

Spring 2023 Economics Advanced Courses

ECON 402: American Economic History

  Survey of the history of the American Economy from the colonial era to the 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 courses are required.

CRN 68917; Sect. A3; TR 11:00AM-12:20PM; 108 Bevier Hall
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 65780; Sect. A3; MW 9:30AM-10:50AM; 317 DKH
Grad Student G. Marques de Amorim

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; economics 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;
156 Henry Administration Building
Professor D. Albouy

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. **Prerequisites:** ECON 202; ECON 302; MATH 220/MATH 221 or other calculus course are required.

CRN 68918; Sect. A3; TR 12:30PM-1:50PM;
161 Noyes Lab
Professor B. Buckley

ECON 425: Macroeconomic Policy

  Analyzes current macroeconomic policy issues, problems, and techniques; discusses various policy techniques including monetary, fiscal, income, and exchange rate policies, and their effectiveness for treating inflation, unemployment, productivity, resource, and exchange rate problems. May emphasize current issues in developed economies or in emerging market economies. Credit is not given for ECON 462 and ECON 425. **Prerequisites:** ECON 203; ECON 302; ECON 303; MATH 220 or MATH 221 are required. MATH 231 is recommended. Prior exposure to financial markets is encouraged.

CRN 74753; Sect. A3; MW 12:30PM-1:50PM;
124 Burrill Hall
Grad Student H. Martinez Garcia

ECON 426: Monetary Economics and Policy

 Study of a variety of topics on money, banking, and financial markets. In particular, introduces 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 is recommended; Prior exposure to financial markets is encouraged.

CRN 69369; Sect. A3; MW 2:00PM-3:20PM; W109 Turner Hall
Instructor Pending

ECON 436: Economics of Coordination

 Builds on theories and applications of intermediate microeconomics. Topics covered include the importance of models, the basic principles and concepts of economics, game theory and evolutionary game theory, the role of markets and government and the role of other institutions in general, the role of information, competition, the problems of collective action, and coordination problems. **Prerequisite:** ECON 302; MATH 220/ MATH 221 or Calculus I equivalent.

CRN 72390; Sect. A3; TR 9:30AM-10:50AM;
106B1 Engineering Hall
Professor A. Toossi

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, and adverse selection, each of which has 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; MW 11:00AM-12:20PM;
Location Pending
Professor R. Armendariz Buau

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; MW 11:00AM-12:20PM; Online
Grad Student A. Arvind
CRN 33612; Sect. B3; TR 9:30AM-10:50AM;
W109 Turner Hall
CRN 74557; Sect. C3; TR 2:00PM-3:20PM;
217 Noyes Lab
Professor M. Borgschulze

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 courses.

CRN 68922; Sect. A3; MW 9:30AM-10:50AM;
106B8 Engineering Hall
Professor Y. Sun

ECON 448: Employee Compensation & Incentives

 Employee compensation is a critical tool for organizations to attract, retain, and motivate their 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 courses.

CRN 68923; Sect. A3; TR 12:30PM-1:50PM;
2233 Everitt Lab
Professor Y. Sun

ECON 450: Development Economics

 Analyzes the economic problems associated with newly developing nations; emphasize 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 is strongly recommended.

CRN 65865; Sect. A3; MW 9:30AM-10:50AM;
2 Education Building
Professor R. Akresh

ECON 460: Financial Economics

  Study of a variety of financial economics topics. Introduces basic financial products (stocks, bonds, futures, options, and other derivatives), asset pricing theory including capital asset pricing model (CAPM), arbitrage pricing theory (APT), financial institutions and the organization of financial markets, and some topics on the financial crisis and monetary policy. **Prerequisite:** ECON 202; ECON 302; MATH 220/MATH 221 or other Calculus courses.

CRN 69371; Sect. A3; MW 8:00AM-9:20AM; 123 DKH
Professor J. Lee

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 65791; Sect. A3; MW 11:00AM-12:20PM; 311 Greg Hall
Grad Student D. Tabak
CRN 33635; Sect. B3; MW 3:30PM-4:50PM; 1000 Lincoln Hall
Professor J. Shea

Key for Course Area(s) of Focus:

 Microeconomics  Macroeconomics
 Econometrics/Quantitative
Economics

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. **Prerequisites:** 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; 123 DKH
Professor J. Lee**

ECON 474: Econometrics of Policy Evaluation

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

**CRN 73403; Sect. A3; TR 9:30AM-10:50AM; 163 Noyes Lab
Grad Student J. Oolman**

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 including 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; TR 9:30PM-10:50AM; 123 DKH
Professor S. Xie**

