Public Health

The School of Public Health offers two professional degrees, the Master of Public Health (MPH) and the Doctor of Public Health (DrPH). The School of Public Health also offers academic degrees in Biostatistics (http://guide.berkeley.edu/graduate/degree-programs/biostatistics/) (MA, PhD), Environmental Health Sciences (http://guide.berkeley.edu/graduate/degree-programs/environmental-health-sciences/) (MS, PhD), Epidemiology (http://guide.berkeley.edu/graduate/degree-programs/epidemiology/) (MS, PhD), Health and Medical Sciences (http://guide.berkeley.edu/graduate/degree-programs/health-medical-sciences-program/) (MS), Health Policy (http://guide.berkeley.edu/graduate/degree-programs/health-policy/) (PhD), and Infectious Diseases & Immunity (http://guide.berkeley.edu/graduate/degree-programs/infectious-diseases-immunity/) (PhD).

Master of Public Health (MPH)

The program of study leading to the professional MPH degree is based on a series of foundation courses. In addition, MPH students concentrate in one of the following areas: Biostatistics, Environmental Health Sciences, Epidemiology (11-month), Epidemiology/Biostatistics, Health and Social Behavior, Health Policy and Management, Global Health and Environment, Infectious Diseases and Vaccinology, Interdisciplinary, Maternal, Child, and Adolescent Health, and Public Health Nutrition.

The MPH degree is available in a residential program on campus or through an On-Campus/Online MPH (https://publichealth.berkeley.edu/academics/online/) program. The hybrid program requires two accelerated on-campus sessions, while all remaining coursework is completed online.

Doctor of Public Health (DrPH)

The Doctor of Public Health (DrPH) (http://sph.berkeley.edu/areas-study/doctor-public-health/) curriculum is based on a comprehensive body of knowledge in the field of public health and its related disciplines, and the investigation of significant problems in public health practice.

Admission to the University

Applying for Graduate Admission

Thank you for considering UC Berkeley for graduate study! UC Berkeley offers more than 120 graduate programs representing the breadth and depth of interdisciplinary scholarship. The Graduate Division hosts a complete list (https://grad.berkeley.edu/admissions/choosing-your-program/list/) of graduate academic programs, departments, degrees offered, and application deadlines can be found on the Graduate Division website.

Prospective students must submit an online application to be considered for admission, in addition to any supplemental materials specific to the program for which they are applying. The online application and steps to take to apply can be found on the Graduate Division website (https://grad.berkeley.edu/admissions/steps-to-apply/).

Admission Requirements

The minimum graduate admission requirements are:

1. A bachelor's degree or recognized equivalent from an accredited institution;
2. A satisfactory scholastic average, usually a minimum grade-point average (GPA) of 3.0 (B) on a 4.0 scale; and
3. Enough undergraduate training to do graduate work in your chosen field.

For a list of requirements to complete your graduate application, please see the Graduate Division's Admissions Requirements page (https://grad.berkeley.edu/admissions/steps-to-apply/requirements/). It is also important to check with the program or department of interest, as they may have additional requirements specific to their program of study and degree. Department contact information can be found here (https://guide.berkeley.edu/graduate/degree-programs/).

Where to apply?

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

Curriculum

Courses Required		
Core courses in required subject areas below per approved lists:		
Research or Professional Residency (1)		
PB HLTH 297	Field Study in Public Health [1]	
PB HLTH 293	Doctoral Seminar [1-4] (Required in 1, 2, and 3 years)	
Leadership (1)		
PB HLTH 290	Health Issues Seminars [1-4]	
PB HLTH 291A	Preparation for Public Health Practice [2]	
Public Health Ethics (1)		
ESPM C254/ PB HLTH C202	Ethnic and Cultural Diversity in Health Status [4]	
PB HLTH 200A	Current issues in Public Health Ethics: Research and Practice [3]	
STAT 700	Statistics Colloquium [0.0]	
Research Design & Methods (2)		
PB HLTH 202B	Ethnic and Cultural Diversity in Health Status	4
PB HLTH 211	Health and Human Rights [3]	
CIV ENG 264	Behavioral Modeling for Engineering, Planning, and Policy Analysis [3]	
EDUC 274A	Measurement in Education and the Social Sciences I [4]	
EDUC 275B	Data Analysis in Educational Research II [4]	
EDUC 275G	Hierarchical and Longitudinal Modeling [5]	
PB HLTH C240	Introduction to Modern Biostatistical Theory and Practice [4]	
PB HLTH C240D	Machine Learning and Biostatistics in Healthcare [4]	
PB HLTH W215	Course Not Available [3]	
PB HLTH 250B	Epidemiologic Methods II [4]	
PB HLTH W250	Course Not Available [3]	
PB HLTH W250G	Course Not Available [3]	
PB HLTH 201F	Course Not Available [3]	
PB HLTH 218A	Course Not Available	
PB HLTH 219A	Course Not Available	
PB HLTH 219D	Course Not Available [3]	

PB HLTH 231A	Analytic Methods for Health Policy and Management [3]
PB HLTH 231C	Course Not Available [3]
PB HLTH 232	Course Not Available
PB HLTH 235	Course Not Available [3]
PB HLTH 237A	Theories and Methods in Health Policy and Health Services Research [2,4]
PB HLTH 237B	Theories and Methods in Health Policy and Health Services Research B [2,4]
PB HLTH 241	Intermediate Biostatistics for Public Health [4]
PB HLTH 245	Introduction to Multivariate Statistics [4]
PB HLTH 248	Course Not Available
PB HLTH 250B	Epidemiologic Methods II [4]
PB HLTH 251C	Course Not Available [2]
PB HLTH 251D	Applied Epidemiology Using R [2]
PB HLTH 252	Epidemiological Analysis [4]
PB HLTH W252	Course Not Available [4]
PB HLTH 252D	Introduction to Causal Inference [4]
PB HLTH 255D	Methods in Social Epidemiology [2]
PB HLTH W27[illegible]	Course Not Available [3]
PB HLTH 277A	GIS and Spatial Analysis for Health Equity [3]
POL SCI 231A	Quantitative Analysis in Political Research [4]
POL SCI 279	Selected Topics in American Government [4]
STAT C245A	Introduction to Modern Biostatistical Theory and Practice [4]
STAT C247C	Longitudinal Data Analysis [4]
Program Planning (1)	
PB HLTH 205	Program Planning and Needs Assessment [4]
PB HLTH 223C	Strategic Management and the Health Sector [3]
Pedagogy (1)	
PB HLTH 375A	School of Public Health Schoolwide Pedagogy Course [2]

These courses are all electives. They are suggested academic paths of student areas of interest:

Health Politics & Policy Analysis	
CIV ENG 264	Behavioral Modeling for Engineering, Planning, and Policy Analysis [3]
CY PLAN C256	Healthy Cities [3]
DEVP 237	Leadership, Conflict Resolution, and Community Development [3]
PB HLTH 220D	Health Policy Advocacy [3]
PB HLTH 220E	Global Health Policy [3]
PB HLTH W22[illegible]	Course Not Available [3]
PB HLTH 226A	Health Economics A [3]
PB HLTH 206B	Food and Nutrition Policies and Programs [3]
PB HLTH 226C	Economics of Population Health [3]
PB HLTH 220	Health Policy Decision-Making [3]
PB HLTH 200J	Health Policy and Management Breadth Course [2]
PB HLTH W20[illegible]	Course Not Available [3]
PB HLTH 210	Foundations of Maternal and Child Health Policy, Practice and Science [3]
Public Health Interventions	
CY PLAN 268	Community Development Studio/Workshop [4]
PB HLTH 201E	Public Health Interventions: Theory, Practice, and Research [2,3]
PB HLTH 243	Course Not Available
PB HLTH 201F	Course Not Available [3]
PB HLTH 252C	Intervention Trial Design [3]
PB HLTH 253E	Course Not Available [2]
PB HLTH 255C	Mental Health and Psychopathology [3]
Environmental Health Sciences	
PB HLTH 220C	Health Risk Assessment [3]
PB HLTH C160	Environmental Health and Development [4]
PB HLTH 150B	Human Health and the Environment in a Changing World [3]
PB HLTH 200K	Environmental Health Sciences Breadth Course [2]
PB HLTH W200E	Course Not Available [2]
PB HLTH 254	Occupational and Environmental Epidemiology [3]
PB HLTH 273	Environmental Determinants of Infectious Disease [3]
PB HLTH 272A	Course Not Available [4]
PB HLTH 272B	Course Not Available [2]
Global Health Sciences	
PB HLTH 204G	Research Advances in Health Disparities: Multidisciplinary Perspectives [1-3]
PB HLTH 212A	International Maternal and Child Health [2]
PB HLTH 213A	Family Planning, Population Change, and Health [3]
PB HLTH 257	Outbreak Investigation [2]
PB HLTH 260F	Infectious Disease Research in Developing Countries [2]
PB HLTH 212A	International Maternal and Child Health [2]
PB HLTH W212	Course Not Available [3]
PB HLTH W21[illegible]	Course Not Available [3]
PB HLTH 220E	Global Health Policy [3]
PB HLTH 226D	Global Health Economics [3]
PB HLTH 258	Cancer Epidemiology [3]

* Students with a master's or a higher degree outside the field of public health will be required to enroll in this course.

Available MPH Concentrations

- Environmental Health Sciences Concentration (p. 3)
- Epidemiology/Biostatistics Concentration (p. 3)
- Global Health & Environment Concentration (p. 3)
- Health & Social Behavior Concentration (p. 3)
- Health Policy & Management Concentration (2 year program) (p. 4)
- Health Policy & Management Concentration (11 month program) (p. 4)
- Infectious Diseases & Vaccinology Concentration (p. 4)
- Interdisciplinary Concentration (p. 4)

- Maternal, Child, and Adolescent Health Concentration (2 year program) (p. 5)
- Maternal, Child, and Adolescent Health Concentration (11 month program) (p. 5)
- Food, Nutrition, and Population Health Concentration (2 year program) (p. 5)

Curriculum

Required Core Courses for all MPH Concentrations

PB HLTH 142	Introduction to Probability and Statistics in Biology and Public Health	4
PB HLTH 200J	Health Policy and Management Breadth Course [1]	2
PB HLTH 200K	Environmental Health Sciences Breadth Course [2]	2
PB HLTH 200L	Health and Social Behavior Breadth	2
PB HLTH 250A	Epidemiologic Methods I	3
PB HLTH 291A	Preparation for Public Health Practice [3]	2
PB HLTH 297	Field Study in Public Health	1-12

[1] Not required for HPM students.
[2] Not a requirement for Environmental Health Science and Global Health and Environment MPH students.
[3] All of our MPH are expected to fulfill this requirement through PB HLTH 291A (PB HLTH W289, PB HLTH 224A, or PB HLTH 223C) or an equivalent. Note: DrPH students fulfill their leadership requirements through PB HLTH 290: Foundations of Public Health Leadership and Practice.

Environmental Health Sciences Concentration (2 year program)

Courses Required for Concentration

Select at least one of the two options below for an essential methods course:		
PB HLTH 241	Intermediate Biostatistics for Public Health	4
PB HLTH 245	Introduction to Multivariate Statistics	4
EHS Core Courses:		
PB HLTH 270A	Exposure Assessment and Control	3
PB HLTH 270B	Toxicology I	3
PB HLTH 292	Seminars for M.P.H. Students (students must take three EHS Masters Seminars during their time in the program)	1-3
PB HLTH 271E	Science and Policy for Environment and Health	3
PB HLTH 270	Introduction to Environmental Health Sciences	3
PB HLTH 220C	Health Risk Assessment (prerequisite PB HLTH 270B)	3
Select one of the following Environmental Health Sciences Electives:		
PB HLTH 254	Occupational and Environmental Epidemiology	3
PB HLTH C256	Human Genome, Environment and Public Health	4
PB HLTH 273	Environmental Determinants of Infectious Disease	3
PB HLTH W272A	Course Not Available	3
PB HLTH 277A	GIS and Spatial Analysis for Health Equity	3
PB HLTH 290	Health Issues Seminars (Exposure Assessment & Control II)	3
PB HLTH W272C	Course Not Available	3

Epidemiology/Biostatistics Concentration

Courses Required for Concentration

PB HLTH 142	Introduction to Probability and Statistics in Biology and Public Health (Students with a recent course in upper division statistics can opt out of this and take PBHLTH 245.)	4
PB HLTH 245	Introduction to Multivariate Statistics	4
PB HLTH 250A	Epidemiologic Methods I (Students with a recent upper division course in epidemiologic methods can start with PBHLTH 250B instead)	3
PB HLTH 252	Epidemiological Analysis	3
PB HLTH 241	Intermediate Biostatistics for Public Health	4
or PB HLTH W:	Course Not Available	
PB HLTH 250B	Epidemiologic Methods II	4
PB HLTH 292	Seminars for M.P.H. Students (Required 1st, 3rd and 4th semesters, students must take three EHS Masters Seminars during their time in the program))	1-4
PB HLTH 271K	Introduction to Data Management and Programming in SAS for Public Health	2
Electives from approved list		

Global Health & Environment Concentration

Courses Required for Concentration

Select at least one of the two options below for an essential methods course:		4
PB HLTH 241	Intermediate Biostatistics for Public Health	4
PB HLTH 245	Introduction to Multivariate Statistics	4
EHS Core Courses:		
PB HLTH 270	Introduction to Environmental Health Sciences	3
PB HLTH 270A	Exposure Assessment and Control	3
PB HLTH 292	Seminars for M.P.H. Students (students must take three EHS Masters Seminars during their time in the program)	1-3
Select three of the following Global Health and Environment Electives:		
PB HLTH 270B	Toxicology I	3
PB HLTH 220C	Health Risk Assessment	3
PB HLTH 271E	Science and Policy for Environment and Health	3
PB HLTH 271G	Health Implications of Climate Change	3
PB HLTH 273	Environmental Determinants of Infectious Disease	3
PB HLTH 290	Health Issues Seminars (Global Occupational Health and Safety)	4
PB HLTH W272A	Course Not Available	3
PB HLTH W272C	Course Not Available	3

Health & Social Behavior Concentration

Courses Required for Concentration

PB HLTH 292	Seminars for M.P.H. Students (Health & Social Behavior Seminar)	1-4
PB HLTH 203A	Theories of Health and Social Behavior	3
PB HLTH 205	Program Planning and Needs Assessment	4
PB HLTH 218B	Evaluation of Health and Social Programs	4
PB HLTH 292	Seminars for M.P.H. Students (Health & Social Behavior capstone course)	1-4

Select a research method option from a list provided by the department. A few options include:		3-4
PB HLTH 219C	Community-Based Participatory Research in Public Health [3-4]	
PB HLTH 219E	Introduction to Qualitative Methods in Public Health Research [3]	
Select at least one course with a focus on Health, Race, and Social Equity. Minimum 3 units required. A few options include:		
PB HLTH C202E	Ethnic and Cultural Diversity in Health Status [4]	
PB HLTH 204C	Research Advances in Health Disparities: Multidisciplinary Perspectives [1-3]	
PB HLTH 290	Health Issues Seminars [1-4]	
Select at least two courses for a minimum of 6 units from an approved list provided by the department.		

