

# Health Policy

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The PhD Program in Health Policy (formerly known as Health Services and Policy Analysis) at UC Berkeley is distinguished by its interdisciplinary application of the social and behavioral science disciplines to real-world health issues. Students select a specialty field from among three tracks (Health Economics, Organizations & Management, and Population & Data Science) while receiving rigorous training in quantitative research methods. Students augment their training through skills and knowledge from UC Berkeley's top-ranked Economics, Political Science, and Sociology departments, as well as the Haas School of Business and the Goldman School of Public Policy. Graduates of the Health Policy program are well prepared to assume academic careers in research and teaching. The program's interdisciplinary social and behavioral sciences approach to health services and policy research is a cornerstone of the PhD program that enables students to tailor much of their coursework to their own research interests.

## 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 has completed a basic degree 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, or an IELTS Band score of at least 7 on a 9-point scale (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 the 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.

## Required Documents for Applications

1. **Transcripts:** Applicants may upload *unofficial* transcripts with your application for the departmental initial review. Unofficial transcripts must contain specific information including the name of the applicant, name of the school, all courses, grades, units, & degree conferral (if applicable).
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, by the recommender, not the Graduate Admissions.
3. **Evidence of English language proficiency:** All applicants who have completed a basic degree from a country or political entity in which the official language is not English are required to submit official evidence of English language proficiency. This applies to institutions 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:
  - courses in English as a Second Language,
  - courses conducted in a language other than English,
  - courses that will be completed after the application is submitted, and
  - courses of a non-academic nature.

Applicants who have previously applied to Berkeley must also submit new test scores that meet the current minimum requirement from one of the standardized tests. Official TOEFL score reports must be sent directly from Educational Test Services (ETS). The institution code for Berkeley is 4833 for Graduate Organizations. Official IELTS score reports must be sent electronically from the testing center to University of California, Berkeley, Graduate Division, Sproul Hall, Rm 318 MC 5900, Berkeley, CA 94720. TOEFL and IELTS score reports are only valid for two years prior to beginning the graduate program at UC Berkeley. Note: score reports can not expire before the month of June.

## Where to Apply

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

## Admission to the Health Policy PhD Program

Successful applicants have a clear research focus in health policy and/or health services research. Experience working in the health sector

is viewed favorably by the admissions committee, as is prior research experience.

Entering students should have a foundation of basic knowledge in microeconomics, epidemiology, and statistics. A master's degree is preferred but not required for this program. Applicants without a master's degree should have at least two years of related experience. Additional admission requirements include GRE scores (average scores for admitted applicants are in the 80th percentile or above) and three letters of recommendation.

## Health Policy PhD Course Requirements

Available specialty fields:

- Health Economics
- Organizations & Management
- Population & Data Science

## Curriculum Requirements

All students must take the core courses PB HLTH 237C, PB HLTH 237D, PB HLTH 237E, and PB HLTH 237F, five specialty field courses, three quantitative research methods courses, and three additional graduate elective courses.

### Required Core Courses for All Specialty Fields

PB HLTH 237C	Health Policy Research Colloquium	1
PB HLTH 237D	Health Policy PhD Dissertation Seminar	2
PB HLTH 237E	Doctoral Seminar in Health Organizations & Management	2
PB HLTH 237F	Doctoral Seminar in Health Economics	2

## Health Economics Course Requirements

### Specialty Field Core Requirement

ECON 201A	Economic Theory	4
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### Specialty Field Electives

Students select four courses, including a two-course sequence

ECON 201B	Economic Theory	4
ECON 219A	Foundations of Psychology and Economics	3
ECON 219B	Applications of Psychology and Economics	3
ECON 220A & ECON 220B	Industrial Organization and Industrial Organization	3
ECON 230A/230B	Public Economics	3
ECON 250A & ECON 250B & ECON 250C	Labor Economics and Labor Economics and Labor Economics	3
ECON 270B & ECON 270C	Development Economics and Development Economics	3
DEMOG C275A	Economic Demography	3
PB HLTH 226A	Health Economics A	3
PUB POL 251	Microeconomic Organization and Policy Analysis	3
PUB POL 259	How to Conduct Benefit Cost Analysis	4

### Quantitative Research Methods

A,RESEC 212	Econometrics: Multiple Equation Estimation	4
A,RESEC 213	Applied Econometrics	4

ECON 244	Applied Econometrics	3
INFO 251	Applied Machine Learning	4
PB HLTH C240B	Biostatistical Methods: Survival Analysis and Causality	4
PB HLTH C240C	Biostatistical Methods: Computational Statistics with Applications in Biology and Medicine	4
PB HLTH 241	Intermediate Biostatistics for Public Health	4
PB HLTH C242C	Longitudinal Data Analysis	4
PB HLTH 244	Big Data: A Public Health Perspective	3
PB HLTH 245	Introduction to Multivariate Statistics	4
PB HLTH 250B	Epidemiologic Methods II	4
PB HLTH 252	Epidemiological Analysis	4
PB HLTH 252D	Introduction to Causal Inference	4
PB HLTH 252E	Advanced Topics in Causal Inference	4
POL SCI 236A	The Statistics of Causal Inference in the Social Sciences	4

### Electives

Three additional elective courses taken for a letter grade from among Berkeley's wide offering of graduate courses. Students should work with their advisor to select an appropriate mix of courses to ensure multidisciplinary but deep methodological and substantive expertise.

