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

 **CRN 68917; Sect. A3; TR 11:00AM-12:20PM; 123 DKH**

 **Professor** [**I. DiIanni**](http://www.economics.illinois.edu/people/IsaacDiIanni.aspx)

**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**](https://courses.illinois.edu/schedule/2017/fall/ECON/411) **65788; Sect. A3; TR 9:30AM-10:50AM; 215B DKH**

 **Professor B. Marx**

 **CRN 65780; Sect. B1; MW 3:30PM-4:450PM; 111 DKH**

 **Professor J. Giertz**

**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*](https://courses.illinois.edu/schedule/terms/ECON/202)*;* [*ECON 302*](https://courses.illinois.edu/schedule/terms/ECON/302)*;* [*MATH 220*](https://courses.illinois.edu/schedule/terms/MATH/220)*/*[*MATH 221*](https://courses.illinois.edu/schedule/terms/MATH/221) *or other calculus course are required.*

 **CRN 68918; Sect. A3; TR 11:00AM-12:20PM; 209 DKH**

 **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 33602**](https://courses.illinois.edu/schedule/2017/fall/ECON/450)**; Sect. A1; TR 11:00AM-12:20PM; 206 DKH**

 **CRN 33597; Sect. A2; TR 12:30PM-1:50PM: 111 DKH**

 **Grad Student L. Leite**

 **CRN 33600; Sect. A3; MW 9:30AM-10:50AM; 215B DKH**

 **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; Sec. A3; MW 9:30AM-10:50AM; 108 DKH**

 **Grad Student A. Grigoryan**

**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; MW 2:00PM-3:20PM; 119 DKH**

 **Grad Student B. Yang**

**CRN 69370; Sect. B3; TR 2:00PM-3:20PM; 123 DKH**

 **Grad Student D. Arga**

**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**](https://courses.illinois.edu/schedule/2017/fall/ECON/490) **68922; Sect. A3; MW 2:00PM-3:20PM; 123 DKH**

 **Professor** [**Y.**](http://www.economics.illinois.edu/people/aosman.aspx) **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**](https://courses.illinois.edu/schedule/2017/fall/ECON/490) **68923; Sect. A3; MW 3:30PM-4:50PM; 123 DKH**

 **ProfessorY. Sun**

**ECON 453: Economies Middle East & N. Africa**

****Study of the business and economic conditions in the Middle East and North Africa (MENA). Students are expected to expand their knowledge of microeconomic, macroeconomics, and economic development theories and to apply them to concrete cases in the MENA region. ***Prerequisite:*** ECON 202; ECON 302; MATH 220/MATH 221 or other Calculus course.

 **CRN 68919; Sect. A3; TR 2:00PM-3:20PM; 113 DKH**

 **Professor H. Esfahani**

**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; ECON 302 or ECON 303.*

 [**CRN**](https://courses.illinois.edu/schedule/2017/fall/ECON/471) **33635; Sect. A3; TR 11:00AM-12:20PM; 119 DKH**

 **CRN 65791; Sect. B3; TR 12:30PM- 1:50PM; 119 DKH**

 **CRN 65781; Sect. C3; TR 3:30PM-4:50PM; 119 DKH**

 **ProfessorH. Arvin-Rad**

**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. ***Prerequisite***: ECON 203; ECON 302; MATH 220/221. MATH 231; ECON 471 are recommended.

 **CRN 68915; Sect. A3; MW 3:30PM-4:50PM; 108 DKH**

 **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**](https://courses.illinois.edu/schedule/2017/fall/ECON/490) **69334; Sect. B3; TR 12:30PM-1:50PM; 215 DKH**

 **CRN 69335; Sect. C3; TR 2:00PM-3:20PM; 215 DKH**

 **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. B3; TR 9:30AM-10:50AM; 215 DKH**

 **CRN 33645; Sect. C3; TR 11:00AM-12:20PM; 215 DKH**

 **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.***Prerequisites:*** *ECON 302 or equivalent.*

 [**CRN**](https://courses.illinois.edu/schedule/2017/fall/ECON/484) **33650; Sect. A3; TR 11:00AM-12:20PM; 219 DKH**