Health Policy & Management Concentration (2 year program)

Courses Required for Concentration

PB HLTH 220	Health Policy Decision-Making	3
or PB HLTH 22	Health Policy Advocacy	
or PB HLTH 22	Global Health Policy	
or PB HLTH 22	Biomedical Innovation Policy	
or PB HLTH 27	Science and Policy for Environment and Health	
or PB HLTH W:	Course Not Available	
PB HLTH 223C	Strategic Management and the Health Sector	3
or PB HLTH 224A	Organizational Behavior and Management in Health Care	
PB HLTH 226A	Health Economics A	3
or PB HLTH 22	Economics of Population Health	
PB HLTH 227A	Health Care Finance	3
PB HLTH 231A	Analytic Methods for Health Policy and Management	3
PB HLTH 223D	Foundations of Health Policy and Management	2
PB HLTH 223E & PB HLTH 290	Capstone Seminar in Health Policy and Management and Health Issues Seminars	3-6
Additional courses from approved list		

Health Policy & Management Concentration (11 month program)

Courses Required for Concentration

PB HLTH 220	Health Policy Decision-Making	3
or PB HLTH 22	Health Policy Advocacy	
or PB HLTH 22	Global Health Policy	
or PB HLTH 22	Biomedical Innovation Policy	
or PB HLTH 27	Science and Policy for Environment and Health	
or PB HLTH W:	Course Not Available	
PB HLTH 223C	Strategic Management and the Health Sector	3
or PB HLTH 224A	Organizational Behavior and Management in Health Care	
PB HLTH 299	Independent Research (in lieu of practicum)	3-4
PB HLTH 226A	Health Economics A	3
or PB HLTH 226C	Economics of Population Health	
PB HLTH 227A	Health Care Finance	3
PB HLTH 231A	Analytic Methods for Health Policy and Management	3
PB HLTH 223D	Foundations of Health Policy and Management	2
PB HLTH 223E & PB HLTH 290	Capstone Seminar in Health Policy and Management and Health Issues Seminars	3-6
Additional courses from approved list		

Infectious Diseases & Vaccinology Concentration

Core Requirements

PB HLTH 260A	Principles of Infectious Diseases	4
PB HLTH 263	Public Health Immunology	3
PB HLTH 264	Capstone Seminar in Infectious Diseases and Vaccinology [1]	2
PB HLTH 266C	Healthcare-Associated Infections [2]	2
Surveillance and Epidemiology Requirement (choose at least one of the following) [3]		
PB HLTH 253B	Epidemiology and Control of Infectious Diseases	3
or PB HLTH 260E	Molecular Epidemiology of Infectious Diseases	
or PB HLTH 266B	Zoonotic Diseases	
IDV Advanced Courses-Electives (Choose at least two of the following)		
PB HLTH 262	Molecular and Cellular Basis of Bacterial Pathogenesis	3
PB HLTH 265	Molecular Parasitology	3
PB HLTH 266B	Zoonotic Diseases	2
PB HLTH 260E	Molecular Epidemiology of Infectious Diseases	2
PB HLTH 260F	Infectious Disease Research in Developing Countries	2
PB HLTH 236	U.S. Food and Drug Administration, Drug Development, and Public Health [2]	2
PB HLTH 290	Health Issues Seminars	1-4

1. Effective Fall 2022: Name Change to Capstone Seminar in Infectious Diseases
2. Substitution by another School of Public Health seminar related to Infectious Diseases may be acceptable as IDV Division Seminar.
3. If the particular PB HLTH courses listed above have used to fulfill one requirement, the same course cannot be used to fulfill other IDV program and Advanced course requirement

INTERDISCIPLINARY CONCENTRATION

REQUIRED CORE COURSES FOR 1-YEAR IPMPH MPH TRACK

Leadership Series (1)		
PB HLTH 223C	Strategic Management and the Health Sector	3
PB HLTH 224A	Organizational Behavior and Management in Health Care	3
PB HLTH 291A	Preparation for Public Health Practice	2
Program Seminar Series (3)		
PB HLTH 292	Seminars for M.P.H. Students (Interdisciplinary Seminar) (summer, fall, spring)	1-4
Electives from approved list in Interdisciplinary Handbook: https://publichealth.berkeley.edu/academics/interdisciplinary/interdisciplinary-mph (https://publichealth.berkeley.edu/academics/interdisciplinary/interdisciplinary-mph/)/		

Maternal, Child, and Adolescent Health Concentration (2 year program)

Courses Required for Concentration		
PB HLTH 210	Foundations of Maternal and Child Health Policy, Practice and Science	3
PB HLTH 210E	Practicum in MCH Data Analysis I	3
PB HLTH 210F	Practicum In MCH Data Analysis II	3
PB HLTH 210J	Maternal, Child & Adolescent Health Journal Club	2
PB HLTH 299	Independent Research	1-12
Select one of the following:		
PB HLTH 205	Program Planning and Needs Assessment	4
PB HLTH 218B	Evaluation of Health and Social Programs	4
Select one of the following:		
PB HLTH 241	Intermediate Biostatistics for Public Health	4
PB HLTH C242C	Longitudinal Data Analysis	4
PB HLTH 245	Introduction to Multivariate Statistics	4
Optional electives:		
PB HLTH 207A	Public Health Aspects of Maternal and Child Nutrition	2-3
PB HLTH 210B	Adolescent Health	3
PB HLTH 210D	Reproductive and Perinatal Epidemiology	2
PB HLTH 212A	International Maternal and Child Health	2
PB HLTH 213A	Family Planning, Population Change, and Health	3

Maternal, Child, and Adolescent Health Concentration (11 month program)

Courses Required for Concentration		
PB HLTH 210	Foundations of Maternal and Child Health Policy, Practice and Science	3
PB HLTH 210E	Practicum in MCH Data Analysis I	3
PB HLTH 210F	Practicum In MCH Data Analysis II	3
PB HLTH 210J	Maternal, Child & Adolescent Health Journal Club	2
PB HLTH 245	Introduction to Multivariate Statistics	4
PB HLTH 205	Program Planning and Needs Assessment	4
PB HLTH 299	Independent Research	5
Optional electives:		
PB HLTH 207A	Public Health Aspects of Maternal and Child Nutrition	2-3
PB HLTH 210B	Adolescent Health	3
PB HLTH 210D	Reproductive and Perinatal Epidemiology	2
PB HLTH 212A	International Maternal and Child Health	2
PB HLTH 213A	Family Planning, Population Change, and Health	3

Food, Nutrition, and population health Concentration (2 YEAR PROGRAM)

PB HLTH 206	PH Nutrition Core Course: Critical Issues in Public Health Nutrition	2
PB HLTH 206C	Nutritional Epidemiology	3
Choose at least ONE Human Nutrition Course		
PB HLTH 207A	Public Health Aspects of Maternal and Child Nutrition	2-3
PB HLTH 207AW	Maternal and Child Health Nutrition	3
PB HLTH 290AW	Public Health Short Seminar	1-4
Choose at least ONE Food/Nutrition Policy Course		
PB HLTH 206B	Food and Nutrition Policies and Programs	3
PB HLTH 206BW	Food and Nutrition Policy	3
PB HLTH 206D	Programs and Policies in Global Nutrition	3
Choose ONE course, taken in your final year, for your Integrative Learning Experience:		
PB HLTH 204A	Mass Communications in Public Health	3
PB HLTH 206B	Food and Nutrition Policies and Programs	3
PB HLTH 206C	Nutritional Epidemiology	3
PB HLTH 206D	Programs and Policies in Global Nutrition	3
PB HLTH 207	Transforming the Food System: From Agroecology to Population Health	3
PB HLTH 207A	Public Health Aspects of Maternal and Child Nutrition	2,3
PB HLTH 218B	Evaluation of Health and Social Programs	4
PB HLTH 219E	Introduction to Qualitative Methods in Public Health Research	3
PB HLTH 220D	Health Policy Advocacy	3
PB HLTH 245	Introduction to Multivariate Statistics	4
PB HLTH C233/ CY PLAN C256	Healthy Cities	3

Other courses by approval. Please meet with a faculty advisor if you wish to request a course not listed above.

The On-Campus/Online MPH program offers remote instruction with two required courses that include week-long on-campus sessions over two summer term.

Public Health Core Curriculum

Courses Required for all Concentrations		
PB HLTH W142	Course Not Available	
PB HLTH W200E	Course Not Available	
PB HLTH W200F	Course Not Available	
PB HLTH W200G	Course Not Available	
PB HLTH W250	Course Not Available	
PB HLTH W289	Course Not Available	
Interdisciplinary Courses (8 courses required)		
Please see Interdisciplinary Program option page: https://onlinemph.berkeley.edu/academic-planning/program-options/interdisciplinary-program (https://onlinemph.berkeley.edu/academic-planning/program-options/interdisciplinary-program/)/		
Select from OOMPH course catalog: https://onlinemph.berkeley.edu/academic-planning/online-curriculum (https://onlinemph.berkeley.edu/academic-planning/online-curriculum/)/		

Health Policy and Management Concentration

Courses Required		
PB HLTH W220M	Course Not Available	3
or PB HLTH W:	Course Not Available	
PB HLTH W227A	Course Not Available	3
PB HLTH W223	Course Not Available	3
PB HLTH W224	Course Not Available	3
PB HLTH W226A	Course Not Available	3
or PB HLTH W:	Course Not Available	
Elective options (3 courses)		

Select from OOMPH course catalog: https://onlinemph.berkeley.edu/academic-planning/online-curriculum (https://onlinemph.berkeley.edu/academic-planning/online-curriculum/)		

Epidemiology/Biostatistics Concentration

Courses Required		
PB HLTH W241	Course Not Available	4
PB HLTH W250B	Course Not Available	4
Choose at least ONE Competency in Data Management		
PB HLTH W251	Course Not Available	2
or PB HLTH 271K	Introduction to Data Management and Programming in SAS for Public Health	
Additional Courses in Epidemiology & Biostatistics (select at least 5 units)		
PB HLTH 252	Epidemiological Analysis	4
PB HLTH W219	Course Not Available	3
PB HLTH W272C	Course Not Available	3
PB HLTH 252C	Intervention Trial Design	2
PB HLTH W253	Course Not Available	3
PB HLTH W225A	Course Not Available	1
PB HLTH W225B	Course Not Available	1
PB HLTH W268	Course Not Available	3
Elective options (2-3 courses)		
Select from OOMPH MPH course catalog: https://onlinemph.berkeley.edu/academic-planning/online-curriculum (https://onlinemph.berkeley.edu/academic-planning/online-curriculum/)		

Public Health Nutrition Concentration

Courses Required		
PB HLTH W205	Course Not Available	3
PB HLTH W207A	Course Not Available	3
PB HLTH W206A	Course Not Available	3
PB HLTH 206B	Food and Nutrition Policies and Programs	3
PB HLTH W218	Course Not Available	3
Elective options (3 courses)		
Select from OOMPH course catalog: https://onlinemph.berkeley.edu/academic-planning/online-curriculum (https://onlinemph.berkeley.edu/academic-planning/online-curriculum/)		

Concurrent Degree Programs

- Health & Social Behavior (MPH-MCP) (p. 6)
- Public Health & Journalism (MPH-MJ) (p. 6)
- Health Policy & Management (MPH-MBA) (p.)
- Health Policy & Management (MPH-MPP) (p. 7)
- Health & Social Behavior (MPH-MSW) (p.)
- Maternal, Child, & Adolescent Health (MPH-MSW) (p. 7)

Required Course for All MPH Degrees

PB HLTH 142	Introduction to Probability and Statistics in Biology and Public Health [1]	4
PB HLTH 200J	Health Policy and Management Breadth Course [2]	2
PB HLTH 200K	Environmental Health Sciences Breadth Course	2
PB HLTH 200L	Health and Social Behavior Breadth	2
PB HLTH 250A	Epidemiologic Methods I	3
PB HLTH 297	Field Study in Public Health	1-12

[1] Not required for MPP/MPH & MBA/MPH CDPs.
[2] Not required for any HPM MPH including MPP/MPH & MBA/MPH.

Concurrent Degree Requirements

Health & Social Behavior (MPH-MCP)

This concurrent degree program is designed to examine research, practice, and policy at the intersection of urban planning, policy and design with population health. Special attention is given to understanding the forces that are shaping urbanization in the US and globally, what methods are necessary to analyze the relationships between urban policy and planning and human health, and to design and analyze interventions, frequently in partnership with community members and organizations, that can enhance urban health equity. The program prepares students for interdisciplinary careers in such fields as urban development, community health, housing, transportation, policymaking, and others. Graduates secure jobs working in government, international organizations, non-profits, academia/research and the private sector.

Candidates for this program are recruited and admitted through both the School of Public Health and the Department of City and Regional Planning. Students complete the core curriculum of each area, as well as the Health & Social Behavior track within MPH and an area of concentration in MCP. Visit the Public Health website (https://publichealth.berkeley.edu/academics/concurrent/city-planning-mcp-mph/) for more information.

Public Health and Journalism (MPH-MJ)

The three-year MPH/MJ allows students to combine their interests in public health, journalism, communications and media. The program is designed to produce public health professionals who are effective media practitioners and communicators as well as journalists with the training and knowledge necessary to cover public health and medical issues for online, print, broadcast and other media platforms.

