

THE KENNETH C. GRIFFIN DEPARTMENT OF ECONOMICS

Department Website: <http://economics.uchicago.edu>

Chair

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- Benjamin Brooks
- Leonardo Bursztyn
- David W. Galenson
- Mikhail Golosov
- Michael Greenstone
- Lars Peter Hansen
- James J. Heckman
- Ali Hortaçsu
- Greg Kaplan
- Michael Kremer
- John List
- Magne Mogstad
- Casey Mulligan
- Roger B. Myerson
- Derek A. Neal
- Philip J. Reny
- Esteban Rossi-Hansberg
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- Robert Shimer
- Nancy L. Stokey
- Alexander Torgovitsky
- Harald Uhlig
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- Manasi Deshpande
- Thibaut Lamadon
- Doron Ravid
- Evan Rose

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- Christina Brown
- Juanma Castro Vincenzi
- Anne Karing
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- Eric Richert
- Joseph Root
- Max Tabord-Meehan

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- Kotaro Yoshida
Assistant Senior Instructional Professor
- Min Sok Lee
Associate Instructional Professor
- Ayan Bhattacharya
- Ryan Fang
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- Fulya Ersoy
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- Joseph Hardwick
- Pablo Pena
- Murilo Ramos
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Emeritus Faculty

- Arnold C. Harberger
- Steven Levitt
- Kevin M. Murphy

Associate Professor, Social Sciences Division

- Rachel Glennerster
Associate Research Professor
- Juanna Schroeter Joensen
Assistant Research Professor
- Neele Balke

Chicago is a particularly innovative department of economics. The proportion of new ideas in economics that have emanated from or become associated with Chicago over the last forty years is astonishing. Any definition of the Chicago School would have to find room for the following ideas (in chronological order from the 1940s to the present): the economic theory of socialism, general equilibrium theory, general equilibrium models of foreign trade, simultaneous equation methods in econometrics, consumption as a function of permanent income, the economics of the household, the rationality of peasants in poor countries, the economics of education and other acquired skills (human capital), applied welfare economics, monetarism, sociological economics (entrepreneurship, racial discrimination, crime), the economics of invention and innovation, quantitative economic history, the economics of information, political economy (externalities, property rights, liability, contracts), the monetary approach to international finance, rational expectations in macroeconomics, and mechanism design. The unifying thread in all this is not political or ideological but methodological, the methodological conviction that economics is an incomparably powerful tool for understanding society.

The Kenneth C. Griffin Department of Economics offers a program of study leading to the Ph.D. degree. A general description of the program is given below. For a more detailed explanation of the program requirements, as well as complete course descriptions and faculty bios, see the information for current students on our website at: <https://economics.uchicago.edu/phd-program> (<https://economics.uchicago.edu/phd-program/>)

Prerequisites and Preparation for Graduate Study

Each autumn, the Department of Economics enrolls an entering class of 20-25 graduate students who come from many countries around the world and have been selected from a large and diverse group of applicants. Admission to graduate study requires a bachelor's degree (or equivalent). This degree need not be in economics, although some background in economics is certainly desirable. There are no formal course requirements for admission, but a strong background in mathematics is important. At the Ph.D. level, the study of economics requires an absolute minimum of one year of college calculus and a quarter (or semester) each of both matrix algebra and mathematical statistics (that is, statistics using calculus, as distinct from introductory statistics

for social science). Prospective students who lack this preparation and have remaining free time in their undergraduate schedules are urged to take these courses before the beginning graduate study.

Beyond these basic prerequisites, many of our applicants have taken other advanced mathematics courses, such as real analysis, have completed some graduate-level classes in economics or related fields, or have had some other significant exposure to research in economics. Many strong applicants have ranked at or near the top of their graduating class.

Admissions Process

Given the year-long sequence of courses, all new students must begin their study in the Autumn Quarter. The application process for admission and financial aid for Economics and all Social Sciences graduate programs is administered through the Divisional Office of the Dean of Students. The Application for Admission and Financial Aid, with instructions, deadlines, and department specific information is available online at <https://apply-ssd.uchicago.edu/apply/>. Most required supplemental material can be uploaded into the application.

Questions pertaining to admissions and aid should be directed to ssd-admissions@uchicago.edu.

All applicants are required to submit scores from the Graduate Record Examination (GRE) General Test. Foreign applicants whose native language is not English must provide evidence of English proficiency by submitting scores from either the Test of English as a Foreign Language (TOEFL) or the International English Language Testing System (IELTS). The current University minimum score requirements are provided with the application.

Criteria for Admissions

The Committee on Admissions takes account of a wide range of factors to evaluate each applicant: the previous educational record, letters of recommendation, writing sample, previous research experience, the applicant's scores on the GRE (General Test) and the TOEFL or IELTS, the compatibility of the applicant's research interests with the program strengths in the department, and any special factors that the applicant may bring to the committee's attention. The committee evaluates each applicant on the basis of all material available; no arbitrary cut-offs in terms of a student's grade point average or test scores are used. Applications must be complete for the January review, including scores from the GRE and TOEFL or IELTS if appropriate. These exams should be taken no later than November 1. In deciding when to register for the exams, applicants should particularly note our yearly cycle to assure that their applications receive full consideration.

Program of Study

The program of study for the Ph.D. degree in Economics includes courses and comprehensive examinations in the three "Core" subjects of Price Theory; the Theory of Income, Employment, and the Price Level; and Quantitative Methods. In addition to the Core, Ph.D. requirements include the demonstration of competence in two Specialized Fields of concentration, courses in three elective Fields for the General Distribution requirement, a Research Paper, the approval of a Thesis Proposal, and the completion of the Doctoral Thesis.

The usual load is three courses per quarter for two years; this permits the completion of nine courses during the regular academic year of three quarters. The comprehensive examination for the Core subjects is given in the Summer Quarter.

Ph.D. students may request permission to choose electives outside the Department of Economics for Field or General Distribution requirements. Satisfactory grades on course work done at the graduate level at another institution may also be used to satisfy part of the course requirements for General Distribution by petition to the Director of Graduate Studies.

With good preparation, students normally take five years to complete the Ph.D. Students who begin with the intention of obtaining the Ph.D. but who change their plans or fail to satisfy the Ph.D. requirements will in most cases be eligible for an M.A. degree.

