

Economics

The PhD program at Berkeley is designed for students interested in pursuing advanced study and conducting original research in economics. The PhD degree is awarded in recognition of the recipient's qualifications as a general economist and of the ability to make scholarly contributions in fields of specialization. New admissions to the graduate program are restricted to students pursuing the PhD degree. There is no external, terminal program for the MA degree.

Admission to the University

Minimum Requirements for Admission

The following minimum requirements apply to all graduate programs and will be verified by the Graduate Division:

1. A bachelor's degree or recognized equivalent from an accredited institution;
2. A grade point average of B or better (3.0);
3. If the applicant comes from a country or political entity (e.g., Quebec) where English is not the official language, adequate proficiency in English to do graduate work, as evidenced by a TOEFL score of at least 90 on the iBT test, 570 on the paper-and-pencil test, 230 on the computer-based test, or an IELTS Band score of at least 7 (note that individual programs may set higher levels for any of these); and
4. Sufficient undergraduate training to do graduate work in the given field.

Applicants Who Already Hold a Graduate Degree

The Graduate Council views academic degrees not as vocational training certificates but as evidence of broad training in research methods, independent study, and articulation of learning. Therefore, applicants who already have academic graduate degrees should be able to pursue new subject matter at an advanced level without need to enroll in a related or similar graduate program.

Programs may consider students for an additional academic master's or professional master's degree only if the additional degree is in a distinctly different field.

Applicants admitted to a doctoral program that requires a master's degree to be earned at Berkeley as a prerequisite (even though the applicant already has a master's degree from another institution in the same or a closely allied field of study) will be permitted to undertake the second master's degree, despite the overlap in field.

The Graduate Division will admit students for a second doctoral degree only if they meet the following guidelines:

1. Applicants with doctoral degrees may be admitted for an additional doctoral degree only if that degree program is in a general area of knowledge distinctly different from the field in which they earned their original degree. For example, a physics PhD could be admitted to a doctoral degree program in music or history; however, a student with a doctoral degree in mathematics would not be permitted to add a PhD in statistics.

2. Applicants who hold the PhD degree may be admitted to a professional doctorate or professional master's degree program if there is no duplication of training involved.

Applicants may apply only to one single degree program or one concurrent degree program per admission cycle.

Any applicant who was previously registered at Berkeley as a graduate student, no matter how briefly, must apply for readmission, not admission, even if the new application is to a different program.

Required Documents for Applications

1. **Transcripts:** Applicants may upload *unofficial* transcripts with your application for the departmental initial review. *If the applicant is admitted*, then *official* transcripts of all college-level work will be required. Admitted applicants must request a current transcript from every post-secondary school attended, including community colleges, summer sessions, and extension programs. Official transcripts must be in sealed envelopes as issued by the school(s) attended.
If you have attended Berkeley, upload your unofficial transcript with your application for the departmental initial review. *If you are admitted*, an official transcript with evidence of degree conferral *will not* be required.
2. **Letters of recommendation:** Applicants may request online letters of recommendation through the online application system. Hard copies of recommendation letters must be sent directly to the program, not the Graduate Division.
3. **Evidence of English language proficiency:** All applicants from countries or political entities in which the official language is not English are required to submit official evidence of English language proficiency. This applies to applicants from Bangladesh, Burma, Nepal, India, Pakistan, Latin America, the Middle East, the People's Republic of China, Taiwan, Japan, Korea, Southeast Asia, most European countries, and Quebec (Canada). However, applicants who, at the time of application, have already completed at least one year of full-time academic course work with grades of B or better at a US university may submit an official transcript from the US university to fulfill this requirement. The following courses will not fulfill this requirement: 1) courses in English as a Second Language, 2) courses conducted in a language other than English, 3) courses that will be completed after the application is submitted, and 4) courses of a non-academic nature. If applicants have previously been denied admission to Berkeley on the basis of their English language proficiency, they must submit new test scores that meet the current minimum from one of the standardized tests.

Where to Apply

Visit the Berkeley Graduate Division application page (<http://grad.berkeley.edu/admissions/apply>) .

Admission to the Program

A degree equivalent to a US bachelor's is required for admission to the program. An undergraduate degree in economics is not required for admission to the PhD program, provided that applicants have achieved an adequate background in economics and mathematics at the undergraduate level.

- **Economics:** All applicants are expected to have completed intermediate math-based economic theory courses. Further education in economics and economic theory is helpful, but not required.

- **Math:** Applicants must have knowledge of multivariate calculus, basic matrix algebra, and differential equations; completion of a two-year math sequence, which emphasizes proofs and derivations. Some knowledge of statistics and elementary probability is highly desirable, as is additional coursework in algebra and real analysis.

Normative Time Requirements

In advancing to the PhD degree, students pass through two major stages:

Preparation for candidacy typically takes three years. During the first two semesters, students take courses to achieve competence in econometric methods, methods of economic history and fundamentals of microeconomic and macroeconomic theory. During the next two years, students prepare for examination in two fields of specialization of their choosing, prepare a dissertation prospectus, and take an oral examination. When these steps are completed, students are advanced to candidacy.

Completion of a dissertation after advancing to candidacy typically takes one to two years. The dissertation must be based on original research and represent a significant contribution to the body of economic knowledge.

The entire process takes approximately five to six years, although some students are able to complete the program in less time.

Time to Advancement

Curriculum

During the first two semesters of graduate study, students must take a set of eight core courses to satisfy requirements in mathematics, economic history, economic theory, and econometrics. Syllabi for current and recent economics courses, including the core courses described below, can be found on the **Economics Course Home Page Registry**.