 **Professor**[**C.**](http://illinois.edu/ds/detail?search_type=all&search=&from_result_list=true&skinId=0&userId=jkindt&sub=) **Schultz**

Key for Course Area(s) of Focus:

 **Microeconomics Macroeconomics**

 **Econometrics/Quantitative Economics**





**ECON 490: International Finance**

****Analysis of topics in international finance, including exchange rates, monetary policy in open economies, currency unions, and financial crises, from both a theoretical and empirical perspective. ***Prerequisites*:** *ECON 202; ECON 303*

 **CRN 64022; Sect. D3; MW 9:30AM-10:50AM; 123 DKH**

 **Professor G. Howard**

**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; 317 DKH**

 **Professor A. Toossi**

**ECON 490: Welfare, Income & Gov’t Role**

Social Welfare, Income Inequality, and the Role of Government. This course presents certain economic perspectives on concepts of distributive justice, inequality and social welfare; it also studies attempts at quantifying them. It goes on to examine, in light of the said objectives and the various resource and informational constraints the economy faces, the government’s role in designing redistributive tax and expenditure policies. In the process, it discusses economic consequences of these policies highlighting the trade-off between the society’s equity concerns and economic efficiency.

 **CRN 70372; Sect. FG3; TR 3:30PM-4:50PM; 215B DKH**

 **Professor F. Gahvari**

**ECON 490: International Trade**

****This is a course on the economic relations between countries, its main structure is divided in two main topics: the microeconomic fundamentals of trade and the macroeconomic dynamics of international trade and capital flows. The first part of the course will be dedicated to discussing the economic fundamentals of trade to answer questions like: What are the divers of international trade relations? Who wins with trade? This is done through a discussion of the main historical theories accompanied by the analysis of the microeconomics of trade. ***Prerequisites****: ECON 302. Recommended: MATH 231.*

 **CRN 64026; Sect. H3; MW 9:30AM-10:50AM; 209 DKH**

 **Grad Student V. Sant Anna**

**ECON 490: Applied Machine Learning in Econ**

This 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. ***Prerequisites:*** *ECON 203 & 302; MATH 220/221; RECOMMENDED: Econometrics knowledge (we will expect you to be comfortable with econometrics).*

 **CRN 57409; Sect. K3; TR 2:00PM-3:20PM; 209 DKH**

 **CRN 57365; Sect. L3; TR 3:30PM-4:50PM; 209 DKH**

 **Grad Student N. Khazra & A. Farhoodi**

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

 **CRN 70381; Sect. R3; TR 9:30AM-10:50AM; 113 DKH**

 **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.S3; MW 2:00PM-3:20PM; 215B DKH**

 **Professor R. Armendariz Buaun**

**ECON 490: Economics 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 64041; Sect. T3; MW 11:00AM-12:20PM; 215 DKH**

 **Professor S. Hong**

**ECON 490: Nonlinear Econometrics 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 & Econ 471.*

 **CRN 59202; Sect. Y3; MW 8:00AM-9:20AM; 70B WH**

 **Professor R. Weinstein**

**ECON 490: Int’l Environmental Policy**

This course explores the economic basis of environmental problems and examines alternative policies aimed at reducing environmental degradation, with a special focus on global environmental problems. International environmental issues need special attention due to the fact most pollution cannot be contained easily within political boundaries. Among the topics are the deficiencies in the market system and existing property-rights system that contribute to environmental problems, cases where public intervention offers the potential for improvement, cases amenable to market-based approaches, and the public-policy tools available to promote environmental goals.

 **CRN 70384; Sect. Z3; TR 9:30AM-10:50AM; 108 DKH**

 **Professor J. Vazquez**

**Helpful Links:**

**Courses & Registration:** [**https://economics.illinois.edu/academics/courses-and-registration**](https://economics.illinois.edu/academics/courses-and-registration)

**Course Syllabi:**

[**http://go.economics.illinois.edu/syllabi**](http://go.economics.illinois.edu/syllabi)

**Fall 2019 Restriction Information:** [**https://go.economics.illinois.edu/FallRestrictions**](https://go.economics.illinois.edu/FallRestrictions)

****

 **Micro Macro Econometrics/Quant.**