Students select one of four public health concentrations (environmental health, infectious diseases, epidemiology/biostatistics, health and social behavior) and simultaneously develop their reporting and multimedia skills. The program explores how public health and journalism intersect and impact each other and prepares graduates for work in a variety of public health, media and journalism. Visit the Berkeley Journalism website (https://journalism.berkeley.edu/programs/concurrent-degree/) for more information.

Health Policy & Management (MPH-MBA)

The MBA/MPH program provides a deep competency in business administration, integrated with up-to-the-minute knowledge of health policy and management and other health care concepts. Students in this program pursue a wide range of interests including global health, entrepreneurship/start-ups, biotech/medtech, provider and payer initiatives, and social impact. This track allows students to have an extended period at Berkeley to take more electives, develop business and leadership skills in a range of applied health care settings, and have two distinct full-time summer internships.

This is a 2.5-year concurrent degree program, offered in a long-standing partnership between Berkeley Public Health and the Haas School of Business. It has been in existence for more than 35 years, so it has a large community of alumni and provides students access to the top-

notch career services and faculty mentors from both Schools. Visit the Haas School of Business (https://mba.haas.berkeley.edu/academics/concurrent-degree-programs/) webpage for the MBA requirements.

Courses Required for MPH Concentration

PB HLTH 220	Health Policy Decision-Making	3
or PB HLTH 22	Health Policy Advocacy	
or PB HLTH 22	Global Health Policy	
or PB HLTH 22	Biomedical Innovation Policy	
or PB HLTH 27	Science and Policy for Environment and Health	
or PB HLTH W:	Course Not Available	
PB HLTH 223C	Strategic Management and the Health Sector	3
or PB HLTH 224A	Organizational Behavior and Management in Health Care	
PB HLTH 223E & PB HLTH 290	Capstone Seminar in Health Policy and Management and Health Issues Seminars	3-6
PB HLTH 226A	Health Economics A	3
or PB HLTH 226C	Economics of Population Health	
Courses Required for MBA Concentration		
MBA 297A	Healthcare in the 21st Century	3
Additional courses from approved list		

Health Policy & Management (MPH-MPp)

From the ACA to the FDA, to issues of equity and access, the health policy realm is highly visible and complex. It is for students who want to master the analytical skills that support policy analysis and decision-making, as well as gain a deeper understanding of key healthcare issues. Visit the Goldman School of Public Policy (https://gspp.berkeley.edu/programs/masters-of-public-policy-mpp/concurrent-degree-programs/public-policy-public-health/) webpage for the MPP requirements.

MPH Courses Required for Concentration

PB HLTH 220	Health Policy Decision-Making	3
or PB HLTH 22	Health Policy Advocacy	
or PB HLTH 22	Global Health Policy	
or PB HLTH 22	Biomedical Innovation Policy	
or PB HLTH 27	Science and Policy for Environment and Health	
or PB HLTH W:	Course Not Available	
PB HLTH 223D	Foundations of Health Policy and Management	2
PB HLTH 226A	Health Economics A	3
or PB HLTH 22	Economics of Population Health	
PB HLTH 227A	Health Care Finance	3
PB HLTH 218B	Evaluation of Health and Social Programs	4
PB HLTH 292	Seminars for M.P.H. Students (Health & Social Behavior Seminar)	1-4
Select a research method option from a list provided by the department. A few options include:		3-4
PB HLTH 219C	Community-Based Participatory Research in Public Health	3-4
PB HLTH 219D	Course Not Available	3
PB HLTH 219E	Introduction to Qualitative Methods in Public Health Research	3
PB HLTH 241	Intermediate Biostatistics for Public Health	4
Select at least one course with a focus on Health, Race, and Social Equity. For example:		
PB HLTH C202B	Ethnic and Cultural Diversity in Health Status	4
PB HLTH 204G	Research Advances in Health Disparities: Multidisciplinary Perspectives	1-3

MPH-MSW Options

Berkeley Public Health and the School of Social Welfare (http://socialwelfare.berkeley.edu/concurrent-masters-social-welfare-and-public-health/) offer two options that offer interdisciplinary preparation in the fields of social welfare and public health leading to the Master of Social Work and Master of Public Health degrees, generally in less time than it would take to obtain these degrees independently.

Health & Social Behavior (MPH-MSW)

Courses Required for MPH Concentration

PB HLTH 203A	Theories of Health and Social Behavior	3
PB HLTH 205	Program Planning and Needs Assessment	4

Courses Required for MSW Concentration

SOC WEL 200	Theories for Multilevel Practice	2
SOC WEL 220	Foundations of Social Welfare Policy	2
SOC WEL 240	Anti-Oppressive Frameworks for Social Work Ethics and Justice	2
SOC WEL 241	Foundations of Multilevel Practice	3
SOC WEL 275	Course Not Available	2
SOC WEL 290A	Course Not Available	2
SOC WEL 290B	Course Not Available	1
SOC WEL 410A	Foundation Practicum I	4
SOC WEL 292A	Course Not Available	1
SOC WEL 292B	Course Not Available	1
SOC WEL 410B	Foundation Practicum II	4
SOC WEL 412A	Advanced Practicum I	6
SOC WEL 412B	Advanced Practicum II	6
For Advancing Adult Health and Well Being students:		
SOC WEL 205	Psychosocial Problems and Psychopathology [2]	
or SOC WEL 210C	Multilevel Approach to Working with Older Adults	
SOC WEL 238(	Health Policy--A Social Welfare Perspective [2]	
SOC WEL 244	Course Not Available [2]	
or SOC WEL 245	Course Not Available	
For Strengthening Children, Youth, and Families students		
SOC WEL 210B	Infant Development [2]	
or SOC WEL 212	Child Development from Infancy to Adolescence in Its Social Context	
SOC WEL 230	Social Policy: Children and Families [2]	
SOC WEL 243	Course Not Available [2]	
For Strengthening Organizations and Communities students:		
SOC WEL 210I	Course Not Available [2]	
SOC WEL 251	Program Development [2]	
SOC WEL 252	Program Implementation [2]	
Additional courses from approved list		

Maternal, Child, & adolescent Health (MPH-MSW)

Courses Required for MPH Concentration

PB HLTH 210	Foundations of Maternal and Child Health Policy, Practice and Science	3
PB HLTH 210E	Practicum in MCH Data Analysis I	3

PB HLTH 210F	Practicum In MCH Data Analysis II	1-4
PB HLTH 210J	Maternal, Child & Adolescent Health Journal Club	2
PB HLTH 210K	Foundations of Maternal, Child, and Adolescent Health Leadership	2
PB HLTH 299	Independent Research	1-12
Select one of the following:		
PB HLTH 205	Program Planning and Needs Assessment [4]	
PB HLTH 218B	Evaluation of Health and Social Programs [4]	
Select one of the following:		
PB HLTH 241	Intermediate Biostatistics for Public Health [4]	
PB HLTH 245	Introduction to Multivariate Statistics [4]	
Courses Required for MSW Concentration		
SOC WEL 200	Theories for Multilevel Practice	2
SOC WEL 220	Foundations of Social Welfare Policy	2
SOC WEL 240	Anti-Oppressive Frameworks for Social Work Ethics and Justice	2
SOC WEL 241	Foundations of Multilevel Practice	3
SOC WEL 275	Course Not Available	2
SOC WEL 290A	Course Not Available	2
SOC WEL 290B	Course Not Available	1
SOC WEL 292A	Course Not Available	1
SOC WEL 292B	Course Not Available	1
SOC WEL 410A	Foundation Practicum I	4
SOC WEL 410B	Foundation Practicum II	4
SOC WEL 412A	Advanced Practicum I	6
SOC WEL 412B	Advanced Practicum II	6
For Advancing Adult Health and Well Being students:		
SOC WEL 205	Psychosocial Problems and Psychopathology [2]	
SOC WEL 210A	A Multilevel Approach to Working with Older Adults [2]	
SOC WEL 238C	Health Policy--A Social Welfare Perspective [2]	
SOC WEL 244	Course Not Available [2]	
or SOC WEL	Course Not Available	
For Strengthening Children, Youth, and Families students:		
SOC WEL 210I	Infant Development [2]	
SOC WEL 212	Child Development from Infancy to Adolescence in Its Social Context [2]	
SOC WEL 230	Social Policy: Children and Families [2]	
SOC WEL 243	Course Not Available [2]	
For Strengthening Organizations and Communities students:		
SOC WEL 210I	Course Not Available [2]	
SOC WEL 251	Program Development [2]	
SOC WEL 252	Program Implementation [2]	
Additional courses from approved list		

Public Health

PB HLTH 200 Foundations of Public Health Practice 1 Unit

Terms offered: Fall 2025, Fall 2024, Fall 2000

Today, graduates of public health programs must be prepared for evidence-based practice and the generation of practice-based evidence. They must have the ability to work in an increasingly interdisciplinary, interprofessional and cross-sectoral environment and settings. Foundations of Public Health Practice introduces 12 areas of critical public health content to bridge the chasm between public health practice and theory. This course serves as an orientation to the various subjects, fields, and concepts that students will encounter in their education. While no single professional is expected to be an expert in all of these practice areas, everyone must be aware of their importance.

Rules & Requirements

Credit Restrictions: Students will receive no credit for PB HLTH 200 after completing PB HLTH 200. A deficient grade in PB HLTH 200 may be removed by taking PB HLTH 200.

Hours & Format

Fall and/or spring: 8 weeks - 1 hour of seminar per week

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructors: Maus, Barnett

Formerly known as: Public Health W200

PB HLTH 200A Current issues in Public Health Ethics: Research and Practice 3 Units

Terms offered: Spring 2018, Spring 2017, Spring 2016

This course seeks to examine the ethical challenges inherent in public health practice, research, and policy. It covers a range of topics in ethics through cases representative of different public health dilemmas. The cases considered include treating homeless people with TB, rationing medical care in the United States, conducting HIV studies of maternal-fetal transmission in Africa, managed care policies and setting priorities, the deaf community and cochlear implants, and the societal implications of genetic information. The goal is to enable students to develop an analytical methodology that has practical application for their future work.

Rules & Requirements

Prerequisites: Graduate standing

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Halpern

PB HLTH 200EW Health Policy and Management Breadth Course 3 Units

Terms offered: Summer 2025 First 6 Week Session
Health policy and management applies concepts from economics, organizational behavior, and political science to the structure, financing, and regulation of the public health and health care delivery systems. This breadth course is designed to give MPH students a basic set of competencies in the domains central to the field.

Rules & Requirements

Credit Restrictions: Students will receive no credit for PB HLTH W200E after completing PB HLTH 200E. A deficient grade in PB HLTH W200E may be removed by taking PB HLTH 200E.

Hours & Format

Fall and/or spring: 7 weeks - 6 hours of lecture per week

Summer: 6 weeks - 6 hours of lecture per week

Online: This is an online course.

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Fulton

Formerly known as: Public Health W200E

PB HLTH 200FW Environmental Health Sciences Breadth Course 2 Units

Terms offered: Fall 2025
This survey course covers the breadth of hazards from chemical, biological, and physical agents of concern to environmental health professionals. Lectures are presented by experts on particular topics that emphasize the activities involved in professional practice.

Objectives & Outcomes

Course Objectives: Communicate environmental health issues to lay public and professionals, using appropriate terminology and data. Define and describe major ways in which the environment and human health are linked in different parts of the world and for different populations. Develop a case study on an environmental health and justice issue and propose solutions that integrate the main components of environmental health (exposure assessment, toxicology, epidemiology, and risk assessment).

Define and describe the key components of environmental health, including exposure assessment, toxicology, epidemiology, and risk assessment.

Describe ways by which the health impact from major environmental health risks, such as climate change, can be effectively controlled.

Learn effective ways to communicate important information in Environmental Health
Learn the concepts of environmental justice, water sanitation and hygiene (WASH), health risks associated with disasters, food systems, and public health.
Understand the associated health effects from developmental, adult and occupational chemical exposures.

Hours & Format

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

Online: This is an online course.

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructors: Graham, Pokhrel

Formerly known as: Public Health W200F

PB HLTH 200GW Health and Social Behavior Breadth 3 Units

Terms offered: Fall 2025

Course focuses on social, cultural, bio-behavioral determinants of health & health behavior, issues related to social & behavioral interventions, policies aimed at improving community & population health. Students will have experience in/be able to apply range of Health & Social Behavior perspectives, approaches to critically analyze public health issues, conceptualize research & interventions at different levels of ecological model. Topics designed to convey key concepts, highlight approaches in Health & Social Behavior via lectures, readings, videos & online resources. Group assignments focus on community context & health. Will require students to synthesize/apply concepts from course. Assignments will culminate in a final group project.

Objectives & Outcomes

Course Objectives: Describe a range of major themes, theories and conceptual frameworks, research and practice approaches commonly encountered in Health and Social Behavior.
Describe and apply ecological public health frameworks and concepts emphasizing multilevel interactions between biology, behavior, environments and the distribution of life opportunities.
Describe the rationale for community involvement in public health actions and the key principles of community-based approaches to public health.
Understand how socially constructed concepts of race, ethnicity, immigration, gender and social class influence health and structure population health inequities.
Understand relationships between human behavior and public health to critically assess models of human behavior and to explore strengths-based, multi-level intervention design.

Rules & Requirements

Credit Restrictions: Students will receive no credit for PB HLTH W200G after completing PB HLTH 200L, or PB HLTH 200G. A deficient grade in PB HLTH W200G may be removed by taking PB HLTH 200L, PB HLTH 200L, or PB HLTH 200G.

Hours & Format

Fall and/or spring:
7 weeks - 6.5 hours of lecture per week
15 weeks - 3 hours of lecture per week

Summer: 6 weeks - 7.5 hours of lecture per week

Online: This is an online course.

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: vanDommelen-Gonzalez

Formerly known as: Public Health W200G

PB HLTH 200J Health Policy and Management Breadth Course 2 Units

Terms offered: Fall 2025, Fall 2024, Fall 2023

Health policy and management applies concepts from economics, organizational behavior, and political science to the structure, financing, and regulation of the public health and health care delivery systems. This breadth course is designed to give MPH students a basic set of competencies in the domains central to the field.