Exemptions from Course Requirements

Students with strong backgrounds in math and economics who have completed the equivalent of the coursework outlined above may be exempted from some or all of the first year course requirements. To qualify for an exemption, admitted students must provide documentation of coursework completed and grade received. Students excused from any or all of the required theory courses may be required to take advanced theory courses to supplement previous training. All exemptions from first year course work must be approved by both the course instructor and the graduate committee chair.

Courses Required

ECON 201A & ECON 201B	Economic Theory and Economic Theory	8
ECON 202A & ECON 202B	Macroeconomic Theory and Macroeconomic Theory	8
ECON 204	Mathematical Tools for Economics	3
ECON 210A	Introduction to Economic History	3
ECON 240A & ECON 240B	Econometrics and Econometrics	9
ECON Electives (2 semesters) per specialized study list: preparation for 2 field exams (usually, one theoretical, one applied)		24
ECON Elective Dept Seminars (12 units/one semester)		12

Preliminary Exams—Field Examination

All graduate students must take written qualifying examinations in two fields of specialization. Students prepare for these examinations in the second year by completing graduate courses offered in their chosen fields. It is department policy that students be prepared in at least one applied field to avoid narrow specialization at this stage of their careers.

Fields Available in the Economics Department

- Advanced Economic Theory
- Comparative Economics
- Development Economics
- Econometrics
- Economic Demography
- Economic History
- Economics of Institutions
- Finance
- Financial Economics
- Industrial Organization
- International Economics
- Labor Economics
- Law and Economics
- Macroeconomics
- Mathematical Economics
- Political Economics
- Psychology and Economics
- Public Finance

Alternative fields offered by another department or designed by the student may be substituted for one of the fields above, if approved by the graduate committee. Alternative fields may include Education and Economics, Health Economics, Resource Economics, Urban and Regional Economics, or City and Regional Planning.

Prospectus

Students must complete at least one semester of any **department seminars** (<https://www.econ.berkeley.edu/events/seminars>) prior to taking their oral examination. This is typically done in the third year of study.

Dissertation Prospectus and Oral Examination

Students are encouraged to begin discussing possible dissertation topics with appropriate faculty members at an early stage. After completing the written field examinations, students choose a faculty member to serve as adviser on developing a dissertation topic involving significant and original research, and to supervise writing of a prospectus. The prospectus describes the research to be conducted, the techniques to be used, and initial findings. Students who cannot find an adviser on their own will be matched with a preliminary adviser at the beginning of the third year of study.

Qualifying Examination

When the prospectus is approved by the faculty adviser, the qualifying examination is scheduled. The examining committee consists of four faculty members who conduct an oral examination based on the student's areas of specialization and on the dissertation prospectus. A primary function of the oral examination is to aid the student in developing a

dissertation and to determine whether the student is sufficiently prepared to complete original research successfully.

Time in Candidacy

Advancement

Upon successful completion of the oral examination and selection of a dissertation committee, the student is advanced to candidacy. Following advancement to candidacy, students pursue research necessary for the completion of their dissertation. Students are encouraged to select dissertation topics that can be completed in one to two years. Except in highly unusual cases, a dissertation does not exceed 300 pages of double-spaced typescript, and dissertations of 100 pages or less are entirely acceptable if they are significant contributions to the body of economic knowledge.

Upon completion of the dissertation and its acceptance by the dissertation committee, the student is awarded the PhD degree.

Professional Placement

Students who have received, or will soon receive, the PhD in Economics are assisted by the department in finding suitable career positions. The department learns of available openings for qualified economists through an exchange of information with universities, colleges, government agencies, and research institutes.

The department staff coordinates and facilitates placement activities, and a faculty member oversees and advises placement. Serious effort is made to help students find positions in which their capacities will be both used and rewarded. The department has been highly successful in placing students, which is a reflection on the quality of its students and their training, and the importance the department places on this activity.

Past placement outcomes can be found on the department's website (<https://www.econ.berkeley.edu/grad/program/placement-outcomes>).

Economics

ECON 201A Economic Theory 4 Units

Terms offered: Fall 2017, Fall 2016, Fall 2015

Basic preparation for the Ph.D. program including theory of the firm and the consumer, game theory.

Rules & Requirements

Prerequisites: 101A-101B, 204, Mathematics 53 and 54; or equivalent

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture and 2 hours of discussion per week

Additional Details

Subject/Course Level: Economics/Graduate

Grading: Letter grade.

ECON 201B Economic Theory 4 Units

Terms offered: Spring 2017, Spring 2016, Spring 2015

Basic preparation for the Ph.D. program including agency theory and mechanism design, general equilibrium theory.

Rules & Requirements

Prerequisites: 101A-101B, 201A, 204, Mathematics 53 and 54; or equivalent

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture and 2 hours of discussion per week

Additional Details

Subject/Course Level: Economics/Graduate

Grading: Letter grade.

ECON 202A Macroeconomic Theory 4 Units

Terms offered: Fall 2017, Fall 2016, Fall 2015

Basic preparation for the Ph.D. program including aggregation theory, national accounting and index problems, survey of major short-term models, implications of various expectations hypotheses, wage price determination, the role of money and financial assets, theories of consumption and investment, disequilibrium theory, dynamic systems, and international considerations.

Rules & Requirements

Prerequisites: 100A-100B or 101A-101B or equivalent. Mathematics 53 and 54 or equivalent

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture and 2 hours of discussion per week

Additional Details

Subject/Course Level: Economics/Graduate

Grading: Letter grade.

ECON 202B Macroeconomic Theory 4 Units

Terms offered: Spring 2017, Spring 2016, Spring 2015

Basic preparation for the Ph.D. program including aggregation theory, national accounting and index problems, survey of major short-term models, implications of various expectations hypotheses, wage price determination, the role of money and financial assets, theories of consumption and investment, disequilibrium theory, dynamic systems, and international considerations.