The program of a typical Ph.D. student consists of the following sequence: In the first year, courses in price theory, the theory of income, and quantitative methods prepare the student for the Core examinations which are taken in the following summer. In the second year, courses and participations in workshops prepare the student for certification in two Specialized Fields; they also complete their General Distribution requirements and identify a Research Paper topic. In the third year, the student develops writing and research skills through the Required Research Paper Seminar. In the fourth year, the student participates in workshops, formulates a thesis topic, and presents a Thesis Proposal Seminar at which the faculty formally approves the topic and admits the student to candidacy. In the fifth and sixth years, the student completes their Doctoral Thesis and gives a Public Lecture.

Joint Ph.D. Program in Financial Economics

The joint Ph.D. program in Financial Economics was established in the 2006-07 academic year and is run jointly by the Kenneth C. Griffin Department of Economics in the Division of the Social Sciences and by the University of Chicago Booth School of Business (formerly the GSB). The aim of this program is to exploit the strengths of both sponsors in training Ph.D. students interested in financial economics. Core economics training

is valuable for students seeking to do research in financial economics, and advances in financial economics have important spillovers to other areas of economics. It has long been a tradition in the Department of Economics to feature core economics training for their Ph.D. students, and the Booth School has well-recognized excellence in finance. Students in the joint program benefit from broad sets of instructors and classmates in both the Economics Department and the Booth School. They also hold an official status and can utilize resources in both Economics and the Booth School.

Upon completion of this program, students will be awarded a Doctor of Philosophy degree in Economics and Finance jointly from the Division of the Social Sciences and the Booth School.

Program Elements

Students must satisfy the requirements for the Ph.D. degree in both programs. This is viable because of the considerable overlap in what the two programs expect of their students.

Admissions

Admission to the joint program requires admission to both the doctoral program in the Department of Economics and to the doctoral program in the Booth School, but interested parties need only apply to one or the other program. Students may enter the joint program at the beginning of their doctoral studies. Those seeking admission to the joint program should apply online to either the Ph.D. program in the Department of Economics or the Booth School.

Students enrolled in doctoral studies in either the Economics Department or the Booth School may apply to the joint program at any time within their first two years in residence. Such students will still have to meet all the requirements of both programs.

Enrollment and financial aid throughout a student's matriculation in the joint program will be administered by either the Division of the Social Sciences or the Booth School, as arranged by the two units. This designation will be for administrative purposes only and will not have programmatic implications. If a student's interests change, the Director of the Ph.D. program in the Booth School and the Dean of Students for the Social Sciences will facilitate transfers out of the joint program and into the doctoral program in Economics or Business.

ECONOMICS COURSES

ECON 30100. Price Theory I. 100 Units.

The course covers a variety of foundational topics in microeconomic theory. We begin with axiomatic decision theory, revealed preference, and the theory of social choice. This is followed by general equilibrium theory and competitive equilibrium. We will then delve into cooperative game theory and the core, with applications to exchange economies and matching theory. The final part of the course is an introduction to non-cooperative game theory, including normal form games, Bayesian games, extensive form games with incomplete information, and repeated games, with applications to oligopoly, auctions, and bargaining.

Instructor(s): Brooks, Benjamin Terms Offered: Autumn

ECON 30200. Price Theory II. 100 Units.

This course focuses on information economics, incentives and strategic settings with incomplete information. Topics include competitive markets with adverse selection, signaling, moral hazard, nonlinear pricing, strategic and informational incentive constraints, auctions, public goods, bilateral trade and optimal mechanism design.

Instructor(s): Reny, Philip Terms Offered: Winter

ECON 30300. Price Theory III. 100 Units.

This course focuses on information economics, incentives and strategic settings with incomplete information. Topics include competitive markets with adverse selection, signaling, moral hazard, nonlinear pricing, strategic and informational incentive constraints, auctions, public goods, bilateral trade and optimal mechanism design.

Instructor(s): Stole, Lars Terms Offered: Spring

ECON 30400. Introduction to Mathematical Methods In Economics. 000 Units.

This optional course for incoming graduate students meets in early September and introduces some basic mathematical concepts used in economic theory: a "briefing" of the math students will encounter in the Core classes. Emphasis is placed on problem-solving, but also on some fairly abstract math you might not see otherwise. Cooperative work is strongly encouraged.

Instructor(s): Staff Terms Offered: Summer

Prerequisite(s): Econ PhD students only

ECON 30450. Computational Methods for Economists. 100 Units.

Computational methods for economists provides PhD students with a comprehensive foundation in modern computational research by bridging the gap between basic coding and high-level scientific programming. Through hands-on, problem-set style exercises, the course covers three critical dimensions: essential development tools like Docker, VS Code, and Git; core programming paradigms including defensive programming and memory management; and advanced scientific applications such as automatic differentiation, gradient descent optimization, and parallelization. Students transition from Python-based workflows using PyTorch for moment-based estimation to high-performance Julia implementations for dynamic discrete choice models, ultimately learning how to deploy scalable workflows on high-performance computing (HPC) clusters.

Instructor(s): Lamadon, Thibaut Terms Offered: Summer

ECON 30540. The Economics of Contracts. 100 Units.

TBD

Equivalent Course(s): BUSN 33931

ECON 30590. Asset Pricing III. 100 Units.

TBD

Equivalent Course(s): BUSN 34905

ECON 30600. The Economics of Information. 100 Units.

Course Search (<https://intranet.chicagobooth.edu/pub/coursesearch/coursesearch/>)

Equivalent Course(s): BUSN 33911

ECON 30610. Advanced Topics in Mechanism and Information Design. 100 Units.

This course will cover advanced material in the theory of mechanism and information design. We will begin by covering classical topics in Bayesian mechanism design, including screening, bilateral trade, and auctions, after which we will discuss recent applications of these ideas for analyzing redistributive markets. We will then pivot to recent advances in the theory of information design, focusing on tools and approaches that interact with the design of incentives.

Instructor(s): Ravid, D Terms Offered: Spring

ECON 30680. Topics Information Economics. 100 Units.

The course will provide an overview of formal models of information and explore ways these models have been used to analyze topics in economics. Emphasis will be placed on recent developments in the field.

