# **Spring 2025 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 course are required.

> CRN: 68917 | Sect. A3 | 215 David Kinley Hall Professor I. Dilanni

#### **ECON 418: Health Economics**

(S) 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 or MATH 221 or other calculus course. 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: Prerequisite: 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 425: Macroeconomic Policy



Analyzes current macroeconomic policy issues, problems, and techniques; discusses various policy techniques including monetary, incomes, and exchange policies, rate effectiveness for treating inflation, unemployment, productivity, resource and exchange rate problems.

May emphasize current issues in developed economies or in emerging market economies. Prerequisite: 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 | 119 David Kinley Hall

Professor P. Elosegui

#### ECON 426: Monetary Economics and Policy



Study of a variety of topics on money, banking, and financial markets. In particular provides as inter-law in the control of t ular, 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. Prerequisite: 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: 69369 | Sect. A3 | 119 David Kinley Hall Professor P. Elosegui

#### 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 | 119 David Kinley Hall Professor T. Durandard

### 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.

> CRN: 33612 | Sect. A3 | 317 David Kinley Hall Professor M. Borgschulte CRN: 74557 | Sect. B3 | 108 Bevier Hall Professor H. Yoo

#### ECON 442: Women in the Economy

Applies economic models of the labor market and household organization to a wide range of important topics, including marriage, fertility, discrimination, and family policies to better understand both personal life choices and public policy problems. Prerequisites: ECON 203, ECON 302, MATH 220 or 221 or other calculus; completion of Composition I gen ed requirement.

> CRN: 76998 | Sect. A3 | 322 David Kinley Hall Professor E. Powers

#### 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 Caculus course.

CRN: 68922 | Sect. A3 | 123 David Kinley Hall Professor Y. Sun

#### ECON 448: Employee Compensation and 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 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 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 | 317 David Kinley Hall PhD Student M. Cho

#### 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 | 123 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 D. Creal

#### 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 | 123 David Kinley Hall Professor J. Lee

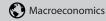
#### ECON 474: Econometrics of Policy Evaluation

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; MATH220/221.

CRN: 68915 | Sect. A3 | 123 David Kinley Hall Professor E. Chung

#### Key for Course Field(s)







III Econometrics/Quantiative Economics



400 Level Playlist https://go.illinois.edu/ Econ400LevelPlaylist

### 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: 69335 | Sect. A3 | 215 David Kinley Hall Professor F. Da Cunha Rodrigues CRN: 68921 | Sect. B3 | 215 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 | 206 David Kinley Hall Professor A. Toossi

#### 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. 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: 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). Prerequisites: ECON 202, ECON 303, MATH 231.

CRN: 57365 | Sect. A03 | 113 David Kinley Hall Professor Y. Sun

#### ECON 490: Gender & 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. Prerequisites: ECON 202; ECON 302 or ECON 303; MATH 220 or MATH 221 or other Calculus course.

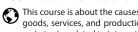
CRN: 70387 | Sect. A3 | 317 David Kinley Hall Professor A. Stocker

#### 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 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. Prerequisites: ECON 202; ECON 302 or ECON 303; MATH 220 or MATH 221 or other Calculus course.

> CRN: 64175 | Sect. B3 | 111 Gregory Hall Professor F. Cenerini

#### 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 | 317 David Kinley Hall PhD Student C. Wang

# ECON 491: Market failure and Remedies



Economists typically believe that unless there is a specific reason to expect a market to fail, it will likely work well. In this course, we will try to understand why most economics hold the initial presumption that markets work.

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, carbon taxation, etc.

Prerequisites: ECON 202; ECON 302 or ECON 303; MATH 220 or MATH 221 or other Calculus course.

CRN: 77062 | Sect. B3 | 119 David Kinley Hall Professor T. Durandard

#### 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.

Prerequisites: ECON 302 & 303. Recommended: Basic knowledge of any statistical software

CRN: 70384 | Sect. I3 | 1090 Lincoln Hall Professor J. Vazquez



CRN: 60458 | Sect. G3 | 209 David Kinley Hall Professor M. Perry

#### ECON 490: Corporate Law and Economics



This course first examines the legal origins of corporations and their rights to own This course first examines the legal origins of corporations and died. I.g. of the property and make contracts under state incorporation laws and the U.S. Constitution.

The course then explains the duties of corporate managers to their shareholders and illustrates these duties in the context of takeover defenses.

Finally, the course examines product liability in tort law and how the bankruptcy laws have been used to resolve large damage awards against corporations.

Prerequisite: ECON 202; ECON 302 or ECON 303; MATH 220 or MATH 221 or other Calculus course. CRN: 64019 | Sect. H3 | 113 David Kinley Hall

# Professor M. Perry



S Political Economy studies the relationship between politics and the economy, and how each influences the other.

The tools of microeconomics and macroeconomics are utilized to understand behaviour of rational and goal driven political actors

Prerequisite: ECON 202; ECON 302 or ECON 303; MATH 220 or MATH 221 or other Calculus course

> CRN: 62266 | Sect. A3 | 123 David Kinley Hall Professor T. Dubovyk

#### ECON 490: Applied Game Theory

Game theory is the study of mathematical models of strategic interaction among rational decision-makers. It explores how individuals or groups make decisions when their choices impact one another. This course presents the main ideas of game theory and shows how they can be used to understand economic and social phenomena Prerequisites: ECON 202; ECON 302 or ECON 303; MATH 220 or MATH 221 or other Cal-

> CRN: 67468 | Sect. N3 | 206 David Kinley Hall Professor A. Toossi

#### ECON 491: Intermediate Econometrics



culus course.

Coming Soon

CRN: 76171 | Sect. A3 | 125 David Kinley Hall

Professor M. Cunha Medeiros

#### ECON 491: Applied Machine Learning Econ

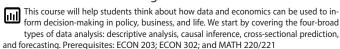


Students will gain exposure to a variety of machine learning approaches for supervised and unsupervised learning. Topics include regularized approaches like lasso and ridge regression, trees, boosting, support vector machines, cluster analysis, and predictive assessment using cross validation. Prerequisites: 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: Decision-Making

471 and familiarity with R or Python.



CRN: 76131 | Sect. AA3 | 119 David Kinley Hall Professor A. Bartik

#### 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. Prerequisites: ECON 203; ECON 302; and MATH 220/221 or Calculus I equivalent; ECON

> CRN: 75725 | Sect. C3 | 219 David Kinley Hall CRN: 74771 | Sect. CC3 | 219 David Kinley Hall Professor D. Alonso Fontes