Objectives & Outcomes

Course Objectives: #
Compare the organization, structure, and functions of health care, public health, and regulatory systems across US and selected international settings;
#
Critically evaluate the role that structural racism plays in the US healthcare system; and
#
Identify the core functions of public health and the essential services that together comprise public health;
#
Identify the principal functions of health insurance, the structure of public and private health insurance plans, and trends in enrollment and expenditures;
#
Understand and be able to discuss dimensions of the policy-making process, including the roles of ethics and evidence;
#
Understand and explain basic principles and tools of finance, budgeting, and resource management;
#
Understand the drivers of innovation in preventive, diagnostic, and therapeutic technologies;
#
Understand various barriers to healthcare access, and discuss potential strategies to mitigate these challenges

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Bertozzi

Formerly known as: Public Health 200C1

PB HLTH 200K Environmental Health Sciences Breadth Course 2 Units

Terms offered: Spring 2025, Spring 2024, Spring 2023
This course will give an introduction to the major human and natural activities that lead to release of hazardous materials into the environment as well as the causal links between chemical, physical, and biological hazards in the environment and their impact on human health, including those related to climate change. The basic principles of toxicology, exposure assessment, risk assessment, risk perception, and environmental health policy will be presented. The overall role of environmental risks in the pattern of human disease, both nationally and internationally, will be covered.

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Kyle

Formerly known as: Public Health 200C2

PB HLTH 200L Health and Social Behavior Breadth 2 Units

Terms offered: Fall 2025, Fall 2024, Fall 2023
Health and social behavior uses theory and research from the behavioral sciences to explain the causes and health effects of salutary and risky behavior.

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Catalano

Formerly known as: Public Health 200C3

PB HLTH 201E Public Health Interventions: Theory, Practice, and Research 2 or 3 Units

Terms offered: Spring 2021, Spring 2020, Spring 2019
This course focuses on the primary factors that affect health and the interventions that can promote health. Students examine the determinants of health and the theory, history, types, ethics, and approaches of public health interventions. Community level interventions and multidisciplinary approaches receive special emphasis. The course stresses a rigorous critique of the outcomes of interventions and practical ways to improve them. Students take an active role in the design and conduct of the course.

Rules & Requirements

Prerequisites: Previous experience with health interventions and doctoral student status or consent of instructor

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructors: Neuhauser, Syme

PB HLTH 202B Ethnic and Cultural Diversity in Health Status 4 Units

Terms offered: Spring 2024, Spring 2023, Spring 2022
Focus on ethnic and cultural diversity in health behavior as a basis for public health programs. Consideration of U.S. ethnic minority groups and cultural groups in non-Western societies. Health status and behavior examined in context of relevant social and anthropological theory (social class, acculturation, political economy). Influence of socio-cultural background on concepts of health, illness, and health-seeking behavior. Implications for planning public health programs and policies.

Rules & Requirements

Prerequisites: Graduate standing or consent of instructor

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Morello-Frosh

PB HLTH 202G Advanced Alcohol Research Seminar 1 Unit

Terms offered: Fall 2025, Spring 2025, Fall 2024

This course is an advanced alcohol research seminar in which presentations are made by alcohol research scientists nationally and internationally, as well as pre-and post-doctoral fellows, and focus on special topical areas related to psychosocial research in the field each semester. Areas covered include the epidemiology of drinking patterns and alcohol-related problems, issues related to treatment of alcohol-related problems, and health services research. Guest presentations are also provided (related to topics outside psychosocial research) to provide a breadth of understanding in the field. The seminar also includes sessions focused on methodological issues in alcohol-related research and grant writing, and has a research ethics component covering a number of sessions.

Rules & Requirements

Repeat rules: Course may be repeated for credit without restriction.

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructors: Cherpitel, Kaskutas

PB HLTH 202L Critical Theory and Social Science Methods 3 Units

Terms offered: Fall 2024

Social science research on identity and vulnerable populations is at a critical moment. This course will examine the tension between theoretical and empirical research and its adverse impact on social science research. It will explore ways to develop methodological approaches to race and other markers of human difference that blend traditional empirical methods with critical theoretical traditions, e.g. critical race theory, feminist theory, disability theory, queer theory, and others. Emphasis will be placed on understanding the implications of this tension between theory and methods for research in the health sciences.

Objectives & Outcomes

Course Objectives: 1. Understand the limitations of contemporary social science research on race and other identity traits such as gender, sex, sexuality, and disability.
2. Understand the significance of the “firewall” between theory and method in social science research and how it can lead to less than robust understandings of the social world and health outcomes.
3. Understand the contributions that critical theoretical traditions can make to empirical research – especially in the health sciences.
4. Be able to design a social science research project that reflects traditional empirical methods and critical theoretical insights.

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

PB HLTH 202W Ethnic and Cultural Diversity in Health Status 3 Units

Terms offered: Not yet offered

This course will examine ethnic and cultural differences in health status and behavior among historically marginalized communities in the United States, including African-Americans, Latinos, Asian-Americans, Native Americans, as well as sexual minorities and groups from non-Western societies.

Rules & Requirements

Credit Restrictions: Students will receive no credit for PB HLTH W202 after completing PB HLTH 202. A deficient grade in PB HLTH W202 may be removed by taking PB HLTH 202.

Hours & Format

Fall and/or spring: 7 weeks - 6 hours of lecture per week

Online: This is an online course.

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Morello-Frosch

Formerly known as: Public Health W202

PB HLTH C202B Ethnic and Cultural Diversity in Health Status 4 Units

Terms offered: Fall 2025, Spring 2025, Spring 2024, Spring 2016
Focus on ethnic and cultural diversity in health behavior as a basis for public health programs. Consideration of U.S. ethnic minority groups and cultural groups in non-Western societies. Health status and behavior examined in context of relevant social and anthropological theory (social class, acculturation, political economy). Influence of socio-cultural background on concepts of health, illness, and health-seeking behavior. Implications for planning public health programs and policies.

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Morello-Frosch

Also listed as: ESPM C254

PB HLTH 203A Theories of Health and Social Behavior 3 Units

Terms offered: Fall 2025, Fall 2024, Fall 2023
This course provides a survey of theoretical perspectives and their application in analyzing the behavioral, social, and cultural dimensions of community health problems. An emphasis is placed on critically examining the strengths and weaknesses of particular theories for understanding and addressing complex community health problems.

Rules & Requirements

Prerequisites: Background in social and behavioral sciences. Consent of instructor

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Holmes

PB HLTH 204A Mass Communications in Public Health 3 Units

Terms offered: Fall 2025, Fall 2024, Fall 2023
Examines the role of mass communication in advancing public health goals. Reviews mass media theories in general, and theories of the news media in particular. Provides an in-depth understanding of media advocacy as a strategy for using news media and paid advertising to support policy initiatives at the local, state, and federal levels. Examples are drawn from a wide range of public health issues.

Rules & Requirements

Prerequisites: Graduate standing or consent of instructor

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

PB HLTH 204G Research Advances in Health Disparities: Multidisciplinary Perspectives 1 - 3 Units

Terms offered: Fall 2024, Fall 2023, Fall 2022
Understanding and addressing persistent racial inequities in health status is a core public health problem. Ethnic minorities are much more likely to experience much higher rates of poor birth outcomes, infant mortality, infectious and chronic diseases, hospitalization rates, and early death rates from all causes. This course examines racial and ethnic health inequities as a function of social inequality. Topics are drawn from a social determinants of health framework emphasizing the importance of the economic, social, and political features that adversely affect the health status of many underrepresented racial and ethnic minorities in the U.S. from a multidisciplinary approach: Public Health, sociology, anthropology, and social welfare

Rules & Requirements

Prerequisites: Graduate standing or consent of instructor

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Herd

PB HLTH 204W Human Centered Design in Public Health 3 Units

Terms offered: Summer 2025 Second 6 Week Session
This course explores the use of human centered design to drive tangible change in public health settings and introduces design thinking: a process of identifying, creating, and implementing creative solutions. Students will explore the role of design thinking in context. Learned methodologies enable students to discover users' needs; synthesize complex information; identify direction for design and communication; generate ideas; and prototype, test, and communicate solutions. Most importantly, this course will support students thinking creatively when addressing public health problems, employing methods and techniques that are focused on idea generation and innovative solution building in service of creating a better world.

Rules & Requirements

Credit Restrictions: Students will receive no credit for PB HLTH W204 after completing PB HLTH 204. A deficient grade in PB HLTH W204 may be removed by taking PB HLTH 204.

Hours & Format

Fall and/or spring: 7 weeks - 6 hours of lecture per week

Summer: 7 weeks - 6 hours of lecture per week

Online: This is an online course.

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Lo

Formerly known as: Public Health W204

PB HLTH 205 Program Planning and Needs Assessment 4 Units

Terms offered: Spring 2025, Fall 2024, Spring 2024
This course provides the necessary skills to plan effective public health programs. Examines principles and methods underlying program planning, emphasizing multi-disciplinary, collaborative and "real world" planning processes. Provides students with conceptual and experiential understanding of how to plan, conduct and present community health needs assessments by covering both theory and practical skills. Students will become familiar with the theory and methods related to ecologically valid assets-based and needs-based community health assessments and translate them into practice. Students will work with a community organization to apply the program planning principles and needs assessment taught throughout the course.

Objectives & Outcomes

Course Objectives: Students will work in a community organization to apply the knowledge and skills acquired in this class. Real world application of program planning principles and needs assessment will be taught throughout the course. Students will complete this course with the development of a complete program plan for a community organization or collect, analyze and present community health assessment data and develop feasible programmatic recommendations.

Rules & Requirements

Prerequisites: Public health students

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructors: Ndola, Prata

PB HLTH 205W Program Planning and Development 3 Units

Terms offered: Summer 2025 Second 6 Week Session
The purpose of this course is to provide students with the necessary skills to plan health programs. We will examine the principles and methods underlying program planning. Multi-disciplinary, collaborative planning will be emphasized. Program planning applications will be emphasized throughout the course by using case studies, specific illustrations, and online planning exercises.

Rules & Requirements

Credit Restrictions: Students will receive no credit for PB HLTH W205 after completing PB HLTH 205. A deficient grade in PB HLTH W205 may be removed by taking PB HLTH 205.

Hours & Format

Fall and/or spring: 7 weeks - 6 hours of lecture per week

Summer: 7 weeks - 6 hours of lecture per week

Online: This is an online course.

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: O'Hara

Formerly known as: Public Health W205

PB HLTH 206 PH Nutrition Core Course: Critical Issues in Public Health Nutrition 2 Units

Terms offered: Fall 2025, Fall 2024, Fall 2023
This course will introduce first-year public health nutrition and other MPH students to critical issues in public health nutrition, and provide them with critical thinking skills to analyze these issues using scientific literature. Students will build group facilitation skills, library research skills, and professional advocacy skills. Second-year public health nutrition students and a panel of PHN graduates will speak to the students about valuable skills and competencies needed for work in public health nutrition.

Rules & Requirements

Prerequisites: Master of Public Health students

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Fernald

PB HLTH 206AW Nutrition Assessment 3 Units

Terms offered: Not yet offered
Nutrition assessment tools are used to evaluate an individual's or population's nutrition status and/or risk of specific nutrient excess or deficiency. This 3-unit course will discuss various dietary, anthropometric, clinical, and biochemical nutrition assessment tools and provide you with skills to determine which assessment tools are needed based on program/research project goals, how to interpret nutrition assessment survey results and apply them to populations, and critically evaluate the metrics used to define different types of malnutrition.

Objectives & Outcomes

Course Objectives: 1. Recommend the appropriate nutrition assessment tool needed based on the target population, nutrient/ nutrition issue of interest, and goal of the assessment.
2.
Critically evaluate nutrition assessment tools based on their required resources, applications, limitations, and biases.
3.
Interpret nutrition assessment results and apply them at the population level.

Rules & Requirements

Credit Restrictions: Students will receive no credit for PB HLTH 206AW after completing PB HLTH 206A. A deficient grade in PB HLTH 206AW may be removed by taking PB HLTH 206A, or PB HLTH 206A.

Hours & Format

Fall and/or spring: 8 weeks - 6 hours of lecture per week

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Zyba

Formerly known as: Public Health W206A

PB HLTH 206B Food and Nutrition Policies and Programs 3 Units

Terms offered: Fall 2024, Spring 2024, Spring 2023
This course examines the historical origins of food and nutrition improvement programs in the United States, including the political and administrative conditions that led to the development of these programs. It also examines the goals, design, operations, and effectiveness of some of these programs: Food Stamp Program, the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), the National School Lunch Program, the School Breakfast Program, Head Start, the Child Care Food Program, and the Elderly Nutrition Program.

Rules & Requirements

Prerequisites: Graduate standing or consent of instructor

Hours & Format

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

Summer: 3 weeks - 15 hours of lecture per week

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Fernald

PB HLTH 206BW Food and Nutrition Policy 3 Units

Terms offered: Fall 2025
Course examines ways in which the US govt designs & implements policies/programs that affect access to nutritionally adequate, safe, affordable diets. We analyze how multiple stakeholders in the food system interact to affect policy design & implementation; historical, social, economic, environmental & political factors that determine stakeholder positions on policy issues; & ways these factors promote or act as barriers to achieving a system that promotes optimal food access, nutrition & health. We cover contemporary food & nutrition policy issues, as well as the history of these issues & ideas. Students will understand the broad spectrum of policies that affect human diets & will become familiar with the policy processes.

Objectives & Outcomes

Course Objectives: a.
Describe the principal areas of domestic food and nutrition policy (e.g., food assistance, dietary guidance and education, agricultural support, food industry regulation, food safety regulation, food and nutrition research) and the most important current issues related to these policy areas.
b.
Identify the governmental agencies primarily responsible for each area of food and nutrition policy and explain their roles.
c.
Identify the ways in which historical, social, cultural, economic, commercial, and institutional factors promote or act as barriers to the design and implementation of agriculture, food, and nutrition policies and programs, and the ways in which these policies and programs affect health.
d.
Describe the major federal food programs—their history, purpose, reach, and effectiveness, as well as current policy and political questions being raised about them.
e.
Identify and apply the methods through which stakeholder groups affect the design and implementation of agriculture, food, and nutrition policies.
f.
Recognize your potential to engage in and influence food and nutrition policy throughout your career.

