Fall 2020 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. Prereauisites: ECON 202: ECON 302: MATH 220/221 or other Calculus course

CRN 70477; Sect. A3; TR 9:30AM-10:50AM; 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 66666; Sect. A3; MW 3:30PM-4:50PM; Online

Professor H. Arvin-Rad CRN 40298; Sect. C3; TR 11:00AM-12:20PM; Online Professor H. Arvin-Rad

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 54554; Sect B3. TR 12:30PM-1:50PM, Online Professor M. Junior

ECON 415: Environmental Economics

Application of economic theory to topical issues such as pollution, climate change, and the environmental impacts of overpopulation. Both marketbased and regulatory solutions to these problems are discussed. *Prerequisite: ECON 202; ECON 302; MATH 220/MATH 221 or other Calculus course.*

CRN 70758; Sect. A3; Online Professor B. Buckley

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 70554; Sect. A3; Online Grad Student G. Marques de 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

CRN 31786; Sect. A3; MW 9:30AM-10:50AM; 112 GH Grad Student M. Arango Isaza

ECON 425: Macroeconomic Policy

Analyzes current macroeconomic policy issues, problems, and techniques; discusses various policy techniques including monetary, fiscal, incomes, 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. *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 70552; Sect. A3; TR 2:00PM-3:20PM; Online Professor R. Zhao

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. Prereauisites: ECON 202: 303: & MATH 231. ECON 302 recommended; Prior exposure to financial markets encouraged

CRN 70775; Sec. A3; TR 9:30AM-10:50AM; Online Professor R. Zhao CRN 70777; Sect. B3; MW 2:00PM-3:20PM; Online Grad Student A. Grigoryan

ECON 437: Game TheoryExplores 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 70774; Sect. B3; TR 2:00PM-3:20PM; Online 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 36303, Sect. A1; Online

Grad Student A. Arvind CRN 66601; Sect. A3; TR 11:00AM-12:20PM; Online Grad Student A. Ranjan

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. **Prerequisite**: ECON 202; ECON 302; MATH 220 or 221 or other Calculus course are required.

CRN 70549; Sect. A3; MW 9:30AM-10:50AM; Online 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 220/221 or other* Calculus course.

CRN 70768; Sect. A3: 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 pav. incentive theory, pav structure, pay for-performance, and employee benefits. *Prerequisites: ECON 202*; ECON 302; MATH 220/221 or other Calculus course.

CRN 70770; Sect. A3: 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.* CAN 61807; Sect. A3; TR 11:00AM-12:20PM; Online 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 financial institutions and the organization of inflancial markets, and some topics on financial crisis and monetary policy. Prerequisites: ECON 202; ECON 302; MATH 220/MATH 221 or other Calculus course.

CRN 70812; Sect. A3; TR 9:30AM-10:50AM; Online Professor D. Cleeton

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 66620; Sect. A3; MW 9:30AM-10:50AM; Online CRN 66623; Sect. B3; MW 11:00AM-12:20PM; Online Professor H. Arvin-Rad

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 73026; Sect. B3; MW 2:00PM-3:20PM; 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 70826; Sect. A3; MW 12:30PM-1:50PM; Online CRN 70965; Sect. B3; MW 2:00PM-3:20PM; Online Grad Student C. Philipps

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 66593; Sect. A3; Online

Professor C. Schultz

ECON 490: Econ of the Digital Economy

This course analyzes firm strategies and public policy issues surrounding digital economy and related industries. The analysis applies economic tools and principles, including game theory, industrial organization, and information economics. Topics include: economics of information; economics of information goods and platforms; strategic pricing; search and the long tail; network effects and system competition; industry structure of digital markets.

CRN 63647; Sect. B3; MW 9:30AM-10:50AM; Online

Professor S. Hong

ECON 490: Tech and the Future of Jobs

This course examines how new technologies are changing the nature of and returns to work. We will investigate how the labor market has been impacted by computerization, the internet, automation, algorithmic management, the gig economy, outsourcing, and offshoring. We will study how these compare to technological change in the past and consider how policy might prepare for the

CRN 59653; Sect. D3; TR 9:30AM-10:50AM; Online Professor A. Garin

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; Recommended students have existing Econometrics knowledge

CRN 63643; Sect. E3; MW 9:30AM-10:50AM; Online Grad Student J. Wade

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 arowth 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. *Prerequisites*: ECON 302 & 303. Recommended: Basic knowledge of any statistical software. R/Excel/ Stata may be used in a few classes.

CRN 66602: Sect. G3: 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 72492; Sect.J3; Online Professor R. Armendariz Buaun

ECON 490: Economic Developmnt & Migration

This class deals with the inter-relationships between economic 850 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.
CRN 66622; Sect. L3; MW 12:30PM-1:50PM; Online
Professor M. Kleemans

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 59654; Sect. N3; Online Professor R. Bebczuk
CRN 66613: Sect. N33; MW 11:00AM-12:20PM; Online Professor R. Bebczuk

Helpful Links:

Courses & Registration:

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

Course Syllabi:

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

Fall 2019 Restriction Information: https://go.economics.illinois.edu/FallRestrictions