Rules & Requirements

Prerequisites: 100A-100B or 101A-101B or equivalent. Mathematics 50A or equivalent

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture and 2 hours of discussion per week

Additional Details

Subject/Course Level: Economics/Graduate

Grading: Letter grade.

ECON 204 Mathematical Tools for Economics 3 Units

Terms offered: Fall 2017, Summer 2017 3 Week Session, Fall 2016

The course provides a rigorous abstract treatment of the elements of real analysis and linear algebra central to current research in economics. The course develops in the students the ability to read mathematical proofs and to compose simple proofs on their own.

Rules & Requirements

Prerequisites: Mathematics 53 and 54 or equivalent and consent of instructor

Hours & Format

Fall and/or spring: 15 weeks - 2 hours of lecture and 1 hour of discussion per week

Summer: 3 weeks - 10 hours of lecture and 5 hours of discussion per week

Additional Details

Subject/Course Level: Economics/Graduate

Grading: Letter grade.

ECON 206 Mechanism Design and Agency Theory 3 Units

Terms offered: Spring 2017, Spring 2016, Spring 2015

This course will study the optimal design of mechanisms in the presence of incomplete information and imperfect observability. The course will begin with the "classic" principal-agent problem and will then develop its applications to the "implicit contracts" theory of agency and to the choice of government policies for regulated industries. The second half of the course will treat the design of auctions, regulation with costly or imperfect monitoring, mechanism design with limited contracts.

Rules & Requirements

Prerequisites: 201B and 209A or consent of instructor

Hours & Format

Fall and/or spring: 15 weeks - 2 hours of lecture per week

Additional Details

Subject/Course Level: Economics/Graduate

Grading: Letter grade.

Formerly known as: 209B

ECON 207A Mathematical Economics 3 Units

Terms offered: Fall 2011, Fall 2010, Spring 2009

Mathematical analysis of economic theory. The problems treated involve as wide a range of mathematical techniques and of economic topics as possible, including theories of preference, utility, demand, personal probability, games and general equilibrium. Also listed as IDS 213A-213B and Math 213A-213B.

Rules & Requirements

Prerequisites: MATH 104 and 110 and Statistics 101

Hours & Format

Fall and/or spring: 15 weeks - 2 hours of lecture per week

Additional Details

Subject/Course Level: Economics/Graduate

Grading: Letter grade.

ECON 207B Mathematical Economics 3 Units

Terms offered: Spring 2015, Spring 2012, Spring 2011

Mathematical analysis of economic theory. The problems treated involve as wide a range of mathematical techniques and of economic topics as possible, including theories of preference, utility, demand, personal probability, games and general equilibrium. Also listed as IDS 213A-213B and Math 213A-213B.

Rules & Requirements

Prerequisites: MATH 104 and 110 and Statistics 101

Hours & Format

Fall and/or spring: 15 weeks - 2 hours of lecture per week

Additional Details

Subject/Course Level: Economics/Graduate

Grading: Letter grade.

ECON 208 Microeconomic Theory Seminar 3 Units

Terms offered: Fall 2017, Spring 2017, Fall 2016

Rules & Requirements

Prerequisites: Consent of instructor

Repeat rules: Course may be repeated for credit. Course may be repeated for credit when topic changes.

Hours & Format

Fall and/or spring: 15 weeks - 2 hours of seminar per week

Additional Details

Subject/Course Level: Economics/Graduate

Grading: Letter grade.

ECON 209A Theory and Application of Non-Cooperative Games 3 Units

Terms offered: Fall 2014, Fall 2013, Fall 2012

This course will study both pure game theory and its application to such problems as oligopoly pricing, non-cooperative bargaining, predatory pricing, and optimal auctions. The focus will be on game theory as a modelling process as opposed to a body of known results.

Rules & Requirements

Prerequisites: Consent of instructor

Hours & Format

Fall and/or spring: 15 weeks - 2 hours of lecture per week

Additional Details

Subject/Course Level: Economics/Graduate

Grading: Letter grade.

ECON 209B Theory and Application of Non-Cooperative Games: II 3 Units

Terms offered: Spring 2016, Spring 2015, Spring 2014

The course will cover basic topics not covered in 209A; will provide a more thorough treatment of topics covered in 209A; will cover a selection of advanced topics.

Rules & Requirements

Prerequisites: 209A or consent of instructor

Hours & Format

Fall and/or spring: 15 weeks - 2 hours of lecture per week

Additional Details

Subject/Course Level: Economics/Graduate

Grading: Letter grade.

ECON 210A Introduction to Economic History 3 Units

Terms offered: Spring 2017, Spring 2016, Spring 2015

Survey of some central themes in world economic history. Required of all Ph.D. candidates in economics.

Hours & Format

Fall and/or spring: 15 weeks - 2 hours of lecture per week

Additional Details

Subject/Course Level: Economics/Graduate

Grading: Letter grade.

ECON 210B Topics in European Economic History 3 Units

Terms offered: Spring 2017, Spring 2016, Fall 2013

A survey of some central themes in European economic history.

Rules & Requirements

Prerequisites: 210A

Hours & Format

Fall and/or spring: 15 weeks - 2 hours of lecture per week

Additional Details

Subject/Course Level: Economics/Graduate

Grading: Letter grade.

ECON 210C Topics in American Economic History 3 Units

Terms offered: Fall 2017, Fall 2016, Fall 2015

A survey of some central themes in American economic history.

Rules & Requirements

Prerequisites: 210A

Hours & Format

Fall and/or spring: 15 weeks - 2 hours of lecture per week

Additional Details

Subject/Course Level: Economics/Graduate

Grading: Letter grade.

