

# DEPARTMENT OF ECONOMICS

---

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

- Robert Shimer

## Professors

- Ufuk Akcigit
- Fernando Alvarez
- Stéphane Bonhomme
- Leonardo Bursztyjn
- David W. Galenson
- Mikhail Golosov
- Michael Greenstone
- Lars Peter Hansen
- James J. Heckman
- Ali Hortaçsu
- Greg Kaplan
- Michael Kremer
- Steven Levitt
- John List
- Magne Mogstad
- Casey Mulligan
- Kevin M. Murphy
- Roger B. Myerson
- Derek A. Neal
- Philip J. Reny
- Esteban Rossi-Hansberg
- Azeem Shaikh
- Robert Shimer
- Nancy L. Stokey
- Alexander Torgovitsky
- Harald Uhlig

## Associate Professor

- Benjamin Brooks
- Manasi Deshpande
- Thibaut Lamadon
- Felix Tintelnot

## Assistant Professor

- Christina Brown
- Manasi Deshpande
- Michael Dinerstein
- Anne Karing
- Kirill Ponomarev
- Doron Ravid
- Eric Richert
- Joseph Root
- Evan Rose
- Max Tabord-Meehan

## Senior Instructional Professor

- Victor O. Lima
- Allen R. Sanderson  
Associate Senior Instructional Professor
- Kotaro Yoshida  
Assistant Senior Instructional Professor
- Min Sok Lee  
Associate Instructional Professor
- Ryan Fang
- Kanit Kuevibulvanich
- Sergio Salas Landeau
- Melissa Tartari
- Rui Zhao  
Assistant Instructional Professor
- Fulya Ersoy
- Oscar Galvez-Soriano
- Joseph Hardwick
- Pablo Pena
- Gina Pieters
- Murilo Ramos
- Srinivasan Vasudevan  
Emeritus Faculty
- Arnold C. Harberger  
Associate Professor, Social Science Division
- Rachel Glennerster  
Associate Research Professor
- Juanna Schroter Joensen
- Susanne Neckermann  
Assistant Research Professor
- Neele Balke
- Alessandra Gonzalez

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/content/graduate-economics-chicago> (<https://economics.uchicago.edu/content/graduate-economics-chicago/>).

#### 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](mailto: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 in order 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. An examination in each Specialized Field of concentration is given once a year.

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.

Students normally take six 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 and third years, the student takes courses and participates in workshops to prepare 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.**

Theory of consumer choice, including household production, indirect utility, and hedonic indices. Models of the firm. Analysis of factor demand and product supply under competitive and monopolistic conditions. Static and dynamic cost curves, including learning by doing and temporary changes. Uncertainty applied to consumer and producer choices. Property rights and the effects of laws. Investment in human and physical capital.  
Instructor(s): Murphy, Kevin Terms Offered: Autumn

#### **ECON 30200. Price Theory II. 100 Units.**

The first five weeks of this course are a continuation of ECON 30100, Price Theory I. The second half of the course will be devoted to the Walrasian model of general competitive equilibrium as developed by Arrow and Debreu. This will begin with a brief development of the consumer and producer theories, followed by the welfare theorems connecting equilibria and optima and a treatment of the classical existence of equilibrium theorem. The core of an economy, a limit theorem relating the core to the set of competitive equilibria, and models in which agents are small relative to the market will also be considered. Finally we will study general equilibrium under some alternative assumptions; such as, informational asymmetries and rational expectations equilibrium, public goods and Lindahl equilibrium, financial general equilibrium and asset pricing.  
Instructor(s): Brooks, Benjamin 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 three-week 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 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): Shaikh, Azeem 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; Uhlig, Harald 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, difference-in-differences, and quantile regression. The emphasis of the course is on identification and practical implementation. The course also covers the shortcomings of commonly used tools, and discusses recent theoretical research aimed at addressing these deficiencies.