Instructor(s): Kamenica, Emir Terms Offered: Autumn

Equivalent Course(s): BUSN 33914

ECON 31000. Empirical Analysis I. 100 Units.

This course provides a rigorous introduction to some basic methods in econometrics, including the ordinary least squares estimator, (linear) instrumental variable methods, and maximum likelihood methods. We begin in the first part of the course by developing the requisite large-sample (asymptotic) theory. Along the way, we will illustrate the use of the asymptotic theory for estimation and inference. In the second part of the course, we will introduce the linear regression model and study the OLS estimator and IV methods for this model. A distinguishing feature of this part of course is an emphasis on different interpretations of the linear regression model, i.e., descriptive versus structural (causal) uses of linear regression. In the final part of the course, we will study ML estimators. We will apply the theory to some limited dependent variable models.

Instructor(s): Torgovitsky, Alexander Terms Offered: Autumn

ECON 31100. Empirical Analysis II. 100 Units.

The course will review some of the classical methods you were introduced to in the previous quarter and give examples of their use in applied microeconomic research. Our focus will be on using statistical methods to understand economic questions and data, and on identifying and estimating the parameters of economic models. The methods we will build on include regression techniques, maximum likelihood, method of moments estimators, as well as some non-parametric methods. Lectures and homework assignments will seek to build proficiency in the correct application of these methods to economic research questions.

Instructor(s): Bonhomme, Stephane Terms Offered: Winter

ECON 31200. Empirical Analysis III. 100 Units.

This course studies methods pertinent to economic dynamics and time series, developing stochastic process tools to represent dynamic equilibrium models. We will discuss the Generalized Method of Moments from a time series perspective and introduces Bayesian inference and robust counterparts from a decision theoretic perspective, then provides practical approaches such as exponential tilting and Markov Chain Monte Carlo methods. The course explores some hidden state Markov models including the Kalman Filter and discrete state counterparts. Univariate as well as multivariate linear time series models will be developed, emphasizing core concepts such as impulse responses, (co)-integration and spectral analysis.

Instructor(s): Hansen, Lars Peter Terms Offered: Spring

ECON 31715. Econometrics with Partial Identification. 100 Units.

One of the main new ideas in econometrics over the last three decades was that point identification is unnecessary to draw informative conclusions from the available data. Indeed, in many settings, reasonable modeling assumptions naturally deliver a set of parameter values consistent with the data. Then, one is tasked with (1) obtaining a tractable characterization of the identified set; (2) providing methods to estimate it; and (3) making confidence statements about partially identified parameters. This course covers modern approaches to solving the above problems, focusing on tractability and implementation. It provides some theoretical background, develops the necessary statistical toolkit, and reviews a number of empirical papers that apply the partial identification approach in practice. The course will be of interest to students in econometrics, applied microeconomics, and industrial organization.

Instructor(s): Ponomarev, K Terms Offered: Autumn

ECON 31720. Applied Microeconometrics. 100 Units.

This course is about empirical strategies that are commonly used in applied microeconomics. The topics will include control variables (matching), instrumental variables, regression discontinuity and kink designs, panel data, and event studies, among other topics.

Instructor(s): Torgovitsky, Alex Terms Offered: Autumn

ECON 31730. Advanced Time Series Analysis. 100 Units.

The course covers modern tools for reduced-form and structural time series analysis, with a view towards applications in macroeconomics. Topics covered include frequentist and Bayesian inference in VARMA models, spectral analysis, estimation of dynamic causal effects with structural VARs and local projections, state space models, dynamic factor models, estimation of structural models with representative or heterogeneous agents, and analysis of non-stationary models. Problem sets will involve a mix of theory, coding, and empirical work.

Instructor(s): Plagborg-Møller, Mikkel Terms Offered: Spring

ECON 31740. Optimization-Conscious Econometrics. 100 Units.

This course studies the core optimization concepts underlying econometric estimation and inference. The objective is to both develop a deep understanding of how estimators are computed, and to get a better theoretical and geometrical understanding of classical econometric estimators through the prism of optimization theory. Each optimization concept or method is studied using a well established econometric estimator as the working example: linear programming is taught through the example of quantile regression, duality is taught via nonparametric inference, numerical linear algebra is taught via partial identification questions in OLS, integer programming is taught as a solution method for instrumental variables quantile regression, and so on.

Instructor(s): Pouliot, Guillaume Terms Offered: Winter

Equivalent Course(s): PPHA 48403

ECON 31761. Frontiers of Causal Inference. 100 Units.

This course covers selected topics on the research frontier of causal inference and econometrics. Exact topics are to be determined, but may include: sensitivity analysis, empirical Bayes, partial identification, experimental design and evaluation, the intersection of decision theory with causal inference, clustering and finite population inference, instrumental variables, machine learning methods for causal inference. Special attention will be given to the use of economic models in causal inference.

Instructor(s): Torgovitsky, Alex Mogstad, Magne Terms Offered: Autumn

ECON 31800. Advanced Econometrics. 100 Units.

Equivalent Course(s): BUSN 41911

ECON 32000. Topics in American Economic History. 100 Units.

Economic analysis of the role of labor markets in American economic growth. Specific topics include the economics of colonization, the transatlantic slave trade, the transition from indentured to slave labor in colonial America, the record of nineteenth-century economic growth, nineteenth-century immigration, nativity and the expansion of education, the economics of westward migration, the quantitative analysis of economic and social mobility, and the economics of racial discrimination in the twentieth century.

Instructor(s): D. Galenson Terms Offered: Autumn

ECON 33000. Theory of Income I. 100 Units.

Substantively, the course will cover consumption/savings decisions, human capital accumulation, investment decisions, the neoclassical growth model and variations with elastic labor supply and taxes, growth with exogenous technical change, endogenous growth with constant returns to scale, commodity price fluctuations, asset pricing, frictional unemployment, and consumption/saving decisions with uninsured idiosyncratic risk. Technically, the course will introduce and apply optimal control, dynamic programming, formulating Bellman equations, computing value and policy functions, Markov processes, stationary distributions, recursive competitive equilibria, complete and incomplete markets models, and heterogeneous agent models.

Instructor(s): Alvarez, Fernando Terms Offered: Autumn

ECON 33100. The Theory of Income II. 100 Units.