Rules & Requirements

Credit Restrictions: Students will receive no credit for PB HLTH W206B after completing PB HLTH 206B. A deficient grade in PB HLTH W206B may be removed by taking PB HLTH 206B, or PB HLTH 206B.

Repeat rules: Course may be repeated for credit with advisor consent.

Hours & Format

Fall and/or spring: 8 weeks - 7 hours of lecture per week

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Thompson

Formerly known as: Public Health W206B

PB HLTH 206C Nutritional Epidemiology 3 Units

Terms offered: Fall 2025, Fall 2024, Fall 2023
This course develops the ability to read published nutritional epidemiology research critically. Basic research methods in nutritional epidemiology will be reviewed, and issues in design, analysis, and interpretation unique to nutritional epidemiology will be addressed. This will be accomplished by readings and study questions, lecture/discussions, and problem sets.

Hours & Format

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

Summer: 8 weeks - 15 hours of lecture per week

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Block

PB HLTH 206D Programs and Policies in Global Nutrition 3 Units

Terms offered: Spring 2025, Spring 2024, Spring 2023
This course will use a case-based approach to examine the ways in which governments in developing countries design and implement policies and programs that affect food production and access to safe, affordable, and nutritionally adequate diets. In the course we will analyze, assess and evaluate ways to take action to ameliorate the major nutritional problems facing vulnerable populations in developing countries.

Objectives & Outcomes

Course Objectives: #
Critical analysis of issues in public health nutrition relating to the context of a developing country;
#
Demonstration of effective organizational skills and the ability to communicate with and enlist the support of potential participants and stakeholders; and
#
Participation in making policy related to health and nutrition within services, programs, and projects.
#
Understanding of the biological and social roles of nutrition in health, particularly as they relate to issues of poor nutrition in a global context;

Student Learning Outcomes: 1.
Describe and interpret the prevalence and trends of public health nutrition issues faced by mothers and children living in low- and middle-income countries, ranging from malnutrition to micronutrient deficiencies to overweight and obesity.
2.
Discuss the political, environmental, cultural, and socioeconomic factors underlying a wide range of nutrition issues in low- and middle-income countries and predict how interventions affect these factors.
3.
Identify the ways in which historical, social, cultural, economic, commercial, and institutional factors promote or act as barriers to the design and implementation of agriculture, food, and nutrition policies and programs, and the ways in which these policies and programs affect health and other outcomes.
4.
Integrate knowledge of nutritional issues and policies to analyze methods through which stakeholder groups affect the design and implementation of food and nutrition programs and policies.

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Fernald

PB HLTH 207 Transforming the Food System: From Agroecology to Population Health 3 Units

Terms offered: Fall 2025, Fall 2024, Fall 2023
This course will take a solutions-oriented approach to addressing the pressing problems in current food systems. We will explore strategies used by the disciplines of agroecology, policy, law, public health, and business in working to improve food systems and apply their varied approaches to real-world case studies. Through weekly readings, discussions, and problem-solving sessions with Berkeley's leading food systems experts, students will gain a broad understanding of food systems and the leverage points that can be targeted to improve the health of people and the planet.

Objectives & Outcomes

Course Objectives: 1.
Define and explain food systems, explain interdependence within those systems, and understand their impacts on the health of people and the planet
2.
Identify leverage points for transforming food systems based on evidence
3.
Understand various strategies—legal, political, agro-ecological, economic, behavioral, etc.—that different disciplines use to target leverage points
4.
Articulate different perspectives on food systems issues and explain the pros and cons of strategies for food systems change
5.
Adapt communication styles to various audiences and media

Rules & Requirements

Prerequisites: Graduate student standing

Repeat rules: Course may be repeated for credit with advisor consent.

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Madsen

PB HLTH 207A Public Health Aspects of Maternal and Child Nutrition 2 or 3 Units

Terms offered: Fall 2024, Fall 2023, Fall 2022
Nutrition plays a vital role in human reproduction and child growth and development. This course provides an overview of the major nutritional issues faced by women of childbearing age, infants, children, and adolescents in the United States and around the world, with selected topics explored in greater depth. Nutritional problems are multi-factorial and occur at multiple levels and we will study them from a variety of viewpoints (biological, pyschological, socio-cultural, economic, political, and behavioral) as well as from individual and population perspectives. Participants in the course will become acquainted with nutritional research, policies, and interventions designed to enhance reproduction, growth, and development. This course will also explore health disparities in maternal and child nutrition in both a domestic and international context.

Rules & Requirements

Prerequisites: Course in epidemiology required; previous coursework in biology and nutritional science highly recommended

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Abrams

PB HLTH 207AW Maternal and Child Health Nutrition 3 Units

Terms offered: Fall 2025
Nutrition plays a vital role in human reproduction and child growth and development. This course covers core principles of nutrition and health and provides an overview of the major nutritional needs and issues faced by women of reproductive age, infants, children, and adolescents in the United States and globally, with selected topics explored in greater depth. This course will also explore disparities in various health outcomes related to MCH nutrition and provide students the opportunity to apply the course concepts at a personal and programmatic level.
Rules & Requirements

Credit Restrictions: Students will receive no credit for PB HLTH W207A after completing PB HLTH 206, or PB HLTH 207A. A deficient grade in PB HLTH W207A may be removed by taking PB HLTH 206, PB HLTH 206, or PB HLTH 207A.

Repeat rules: Course may be repeated for credit under special circumstances: if student receives D or F grade

Hours & Format

Fall and/or spring: 8 weeks - 6 hours of lecture per week

Summer: 8 weeks - 6 hours of lecture per week

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Zyba

Formerly known as: Public Health W207A

PB HLTH 209A Introduction to Plant-Centric Food Systems 1 Unit

Terms offered: Spring 2023, Spring 2022
This is an energizing and exciting symposium that explores the robust opportunities and accompanying challenges of plant-forward solutions. The gathering is convened to underscore the urgency of shifting to plant-based diets for healthier, more equitable, and resilient food systems and to explore how students will play a pivotal role in the transformation of the food system. Plant Futures is the first program at UC Berkeley to feature in depth multidisciplinary conversation aimed at exploring the role and importance of plant-based foods as a critical lever for change, and provides a unique opportunity for students to directly connect to prominent leaders, creators and influencers and forge pathways for future professional engagement.
Objectives & Outcomes

Course Objectives: 1.
Deepen students' knowledge of the impacts of our diets and current food production systems on personal health and planetary boundaries that directly drive climate change by understanding the urgent challenges and most critical levers for transformation in food systems.
2.
Build critical systems thinking competencies at the intersection of agriculture, nutrition, climate science, behavioral science, economics, entrepreneurship and ethics with plant-centric food systems.
3.
Provide a multisectoral opportunity for students to build community and connect with leaders in different disciplines working in the plant-based sector through networking opportunities that converge the scientific, business, and academic communities.
4.
Create an opportunity for students to engage and directly collaborate with food industry business leaders, experts, and researchers working on the forefront of innovation and sustainability, specifically in the plant-based sector.
5.
Provide students with frameworks, examples and skill sets to design and implement innovative plant-centered food systems that are sustainable and driven by public health principles.
6.
Equip students with the foundation and tools to become advocates and change makers for plant-centered food systems in their personal lives, on campus, and beyond. Ultimately, prepare students at a personal and professional level to accelerate the transition to a healthy, sustainable and just food system.

Hours & Format

Fall and/or spring: 1 weeks - 20 hours of seminar per week

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Rosenzweig

PB HLTH 209B Plant Futures Challenge Lab 3 Units

Terms offered: Fall 2025, Fall 2024, Spring 2024
A collaborative, multidisciplinary applied learning journey in systems entrepreneurship, ethical leadership and innovation models intended to accelerate the transition to a healthy, sustainable and just food system.
Objectives & Outcomes

Course Objectives: 1.
Develop systems-thinking and analysis capabilities while developing ‘food-systems intelligence’ and ‘triple-bottom line’ business design capabilities. Understand the complex interdependencies and trade-offs involved in solving food systems challenges.
2.
Develop an understanding of mission-driven organizational strategies and practices, based on clear ethical principles.
3.
Combine and apply entrepreneurial skill sets, mind sets and tool sets needed for leadership, team building, and initiating and managing innovative change. Learn to transform an idea into a tangible, viable plan of action.
4.
Learn to recognize and “size” unmet needs, issues, and opportunities in the food system and apply creativity, research, and discipline to create the type of solutions that make meaningful, lasting impacts.
5.
Expand your personal capacities for collaboration while reaching out of your comfort zone by contacting and enrolling experts who can assist your project.
6.
Lead and collaborate with other students from different disciplines across the University to apply the team building strategies and leadership necessary to develop a plant-forward solution to solve complex food systems challenges.
7.
Grow and cultivate your professional network and experience by building deep relationships with mentors and professional allies.
8.
Develop, through practice, the foundation and tools needed to become advocates for plant-forward solutions in your personal lives, at Berkeley, and beyond!

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructors: Rosenzweig, Gheihman

PB HLTH 209W Comparative Health Systems 3 Units

Terms offered: Not yet offered
In the past decade, health systems and their role in global health have received increasing focus. While disease-focused, 'vertical programs', such as malaria and HIV/AIDs still command the lion's share of donor resources, it has become clear that the sustainability of disease programs depends on embedding them into a country's health system. This course provides a real world, practical understanding of health systems, based on a solid academic foundation. It introduces current debates about health systems, health financing, and universal health coverage in the international community. Students will use five key structural questions to analyze health care systems and their performance on quality, cost and access metrics.
Rules & Requirements

Credit Restrictions: Students will receive no credit for PB HLTH W209 after completing PB HLTH 209. A deficient grade in PB HLTH W209 may be removed by taking PB HLTH 209.

Hours & Format

Fall and/or spring: 8 weeks - 6 hours of lecture per week

Summer: 8 weeks - 6 hours of lecture per week

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Feachem

Formerly known as: Public Health W209

PB HLTH 210 Foundations of Maternal and Child Health Policy, Practice and Science 3 Units

Terms offered: Fall 2025, Fall 2024, Fall 2023
This course will explore issues related to maternal, child, and adolescent health throughout the life course with a focus on the social determinants of health, health disparities, and social justice. Discussion will focus on current issues central to maternal and child health policy and practice; the history and organization of MCH health services in the US; and analyze the ways in which the political context in the US and internationally affects the health and well-being of families, including critical examination of the ways in which knowledge about an issue, an understanding of the social strategies to address that issue, and political will are all leveraged to influence the creation of MCH policy.
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: Public Health/Graduate

Grading: Letter grade.

Instructor: Pies

PB HLTH 210B Adolescent Health 3 Units

Terms offered: Spring 2025, Spring 2023, Spring 2022
This course is designed to provide an understanding of the epidemiology and etiology of critical health issues among adolescents, including complex contextual influences and individual processes related to this dynamic period of life. Each adolescent health outcome will be considered in light of developmental issues related to the pubertal transition and multilevel influences that contribute to adolescent health and well-being, including 1) biological, 2) cognitive, 3) behavioral, and 4) social-culture factors. The course will emphasize: empirical evidence for the etiology of adolescent health problems, documented risk and protective factors, and content and timing of preventive intervention efforts to ameliorate risk.
Rules & Requirements

Prerequisites: Graduate standing

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Deardorff

PB HLTH 210D Reproductive and Perinatal Epidemiology 3 Units

Terms offered: Spring 2025, Spring 2020, Spring 2017
This course will focus on research methods and issues in perinatal and reproductive epidemiology with an emphasis on methodologies and specific case studies. Specific adverse reproductive outcomes, risk factors, and prevalence will be discussed. The course will include critiques of published studies, methods of conducting epidemiologic research and data collection, and techniques of proposal writing.
Objectives & Outcomes

Course Objectives: Apply the fundamentals of study design and grant writing
Critique scientific literature
Discuss and describe the epidemiology of specific reproductive outcomes including their risk factors and prevalence
Explore epidemiologic challenges unique or specific to reproductive/perinatal outcomes
Review epidemiologic methods used in maternal and child health research and the specific strengths and limitations of these methods

Rules & Requirements

Prerequisites: Graduate standing in public health or consent of instructor

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Padula

PB HLTH 210E Practicum in MCH Data Analysis I 3 Units

Terms offered: Fall 2025, Fall 2024, Fall 2023
This course is designed to support MCH students complete their masters capstone project. Part I is offered in the Fall and Part II is in Spring.
Rules & Requirements

Credit Restrictions: Formerly known as: PH 293-7 MCH Seminar.

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Harley

PB HLTH 210F Practicum In MCH Data Analysis II 1 - 4 Units

Terms offered: Spring 2025, Spring 2024, Spring 2023
The course is designed to support MCH students working on their Master's Capstone project. The course goal is to support students in a variety of methodological issues and practical issues. The course is a combination of formal class meetings and one-on-one meetings.
Rules & Requirements

Credit Restrictions: Formerly known as: 293-6 Practical Issues in MCH Data Analysis.

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Harley

PB HLTH 210J Maternal, Child & Adolescent Health Journal Club 2 Units

Terms offered: Fall 2025, Fall 2024, Fall 2023
The purpose of this seminar is to learn how to critically review peer-reviewed articles in the field of maternal, child, adolescent and family health (MCAH). This is a required course for all Maternal, Child, and Adolescent Health MPH students and some MCAH Specialty areas. Others may enroll with permission of the instructor.
Rules & Requirements

Repeat rules: Course may be repeated for credit without restriction.

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Offered for satisfactory/unsatisfactory grade only.

Instructor: Eskenazi

PB HLTH 210K Foundations of Maternal, Child, and Adolescent Health Leadership 2 Units

Terms offered: Spring 2024, Spring 2023, Spring 2022
This course introduces students to theories and concepts of leadership and explores ways of applying these to maternal, child, and adolescent health issues. This course provides opportunities for students to develop skills and resources for further developing their own leadership. The skills taught in this course will prepare students to become dynamic, thoughtful leaders in the field of MCAH with a particular focus on continued self-reflection and development to lead programs that address the diverse issues facing MCAH populations.
Rules & Requirements

Repeat rules: Course may be repeated for credit without restriction.