## Organization and Management Course Requirements

### Specialty Field Core Requirement

PB HLTH 224A	Organizational Behavior and Management in Health Care	3
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### Specialty Field Electives

Students select four courses, with one micro and one macro course

#### Micro-Organizational

INFO 233	Social Psychology and Information Technology [3]
PHDBA 259A	Research in Micro-Organizational Behavior [3]
PHDBA 259E	Research Seminar in Behavioral Science [4]
PHDBA 259S	Research Seminar in Management of Organizations [2-4]
PUB POL 290	Special Topics in Public Policy [1-4]

#### Macro-Organizational

PHDBA 259C	Research Workshop on Macro Organizational Behavior [3]
PHDBA 297T	Doctoral Topics in Business Administration [0.5-3]
PHDBA C270	Workshop in Institutional Analysis [2]
SOCIOL 280D	Advanced Study in Substantive Sociological Fields: Organizations [3]

#### Other Electives

DEMOG C280	Social Networks [4]
PUB POL 273	Public Management and Policy Implementation [4]
POL SCI 289	Research Topics in Public Organization [4]
PSYCH 290J	Seminars: Social [2]
SOCIOL 280DD	Sociology of Medicine [3]
SOC WEL 210I	Group, Organizational, and Community Dynamics [2]

### Quantitative Research Methods

Students select three courses

EDUC 274A	Measurement in Education and the Social Sciences I	4	EDUC 275B	Data Analysis in Educational Research II	4
EDUC 274B	Measurement in Education and the Social Sciences II	4	EDUC 275G	Hierarchical and Longitudinal Modeling	3
EDUC 274C	Research Seminar in Measurement	2	INFO 201	Research Design and Applications for Data and Analysis	3
EDUC 274D	Multidimensional Measurement	4	INFO 251	Applied Machine Learning	4
EDUC 275B	Data Analysis in Educational Research II	4	PB HLTH 196	Special Topics in Public Health	1-4
EDUC 275G	Hierarchical and Longitudinal Modeling	3	PB HLTH 219D	Social and Behavioral Health Research: Introduction to Survey Methods	3
INFO 251	Applied Machine Learning	4	PB HLTH 226C	Economics of Population Health	3
PB HLTH C242C	Longitudinal Data Analysis	4	PB HLTH C240B	Biostatistical Methods: Survival Analysis and Causality	4
PB HLTH 219D	Social and Behavioral Health Research: Introduction to Survey Methods	3	PB HLTH C240C	Biostatistical Methods: Computational Statistics with Applications in Biology and Medicine	4
PB HLTH 241	Intermediate Biostatistics for Public Health	4	PB HLTH 241	Intermediate Biostatistics for Public Health	4
PB HLTH 244	Big Data: A Public Health Perspective	3	PB HLTH C242C	Longitudinal Data Analysis	4
PB HLTH 245	Introduction to Multivariate Statistics	4	PB HLTH 243C	Information Systems in Public Health	2
PB HLTH 250B	Epidemiologic Methods II	4	PB HLTH 244	Big Data: A Public Health Perspective	3
PB HLTH 250C	Advanced Epidemiologic Methods	3	PB HLTH 245	Introduction to Multivariate Statistics	4
PB HLTH 252	Epidemiological Analysis	4	PB HLTH 250B	Epidemiologic Methods II	4
PB HLTH 252D	Introduction to Causal Inference	4	PB HLTH 250C	Advanced Epidemiologic Methods	3
PB HLTH 252E	Advanced Topics in Causal Inference	4	PB HLTH 252	Epidemiological Analysis	4
PB HLTH C240B	Biostatistical Methods: Survival Analysis and Causality	4	PB HLTH 252D	Introduction to Causal Inference	4
PB HLTH C240C	Biostatistical Methods: Computational Statistics with Applications in Biology and Medicine	4	PB HLTH 252E	Advanced Topics in Causal Inference	4
PHDBA 297B	Research and Theory in Business: Behavioral Science	3	PB HLTH 290	Health Issues Seminars	1-4
POL SCI 239T	An Introduction to Computational Tools and Techniques for Social Science Research	4	DEVP 229	Quantitative Methods and Impact Evaluation	3
POL SCI 239T	An Introduction to Computational Tools and Techniques for Social Science Research	4	PUB POL 259	How to Conduct Benefit Cost Analysis	4
POL SCI C236A	The Statistics of Causal Inference in the Social Science	4	POL SCI 239T	An Introduction to Computational Tools and Techniques for Social Science Research	4
PSYCH 206	Structural Equation Modeling	3	POL SCI 236A	The Statistics of Causal Inference in the Social Sciences	4
SOCIOL 273L	Computational Social Science	3	PSYCH 206	Structural Equation Modeling	3
SOCIOL 273M	Computational Social Science	3	SOCIOL 273L	Computational Social Science	3
			SOCIOL 273M	Computational Social Science	3

**Electives**

Three additional elective courses taken for a letter grade from among Berkeley's wide offering of graduate courses. Students should work with their advisor to select an appropriate mix of courses to ensure multidisciplinary but deep methodological and substantive expertise.

**Population & Data Science Course Requirements****Speciality Field Core Requirements**

Students select five courses

A,RESEC 212	Econometrics: Multiple Equation Estimation	4
A,RESEC 213	Applied Econometrics	4
DEMOG 210	Demographic Methods: Rates and Structures	4
ECON 244	Applied Econometrics	3
EDUC 274A	Measurement in Education and the Social Sciences I	4
EDUC 274B	Measurement in Education and the Social Sciences II	4
EDUC 274C	Research Seminar in Measurement	2
EDUC 274D	Multidimensional Measurement	4

**Specialty Field Examination**

A comprehensive written examination in the student's specialty field must be successfully completed prior to the qualifying examination.

**Quantitative Research Methods Paper**

An empirical research paper to demonstrate the student's ability to use doctoral-level quantitative research methods with real data must be successfully completed before the end of the third year of the program.

**Qualifying Examination**

An oral qualifying examination must be passed before the student can be advanced to doctoral candidacy.

**Dissertation**

An original research dissertation is required for the PhD degree.