The course discusses topics in economic growth and business cycles. It organizes discussion around a number of stylized empirical facts that motivated a lot of macroeconomic research in the last several decades. The course discusses models of balanced growth and structural change; highlights implications of macroeconomic networks, international trade and monopolistic competition for both structural change and resource misallocation; and provides an overview of Real Business Cycles and New Keynesian models. The course utilizes heavily theoretical techniques introduced in Theory of Income I.

Instructor(s): Golosov, Mikhail Terms Offered: Winter

ECON 33200. The Theory of Income III. 100 Units.

The course material is divided in four parts. We cover the first and second welfare theorems, using them to discuss OLG models. A variety of versions are discussed: two periods, perpetual youth versions, with and without capital accumulation, with and without population growth, etc. We approach the study of aggregation, Pareto Optimality and uncertainty and asset pricing with an eye toward using them for macroeconomic models, etc. We will analyze linear labor and capital income taxes in the neoclassical growth model, including optimal Ramsey taxation. We will approach labor markets, as related to questions in macroeconomics, including classical partial equilibrium search models of unemployment. We also cover the Diamond-Mortensen-Pissarides model

of search and matching, and use it for both positive questions, such as the propagation and amplification of aggregate shocks to labor market, and for normative questions, such as the social efficiency of decentralized search and matching.

Instructor(s): Lorenzoni, Guido Terms Offered: Spring

ECON 33410. Demand and Supply in Labor Markets. 100 Units.

TBD

Instructor(s): Mogstad, Magne Terms Offered: Winter

ECON 33502. Monetary Economics I. 100 Units.

This course discusses traditional and recent topics in monetary economics. Various classes of models of money will be introduced and discussed, including the standard New Keynesian model. We will discuss banking and financial intermediation. Recent topics will include the discussion of digital currencies, their pricing and competition to traditional currencies as well as the recent literature concerning central bank digital currencies. The course will then examine the time series literature on identifying monetary policy shocks. In the second half of the course, the course will discuss asset pricing implications of the standard New Keynesian model and how these can be used to infer the public's perceptions of monetary policy. It will overview the recent empirical literature linking monetary policy to stocks and bonds, as well as theoretical frameworks.

Instructor(s): Uhlig, Harald Terms Offered: Autumn

ECON 33530. Firm Dynamics and Economic Growth. 100 Units.

This class focuses on the theory and empirics of economic growth. The class will follow a micro-to-macro approach and hence special emphasis will be given to firms and inventors to uncover the determinants of aggregate productivity growth. In addition to some classic papers, the class will mainly focus on recent research. Students will be encouraged to discuss the frontier topics in class and produce new and exciting research ideas.

Instructor(s): Akcigit, Ufuk Terms Offered: Winter

ECON 33540. Macroeconomics with Heterogeneous Households. 100 Units.

This is an advanced course in macroeconomics with heterogeneous households. We will cover techniques in both discrete and continuous time. We will study applications to income and consumption dynamics, and then explore implications for fiscal and monetary policy.

Instructor(s): Kaplan, Greg Terms Offered: Winter

ECON 33550. Spatial Economics. 100 Units.

The course will discuss recent advances in spatial modelling and quantification that allow us to study trade, migration, as well as urban, regional, national, and global growth in a unified spatial general equilibrium framework. These frameworks can be quantified using a variety of data to perform detailed policy counterfactual exercises. These exercises can help us understand the impact of trade and migration policy as well as local and national fiscal policy, transportation policy and the effect of regional shocks including the ones associated with climate change.

Instructor(s): Rossi-Hansberg, Esteban Terms Offered: Winter

ECON 33703. Financial Markets in the Macroeconomy. 100 Units.

This course focuses on understanding the role of external financing, financial crises, and their effects on the real economy. In the first part of the course, we will explore possible microfoundations for financial frictions and liquidity. In particular, we will discuss models of decentralized trading in financial markets, where illiquidity may be due to informational or trading frictions. In the second part of the course, we will focus on the macroeconomic effects of financial frictions and financial crises. We will study models with incomplete markets and heterogeneous agents to study the macroeconomic effects of households' and firms' deleveraging, of house prices changes, of different fiscal and monetary policy, and so forth. We will also introduce multiple sectors model to think about unbalanced shocks, such as Covid-19, their macroeconomic effects and policy implications.

Equivalent Course(s): BUSN 33948

ECON 33950. Topics in Macro Fluctuations and Policy. 100 Units.

TBD

Equivalent Course(s): BUSN 33950

ECON 34400. Job Mobility/Wage Determinants. 100 Units.

This course is divided into four parts: Part I reviews segments of the literature on wage growth and labor mobility. The course begins by reviewing a standard model of life-cycle human capital accumulation. We then introduce models of learning and sorting. The goal is to understand how investments in both information and human capital generate observed patterns of wage growth and mobility decisions over the life-cycle. Part II examines the literature on investment in schooling. We will review work on measuring the returns to schooling and assessing the evidence that credit constraints affect human capital investment decisions. We will discuss the role of human capital investment in determining earnings inequality. Part III examines the design of incentive systems within organizations. We will give particular attention to trade-offs between insurance and incentives, tournament theory, moral hazard in teams, and models of multi-tasking. These models also provide insight concerning sources of wage growth within firms and the distribution of wages within firms. Part IV examines the theoretical and empirical literature on income inequality by race and gender. We will also examine how the increase in female labor supply during the past four decades has influenced the wage structure. We devote considerable attention to the effects of public policy on observed racial income gaps.

Instructor(s): Neal, Derek Terms Offered: Autumn

ECON 34410. Demand and Supply in Labor Markets. 100 Units.

TBD

Instructor(s): Mogstad, Magne Terms Offered: Winter

ECON 34430. Topics in Labor Markets: Earnings and Employment. 100 Units.

The class will cover recent developments in the understanding of the determinants of employment and earnings in the labor market. We will start by studying extensive and intensive labor supply decisions in the short and long run and their implications for macro and micro elasticities. We will then look at the effect of uncertainty in earnings by studying the joint dynamics of earnings and consumption. The next section is concerned with labor demand and in particular how skills demand has impacted inequality. Finally, the course will cover models with two-sided heterogeneity with complementarities, sorting and mobility frictions. The methods presented in the course will range from nonparametric econometrics methods to solving equilibrium and dynamic contracting problems. Students should expect to learn how to work with data and how to develop, solve and evaluate structural models of the labor market.