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. 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; 123 DKH
**CRN 52446; Sect. B3; TR 1:30PM-4:20PM; 212 DKH
Professor A. Toossi
** 2nd 8-Week Course begins 3/20/23**

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; include 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; TR 9:30AM-10:50AM; 215B DKH
Professor C. Schultz**

ECON 490: Gender & Development

 Focuses on the role of gender economics in developing countries. A variety of topics in the intersection of gender economics and development economics will be covered, including gender inequality, women's empowerment, household dynamics, the role of government, poverty cycles, violence, and the interaction of race and gender dynamics. The course will primarily focus on the roles and circumstances of women in developing countries and how inequalities between men and women originated and continue to impact outcomes today. In addition to learning the relevant theory, assigned readings will cover recent research in each of the main topic areas. Students will read papers related to each of these topics and will write their own research paper on a topic and country of their choice. **Prerequisite:** ECON 202; ECON 302 or ECON 303; MATH 220 or MATH 221 or other Calculus courses.

**CRN 70387; Sect. A3; TR 3:30PM-4:50PM; 317 Greg Hall
Grad Student A. Stocker**

ECON 490: Valuation of Nonmarket Goods

 How much should a pianist pay for their hand insurance? Or a mining company for damages to an ecosystem? The course explores this type of question through the most common methods for the valuation of non-market goods and services. These are used often by government agencies, attorneys, and judges calculating damages to the environment or health, insurance companies, and all branches of economics which need to assign values to goods and services that are not traded in markets. Topics include stated preferences, travel cost methods, and the hedonic method, among others. By the end of the course, the student will be familiar with the most common evaluation methods and will be able to apply and modify them for new contexts. **Prerequisite:** ECON 202; ECON 302 or ECON 303; MATH 220 or MATH 221 or other Calculus courses.

**CRN 64175; Sect. B3; MW 2:00PM-3:20PM; 108 DKH
Grad Student F. Cenerini**

ECON 490: Behavioral Economics

 This course will focus on the intersection of Behavioral and Experimental economics using field experiments, lab experiments, and tests of a theory to answer policy and social issue questions. **Prerequisite:** ECON 202; ECON 302 or ECON 303; MATH 220 or MATH 221 or other Calculus courses.

**CRN 54975; Sect. C3; MW 12:30PM-1:50PM; 108 Bevier
Grad Student S. Bhardwaj**

ECON 490: Tech & the Future of Jobs

 This course will cover key techniques in applied econometric research, with a focus on causal inference. Emphasis will be placed on questions related to policy and program evaluation. Techniques covered will include experiments, regression and matching, instrumental variables, difference-in-differences, synthetic control, regression discontinuity, and analysis of high-dimensional datasets. We will discuss the properties of each of these techniques and illustrate them using examples from health policy, education policy, workforce development programs, environmental and labor market regulations, and economic development programs. Students will gain experience applying the techniques to estimate the causal impacts of different policies using real-data sets. Students will finish the course by proposing their own program evaluation. **Prerequisite:** ECON 202; ECON 302 or ECON 303; MATH 220 or MATH 221 or other Calculus courses.

**CRN 67468; Sect. D3; MW 11:00AM-12:20PM;
1090 Lincoln Hall
Professor A. Garin**

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 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. Firstly, we examine long-run growth determined by exogenous factors, secondly, we discuss endogenous growth by looking at technical factors and the role of human capital, thirdly we delve deeper by considering population dynamics and its implications, fourthly 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.* **Prerequisite:** ECON 202; ECON 302 or ECON 303; MATH 220 or MATH 221 or other Calculus courses.

**CRN 70384; Sect. E3; MW 11:00AM-12:20PM;
1092 Lincoln Hall
Professor J. Vazquez**

ECON 491: Applied Machine Learning

 Students will gain exposure to a variety of machine-learning approaches for supervised and unsupervised learning. Topics include regularized approaches like lasso and ridge regression, trees, boosting, support vector machines, cluster analysis, and predictive assessment using cross-validation. Emphasis is given on applications with the use of a programming language like R or Python. **Prerequisite:** ECON 203 & 302, MATH 220/221, or Calculus I equivalent.

**CRN 74775; Sect. A3; TR 2:00PM-3:20PM; 123 DKH
CRN 74773; Sect. B3; TR 12:30PM-1:50PM; 123 DKH
Professor Y. Bilias**

 Micro

 Macro

 Econometrics/Quant.

Helpful Links:

Courses & Registration:

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

Course Syllabi:

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

Spring 2023 Restriction Information:
<https://go.economics.illinois.edu/Spring2023Restriction>