ECON 211 Seminar in Economic History 3 Units

Terms offered: Fall 2017, Spring 2017, Fall 2016

Rules & Requirements

Prerequisites: Consent of instructor

Repeat rules: Course may be repeated for credit. Course may be repeated for credit when topic changes.

Hours & Format

Fall and/or spring: 15 weeks - 2 hours of seminar per week

Additional Details

Subject/Course Level: Economics/Graduate

Grading: Letter grade.

ECON 215A Political Economics 3 Units

Terms offered: Fall 2017, Fall 2016, Fall 2015

Tools of political economics: preferences and institutions, electoral competition, agency, partisan politics. Redistributive politics: general interest politics, special interest politics. Comparative politics: electoral rules, separation of powers, political regimes. Dynamic politics: fiscal policy, growth.

Rules & Requirements

Prerequisites: 215A is a prerequisite to 215B

Hours & Format

Fall and/or spring: 15 weeks - 2 hours of lecture per week

Additional Details

Subject/Course Level: Economics/Graduate

Grading: Letter grade.

Instructor: Roland

ECON 215B Political Economics 3 Units

Terms offered: Spring 2016, Spring 2015, Fall 2013

Tools of political economics: preferences and institutions, electoral competition, agency, partisan politics. Redistributive politics: general interest politics, special interest politics. Comparative politics: electoral rules, separation of powers, political regimes. Dynamic politics: fiscal policy, growth.

Rules & Requirements

Prerequisites: 215A is a prerequisite to 215B

Hours & Format

Fall and/or spring: 15 weeks - 2 hours of lecture per week

Additional Details

Subject/Course Level: Economics/Graduate

Grading: Letter grade.

Instructor: Roland

ECON C215A Political Economics 3 Units

Terms offered: Fall 2010, Fall 2009

Tools of political economics: preferences and institutions, electoral competition, agency, partisan politics. Redistributive politics: general interest politics, special interest politics. Comparative politics: electoral rules, separation of powers, political regimes. Dynamic politics: fiscal policy, growth.

Hours & Format

Fall and/or spring: 15 weeks - 2 hours of lecture per week

Additional Details

Subject/Course Level: Economics/Graduate

Grading: Letter grade.

Also listed as: POL SCI C237A

ECON C215B Political Economics 3 Units

Terms offered: Prior to 2007

Tools of political economics: preferences and institutions, electoral competition, agency, partisan politics. Redistributive politics: general interest politics, special interest politics. Comparative politics: electoral rules, separation of powers, political regimes. Dynamic politics: fiscal policy, growth.

Rules & Requirements

Prerequisites: ECON C215A is a prerequisite to ECON C215B, and POL SCI C237A is a prerequisite to POL SCI C237B

Hours & Format

Fall and/or spring: 15 weeks - 2 hours of lecture per week

Additional Details

Subject/Course Level: Economics/Graduate

Grading: Letter grade.

Also listed as: POL SCI C237B

ECON 217 Risk Seminar 3 Units

Terms offered: Fall 2017, Spring 2017, Fall 2016

This interdisciplinary seminar features seminar participants and guest speakers from academic institutions and financial services firms, presenting work on the analysis and management of risk in financial markets. Economics, statistics, finance, operations research, and other disciplines will be represented.

Rules & Requirements

Prerequisites: Consent of instructor. Graduate standing

Credit Restrictions: Students will receive no credit for Economics 217 after completing Statistics 278B.

Repeat rules: Course may be repeated for credit when topic changes.

Hours & Format

Fall and/or spring: 15 weeks - 2 hours of seminar per week

Additional Details

Subject/Course Level: Economics/Graduate

Grading: Offered for satisfactory/unsatisfactory grade only.

Instructors: Goldberg, Anderson

ECON 218 Seminar in Psychology and Economics 3 Units

Terms offered: Fall 2017, Spring 2017, Fall 2016

A graduate seminar in the field of behavioral economics.

Hours & Format

Fall and/or spring: 15 weeks - 2 hours of seminar per week

Additional Details

Subject/Course Level: Economics/Graduate

Grading: Letter grade.

Instructors: Della Vigna, Koszegi, Rabin

ECON 219A Foundations of Psychology and Economics 3 Units

Terms offered: Fall 2017, Fall 2016, Spring 2016

This course presents psychological and experimental economics research demonstrating departures from perfect rationality, self-interest, and other classical assumptions of economics and explores ways that these departures can be mathematically modeled and incorporated into mainstream positive and normative economics. The course will focus on the behavioral evidence itself, especially on specific formal assumptions that capture the findings in a way that can be used by economists. Economic applications will be used for illustrative purposes, but the course will emphasize formal theory.

Rules & Requirements

Prerequisites: 201A-201B or consent of instructor

Hours & Format

Fall and/or spring: 15 weeks - 2 hours of lecture per week

Additional Details

Subject/Course Level: Economics/Graduate

Grading: Letter grade.

ECON 219B Applications of Psychology and Economics 3 Units

Terms offered: Spring 2017, Spring 2015, Spring 2014

This course will build off of the material presented in 219A. It will expand on the psychological and experimental economic research presented there, but will emphasize a range of economic applications and especially empirical research.

Rules & Requirements

Prerequisites: 219A, 240A-240B or consent of instructor

Hours & Format

Fall and/or spring: 15 weeks - 2 hours of lecture per week

Additional Details

Subject/Course Level: Economics/Graduate

Grading: Letter grade.

ECON 220A Industrial Organization 3 Units

Terms offered: Spring 2017, Spring 2016, Spring 2015

Market structure, conduct and performance in the unregulated sector of the American economy. Public policies related to the promotion or restriction of competition.

Rules & Requirements

Prerequisites: 201A

Hours & Format

Fall and/or spring: 15 weeks - 2 hours of lecture per week

Additional Details

Subject/Course Level: Economics/Graduate

Grading: Letter grade.