Instructor(s): Lamadon, Thibault Terms Offered: Spring

ECON 34460. Topics in Public and Labor Economics. 100 Units.

This graduate course will cover select topics at the intersection of public and labor economics, including labor supply and demand, responses to and incidence of labor income taxation, labor market competition, skills and training, search and information frictions, minimum wages, and discrimination.

Instructor(s): Rose, Evan; Lamadon, Thibaut Terms Offered: Autumn

ECON 34901. Social Interactions and Inequality. 100 Units.

This course will focus on the theory, econometrics, and empirical analysis of social influences on economic behavior, termed social interactions. As such, the course will include topics ranging from social networks to social capital to discrimination. We will examine the effects of social interactions on individual and aggregate behaviors as well as the implications of social interactions for the formation of social structure. Particular attention will be given to the translation of theoretical models into econometric analogs and to the identification questions that arise when attempting to construct empirical evidence on social interactions. Applications of social interactions will focus on contexts in which their presence can help explain observed levels of socioeconomic inequality.

Instructor(s): Staff Terms Offered: Spring

ECON 34930. Inequality: Theory, Methods and Evidence. 100 Units.

This course will explore the theory, methodology and evidence of economic inequality.

Instructor(s): Durlauf, S Terms Offered: Spring

Equivalent Course(s): PPHA 33230

ECON 35050. Asset Pricing I. 100 Units.

TBD

Equivalent Course(s): BUSN 34901

ECON 35060. Asset Pricing II. 100 Units.

TBD

Equivalent Course(s): BUSN 34902

ECON 35070. Corporate Finance I. 100 Units.

TBD

Equivalent Course(s): BUSN 34903

ECON 35080. Corporate Finance II. 100 Units.

TBD

Equivalent Course(s): BUSN 34904

ECON 35090. Corporate Finance III. 100 Units.

TBD

Equivalent Course(s): BUSN 34906

ECON 35101. International Macroeconomics and Trade. 100 Units.

This is a graduate course in international trade. It introduces the fundamental concepts and tools of international trade and economic geography to prepare students to tackle research questions in these areas. This course is the first in the Economics Department's second-year Trade and Growth sequence.

Equivalent Course(s): BUSN 33946

ECON 35310. Topics in International Trade and Growth. 100 Units.

Topics discussed in class include production networks, global value chains, foreign direct investment, boundary of the firm & incomplete contracts, and trade policy.

Instructor(s): Castro Vincenzi, Juan Manuel Terms Offered: Spring

ECON 35360. Labor Search and Frictions in Macro. 100 Units.

This course focuses on understanding the macroeconomic implications of labor market frictions. We will develop and explore equilibrium models of unemployment arising from search frictions, geographic and skill heterogeneity, and information frictions arising from adverse selection and moral hazard issues. We will discipline the models with microeconomic and aggregate data, and then examine both the positive and normative implications of these quantitative models for outcomes such as unemployment and vacancy rates, and their behavior both over the business cycle and across geographic space.

Instructor(s): Shimer, Robert Terms Offered: Winter

ECON 35550. The Practicalities of Running Randomized Control Trials. 100 Units.

This course is designed for those who plan to run a randomized control trial. It provides practical advice about the trade-offs researchers face when selecting topics to study, the type of randomization technique to use, the content of a survey instruments, analytical techniques and much more. How do you choose the right minimum detectable effect size for estimating the sample size needed to run a high quality RCT? How do you quantify difficult to measure outcomes such as women's empowerment or ensure people are providing truthful answers when you are asking questions on sensitive topics like sexual health? When should you tie your hands by pre-committing to your analysis plan in advance, and when is a pre-analysis plan not a good idea? This course will draw on lots of examples from RCTs around the world, most (though not all) from a development context. Alongside field tips, it will also cover the concepts and theory behind the tradeoffs researchers face running RCTs. The course is designed for PhD students but given its practical nature is open to and accessible to masters students who plan to work on RCTs.

Instructor(s): Glennerster, Rachel Terms Offered: Autumn

Equivalent Course(s): PPHA 35561, ECMA 35550

ECON 35570. Political Economy of Development (PhD) 100 Units.

This course is intended as an introduction for Ph.D. students to the research literature in the political economy of development. Its purpose is to give students both a sense of the frontier research topics and a good command of how social science methodological tools are used in the area. This class is for PhD and Harris MACRM students only, with no exceptions. Must have completed a PhD level Microeconomics course to enroll.

Instructor(s): Montero, E; Sanchez de la Sierra, Raul Terms Offered: Spring

Equivalent Course(s): PPHA 41120, PLSC 46600

ECON 35600. Development Economics. 100 Units.

This course covers theoretical models and empirical methods in development economics. Topics include health, education, household economics, small and medium enterprise finance, technology adoption, corruption, and the intersection of behavioral economics and development. The course will also review a range of research designs including experiments, natural experiments, and structural approaches.

Instructor(s): Kremer, Michael Terms Offered: Autumn

Equivalent Course(s): PPHA 44401

ECON 35610. Development Economics II. 100 Units.

This course covers theoretical models and empirical methods in development economics. Topics include household formation and decision-making, technology adoption, risk, firms, labor markets, agriculture, and public service delivery. The course will also review a range of research designs including experiments, natural experiments, and structural approaches.

Instructor(s): Brown, Christina Terms Offered: Winter

Prerequisite(s): ECON 35600

ECON 35650. Behavioral Development Economics. 100 Units.

This course will focus on the intersection of two rapidly growing fields in economics - development economics, and behavioral economics. Behavioral development economics brings insights and tools from psychology and behavioral economics to the study of developing economies and poverty more generally. We will apply existing ideas in behavioral economics to important development questions and ask whether there is a need for a special behavioral science of poverty and development. Methods covered will include field experiments, testing behavioral theory, and combining experiments with structural estimation.

Instructor(s): Karing, Anne Terms Offered: Spring

ECON 36000. Public Finance I. 100 Units.

