Spring 2024 Economics Advanced Courses

ILLINOIS ECONOMICS
undergraduate studies

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 course are required.*

CRN: 68917; Sect. A3; 215 David Kinley Hall

Professor I. Delani

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.

Prerequisite: *ECON 302 or consent of instructor.*

CRN: 65788; Sect. A3; 123 David Kinley Hall

Professor D. Albouy

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.

Prerequisite: *ECON 302.*

CRN: 52507; Sect. A3; 123 David Kinley Hall

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 or MATH 221 or other calculus course are required.*

CRN: 68918; Sect. A3; 119 David Kinley Hall

Professor B. Buckley

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: 33599; Sect. A3; 125 David Kinley Hall

Professor P. Dziuba

ECON 422: International Macroeconomics

(🌐) International macroeconomics and financial crises. Topics include balance of payments, exchange rates, business cycle risk, currency unions, and safe assets. Emphasis on understanding different types of financial crises from a positive and normative perspective. **Prerequisites:** *ECON 202 or introductory statistics equivalent, ECON 303, MATH 220/MATH 221 or Calculus I equivalent.*

CRN: 75665; Sect. A3; 119 David Kinley Hall

Professor G. Howard

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 financial crisis and monetary policy.

Prerequisites: *ECON 202; ECON 302; MATH 220/MATH 221 or other Calculus course.*

CRN: 69371; Sect. A3; 215 David Kinley Hall

PhD Student M. Cho

Key for Course Area(s) of Focus

($) **Microeconomics**   (🌐) **Macroeconomics**

(📊) **Econometrics/Quantitative Economics**

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 assests, exchange rates, banks and regulation of the banking industry, the money supply process and monetary policy. **Prerequisites:** *ECON 202; ECON 303; MATH 231 are required. ECON 302 is recommended; Prior exposure to financial markets is also encouraged.*

CRN: 69369; Sect. A3; 333 Armory

Professor R. Bebczuk

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.

Prerequisites: *ECON 302; MATH 220/ MATH 221 or Calculus I equivalent.*

CRN: 72390; Sect. A3; 312 David Kinley 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, adverse selection, each of which have broad applications in economics, politics, psychology, and everyday life.

Prerequisites: *ECON 202; ECON 302; MATH 220/MATH 221 are required. ECON 203; MATH 231 are recommended.*

CRN: 69366; Sect. A3; 432 Armory

Professor R. Armendariz Buaun

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: 33612; Sect. A3; W109 Turner Hall

CRN: 74557; Sect. B3; 319 Gregory Hall

Professor M. Borgshulte

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/MATH 221 or other Calculus course.*

CRN: 68922; Sect. A3; 123 David Kinley Hall

Professor Y. Sun

ECON 448: Employee Compensation and Insentives

($) 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 will 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/ MATH 221 or other Calculus course.*

CRN: 68923; Sect. A3; 123 David Kinley Hall

Professor Y. Sun

ECON 456: Economic Development and Migration

($) (🌐) Topics include the inter-relationships between economic development and migration. After introducing the basic concepts of poverty and inequality - between as well as within countries - this course focuses on the role that migration and population growth play in the process of economic development. The causes of migration and its consequences are examined at national and international levels together with their policy implications, including those related to urbanization, brain drain, and labor market impacts of immigration. A range of migration forms is discussed, including international and internal migration, permanent and temporary migration, legal and illegal migration, as well as forced migration and refugees. **Prerequisites :** *ECON 202; ECON 302; MATH 220/221 or other Calculus course.*

CRN: 75714; Sect. A3; 108 David Kinley Hall

CRN: 75716; Sect. B3; 108 David Kinley Hall

Professor M. Kleemans

ECON 469: Economics of Risk

($) 📊 Exploration of economic decisions under uncertainty. Includes expected utility theory and non-expected utility theory; applications to individual decision problems in investment and insurance; general equilibrium in markets under uncertainty, including problems generated by asymmetric information; measurement of risk; the value of information obtained before a decision.
Prerequisites: *ECON 302 or equivalent; one of MATH 220 or MATH 221 or equivalent.*
CRN: 62226; Sect. A3; 125 David Kinley Hall
Professor P. Dziuba

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; 119 David Kinley Hall
Professor C. Agiakloglou

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/MATH 221 are required. MATH 231 is recommended.*
CRN: 68921; Sect. A3; 123 David Kinley Hall
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. Particular emphasis on the contribution of game theory as the equilibrium concept in oligopoly settings. **Prerequisite:** *ECON 302.*
CRN: 65782; Sect. A3; 215B David Kinley Hall
CRN: 52446; Sect. B3; 215B David Kinley Hall
Professor A. Toossi

ECON 480: 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.
Prerequisite: *ECON 302 or equivalent.*
CRN: 33650; Sect. A3; 125 David Kinley Hall
CRN: 46239; Sect. B3; 125 David Kinley Hall
Professor C. Shultz