ECON 220B Industrial Organization 3 Units

Terms offered: Fall 2017, Fall 2016, Fall 2015

Continuation of 220A. The characteristics of regulated industries and the consequences of regulation for economic performance.

Rules & Requirements

Prerequisites: 220A

Hours & Format

Fall and/or spring: 15 weeks - 2 hours of lecture per week

Additional Details

Subject/Course Level: Economics/Graduate

Grading: Letter grade.

ECON 220C Special Topics in Industrial Organization 3 Units

Terms offered: Spring 2017, Spring 2016, Fall 2013

See course announcement for current topics.

Rules & Requirements

Prerequisites: 220A

Hours & Format

Fall and/or spring: 15 weeks - 2 hours of lecture per week

Additional Details

Subject/Course Level: Economics/Graduate

Grading: Letter grade.

ECON 221 Seminar in Industrial Organization: Regulation and Public Enterprise 3 Units

Terms offered: Fall 2017, Spring 2017, Fall 2016

Rules & Requirements

Prerequisites: Consent of instructor

Repeat rules: Course may be repeated for credit. Course may be repeated for credit when topic changes.

Hours & Format

Fall and/or spring: 15 weeks - 2 hours of seminar per week

Additional Details

Subject/Course Level: Economics/Graduate

Grading: Letter grade.

ECON C222 Economics of Innovation 3 Units

Terms offered: Fall 2017, Spring 2017, Fall 2016, Spring 2016, Fall 2015, Spring 2015

Study of innovation, technical change, and intellectual property, including the industrial organization and performance of high-technology industries and firms; the use of economic, patent, and other bibliometric data for the analysis of technical change; legal and economic issues of intellectual property rights; science and technology policy; and the contributions of innovation and diffusion to economic growth. Methods of analysis are both theoretical and empirical, econometric and case study.

Rules & Requirements

Repeat rules: Course may be repeated for credit. Course may be repeated for credit when topic changes.

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture per week

Additional Details

Subject/Course Level: Economics/Graduate

Grading: Letter grade.

Also listed as: PHDBA C279I

ECON 224 Economics of Institutions 3 Units

Terms offered: Spring 2017, Spring 2016, Spring 2015

This course develops the proposition that institutions have pervasive ramifications for understanding economic organization. A comparative institutional approach is employed whereby the transaction is made the basic unit of analysis and alternative modes of organization are assessed with respect to their comparative contracting properties.

Hours & Format

Fall and/or spring: 15 weeks - 2 hours of lecture per week

Additional Details

Subject/Course Level: Economics/Graduate

Grading: Letter grade.

ECON C225 Workshop in Institutional Analysis 2 Units

Terms offered: Fall 2017, Spring 2017, Fall 2016, Spring 2016, Fall 2015, Spring 2015

This seminar features current research of faculty, from UC Berkeley and elsewhere, and of advanced doctoral students who are investigating the efficacy of economic and non-economic forms of organization. An interdisciplinary perspective--combining aspects of law, economics, and organization--is maintained. Markets, hierarchies, hybrids, bureaus, and the supporting institutions of law and politics all come under scrutiny. The aspiration is to progressively build toward a new science of organization.

Rules & Requirements

Prerequisites: Economics 100 or 101; Business Administration 110 or equivalent; or consent of instructor

Hours & Format

Fall and/or spring: 15 weeks - 2 hours of lecture per week

Additional Details

Subject/Course Level: Economics/Graduate

Grading: Offered for satisfactory/unsatisfactory grade only.

Also listed as: PHDBA C270

ECON 230A Public Economics 3 Units

Terms offered: Fall 2017, Fall 2016, Fall 2015

The economic and policy analysis of government expenditures, taxes, and intergovernmental fiscal relations. 230A is not a prerequisite for 230B.

Hours & Format

Fall and/or spring: 15 weeks - 2 hours of lecture per week

Additional Details

Subject/Course Level: Economics/Graduate

Grading: Letter grade.

ECON 230B Public Economics 3 Units

Terms offered: Spring 2017, Spring 2016, Spring 2015

Government intervention changes opportunities and incentives for firms, families, individuals, service providers, and state and local government. This course considers the incentive effects of government expenditure programs. The primary emphasis will be in the examination of the effect of social expenditure programs on individuals and families. Most of the papers will be empirical. The course will not contain an explicit section on methodology and econometric techniques; instead, relevant econometric techniques (e.g., discrete choice, duration analysis) will be discussed in the context of the empirical literature.

Hours & Format

Fall and/or spring: 15 weeks - 2 hours of lecture per week

Additional Details

Subject/Course Level: Economics/Graduate

Grading: Letter grade.

ECON 230C Public Sector Microeconomics 3 Units

Terms offered: Spring 2010, Spring 2009, Spring 1999

The economic and policy analysis of government expenditures, taxes, and intergovernmental fiscal relations.

Hours & Format

Fall and/or spring: 15 weeks - 2 hours of lecture per week

Additional Details

Subject/Course Level: Economics/Graduate

Grading: Letter grade.

ECON 231 Seminar in Public Sector Economics 3 Units

Terms offered: Fall 2017, Spring 2017, Fall 2016

Rules & Requirements

Prerequisites: Consent of instructor

Repeat rules: Course may be repeated for credit. Course may be repeated for credit when topic changes.

Hours & Format

Fall and/or spring: 15 weeks - 2 hours of seminar per week

Additional Details

Subject/Course Level: Economics/Graduate

Grading: Letter grade.

ECON 234A Macroeconomic Finance 3 Units

Terms offered: Spring 2012, Spring 2011, Fall 2009

Introduction to macroeconomic finance. Course covers static portfolio choice, capital asset pricing model (CAPM), consumption based models, dynamic equilibrium asset pricing theories, and current issues in behavioral finance. Strong emphasis on household finance and risk-sharing. Course is both theoretical and empirical.