Instructor(s): Torgovitsky, Alex 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 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.**

This course will use dynamic general equilibrium models to study macroeconomic questions. The first half of the quarter will focus on applications of the neoclassical growth model, including variants useful for studying the effects of capital, labor, and consumption taxes; the effects of general and investment specific technical change; the role of human capital accumulation, and the q-model of investment. On the technical side, this part of the course will rely heavily on the tools of optimal control theory (Hamiltonians) and on the First and Second welfare theorems. The second part of the course will focus on applications of stochastic dynamic programming. On the substantive side, particular topics include models of job search and asset pricing; models with idiosyncratic (insurable) and aggregate (uninsurable) risk; and dynamic tax smoothing. On the technical side, this part of the course will rely heavily on Bellman equations and other recursive modeling techniques.

Instructor(s): Stokey, Nancy Terms Offered: Autumn

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

This course will explore a variety of macroeconomic models in which the welfare theorems do not necessarily hold, including overlapping generations models, equilibrium models with labor market search and matching frictions, economies with sticky prices and sticky wages, and environments in which money facilitates exchange. We will also explore the role of government policy within these models, including optimal taxation, optimal monetary policy, and the time consistency of these policies. If time permits, we will look at environments with non-convex adjustment costs, such as irreversible investment and fixed costs of changing prices.

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

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

The course shares with the other two Theory of Income courses the objectives of (1) explaining human behavior as evidenced by aggregate variables and (2) predicting the aggregate effects of certain government policies. Economics 33200 considers some of the prevailing business cycle theories, and their application to the recession of 2008-9. Some hypotheses to be considered are the q-theory of housing investment, the neoclassical approach to fiscal policy, and whether government spending has a "multiplier." The course confronts several empirical issues that are also encountered outside the field of macroeconomics such as the construction of aggregate data, choice of data set, and the measurement of expectations.

Instructor(s): Alvarez, Fernando 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, and Pflueger, Carolin 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.**

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

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 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): Steve Durlauf 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 35101. International Macroeconomics and Trade. 100 Units.**

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

Instructor(s): Adao, Rodrigo Terms Offered: Autumn

Equivalent Course(s): BUSN 33946

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

TBD

Instructor(s): F. Tintelnot 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 35530. Microeconomics of Development. 100 Units.**

This course will cover the key micro-economic issues in economic development, covering theoretical contributions and empirical applications to understand why some countries are poor and how markets function differently in poor economies. Topics include human capital (education and health), labor markets, credit markets, land markets, firms, and the role of the public sector.

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

Equivalent Course(s): ECMA 35530

**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): ECMA 35550, PPHA 35561



**ECON 35570. Political Economy of Development. 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): Blattman, C Terms Offered: Spring

Equivalent Course(s): PLSC 46600, PPHA 41120

**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 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 Ph.D.-level course provides the conceptual and theoretical foundations of public finance by dealing with a large number of concepts, models, and techniques that are used in the research on public finance. A command of the positive analysis of the incidence of government policies is fundamental to the study of most problems of public finance; positive analysis is emphasized throughout the course. Among the topics are: measurements of changes in welfare; economy-wide incidence of taxes; effects of taxation on risk-taking, investments, and financial markets; corporate taxation; taxation of goods and services; taxation of income; taxation and savings; positive problems of redistribution; and tax arbitrage, tax avoidance, tax evasion, and the underground economy.

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. 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. Must have completed PPHA 44330 Energy and Environmental Economics II to enroll.

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

Equivalent Course(s): PPHA 44340

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

Graduate course focusing on recent empirical economic literature in social insurance.

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

**ECON 37710. Economics of Healthcare. 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: Spring

Equivalent Course(s): PPHA 48050

**ECON 37720. Health Economics Literature Seminar. 100 Units.**

TBD

Equivalent Course(s): BUSN 33919

**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.**

TBD

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: Winter

Equivalent Course(s): BUSN 38922

**ECON 42200. Advanced Topics in Political Economy: Comparing Societies. 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: 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, PPHA 45710

**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.**

Course Search

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

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.

Instructor(s): Ufuk Akcigit Fernando Alvarez Stéphane Bonhomme Benjamin Brooks Leo Bursztyrn Manasi Deshpande Michael Dinerstein David Galenson Michael Greenstone Lars Hansen Jim Heckman Ali Hortacsu Greg Kaplan Thibaut Lamadon Steve Levitt John List Magne Mogstad Casey Mulligan Kevin Murphy Roger Myerson Derek Neal Doron Ravid Phil Reny Azeem Shaikh Rob Shimer Nancy Stokey Felix Tintelnot Harad Uhlig 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

