; Sect. C3; MW 2:00PM-3:20PM; Online
Grad Student M. Zare

ECON 490: International Finance

 This course seeks to introduce international finance concepts and models and discuss their implications on financial stability, economic growth and social outcomes in open economies. Students will be encouraged to use their analytical skills to critically assess policy measures in the international finance arena and formulate sound policy recommendations themselves. The course has a clearly empirical focus, and descriptive and econometric evidence from both developed countries and developing countries will be discussed throughout the classes, in many cases to defy common knowledge in policy circles. In addition, current events will be used as a trigger for the application of ideas and/or data introduced in class.

CRN 64022; Sect. D3; MW 11:00AM-12:20PM; Online
Professor G. Howard

ECON 490: Applied Machine Learning

 This introductory course gives an overview of different concepts, techniques, and algorithms in machine learning and their applications in economics. We begin with topics such as classification, linear and non-linear regressions and end with more recent topics such as boosting, support vector machines, and Neural networks as time allows. This course will give students the basic knowledge behind these machine learning methods and the ability to utilize them in an economic setting. Students will be led and mentored to develop and solve an economic problem with machine learning methods introduced during the course. *Prerequisite:* ECON 203 & 302, MATH 220/221; *Required:* ECON 471 or *Recommended:* students have existing Econometrics knowledge.

CRN 57409; Sect. E3; TR 2:00PM-3:20PM; Online
Grad Student J. Wade

ECON 490: Economics of Coordination

 In any institution based on the decentralized decision making of agents who follow their own goals, a fundamental question is how to structure interactions between them so that they are free to make their own decisions while avoiding outcomes that none would have chosen. The coordination failure occurs when the individuals find the aggregate effect of the decentralized decision making to be undesirable. In this course we discuss the types and causes of coordination problems, and using core concepts of economics and game theory will develop simple models to shed light on coordination problems in different markets and how institutions are developed to overcome them.

CRN 62266; Sect. F3; TR 2:00PM-3:20PM; Online
Professor A. Toossi

ECON 490: Economic Growth

 The course is designed to inspect some fundamental questions in the world economy- What are the primary factors driving the per capita GDP growth of any particular country? What explains the convergence or divergence patterns of growth rates across nations? Scholars have proposed different theories to address these concerns and we will explore some of them. Firstlv, we examine long run growth determined by exogenous factors, secondlv, we discuss endogenous growth by looking at technical factors and role of human capital, thirdlv we delve deeper by considering population dynamics and its implications, fourthlv we look at more recent theories emphasizing the role of institutions and finally we evaluate all the theories together. The objective of the course is to enable students to apply the knowledge of macroeconomic theory and mathematical tools to address issues in growth. *Prerequisites:* ECON 302 & 303. *Recommended:* Basic knowledge of any statistical software. R/Excel/ Stata may be used in a few classes.

CRN 70381; Sect. G3; MW 11:00AM-12:20PM; Online
Grad Student P. Ghosh

ECON 490: Predictive Analysis

 This course develops analytical tools to employ economic modeling and data to make better strategic decisions. The objective of this course is to foster data-driven critical-thinking skills through econometric analyses and statistical interpretation.

CRN 70371; Sect.H3; MW 2:00PM-3:20PM; Online
Professor R. Armendariz Buau

ECON 490: Applied Macroeconometrics

 Course Description Coming Soon

CRN 59299; Sect. I3; TR 11:00AM-12:20PM; Online
Professor P. Amir Ahmadi

ECON 490: Nonlinear Econometric Models

 Duration analysis is used to address a wide range of questions relevant for policy organizations, central banks, the financial sector, and industry generally. Examples of these questions include: what is the probability that an individual will exit unemployment this week, given he has been unemployed for the past eight weeks; what is the probability that an individual defaults on their mortgage this month given they have not defaulted for the past 12 months; what is the probability that a firm adopts a new technology this year conditional on not having adopted for the past 3 years, and how does this depend on the firm's market share. The goal of this course is to develop the tools to understand, estimate, and interpret duration analysis models—statistical models used to analyze duration data. Students will gain practical experience organizing data and writing code for statistical software to estimate these models and better understand economic phenomena. *Prerequisites: ECON 302 or 303, and ECON 471.*

CRN 59202; Sect. K3; MW 8:00AM-9:20AM; Online
Professor R. Weinstein

Helpful Links:

Courses & Registration:

<https://economics.illinois.edu/academics/courses-and-registration>

Course Syllabi:

<http://go.economics.illinois.edu/syllabi>

Spring 2021 Restriction Information:

<https://go.economics.illinois.edu/Spring2021Restrictions>