This course discusses normative aspects of designing government policies. We study design of capital, labor and commodity taxation, stabilization policies over the business cycles, management of public debt and its maturity structure. The course introduces students to a wide range of techniques that are used to study such questions in realistic, heterogeneous agent models: primal and dual approaches to Ramsey problems, mechanism design techniques, perturbational methods. We also discuss the relationship between models used for normative analysis and empirical data: measurements and estimations of key economic objects identified by theoretical models and quantitative implications of those estimates for optimal policies.

Instructor(s): Golosov, Mikhail Terms Offered: Winter

Prerequisite(s): Open to Ph.D. students; other students may enroll with consent of the instructor.

ECON 36200. Public Sector Economics. 100 Units.

The concept of "market distortion" is used to formulate measurements, explanations, and consequences of government activities including tax systems, expenditure programs, and regulatory arrangements. Topics include cross-country comparisons of government behavior, predicting microlevel responses to policy, measuring and evaluating the incidence of government activity, alternative models of government decision-making, and the application of public finance to other economics fields.

Instructor(s): Mulligan, Casey Terms Offered: Autumn

ECON 36330. New Developments in Public Finance. 100 Units.

Course Search (<https://intranet.chicagobooth.edu/pub/coursesearch/coursesearch/>) This course provides graduate-level discussion of topics and methods in public finance. This course has two objectives. The first is to teach current topics and methods in public finance. The second is to advance students' development as economists by providing training in the production of high-quality research. This training may help students read, contribute to, and draw from recent progress in this literature. The course covers a wide variety of applied econometric and theoretical approaches. It also discusses applications of a wide variety of datasets and methods that are useful in many settings for public finance and applied economics research.

Instructor(s): Ganong, Noel, and Zwick

Equivalent Course(s): BUSN 35916

ECON 36750. Energy and Environmental Economics III (PhD) 100 Units.

Optimal environmental regulation requires an analysis of the trade between market and regulatory imperfections. Market allocations are inefficient in the presence of imperfections such as externalities, market power, and informational asymmetries. On the other hand, government intervention to mitigate these imperfections is not costless, and can even make market performance worse. This course focuses on recent empirical analysis of the costs and benefits of environmental and energy policies, including an introduction to the relevant econometric methodologies such as randomized controlled trials, regression discontinuity designs, bunching analysis, and structural estimation. Topics will include: energy demand and the energy efficiency gap, fuel economy and appliance efficiency standards, non-linear and real-time electricity pricing, wholesale electricity markets, renewable electricity policies, natural gas markets, retail gasoline markets, and technology innovations.

Instructor(s): Ito, K Terms Offered: Spring

Equivalent Course(s): PPHA 44340

ECON 36820. Empirical Topics in Social Insurance. 100 Units.

This course guides graduate students through empirical research on social insurance grounded in theory, including the optimal design of social insurance, social insurance and labor supply, targeting of social insurance programs, and spillovers from social insurance. The course presents theory and empirical tests of the theory, highlights empirical methods, and reviews the state of research on social insurance, highlighting important gaps in the literature.

Instructor(s): Deshpande, Manasi Terms Offered: Spring

ECON 37710. Economics of Healthcare (PhD) 100 Units.

This is a PhD-level course in the economics of healthcare open to PhD students in Economics, Booth, Harris, and MACRM and other students with instructor's consent. The goal is to prepare students to conduct independent research in the field, and to use tools from a variety of fields to study healthcare markets. Topics will include health insurance, the production and supply of healthcare, the economic geography of healthcare, regulations, and labor market connections. We will emphasize bridges to fields including public finance, labor economics, and industrial organization. We will cover econometric techniques, datasets, and institutional knowledge required to develop research ideas in the field, and help students develop such ideas. The course will cover the latest research and benefit from workshops in the field.

Instructor(s): Gottlieb, J Terms Offered: Autumn

Equivalent Course(s): PPHA 48050

ECON 37720. Health Economics Literature Seminar. 100 Units.

TBD

Equivalent Course(s): BUSN 33920

ECON 38102. Applied Macroeconomics: Heterogeneity and Macro. 100 Units.

Course Search (<https://intranet.chicagobooth.edu/pub/coursesearch/coursesearch/>)

Instructor(s): Kekre & Vavra

Equivalent Course(s): BUSN 33949

ECON 39600. Topics in Asset Pricing. 100 Units.

Course Search (<https://intranet.chicagobooth.edu/pub/coursesearch/coursesearch/>)

Equivalent Course(s): BUSN 35907

ECON 40201. Advanced Industrial Organization II. 100 Units.

Course Search

Instructor(s): Hortacsu, Ali Terms Offered: Winter

Equivalent Course(s): BUSN 33922

ECON 40603. Market Design. 100 Units.

Course Search (<https://intranet.chicagobooth.edu/pub/coursesearch/coursesearch/>)

Instructor(s): Leshno, Jacob; Budish, Eric Terms Offered: Spring

Equivalent Course(s): BUSN 33915

ECON 41150. Behavioral Finance. 100 Units.

Course Search (<https://intranet.chicagobooth.edu/pub/coursesearch/coursesearch/>)

Equivalent Course(s): BUSN 35906

ECON 41175. Behavioral Economics - Development & Observational Data. 100 Units.

Behavioral economics applies psychological insights to economic markets and decision making. In this class, we will discuss the recent theoretical and empirical advances made in this increasingly important field of economics with a focus on behavioral development economics and observational data analysis. Being thoughtful about the role of psychology can lead to a greater understanding of how economic agents make decisions and how the economy works. This course will utilize lectures, discussion, and problem sets to provide an introduction to the topic of behavioral economics. The primary goal of the class is to provide a basic understanding of the field and think about how one can do original research as a PhD student in this field.

Instructor(s): Dean, Joshua; Pope, Devin Terms Offered: Autumn

Equivalent Course(s): BUSN 38916

ECON 41185. Behavioral Economics - Theory & the Lab. 100 Units.