ECON 490: Gender and Development Economics

($) This course 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. **Prerequisites:** *ECON 202; ECON 302 or ECON 303; MATH 220 or MATH 221 or other Calculus course.*
CRN: 70387; Sect. A3; 317 David Kinley Hall
PhD Student A. Stocker

ECON 490: Real Estate & Housing

($) **CRN: 70381; Sect. G3; Location Pending**
Professor M. Yi

ECON 491: Advanced Microeconomic Theory

📊 This ccourse covers the foundations of microeconomic theory, from Consumer and Producer theories to an introduction of General Equilirium **Prerequisite:** *Math 231.*
CRN: 76171; Sect. 03; 215 David Kinley Hall
Professor R. Armendariz Buaun

ECON 491: Time Series

📊 Modern time series analysis techniques for handling economic data which arises in a happenstance fashion through time and their application to specific economic problems.
CRN: 76132; Sect. A04; 119 David Kinley Hall
Professor C. Agiakloglou

ECON 490: Valuation of Non-Market 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 questions through the most common methods for 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 method, 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. **Prerequisites:** *ECON 202; ECON 302 or ECON 303; MATH 220 or MATH 221 or other Calculus course*
CRN: 64175; Sect. B3; Online
PhD Student F. Cenerini

ECON 490: Mechanism Design & Information

($) A homework assignment has four questions. Two students want to split the homework but do not know which questions the other prefers. Can they reach a fair division? In this course, we will learn how economists think about this question (and many others). Traditionally, economics has focused on the study of existing markets, but recently, economic theorists have been involved in designing markets for new products and redesigning poorly performing existing markets. Mechanism design is used to determine pricing policies, write labor contracts, design auctions, tax schemes, matching mechanisms, etc... We will approach these issues from a theoretical perspective and examine real-world applications. Examples will include how Google sells advertising space, how medical students are matched to residencies, and how governments auction natural resources. **Prerequisites:** *ECON 302, ECON 437, MATH 220/221*
CRN: 57211; Sect. C3; 131 Animal Sciences Laboratory
Professor T. Durandard

ECON 490: International Trade

🌐 This course is about the causes and consequences of the international trade of final goods, services, and production inputs. Throughout the course, we will cover the main topics related to international trade that are at the center of the public debate using rigorous economic models. We will discuss issues including the benefits and costs of trade, the effects of trade policies, such as tariffs and quotas, the role of international institutions such as the World Trade Organization; also questions such as what products are traded, who trades them. and at what quantities and prices are they sold. **Prerequisites:** *ECON 202; ECON 302 or ECON 303; MATH 220 or MATH 221 or other Calculus course.*
CRN: 70388; Sect. D3; 108 David Kinley Hall
PhD Student C. Wang

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. Firstly, we examine long run growth determined by exogenous factors, secondly, we discuss endogenous growth by looking at technical factors and 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. **Required Prerequisites:** *ECON 302 & 303.* **Recommended:** *Basic knowledge of any statistical software*
CRN: 70384; Sect. F3; 1090 Lincoln Hall
Professor J. Vazquez

ECON 491: Applied Machine Learning, Econ

📊 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. **Prerequisites:** *ECON 203; ECON 302; and MATH 220/221 or Calculus I equivalent.*
CRN: 74775; Sect. A3; 215 David Kinley Hall
CRN: 74773; Sect. B3; 215 David Kinley Hall
Professor Y. Bilias

ECON 491: Data Analyisis: Problem Solving

📊 Students in this course will work in groups of 4 to organize and analyze a data set, develop models, solve problems, and present results. Classes will alternate discussions about each step of the process with computer lab work. This class focuses on the process, rather than the results, of data analysis and problem solving. Participation and presentations will be part of the graded work. **Prerequisites:** *ECON 203; ECON 302; and MATH 220/221 or Calculus I equivalent; ECON 471 and familiarity with R or Python.*
CRN: 75725; Sect. A3; 219 David Kinley Hall
CRN: 74771; Sect. B3; 219 David Kinley Hall
Professor D. Alonso Fontes

ECON 490: International Labor Markets

🌐 This course provides an overview of labor markets in a number of countries that represent different stages of economic development, with an emphasis on labor market regulations. We will focus on the impact of various labor market regulations, including minimum wages, employment protections, collective bargaining rights, and social security laws, on various labor market outcomes (earnings, employment, productivity, and a country's overall economic growth). Students are expected to gain an in-depth understanding of the huge variations in labor market regulations around the world, and critically analyze its important impact on various labor market outcomes and a country's overall economic growth. **Prerequisites:** *ECON 202 & MATH 220 or equivalent.*
CRN: 70388; Sect. D3; 108 David Kinley Hall
Professor Y. Sun