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture per week

Additional Details

Subject/Course Level: Economics/Graduate

Grading: Letter grade.

Formerly known as: 236D

ECON 234C Financial Decision-Making in Firms 3 Units

Terms offered: Spring 2017, Spring 2016, Spring 2015

This course provides a theoretical and empirical treatment of the core topics in corporate finance including internal corporate investment; external corporate investment (mergers and acquisitions); capital structure and financial contracting; bankruptcy; corporate governance.

Rules & Requirements

Prerequisites: 240A-240B or equivalent

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture per week

Additional Details

Subject/Course Level: Economics/Graduate

Grading: Letter grade.

ECON 235 Financial Economics Seminar 3 Units

Terms offered: Fall 2017, Spring 2017, Fall 2016

This course presents speakers who work on the boundary of economics and finance, on topics including asset pricing, behavioral finance, and corporate finance.

Rules & Requirements

Repeat rules: Course may be repeated for credit. Course may be repeated for credit when topic changes.

Hours & Format

Fall and/or spring: 15 weeks - 2 hours of seminar per week

Additional Details

Subject/Course Level: Economics/Graduate

Grading: Letter grade.

ECON 236A Aggregate Economics 3 Units

Terms offered: Fall 2017, Fall 2016, Fall 2015

Macroeconomic models; theory and practice of aggregate economics; rational expectations models; finance theory integrated with macro.

Rules & Requirements

Prerequisites: For 236A: 201A-201B and 202A-202B. For 236B: 236A

Hours & Format

Fall and/or spring: 15 weeks - 2 hours of lecture per week

Additional Details

Subject/Course Level: Economics/Graduate

Grading: Letter grade.

ECON 236B Aggregate Economics 3 Units

Terms offered: Spring 2017, Spring 2016, Spring 2015

Macroeconomic models; theory and practice of aggregate economics; rational expectations models; finance theory integrated with macro.

Rules & Requirements

Prerequisites: For 236A: 201A-201B and 202A-202B. For 236B: 236A

Hours & Format

Fall and/or spring: 15 weeks - 2 hours of lecture per week

Additional Details

Subject/Course Level: Economics/Graduate

Grading: Letter grade.

ECON 237 Seminar in Advanced Macroeconomics and Money 3 Units

Terms offered: Fall 2017, Spring 2017, Fall 2016

Rules & Requirements

Prerequisites: Consent of instructor

Repeat rules: Course may be repeated for credit. Course may be repeated for credit when topic changes.

Hours & Format

Fall and/or spring: 15 weeks - 2 hours of seminar per week

Additional Details

Subject/Course Level: Economics/Graduate

Grading: Letter grade.

ECON 240A Econometrics 5 Units

Terms offered: Fall 2017, Fall 2016, Fall 2015

Basic preparation for the Ph.D. program including probability and statistical theory and the classical linear regression model.

Rules & Requirements

Prerequisites: 100A or 101A or equivalent; 100B or 101B or equivalent; Mathematics 53 and 54, or equivalent; Statistics 131A or equivalent

Hours & Format

Fall and/or spring: 15 weeks - 4 hours of lecture and 2 hours of discussion per week

Additional Details

Subject/Course Level: Economics/Graduate

Grading: Letter grade.

Formerly known as: 240

ECON 240B Econometrics 4 Units

Terms offered: Spring 2017, Spring 2016, Spring 2015

Basic preparation for the Ph.D. program including generalized least squares; instrumental variables estimation; generalized method of moments; time series analysis; and nonlinear models.

Rules & Requirements

Prerequisites: 240A or equivalent

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture and 2 hours of discussion per week

Additional Details

Subject/Course Level: Economics/Graduate

Grading: Letter grade.

ECON 241A Econometrics 4 Units

Terms offered: Spring 2017, Spring 2016, Spring 2015

Intended for students specializing in econometrics and others with strong mathematical backgrounds. Linear and nonlinear statistical models and their applications in economics. Special problems in analyzing data from non-controlled experiments.

Rules & Requirements

Prerequisites: Statistics 200A-200B or equivalent and a course in linear algebra. Recommended: Math 112

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture per week

Additional Details

Subject/Course Level: Economics/Graduate

Grading: Letter grade.

ECON 241B Econometrics 4 Units

Terms offered: Fall 2017, Fall 2016, Fall 2015

Simultaneous equations and time-series models.

Rules & Requirements

Prerequisites: 241A

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture per week

Additional Details

Subject/Course Level: Economics/Graduate

Grading: Letter grade.

ECON 242 Seminar in Econometrics 3 Units
Terms offered: Fall 2017, Spring 2017, Fall 2016

Rules & Requirements

Prerequisites: 240A-240B

Repeat rules: Course may be repeated for credit. Course may be repeated for credit when topic changes.

Hours & Format

Fall and/or spring: 15 weeks - 2 hours of seminar per week

Additional Details

Subject/Course Level: Economics/Graduate

Grading: Letter grade.

ECON 244 Applied Econometrics 3 Units
Terms offered: Fall 2017, Fall 2016, Fall 2015
Methods of applied econometrics, with emphasis on alternative modelling strategies and problems met in practice. Intended for doctoral students conducting empirical research.

Rules & Requirements

Prerequisites: 240A-240B

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture per week

Additional Details

Subject/Course Level: Economics/Graduate

Grading: Letter grade.

ECON 250A Labor Economics 3 Units
Terms offered: Fall 2017, Fall 2016, Fall 2015
Analysis of labor market behavior.