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Offered for satisfactory/unsatisfactory grade only.

Instructor: Strouse

PB HLTH 210L Abortion: Implications for Public Health 2 Units

Terms offered: Fall 2025
This class will orient students to important definitions, tools, and activities to understand the public health implications of abortion, to inform their and others' attitudes and beliefs about abortion, and ultimately, to prevent morbidity and mortality caused by unsafe abortion. The course will explore women's rights, reproductive rights, human rights, and foster discussion about access to abortion services as a form of empowerment.
Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Prata

PB HLTH 211 Health and Human Rights 3 Units

Terms offered: Fall 2025, Fall 2024, Fall 2023

The course examines the origins of health and human rights concerns and outlines a conceptual basis for human rights among health professionals. It provides an overview of the epidemiology of human rights violations worldwide and an analysis of the psychology of abuse. The course considers the role of health professionals in (1) documenting the health and social consequences of human rights violations and war; (2) treating survivors of abuse; (3) addressing specific human rights concerns of women and children; (4) identifying the impact of health policy on human rights; and (5) participating in human rights education and advocacy. The course will also examine issues of universality of human rights and cultural relativism and the role of accountability for the past abuses in prevention.

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructors: Iacopino, Weinstein

PB HLTH 212A International Maternal and Child Health 2 Units

Terms offered: Fall 2025, Fall 2024, Fall 2023

Assessment of health status of mothers, infants, and children on worldwide basis; special emphasis on problems, policies, and programs affecting MCH and family planning in developing countries.

Rules & Requirements

Prerequisites: Graduate standing or consent of instructor

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Miller

PB HLTH 212W Foundations of Global Health 3 Units

Terms offered: Fall 2025

This course introduces students to the basic principles of global public health that are used to improve population health at all levels. The course will start with an introduction to essential concepts from public health disciplines that are the foundations of global health practice. Students will then apply these concepts to current global health challenges through course activities, assignments, and readings that will provide a real world context. Global health experts will share their experiences and lessons learned from implementing global health research and programs. Throughout the course, students will gain critical and creative-thinking experience in applying tools and frameworks towards addressing diverse global health needs.

Rules & Requirements

Credit Restrictions: Students will receive no credit for PB HLTH W212 after completing PB HLTH 212. A deficient grade in PB HLTH W212 may be removed by taking PB HLTH 212.

Hours & Format

Fall and/or spring: 8 weeks - 6 hours of lecture per week

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructors: Reingold, Fong

Formerly known as: Public Health W212

PB HLTH 213A Family Planning, Population Change, and Health 3 Units

Terms offered: Fall 2025, Fall 2024, Fall 2023

Course examines the determinants of family size and the role played by contraception, voluntary sterilization, and induced abortion in the transition to small families. It looks at the factors controlling access to fertility regulation in developed and developing countries and discusses the factors that have made for successful family programs as well as those that have generated controversy. The course looks at the relationship between family planning and the health of women and children and at the role of family size in economic development and environmental problems. It looks at advances in family planning, organization, and promotion of services and discusses ethical issues facing providers.

Rules & Requirements

Prerequisites: Graduate standing or consent of instructor

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructors: Campbell, Potts, Prata

PB HLTH 213W Global Health Ethics 3 Units

Terms offered: Fall 2025

This course provides an overview to ethical issues within a global health context. The course starts with an introduction to ethical frameworks, theories, and historical references that elevate the ethics conversation to the global stage. The course will then link theory to practice as we delve deeper into ethical issues in research, experiential learning, and delivery. We will consider ethical questions about the discipline of global public health and the roles of governments, academic institutions, organizations, health professions, and members of the public as stewards of health. Students will gain a deeper understanding of the divers international perspectives on the concepts of ethics and health.

Hours & Format

Fall and/or spring: 8 weeks - 6 hours of lecture per week

Summer: 8 weeks - 6 hours of lecture per week

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructors: Haar, Dandu, DeBoer

Formerly known as: Public Health W213

PB HLTH 215 Anti-Racist and Racial Justice Praxis Spring Student Elective 3 Units

Terms offered: Spring 2024, Spring 2023, Spring 2022

The Anti-Racist and Racial Justice Praxis Spring Student Elective is a semester-long student elective course for continuing students. This class will cultivate up to 40 student champions to develop an anti-racist analysis of public health, present a set of anti-racist public health tools, and build skills necessary for advancing an anti-racist agenda within the field.

Objectives & Outcomes

Course Objectives: Analyze how systems of racism operate in a modern context and impact health

Apply new skills when working to implement an anti-racist agenda at the institutional and governmental levels.

Recognize common challenges and problems in racial dialogue and learn skills to overcome these issues.

Rules & Requirements

Prerequisites: A Health and Social Behavior breadth course; PBHLTH 200L, PBHLTH W200G or PBHLTH 203A

Hours & Format

Fall and/or spring: 15 weeks - 2.5 hours of lecture per week

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructors: Malawa, Gaarde

PB HLTH 216A Biological Embedding of Social Factors 2 Units

Terms offered: Fall 2019, Fall 2017, Spring 2016

This is an interdisciplinary course which will adopt a broad-based ecological perspective of health and behavior. This class will emphasize the interconnected and multidirectional relationships between biology, behavior, and the social environment. This course will be conducted as a seminar series (with a focus on biological processes). We will investigate the assertion that biological, psychological, and social processes interact over a lifetime to influence health and vulnerability to disease (a developmental epigenetic perspective). Rather than focusing on "if" social factors can influence health and disease we will focus on "how" social factors may regulate/change biological measures. Three very general themes will be addressed: development, "social" neuroscience and gene-environment interactions as they relate to behavior. Topics such as constraints/plasticity and behavior, genetic determinism, vulnerability versus resilience, gene-environment interactions, fetal/developmental programming, and stress will all be touched upon.

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Francis

PB HLTH 218B Evaluation of Health and Social Programs 4 Units

Terms offered: Fall 2025, Fall 2024, Fall 2023

The study of concepts, methods, rationale, and uses of evaluation research as they apply to health and social programs.

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

PB HLTH 218W Evaluation of Health and Social Programs 3 Units

Terms offered: Not yet offered
This course provides an overview of the concepts and methods of program evaluation. The course will be useful to those concerned with evaluation of health and social service programs. Participants will develop the critical skills necessary to assess the quality of evaluation research projects, to apply technical skills in professional practice, and to develop evaluation plans for a variety of heath and social programs.
Rules & Requirements

Credit Restrictions: Students will receive no credit for PB HLTH W218 after completing PB HLTH 218. A deficient grade in PB HLTH W218 may be removed by taking PB HLTH 218.

Hours & Format

Fall and/or spring: 7 weeks - 6 hours of lecture per week

Online: This is an online course.

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Formerly known as: Public Health W218

PB HLTH 219C Community-Based Participatory Research in Public Health 3 - 4 Units

Terms offered: Spring 2024, Spring 2022, Spring 2020
The goal of this seminar is to provide doctoral and advanced master's degree students with an understanding of theories, principles, and strategies of community-based participatory research (CBPR) and related traditions. The advantages and limitations of this approach, skills necessary for effective application, and theory-driven case studies will be explored. Students undertaking a service-learning project applying CBPR may receive a 4th unit.
Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Minkler

PB HLTH 219E Introduction to Qualitative Methods in Public Health Research 3 Units

Terms offered: Spring 2025, Spring 2024, Spring 2023
This course is designed to familiarize students who have little or no experience in conducting qualitative research with the perspectives, methods, and techniques of a vast and contentious tradition of research. The course will cover some of the methods of data collections used in the conduct of qualitative inquiries, the analysis of textural data, the write-up of findings from qualitative studies, and the development of a qualitative research proposal. While learning about qualitative methods, students will gain an understanding of the qualitative research literature on a topic of their choice, as well as how to integrate findings from a variety of qualitative studies on a research question of topic.
Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Miller

PB HLTH 219W Social and Behavioral Health Research: Introduction to Survey Methods 3 Units

Terms offered: Summer 2025 Second 6 Week Session
This course provides a thorough background in the design, administration, and interpretation of a range of survey strategies (e.g., telephone, face-to-face, mail and internet surveys) within the broader context
of a research or evaluation project. Topics will include formulation of study aims, developing an appropriate research design, protection of human subjects and proper conduct of research, sample size calculations, recruitment strategies, survey administration, and development of an analysis plan. Class topics are designed to convey practical knowledge through topical lectures, group activities, partner feedback and a survey design project consisting of two parts: a survey instrument and a research plan.

Objectives & Outcomes

Student Learning Outcomes: 1. Formulate research questions and develop testable hypotheses appropriate for survey research
2. Identify appropriate survey tools to address a particular research question and hypothesis
3. Define and operationalize constructs and variables for survey research

4. Assess the reliability and validity of survey measures
5. Select a sampling design optimized for examining a particular research question and hypothesis

6. Demonstrate the ability to identify and address cultural and ethical considerations in conducting survey research, particularly involving diverse and special populations (including children, the elderly, and those diagnosed and treated for acute and chronic conditions) where relevant

7. Develop an analysis plan and dissemination plan linked to research questions, hypotheses and a survey instrument

Rules & Requirements

Credit Restrictions: Students will receive no credit for PB HLTH W219 after completing PB HLTH 219. A deficient grade in PB HLTH W219 may be removed by taking PB HLTH 219.

Hours & Format

Fall and/or spring: 7 weeks - 6 hours of lecture per week

Summer: 7 weeks - 6 hours of lecture per week

Online: This is an online course.

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Sheats

Formerly known as: Public Health W219

PB HLTH 220 Health Policy Decision-Making 3 Units

Terms offered: Fall 2023, Fall 2022, Fall 2021
Introduction to federal-level health policy and analysis of government capacity in addressing major issues in health policy. The course explores structural impediments to reform in the US, regulatory decision-making -- particularly decision-making under conditions of uncertainty, and basic tools of policy analysis. Students will apply these tools in a seminar paper that analyzes a proposed or existing health policy or program.

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Sentell

PB HLTH 220C Health Risk Assessment 3 Units

Terms offered: Spring 2025, Spring 2024, Spring 2023
This course introduces the basic scientific principles of environmental health risk assessment, develops the understanding necessary to carry out and interpret quantitative risk assessments, and describes the context in which decisions manage environmental health risks are made. The course presents the quantitative methods used to assess the human health risks associated with exposure to microbial and chemical agents, focusing on the four major components of risk assessment: hazard identification, dose-response assessment, exposure assessment and risk characterization. The course examines the application of environmental health risk assessment to contemporary issues including the associated complexities, challenges and controversies.

Rules & Requirements

Prerequisites: 250A, 270A-270B recommended. Graduate standing

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructors: Zhang, Smith

PB HLTH 220D Health Policy Advocacy 3 Units

Terms offered: Spring 2025, Spring 2024, Fall 2023
A graduate seminar in practice-based means to advocate for health policy. This course focuses on data based strategies using persuasive written and oral communication skills necessary to preserve and/or improve the health status of populations. Students will develop research, organization, and coalition-building skills necessary to produce an effective advocacy campaign. The course identifies the roles of those involved in the making of policy and demonstrates the use of appropriate channels and technologies to influence health policy change.
Rules & Requirements

Prerequisites: Graduate standing or consent of instructor

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Snyder

PB HLTH 220DW Health Policy Advocacy 3 Units

Terms offered: Fall 2025
The course focuses on strategic policy-making, messaging informed by values and data, and persuasive written and oral communication skills necessary to preserve and/or improve health and advance health equity. Students will understand and situate the important role of focused public health advocacy in the spectrum of public health practice. Students will develop research, strategy, organization, communication, and coalition-building skills necessary to produce an effective advocacy campaign and understand the unique approaches to advocacy in different forums. The course identifies the roles of those involved in making policy and demonstrates the use of appropriate channels and technologies to influence health policy change.
Rules & Requirements

Credit Restrictions: Students will receive no credit for PB HLTH 220DW after completing PB HLTH 220D. A deficient grade in PB HLTH 220DW may be removed by taking PB HLTH 220D.

Hours & Format

Fall and/or spring: 8 weeks - 6 hours of lecture per week

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructors: Johnson, Iton

PB HLTH 220E Global Health Policy 3 Units

Terms offered: Fall 2025, Fall 2024, Fall 2023
This course will provide an intensive, case-based introduction to global health policy. Students will simulate working on teams asked to advise Ministries of Health in low- and middle-income countries and other global policymaking institutions grappling with health policy questions. Over a series of four cases, the course will introduce students to key concepts in health policy and economics, including allocating scarce resources, pandemic response, financial incentives to shape provider behaviors, and policies to influence the private sector to improve population health. Students will also become familiar with the major actors and institutions that shape international health policy.
Rules & Requirements

Prerequisites: Graduate standing

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Bertozzi

PB HLTH 220MW Health Policy Methods 3 Units

Terms offered: Summer 2025 Second 6 Week Session
This course serves as an introduction to key topics in health policy making in the United States, with a focus on the policy process and policy analysis methods. Using the policy analysis framework of Eugene Bardach's Eightfold Path first introduced in PBHLTH W200E, the course will explore the entire policy analysis process from the identification of a problem, to the evaluation of policy solutions, and finally to the techniques and formats for effective health policy communications. This analysis method is contextualized within the process of public policy making within the U.S. government.
Objectives & Outcomes

Course Objectives: •
Apply learned policy analysis skills to proposed and existing public health policies.
•
Build critical policy analysis skills to identify and evaluate the methods used for developing policy alternatives and understand the impact of existing public health policies.
•
Critique the role of research and evidence in public health policy formation and evaluation.
•
Describe our country's institutional players (i.e., legislative, administrative, judicial), their roles in policy making and how to influence policy outcomes.
•
Leverage critical analysis tools of language and framing to develop and advocate health policies in verbal and written communication deliverables.

Student Learning Outcomes: •
Conduct policy advocacy: understand the gaps in community needs and articulate these needs in the policy setting. Develop innovative strategies for influencing health policy for diverse groups.
•
Conduct policy analysis: evaluate and analyze policy solutions that are culturally competent. Communicate evidence and recommendations succinctly and persuasively.
•
Deepen understanding of the dimensions of the policy-making process, including the roles of ethics and evidence.
•
Examine current public health issues and their impacts on public health and health equity.
•
Learn about the health policy context and the institutions, stakeholders, advocacy groups and processes that shape policy outcomes.
•
Recognize the disparate impacts of policies on communities with intersectional identities.