This is a research class aimed at PhD students in economics, psychology, or related disciplines, and is part of a sequence of courses that focus on different aspects of behavioral economics. This class will examine behavioral economics in the context of theory and controlled laboratory experiments. Traditional economic theory is based on standard working assumptions including unlimited rationality and complete self-control. Behavioral economics considers what happens in economic contexts when these working assumptions are modified to incorporate more realistic conceptions of human behavior. The role of markets is central to this study. We carefully consider conditions under which rationality of participants influences market outcomes. However, financial markets are not covered in detail, and this is not a finance class. Students will be asked to write frequent short papers based on original ideas and a more substantial research paper. The research paper is due at a date TBD to give students time to undertake a serious paper. There will be one course meeting during the Spring quarter, on a date to be arranged, where these papers will be presented.

Instructor(s): Imas, Alex Terms Offered: Spring

Equivalent Course(s): BUSN 38918

ECON 41300. A Course In Experimental Economics. 100 Units.

This course provides the necessary tools to be an avid consumer of the experimental literature and instructs students on how to become a producer of that literature. Topics include a summary of recent experimental findings and details on how to gather and analyze data using experimental methods.

Instructor(s): List, John Terms Offered: Spring

Equivalent Course(s): BUSN 38922

ECON 42200. Advanced Topics in Political Economy: Comparing Societies (PhD) 100 Units.

The course will study the cultural, social, and institutional foundations of contemporary and historical societies around the world. Particular attention will be paid to factors that are typically taken for granted and presumed universal within the economics discipline. These include perceptions of reality (including birth, death, the afterlife, the spiritual world, nature, and the environment), and moral frameworks (including views about right/wrong, fairness, equality, and community membership). We will consider how these differences then affect and are affected by resulting cultural values, social structures, and formal political and legal institutions. The course is targeted to advanced (second-year or later) Ph.D. students with an interest in economic development, political economy, cultural economics, and/or economic history. Must be a PhD student to enroll.

Instructor(s): Robinson, J Terms Offered: Autumn Winter

Equivalent Course(s): PLSC 41150, PPHA 41150

ECON 42400. Applied Microeconomics in Economic History. 100 Units.

TBD

Terms Offered: TBD

Equivalent Course(s): BUSN 33917

ECON 42800. Creativity. 100 Units.

This seminar examines recent research on how creative people innovate in a wide range of intellectual activities. The main project for the course is a term paper that analyzes the creative life cycle of one or more innovators of the student's choice, using both quantitative and qualitative evidence. Students present their research in progress for discussion. The seminar is designed to give students all the tools needed to do this research, including choosing a subject, finding and using an appropriate data set, and negotiating the relevant scholarship.

Instructor(s): D. Galenson Terms Offered: Winter

Prerequisite(s): ECON 20100

ECON 42900. Innovators. 100 Units.

Economists broadly agree that technological change is the principal source of long-run productivity growth. Yet although most advances are made by individuals or small groups, until recently economists have not studied

how innovations are made. This course looks inside the black box, surveying recent research on the methods and life cycles of innovators in a wide range of activities, including economists, scientists, entrepreneurs, and artists. This research adds a new dimension to our understanding of creativity and technological change.
Instructor(s): D. Galenson Terms Offered: Autumn

ECON 49700. Research Seminar. 100 Units.

The Required Research Seminar/Paper is designed to introduce the Ph.D. student to the demands and excitement of research, promote early contact with the faculty, and introduce the process of selecting a research topic and writing about it. (The thesis itself comes later and may be on a different topic.) Every student is required to write a research paper under faculty supervision by taking the Required Research Seminar.
Equivalent Course(s): BUSN 35930

ECON 49800. Research Seminar. 100 Units.

The Required Research Seminar/Paper is designed to introduce the Ph.D. student to the demands and excitement of research, promote early contact with the faculty, and introduce the process of selecting a research topic and writing about it. (The thesis itself comes later and may be on a different topic.) Every student is required to write a research paper under faculty supervision by taking the Required Research Seminar.
Equivalent Course(s): BUSN 35931

ECON 49900. Required Research Paper. 100 Units.

The Required Research Seminar/Paper is designed to introduce the Ph.D. student to the demands and excitement of research, promote early contact with the faculty, and introduce the process of selecting a research topic and writing about it. (The thesis itself comes later and may be on a different topic.) Every student is required to write a research paper under faculty supervision by taking the Required Research Seminar.
Equivalent Course(s): BUSN 35932

ECON 50000. Workshop in Economic Theory. 000 Units.

Faculty led workshop presenting current research in economic theory.
Instructor(s): Reny, Philip Myerson, Roger Sonnenschein, Hugo Terms Offered: Autumn Spring Winter

ECON 50100. Student Economic Theory Working Group. 100 Units.

Student organized Economic Theory working group
Terms Offered: Spring

ECON 50200. Economic Theory Discussion Group. 000 Units.

Informal discussion and advising session for PhD students interested in and working on Economic Theory
Instructor(s): Brooks, Benjamin; Ravid, Doron Terms Offered: Autumn Spring Winter

ECON 50300. Becker Applied Economics Workshop. 000 Units.

Faculty led workshop presenting current research in applied economics.
Instructor(s): List, John Greenstone, Michael Mogtsad, Magne Terms Offered: Autumn Spring Winter

ECON 51200. Workshop: Econometrics. 000 Units.

Faculty led workshop presenting current research in econometrics.
Instructor(s): Heckman, James Hansen, Lars Peter Hickman, Brent Shaikh, Azeem Terms Offered: Autumn Spring Winter

ECON 51400. Econometrics and Statistics Colloquium. 100 Units.

Course Search (<https://intranet.chicagobooth.edu/pub/coursesearch/coursesearch/>)
Equivalent Course(s): BUSN 41600

ECON 51800. Applied Econometrics Reading Group. 000 Units.

Weekly research meeting for faculty and PhD students interested in Applied Econometrics
Instructor(s): Mogstad, Magne Terms Offered: Autumn Spring Winter

ECON 53000. Workshop: Money and Banking. 000 Units.

Faculty led workshop presenting current research in Money and Banking.
Instructor(s): Alvarez, Fernando Shimer, Robert Hansen, Lars Peter Stokey, Nancy Terms Offered: Autumn Spring Winter
Equivalent Course(s): BUSN 33630

ECON 54300. Applied Economics Workshop. 100 Units.

Course Search (<https://intranet.chicagobooth.edu/pub/coursesearch/coursesearch/>)
Equivalent Course(s): BUSN 33610

ECON 55600. Seminar: Finance. 100 Units.