Rules & Requirements

Prerequisites: 250A is prerequisite to 250B. Consent of instructor

Hours & Format

Fall and/or spring: 15 weeks - 2 hours of lecture per week

Additional Details

Subject/Course Level: Economics/Graduate

Grading: Letter grade.

ECON 250B Labor Economics 3 Units
Terms offered: Spring 2016, Spring 2015, Spring 2014
Analysis of labor market behavior.

Rules & Requirements

Prerequisites: 250A is prerequisite to 250B. Consent of instructor

Hours & Format

Fall and/or spring: 15 weeks - 2 hours of lecture per week

Additional Details

Subject/Course Level: Economics/Graduate

Grading: Letter grade.

ECON 250C Labor Economics 3 Units
Terms offered: Fall 2014, Spring 2013, Spring 2012
Analysis of labor market behavior.

Rules & Requirements

Prerequisites: 250B

Hours & Format

Fall and/or spring: 15 weeks - 2 hours of lecture per week

Additional Details

Subject/Course Level: Economics/Graduate

Grading: Letter grade.

ECON 251 Seminar in Labor Economics 3 Units
Terms offered: Fall 2017, Spring 2017, Fall 2016
Seminar for students at the doctoral dissertation level.

Rules & Requirements

Prerequisites: Consent of instructor

Repeat rules: Course may be repeated for credit. Course may be repeated for credit when topic changes.

Hours & Format

Fall and/or spring: 15 weeks - 2 hours of seminar per week

Additional Details

Subject/Course Level: Economics/Graduate

Grading: Letter grade.

ECON 260A Comparative Economics 3 Units

Terms offered: Fall 2017, Fall 2016, Fall 2015

New issues raised by transition for economics. Political economy of reform: speed, sequencing, reform design, political economy of privatization. Allocative changes: speed of sectoral reallocation, price liberalization, output fall and macroeconomic dynamics, law enforcement, dynamics of institutional change.

Rules & Requirements

Prerequisites: 260A is prerequisite to 260B

Hours & Format

Fall and/or spring: 15 weeks - 2 hours of lecture per week

Additional Details

Subject/Course Level: Economics/Graduate

Grading: Letter grade.

Instructor: Roland

ECON 270B Development Economics 3 Units

Terms offered: Spring 2017, Spring 2016, Spring 2015

Problems of underdevelopment and poverty, policy issues and development strategies.

Hours & Format

Fall and/or spring: 15 weeks - 2 hours of lecture per week

Additional Details

Subject/Course Level: Economics/Graduate

Grading: Letter grade.

ECON 270C Development Economics 3 Units

Terms offered: Spring 2017, Spring 2016, Spring 2015

Basic macro-policy planning with investment project analysis.

Hours & Format

Fall and/or spring: 15 weeks - 2 hours of lecture per week

Additional Details

Subject/Course Level: Economics/Graduate

Grading: Letter grade.

ECON C270A Microeconomics of Development 3 Units

Terms offered: Fall 2017, Fall 2016, Fall 2015

Theoretical and empirical analyses of poverty and inequality, household and community behavior, and contract and institutions in the context of developing countries.

Rules & Requirements

Prerequisites: Consent of instructor

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture per week

Additional Details

Subject/Course Level: Economics/Graduate

Grading: Letter grade.

Also listed as: A, RESEC C251

ECON 271 Seminar in Development Economics 3 Units

Terms offered: Fall 2017, Spring 2017, Fall 2016

Rules & Requirements

Prerequisites: Consent of instructor

Repeat rules: Course may be repeated for credit. Course may be repeated for credit when topic changes.

Hours & Format

Fall and/or spring: 15 weeks - 2 hours of seminar per week

Additional Details

Subject/Course Level: Economics/Graduate

Grading: Letter grade.

ECON 274 Global Poverty and Impact Evaluation 4 Units

Terms offered: Spring 2017, Spring 2016, Spring 2015

Rather than simply describing the causes and symptoms of global poverty, this course will explore the variety of tools available for rigorously measuring the impact of development programs. Through weekly case studies of field research, the course will cover impact evaluation theory and methods. The course will culminate with a final project in which each student will design an impact evaluation of a policy or intervention.

Rules & Requirements

Prerequisites: At least one prior term of intermediate economics (i.e., 100A or 100B) and some prior coursework in statistics

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture and 1 hour of discussion per week

Additional Details

Subject/Course Level: Economics/Graduate

Grading: Letter grade.

Instructor: Miguel

ECON C275A Economic Demography 3 Units

Terms offered: Spring 2015, Spring 2014, Spring 2013

Economic consequences of demographic change in developing and developed countries including capital formation, labor markets, and intergenerational transfers. Economic determinants of fertility, mortality and migration.

Hours & Format

Fall and/or spring: 15 weeks - 2 hours of lecture per week

Additional Details

Subject/Course Level: Economics/Graduate

Grading: Letter grade.

Instructor: Lee

Also listed as: DEMOG C275A

ECON 280A International Economics 3 Units

Terms offered: Fall 2017, Fall 2016, Fall 2015

The world economy as a general equilibrium system. The theory of international economics, trade policy.

Hours & Format

Fall and/or spring: 15 weeks - 2 hours of lecture per week

Additional Details

Subject/Course Level: Economics/Graduate

Grading: Letter grade.

ECON 280B International Economics 3 Units

Terms offered: Fall 2017, Fall 2016, Fall 2015

This course develops basic theoretical models for studying issues in open-economy macroeconomics. The current account and the trade balance, international capital market integration, developing country debt problems, the real exchange rate, fiscal policy in the open economy, and international policy coordination.

Rules & Requirements

Prerequisites: 280A is not prerequisite to 280B

Hours & Format

Fall and/or spring: 15 weeks - 2 hours of lecture per week

Additional Details

Subject/Course Level: Economics/Graduate

Grading: Letter grade.