Rules & Requirements

Prerequisites: PB HLTH W200E

Credit Restrictions: Students will receive no credit for PB HLTH W220M after completing PB HLTH 220, or PB HLTH 220M. A deficient grade in PB HLTH W220M may be removed by taking PB HLTH 220, PB HLTH 220, or PB HLTH 220M.

Hours & Format

Fall and/or spring:
7 weeks - 6.5 hours of lecture per week

PB HLTH 222A Biomedical Innovation Policy 3 Units

Terms offered: Spring 2025, Spring 2024, Spring 2023
Course examines the policy framework for biomedical technology, including medical devices, drugs, diagnostics, digital therapeutics and algorithms. Emphasis will be placed on the funding of research and development, the protection of intellectual property, FDA market authorization, insurance coverage and algorithm design. Focus will be on the US but will examine industrial policy and innovation nationalism within a global context. Students are required to read peer-reviewed articles, keep up with journalistic reports and participate in classroom discussions. Lectures will be pre-recorded and posted on bCourses and it is expected that students will have watched these lectures and done the readings prior to class.
Objectives & Outcomes

Course Objectives: •
Compare the strengths and limits of alternative mechanisms for stimulating R&D investments in the life sciences: research grants, commercialization grants, tax credits, patent-protected pricing, innovation prizes, and advanced market commitments, among others.
•
Describe the basic principles and applications of intellectual property policy and the tradeoffs between greater access to current treatments. via low product prices, and greater incentives for investment in new treatments, via high prices.
o
Intellectual property policy with respect to generics and biosimilars

•
Discuss the basic structure of regulatory market authorization:
o
FDA review of safety and efficacy for pharmaceuticals
o
Accelerated review and the evolution of evidentiary demands
o
Market authorization for medical devices, diagnostic tests, digital therapeutics

•
Explain the basic principles of health technology assessment and their applicability to insurance coverage and pricing.

Rules & Requirements

Prerequisites: Graduate standing. Undergraduates will be considered on case-by-case basis

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Robinson

PB HLTH 222AW Biomedical Innovation Policy 3 Units

Terms offered: Not yet offered

This course examines the policy framework for biomedical technology, including medical devices, drugs, diagnostics, digital therapeutics, and algorithms. Emphasis will be placed on the funding of research and development, the protection of intellectual property, FDA market authorization, insurance coverage, and algorithm design. The focus will be on the US but we will examine industrial policy and innovation nationalism within a global context. Students will be required to read peer-reviewed articles, keep up with journalistic reports, and participate in online discussions.

Objectives & Outcomes

Course Objectives: #

Be able to explain the principles of health technology assessment (HTA) and the challenges raised in their application to insurance coverage and pricing for Medicare.

#

Compare the strengths and limits of alternative mechanisms for stimulating R&D investments in the life sciences: research grants, commercialization grants, tax credits, patent-protected pricing, and innovation prizes, among others. Be able to apply these principles to develop a package of policy incentives to encourage investment in novel antibiotics.

#

Describe the basic principles and applications of intellectual property policy and the tradeoffs between greater access to current treatments. via low product prices, and greater incentives for investment in new treatments, via high prices.

#

Intellectual property policy with respect to generics and biosimilars

#

Discuss the structure of regulatory market authorization, including FDA review of safety and efficacy for pharmaceuticals and market authorization for medical devices, diagnostic tests, digital therapeutics. Apply these principles in video debate over FDA accelerated review.

Rules & Requirements

Credit Restrictions: Students will receive no credit for PB HLTH W222A after completing PB HLTH 222A. A deficient grade in PB HLTH W222A may be removed by taking PB HLTH 222A, or PB HLTH 222A.

Hours & Format

Fall and/or spring: 8 weeks - 6 hours of lecture per week

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Robinson

Formerly known as: Public Health W222A

PB HLTH 223A Capstone Seminar in Health Policy and Management Part 1 1 Unit

Terms offered: Fall 2025, Fall 2014, Fall 2013

First semester of a year-long course; an integrative seminar to provide a supportive environment for master's degree students in the HPM program of the School of Public Health. During the first semester, students learn about the Capstone requirements, learn research techniques that may be applied to their projects, and define their project. The course includes weekly lectures on research methods as well as in-class exercises practicing these methods and applying them to potential Capstone topics. In the second semester, students conduct an applied methods thesis, write a report and present it. A core requirement which prepares students to transition to the profession; it fulfills Council on Education for Public Health (CEPH) requirement.

Rules & Requirements

Prerequisites: Graduate standing in Health Policy and Management and completion of PBHLTH 297 (internship) or one-year practicum (in progress)

Hours & Format

Fall and/or spring: 15 weeks - 1 hour of seminar per week

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade. This is part one of a year long series course. A provisional grade of IP (in progress) will be applied and later replaced with the final grade after completing part two of the series.

Instructor: Webb

PB HLTH 223B Capstone Seminar in Health Policy and Management Part 2 2 Units

Terms offered: Fall 2009, Fall 2008, Fall 2007
Second semester of a year-long course; an integrative seminar to provide a supportive environment for master's degree students in the HPM program of the School of Public Health. In the first semester, students learn about the Capstone requirements, learn research techniques that may be applied to their projects, and define their project. During the second semester, students conduct an applied methods thesis, write a report and present it. The course addresses challenges students are experiencing in conducting their projects as well as real-time problem solving for these challenges. A core requirement which prepares students to transition to the profession; it fulfills Council on Education for Public Health (CEPH) requirement.
Rules & Requirements

Prerequisites: PBHLTH 223A; completion of PBHLTH 297 (internship) or one-year practicum (in progress)

Hours & Format

Fall and/or spring: 15 weeks - 1 hour of seminar per week

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade. This is part two of a year long series course. Upon completion, the final grade will be applied to both parts of the series.

Instructor: Webb

PB HLTH 223C Strategic Management and the Health Sector 3 Units

Terms offered: Spring 2025, Spring 2024, Spring 2023
The overall purpose of this course is to assist the student in managing health care organizations from a strategic perspective. This is accomplished by systematically addressing systemwide, organization-wide, group- and individual-level issues in strategy formulation, content, implementation, and performance. Emphasis is placed upon the manager's role in simultaneously taking into account a wide variety of internal and external factors to improve organization and system performance in meeting the health needs of individuals and communities. Emphasis is also placed on the development and implementation of strategies to meet multiple stakeholder demands, particular attention given to continuous quality improvement/total quality management.
Rules & Requirements

Prerequisites: Business Administration 205 or 224A and 223A or consent of instructor. Students are required to have a general background knowledge of the health services system

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructors: Shortell, Oxendine

PB HLTH 223D Foundations of Health Policy and Management 2 Units

Terms offered: Fall 2025, Fall 2024, Fall 2023
This course is designed as a first semester seminar for master's students in the Division of Health Policy and Management. The purposes of this course are fourfold: 1) to provide an overview of the U.S. medical and health care systems; 2) to provide an introduction to basic concepts and competencies in health policy analysis and health management; 3) to provide internship preparation and career development activities; and 4) to provide opportunities to develop relationships with 1st- and 2nd-year HPM students and with faculty.
Rules & Requirements

Prerequisites: Graduate standing in Health Policy and Management or consent of instructor

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructors: Oxendine, Solomon

PB HLTH 223E Capstone Seminar in Health Policy and Management 2 Units

Terms offered: Spring 2025, Spring 2024, Spring 2023
This course is an integrative seminar that builds on the core curriculum requirements of the school and HPM specialty. Participants are master's degree students advancing to candidacy. After sharing their internship experiences and the impact on career decisions, the students are required to draw on situations from their internship to demonstrate what they have learned by leading fellow seminar participants in facilitated discussions, culminating in a specific management recommendation or policy position. Students will gain exposure to a range of HPM issues based on the experiences of their peers. Each student is also required to produce a 20-page paper and prepare and deliver a formal presentation to seminar participants and invited faculty. The paper will address an HPM topic of interest that has been selected by the student and approved by the course faculty and the student's academic advisor. Suggested formats for the paper are a policy or strategic management analysis, but other options may be proposed and approved by the instructor.
Rules & Requirements

Prerequisites: Graduate standing in HPM and completion of 297 internship

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Solomon

PB HLTH 223K Health Policy and Management in Public Health 1 Unit

Terms offered: Spring 2025

This course incorporates four key CEPH competencies related to health policy and management and provides the student with an understanding of the nature and essential components of public health and health policy and management. Specifically, the course opens with an overview of the key roles that public health plays and then takes a look at dimensions of the structure of health systems, key managerial concepts in finance and resource allocation and how the policy setting process can impact different populations in potentially unequal ways. For each topic area, general framing will be presented and then a more specific use case framed to allow the student to consider a tangible example.

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

PB HLTH 223W Strategy in Health Care Organizations 3 Units

Terms offered: Summer 2025 Second 6 Week Session

This course is an introduction to health care strategy in which students will have an immersive, practical, hands-on experience in the strategic management of a real or fictitious health care organization. This course will familiarize students with the requisite skills and techniques to lead strategic change at a division, department, or enterprise level within a health care organization.

Objectives & Outcomes

Course Objectives: 1.
Strategic Management Theory and Leading Practices. Students will learn this through a combination of lectures, readings from the textbook and business journal articles, and “how to” instructional videos.
2.
Real World Experience. Students will learn this through a combination of Executive Interviews, Case Studies, and personal reflection.
3.
Hands-on Practice. Students will learn this through a carefully designed, team-based practical experience in which they for a real or fictitious health care organization of their choice.

Student Learning Outcomes: Adjust organizational strategy in response to real-time crises.
Define and align their organization’s mission, vision, values, and strategy.
Learn how to define and measure key performance indicators (KPIs).
Learn how to successfully implement a strategy by creating a Strategic Roadmap, high level Project Plan, and Risk Mitigation Plan.
Learn various common strategies, including: Growth by Concentration/ Horizontal Integration, Growth by Related Diversification/Vertical Integration, and Innovation.
Learn various tools and techniques that may be used in informing a strategy including: Value Chain Analysis, Benchmarking, SWOT Analyses, Root Cause Analysis, Porter’s Five Forces Model, Scenario Planning, and Balanced Scorecards.
Understand the important influences of leadership and culture on the successful execution of the strategy.
Understand the pros and cons of strategic alternatives including: Internal Development, Internal New Venture Creation, Investment in New Ventures, Acquisition, Mergers, Joint Ventures/Strategic Alliances/ Partnerships, and Innovation.

Rules & Requirements

Credit Restrictions: Students will receive no credit for PB HLTH W223 after completing PB HLTH 223. A deficient grade in PB HLTH W223 may be removed by taking PB HLTH 223.

Hours & Format

Fall and/or spring: 7 weeks - 6 hours of lecture per week

Summer: 7 weeks - 6 hours of lecture per week

Online: This is an online course.

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Webb

Formerly known as: Public Health W223

PB HLTH 224A Organizational Behavior and Management in Health Care 3 Units

Terms offered: Fall 2025, Fall 2024, Fall 2023
Introduction to health administration, focusing on theories of management, organizations, and environments as they relate to the administration of health services. Cases, simulation, and structured experiences will be used to tie theory to practice.

Rules & Requirements

Prerequisites: Graduate standing or consent of instructor

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Rodriguez

PB HLTH 224D Doctoral Seminar: Organizational Analysis of the Health Care Sector 3 Units

Terms offered: Fall 2022, Spring 2021, Fall 2017
This course examines major theories and frameworks for analyzing health care organizations. Emphasis is given to the application and testing of theories in the health care sector. Population ecology, transaction-cost economics, strategic management, and network theories are examined. The seminar will rely on extensive student participation.

Rules & Requirements

Prerequisites: One doctoral-level organizational theory course or consent of instructor

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Shortell

PB HLTH 224E Health Care Quality 3 Units

Terms offered: Spring 2025, Spring 2024, Spring 2023
The course focuses on the quality of Health Care in the United States, including variations and determinants in quality and best practices in improving quality. Students will develop an understanding of conceptual frameworks for Health Care problem solving and quality improvement. As part of the class they will gain experience in designing a Health Care quality improvement plan. The course is designed for Graduate students interested in healthcare delivery.

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Nazeeri-Simmons

PB HLTH 224W Organizational Behavior and Management in Health Care 3 Units

Terms offered: Fall 2025
Today, the health care system consists of a mixture of organizational forms that plan, regulate, and deliver medical care and other health services. The objective of this course is to consider 1) the structure of these organizations and the factors that affect their performance, as well as their growth and decline and 2) the role that health care managers play in the organizations in which they work.

Rules & Requirements

Credit Restrictions: Students will receive no credit for PB HLTH W224 after completing PB HLTH 224. A deficient grade in PB HLTH W224 may be removed by taking PB HLTH 224.

Hours & Format

Fall and/or spring: 7 weeks - 6 hours of lecture per week

Online: This is an online course.