Course Search (<https://intranet.chicagobooth.edu/pub/coursesearch/coursesearch/>)
Equivalent Course(s): BUSN 35600

ECON 56300. Public Policy and Economics Workshop. 000 Units.

This is a workshop; only open to PhD students and is an audit only course.
Equivalent Course(s): PPHA 51500

ECON 57000. Workshop in Macro and International Economics. 100 Units.

Course Search (<https://intranet.chicagobooth.edu/pub/coursesearch/coursesearch/>)

Equivalent Course(s): BUSN 33650

ECON 58700. Workshop in Family Economics. 100 Units.

Faculty led workshop presenting current research in family economics.

Instructor(s): Voena, Alessandra Heckman, James Mogstad, Magne Lamadon, Thibaut Terms Offered: Autumn Spring Winter

ECON 58900. Workshop: Demography. 100 Units.

This workshop is sponsored by the Committee on Demographic Training in collaboration with the Population Research Center of NORC and the University. Visitors from other campuses as well as Chicago faculty discuss current research activities in population studies. PQ: Must Register for an R

Instructor(s): Staff Terms Offered: Spring Winter

Equivalent Course(s): SOCI 60001

ECON 59000. Workshop: Applications of Economics. 000 Units.

Faculty led workshop presenting current research in economics applications.

Instructor(s): Hortacsu, Ali Voena, Allesandra Hickman, Brent Philipson, Tomas Akcigit, Ufuk Terms Offered: Autumn Spring Winter

ECON 59200. Workshop: Economic Policy/Public Finance. 100 Units.

TBD

ECON 59900. Thesis Preparation: Economics. 100 Units.

This course is designed for advanced thesis preparation work sponsored by a faculty member.

Terms Offered: Autumn Spring Summer Winter

ECON 60200. Working Group: Applied Micro. 000 Units.

Faculty and graduate student led working group presenting graduate student research in applied microeconomics.

Instructor(s): Mogstad, Magne Dinerstein, Michael Levitt, Steve Greenstone, Michael Terms Offered: Autumn Spring Winter

ECON 60250. Student Applied Micro Working Group. 000 Units.

Graduate student led working group presenting graduate student research in applied microeconomics.

Instructor(s): Staff Terms Offered: Autumn Spring Winter

ECON 60300. Working Group: Economic Dynamics. 100 Units.

TBD

ECON 60310. Economics Dynamics. 000 Units.

Faculty and graduate student led working group presenting current research in economic dynamics.

Instructor(s): Hansen, Lars Peter Alvarez, Fernando Terms Offered: Autumn Spring Winter

ECON 60400. Working Group: Economic Theory. 000 Units.

Faculty and graduate student led working group presenting graduate student research in economic theory.

Instructor(s): Myerson, Roger Reny, Phil Terms Offered: Autumn Spring Winter

ECON 60600. Working Group: Capital Theory. 000 Units.

Faculty and graduate student led working group presenting graduate student research in capital theory economics.

Instructor(s): Stokey, Nancy Alvarez, Fernando Shimer, Robert Terms Offered: Autumn Spring Winter

ECON 60700. Working Group: International Development. 100 Units.

TBD

ECON 60900. Working Group: Applied Macroeconomic Theory. 000 Units.

Faculty and graduate student led working group presenting graduate student research in macroeconomic theory.

Instructor(s): Alvarez, Fernando Terms Offered: Autumn Spring Winter

ECON 61000. Working Group: Demography Workshop Post-Mortem. 100 Units.

The Post-Mortem Seminar meets immediately following the Demography Workshop each week. The 30 minute discussion occurs immediately after the workshop, offering attendees opportunities to explore the theoretical claims, methods, and findings presented at the Demography Workshop, as well as to consider ethical issues embodied in the presented research and how we can engage in the responsible conduct of research. The PM seminar is led by faculty members and postdoctoral fellows with expertise in the demography and economics of aging, providing attendees with opportunities for intellectual engagement with area experts in a casual discussion-based setting.

Equivalent Course(s): SOCI 60015

ECON 61100. Industrial Organization Working Group. 000 Units.

Faculty and graduate student led working group presenting graduate student research in industrial organization.

Terms Offered: Autumn Spring Winter

ECON 61300. EPIC Working Group. 000 Units.

Faculty and graduate student led working group presenting current research in energy and environmental economics.

Instructor(s): Greenstone, Michael Terms Offered: Autumn Spring Winter

ECON 61400. Working Group in Econometrics. 000 Units.

Faculty and graduate student led working group presenting graduate student research in econometrics.

Instructor(s): Shaikh, Azeem Terms Offered: Autumn Spring Winter

ECON 61500. Trade Working Group. 000 Units.

Faculty and graduate student led working group presenting graduate student research in trade economics.

Instructor(s): Tintelnot, Felix Dingel, Jonathan Terms Offered: Autumn Spring Winter

ECON 61600. Computational Methods in Economics Working Group. 000 Units.

Faculty and graduate student led working group presenting graduate student research on computational methods in economics

Instructor(s): Lamadon, Thibault; Pouliot, Guillaume Terms Offered: Autumn Spring Winter

ECON 61700. Political Economy Working Group. 100 Units.

Political Economy Working Group

Terms Offered: Autumn Spring Winter

ECON 61810. Macrofinance, Financial Intermediation and Banking Working Group. 100 Units.

Faculty and graduate student led working group presenting graduate student research in economic theory.

Instructor(s): H. Uhlig Terms Offered: Autumn Spring Winter

Prerequisite(s): Consent of instructor

ECON 61900. Development Working Group. 000 Units.

Development Working Group

Terms Offered: Autumn Spring Winter

ECON 63100. Macro Reading Group. 000 Units.

This is a "Sargent-style" reading group for PhD students in their third year or above with an interest in macroeconomics, very broadly defined. Students are required to read a paper of their choice every week, attend a 1.5 hr meeting each week and give regular presentations of various forms and lengths. Active and regular participation is compulsory.

Instructor(s): Greg Kaplan Terms Offered: Autumn Spring Winter

ECON 63500. Job Placement Working Group. 000 Units.

TBD

ECON 70000. Advanced Study: Economics. 300.00 Units.

Advanced Study: Economics