ECON 280C International Economics 3 Units

Terms offered: Spring 2017, Spring 2015, Spring 2014

This course is an empirical treatment of open-economy macroeconomics and finance. Topics include trade elasticities, the determination of the trade balance and income under fixed and floating exchange rates, purchasing power parity, devaluation in small open economies, quantifying the degree of international capital mobility, implications for the effectiveness of monetary and fiscal policy, international interdependence and coordination, models of exchange rate determination.

Rules & Requirements

Prerequisites: 280B

Hours & Format

Fall and/or spring: 15 weeks - 2 hours of lecture per week

Additional Details

Subject/Course Level: Economics/Graduate

Grading: Letter grade.

ECON 281 Seminar in International Trade and Finance 3 Units

Terms offered: Fall 2017, Spring 2017, Fall 2016

Rules & Requirements

Repeat rules: Course may be repeated for credit. Course may be repeated for credit when topic changes.

Hours & Format

Fall and/or spring: 15 weeks - 2 hours of seminar per week

Additional Details

Subject/Course Level: Economics/Graduate

Grading: Letter grade.

ECON 291 Departmental Seminar 1 Unit

Terms offered: Fall 2017, Spring 2017, Fall 2016

A general interest seminar featuring speakers and topics of broad interest whose work will be important for all areas of economics.

Rules & Requirements

Prerequisites: 201B, 202B

Hours & Format

Fall and/or spring: 15 weeks - 1.5 hours of seminar per week

Additional Details

Subject/Course Level: Economics/Graduate

Grading: Offered for satisfactory/unsatisfactory grade only.

ECON 295 Survey of Research in Economics 1 Unit

Terms offered: Fall 2017, Spring 2017, Fall 2016

Presentations by departmental faculty of new research directions in different subfields of economics.

Hours & Format

Fall and/or spring: 15 weeks - 2 hours of seminar per week

Additional Details

Subject/Course Level: Economics/Graduate

Grading: Offered for pass/not pass grade only.

ECON 296 Special Topics in Economics 3 Units

Terms offered: Spring 2014, Spring 2013, Spring 2011

Topics of different sections to be announced annually.

Rules & Requirements

Prerequisites: Consent of instructor

Repeat rules: Course may be repeated for credit when topic changes.

Hours & Format

Fall and/or spring: 15 weeks - 2 hours of lecture per week

Additional Details

Subject/Course Level: Economics/Graduate

Grading: Letter grade.

ECON 298 Directed Group Study for Graduates 1 - 4 Units

Terms offered: Fall 2017, Spring 2017, Fall 2016

Seminars for the group of selected topics, which will vary from year to year.

Rules & Requirements

Prerequisites: Consent of instructor

Hours & Format

Fall and/or spring: 15 weeks - 0 hours of independent study per week

Additional Details

Subject/Course Level: Economics/Graduate

Grading: Offered for satisfactory/unsatisfactory grade only.

ECON 299 Supervised Independent Study and Research 1 - 12 Units

Terms offered: Fall 2017, Summer 2017 8 Week Session, Summer 2017

Second 6 Week Session

Open to candidates for the Ph.D. degree who have passed the qualifying examination and who are engaged in research for the thesis, and in special cases, with consent of the instructor in charge, to graduate students who desire to do special work in a particular field.

Rules & Requirements

Repeat rules: Course may be repeated for credit. Course may be repeated for credit when topic changes.

Hours & Format

Fall and/or spring: 15 weeks - 0 hours of independent study per week

Summer:

6 weeks - 0 hours of independent study per week

8 weeks - 0 hours of independent study per week

Additional Details

Subject/Course Level: Economics/Graduate

Grading: Offered for satisfactory/unsatisfactory grade only.

ECON 301 GSI Practicum 4 Units

Terms offered: Fall 2017, Spring 2017, Fall 2016

Course credit for experience gained in academic teaching through employment as a graduate student instructor.

Rules & Requirements

Prerequisites: Appointment as graduate student instructor in department, consent of graduate advisor

Repeat rules: Course may be repeated for credit. Course may be repeated for credit when topic changes.

Hours & Format

Fall and/or spring: 15 weeks - 2 hours of seminar per week

Additional Details

Subject/Course Level: Economics/Professional course for teachers or prospective teachers

Grading: Offered for satisfactory/unsatisfactory grade only.

Instructor: Olney

ECON 375 GSI Pedagogy Workshop 4 Units

Terms offered: Fall 2017, Fall 2016, Fall 2015

Course credit for experience gained in academic teaching through employment as a graduate student instructor.

Rules & Requirements

Prerequisites: Appointment as graduate student instructor in department, consent of graduate advisor

Repeat rules: Course may be repeated for credit. Course may be repeated for credit when topic changes.

Hours & Format

Fall and/or spring: 15 weeks - 2 hours of seminar per week

Additional Details

Subject/Course Level: Economics/Professional course for teachers or prospective teachers

Grading: Offered for satisfactory/unsatisfactory grade only.

Instructor: Olney

ECON 602 Individual Study for Doctoral Students 1 - 8 Units

Terms offered: Fall 2017, Spring 2017, Fall 2016

Individual study in consultation with the major field advisor, intended to provide an opportunity for qualified graduate students to prepare themselves for the various examinations required of candidates for the Ph.D. A student will be permitted to accumulate a maximum of 16 units of 602.

Rules & Requirements

Credit Restrictions: Course does not satisfy unit or residence requirements for doctoral degree.

Repeat rules: Course may be repeated for credit. Course may be repeated for credit when topic changes.

Hours & Format

Fall and/or spring: 15 weeks - 0 hours of independent study per week

Additional Details

Subject/Course Level: Economics/Graduate examination preparation

Grading: Offered for satisfactory/unsatisfactory grade only.