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Rodriguez

Formerly known as: Public Health W224

PB HLTH 225AW Introduction to Applied Implementation Science 1 Unit

Terms offered: Not yet offered
This introductory course will serve as the gateway for students into the world of applied IS. It has been designed keeping in mind students looking to gain a preliminary understanding of the principles and practice of IS. The module will provide a broad overview of the theoretical and evidence-based models and frameworks used in the field as well as the barriers and challenges faced by implementation scientists in the real-world application of evidence-based practices, programs and policies.
Objectives & Outcomes

Course Objectives: Apply varied frameworks for the translation of evidence
Examine and evaluate different strategies/tools of implementation science
Gain a methodological understanding of implementation science
Identify and scientific evidence and discern its quality and relevance

Hours & Format

Fall and/or spring: 8 weeks - 1 hour of lecture per week

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Bertozzi

Formerly known as: Public Health W225A

PB HLTH 225BW Implementation Science: Applied Case Studies 1 Unit

Terms offered: Not yet offered
This course provides hands-on experience for students to apply their learnings from “PH W225A Introduction to Applied Implementation Science” to global policy contexts. It has been designed to provide practical exposure to the world of Implementation Science, by employing the models and frameworks discussed in the introductory module to diverse public health programs around the world.
Objectives & Outcomes

Course Objectives: Adapt evidence to different geographical and cultural contexts
Analyze and streamline scientific evidence
Assess potential costs and benefits of introducing and implementing an intervention
Design an implementation methodology while accounting for local constraints
Identify potential challenges in implementation success and failures
Measure the impact of an intervention on select predetermined health outcomes
Optimize resources and manage stakeholders to effective run programs

Rules & Requirements

Prerequisites: Students need to have taken PBHLTH W225A: Introduction to Applied Implementation Science or demonstrate substantial prior experience in the field of implementation science research and/or practice

Hours & Format

Fall and/or spring: 8 weeks - 1 hour of lecture per week

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Bertozzi

Formerly known as: Public Health W225B

PB HLTH 226A Health Economics A 3 Units

Terms offered: Fall 2025, Fall 2024, Fall 2023
This course introduces students to the economics of health and health care. In addition to familarizing students with the language and tools of health economics, the course will provide an overview of key institutional features of the health economy as well as important research findings in the field. These will be used to evaluate the economic logic and incentives in competing proposals for health care reform.
Rules & Requirements

Prerequisites: Graduate standing or consent of instructor

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Robinson

PB HLTH 226AW Health Economics 3 Units

Terms offered: Fall 2025
This online course provides an overview of the United States healthcare system using a microeconomic lens. Students will be introduced to the microeconomic theory and empirical students that will deepen their understanding of how consumers, firms and the government influence healthcare expenditures (including its quantity and prices), healthcare quality, and patient health outcomes. These economic models will enable students to predict how changes in consumer behavior, the industrial organization of firms, and government policies affect healthcare and health outcomes.
Rules & Requirements

Prerequisites: Introduction to Health Policy and Management (PH W200E)

Credit Restrictions: Students will receive no credit for PB HLTH W226A after completing PB HLTH 226A. A deficient grade in PB HLTH W226A may be removed by taking PB HLTH 226A.

Hours & Format

Fall and/or spring: 8 weeks - 6 hours of lecture per week

Summer: 8 weeks - 6 hours of lecture per week

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Fulton

Formerly known as: Public Health W226A

PB HLTH 226C Economics of Population Health 3 Units

Terms offered: Spring 2024, Spring 2023, Spring 2022
This course examines the economic theories and evidence underpinning population health interventions and policies. Topics include the economic evaluation of community and clinical preventive services, systemic population health management innovations, behavioral economics approaches, and policies targeting upstream social determinants of population health. A brief module on cost-effectiveness analysis is included.
Rules & Requirements

Prerequisites: Graduate standing or consent of instructor

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Dow

PB HLTH 226CW Economics of Population Health 3 Units

Terms offered: Not yet offered
This 3-unit online course will explore the economics evidence base and tools for evaluating economic factors and interventions that shape the health of populations. The course will include a substantial economic evaluation module to teach cost-effectiveness analysis tools.
Rules & Requirements

Prerequisites: Graduate Standing

Credit Restrictions: Students will receive no credit for PB HLTH 226CW after completing PB HLTH 226C. A deficient grade in PB HLTH 226CW may be removed by taking PB HLTH 226C, or PB HLTH 226C.

Hours & Format

Fall and/or spring: 7 weeks - 14 hours of lecture per week

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Dow

Formerly known as: Public Health W226C

PB HLTH 226D Global Health Economics 3 Units

Terms offered: Spring 2019, Fall 2017, Fall 2015
This class is a survey of different health care systems in western and eastern Europe, the former Soviet Union, Canada, Japan, Taiwan, and China. Other countries will be added to meet the interests of students. The course examines the structure and financing of the health system in each country and assesses the effectiveness, efficacy, and equity of each systems. Students will make a presentation on a country's health system and write a paper.

Rules & Requirements

Prerequisites: Graduate standing and knowledge of health policy and consent of instructor

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Scheffler

PB HLTH 226FW Cost-Effectiveness Analysis 1 Unit

Terms offered: Not yet offered
This course teaches students cost-effectiveness analysis and related tools in a compact 3-week online format. Students will learn when and why to use alternative economic evaluation methods to assess benefits relative to costs of health policies and interventions. They will also learn to interpret and critique such analyses, and to conduct basic cost-effectiveness analyses themselves.

Rules & Requirements

Credit Restrictions: Students will receive no credit for PB HLTH W226F after completing PB HLTH 226F. A deficient grade in PB HLTH W226F may be removed by taking PB HLTH 226F.

Hours & Format

Fall and/or spring: 3 weeks - 5 hours of lecture per week

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Dow

Formerly known as: Public Health W226F

PB HLTH 227A Health Care Finance 3 Units

Terms offered: Spring 2019, Spring 2017, Fall 2015
This course covers finance and strategic financial management in the health services and products industry, including provider organizations, insurance firms, and biopharmaceutical and medical device companies. Cases are used to apply the financial analysis and planning skills learned in the course. Topic areas include financial statement analysis, pricing and service decisions, debt financing, venture capital, and private equity, IPO and public equity markets, risk and return, capital budgeting and project risk assessment, mergers and acquisitions, vertical and horizontal integration.

Rules & Requirements

Prerequisites: Graduate standing

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: MacPherson

PB HLTH 227AW Health Care Finance 3 Units

Terms offered: Not yet offered
This 3-unit online course provides the student with an understanding of the importance of finance in healthcare and provides basic financial and accounting skills needed by all health professionals. The course introduces student to concepts in both financial and managerial accounting and teaches students relevant financial techniques used by managers and those charged with key capital investment decisions including: ratio analysis, cost-volume profit analysis, discounted cash flow and forecasting.

Rules & Requirements

Credit Restrictions: Students will receive no credit for PB HLTH W227A after completing PB HLTH 227A. A deficient grade in PB HLTH W227A may be removed by taking PB HLTH 227A.

Hours & Format

Fall and/or spring: 7 weeks - 6 hours of lecture per week

Summer: 7 weeks - 6 hours of lecture per week

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: MacPherson

Formerly known as: Public Health W227A

PB HLTH 231A Analytic Methods for Health Policy and Management 3 Units

Terms offered: Spring 2024, Spring 2022, Spring 2020
This course provides an overview of analytic methods that Master's students in health policy and management should be familiar with. Topics include linear regression, limited dependent variable models such as logit, design, and analysis of complex surveys (with weighted and clustered sampling), and quasi-experimental causal analysis. The course complements 245, with an emphasis on enabling nonstatisticians to interpret and critique applications in the HPM literature.

Rules & Requirements

Prerequisites: 142 or equivalent (basic probability and statistics)

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Dow

PB HLTH C233 Healthy Cities 3 Units

Terms offered: Fall 2025, Fall 2024, Fall 2023
Exploration of common origins of urban planning and public health, from why and how the fields separated and strategies to reconnect them, to addressing urban health inequities in the 21st century. Inquiry to influences of urban population health, analysis of determinants, and roles that city planning and public health agencies - at local and international level - have in research, and action aimed at improving urban health. Measures, analysis, and design of policy strategies are explored.

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Corburn

Formerly known as: City and Regional Planning 256

Also listed as: CY PLAN C256

PB HLTH C234 Green Chemistry: An Interdisciplinary Approach to Sustainability 3 Units

Terms offered: Spring 2016, Spring 2015, Spring 2014, Spring 2013
Meeting the challenge of global sustainability will require interdisciplinary approaches to research and education, as well as the integration of this new knowledge into society, policymaking, and business. Green Chemistry is an intellectual framework created to meet these challenges and guide technological development. It encourages the design and production of safer and more sustainable chemicals and products.

Rules & Requirements

Prerequisites: One year of chemistry, including a semester of organic chemistry, or consent of instructors based on previous experience

Hours & Format

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

Summer: 6 weeks - 20 hours of lecture per week

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructors: Arnold, Bergman, Guth, Iles, Kokai, Mulvihill, Schwarzman, Wilson

Also listed as: CHEM C234/ESPM C234

PB HLTH 236 U.S. Food and Drug Administration, Drug Development, and Public Health 2 Units

Terms offered: Spring 2025, Spring 2024, Spring 2023
The process and principles of drug development will be discussed in the context of the FDA's mandate and reach (basic science, pre-clinical and clinical research, policy, law, and public health), emphasizing the impact of public health emergencies such as HIV on evolution of regulatory policies.

Rules & Requirements

Prerequisites: None

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructors: Miller, Strobos

PB HLTH 236AW Regulatory Science, Drug Development and Public Health 3 Units

Terms offered: Not yet offered

This basic and introductory course in regulatory science addresses the demand for increased training in the US and abroad by providing an overview of the basic elements of regulation of health practice and health products; providing students with information needed to understand the most important health practice and product regulation issues from the perspective of current regulatory standards, their standards for evidence and the role of innovation in regulatory science.

Rules & Requirements

Credit Restrictions: Students will receive no credit for PB HLTH W236A after completing PB HLTH 236A. A deficient grade in PB HLTH W236A may be removed by taking PB HLTH 236A.

Hours & Format

Fall and/or spring: 8 weeks - 6 hours of lecture per week

Summer: 8 weeks - 6 hours of lecture per week

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Miller

Formerly known as: Public Health W236A

PB HLTH 237A Theories and Methods in Health Policy and Health Services Research 2 or 4 Units

Terms offered: Fall 2020, Fall 2018

The first half of the course focuses on the application of organization theories to health sector organizations. The second half of the course focuses on the application of public administration and political science theories to health sector organizations. Students will also be exposed to basic research designs, logic models and hypothesis development. Emphasis is placed on critique of existing theories and the associated empirical literature. This PhD seminar course is primarily intended for first year PhD students in the Berkeley PhD Program in Health Policy administered by the School of Public Health on behalf of the Graduate School. The course is also open with the consent of the instructors to students in other PhD programs,

Rules & Requirements

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

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructors: Shortell, Keller

PB HLTH 237B Theories and Methods in Health Policy and Health Services Research B 2 or 4 Units

Terms offered: Spring 2021, Spring 2019

The first half of the course focuses on major economics theories and frameworks relevant to the study of health policy and health services research. The second half of the course focuses on the application of behavioral and social science theories and methods to population health research. Students will also be exposed to basic research designs, logic models, and hypothesis development. Emphasis is placed on critique of existing theories and the associated empirical literature. This PhD seminar course is primarily intended for first year PhD students in the Berkeley PhD program in Health Policy administered by the School of Public Health on behalf of the Graduate School.

Rules & Requirements

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

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructors: Dow, Deardorff, Rodriguez

PB HLTH 237C Health Policy Research Colloquium 1 Unit

Terms offered: Fall 2025, Spring 2025, Fall 2024

The Health Policy Research Colloquium series is a program of empirical research seminars focused on the most important issues facing patients, providers health care plans, purchases, and policymakers today. It provides an opportunity for Health Policy doctoral students across all stages of completion to meet regularly, analyse and critique ongoing research, and participate in stimulating discussions with faculty and guest speakers. Students are required to register for and attend the Health Policy Research Colloquium during their first two years of their PhD training.

Rules & Requirements

Repeat rules: Course may be repeated for credit without restriction.

Hours & Format

Fall and/or spring: 15 weeks - 0-2 hours of colloquium per week

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Offered for satisfactory/unsatisfactory grade only.

Instructor: Shortell

PB HLTH 237D Health Policy PhD Dissertation Seminar 2 Units

Terms offered: Fall 2025, Spring 2025, Fall 2024
This PhD dissertation seminar is restricted to advanced students (Year 3+) of the PhD Program in Health Policy. Draw together skills developed in coursework in the preparation and conduct of one's own dissertation project. For students already advanced to candidacy, this will entail presenting research findings. For students not yet advanced, this will involve developing the dissertation prospectus. Students learn to incorporate colleague feedback to improve research projects. Practices associated with human subjects and ethics of research are also emphasized.

Rules & Requirements

Repeat rules: Course may be repeated for credit without restriction.

Hours & Format

Fall and/or spring: 15 weeks - 0-2 hours of seminar per week

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Offered for satisfactory/unsatisfactory grade only.

Instructors: Rodriguez, Scheffler, Keller

PB HLTH 237E Doctoral Seminar in Health Organizations & Management 2 Units

Terms offered: Fall 2025, Fall 2023, Fall 2021
The seminar is required for all first and second-year students in the PhD Program in Health Policy. This seminar focuses on organizational behavior and management research in health. The seminar covers major organizational and management theories and frameworks relevant to the study of health policy and health sector organizations.

Objectives & Outcomes

Course Objectives: a)
Apply conceptual frameworks derived from organization/ management theories to health policy and health services research.
b)
Critique health policy and health services research studies that explore questions related to organization / management of health care.
c)
Pose relevant and important health policy research questions, and devise strategies for testing these questions empirically.

Rules & Requirements

Prerequisites: Doctoral student status or consent of instructor

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructors: Brewster, Rodriguez

PB HLTH 237F Doctoral Seminar in Health Economics 2 Units

Terms offered: Fall 2024, Fall 2022
The seminar is required for all first and second-year students in the PhD Program in Health Policy. This seminar focuses on health economics. Students critically examine empirical research focused on moral hazard, adverse selection, modeling demand, cost-effectiveness analysis, market influences, provider payment, behavioral economics, and benefits design in health care and public health.

Objectives & Outcomes

Course Objectives: a)
To provide an initial exposure to the major economic theories and frameworks relevant to the study of health policy and health services research.
b)
To introduce key empirical methodologies used by economists.
c)
To critique empirical studies conducted from the methodological perspectives typically applied by economists.
d)
To provide overall socialization to the norms and values of the component disciplines as well as the health policy and health services research field as a whole.

Rules & Requirements

Prerequisites: Doctoral student status or consent of instructor

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructors: Brown, Dow

PB HLTH C240A Introduction to Modern Biostatistical Theory and Practice 4 Units

Terms offered: Spring 2024, Spring 2023, Spring 2022
Course covers major topics in general statistical theory, with a focus on statistical methods in epidemiology. The course provides a broad theoretical framework for understanding the properties of commonly-used and more advanced methods. Emphasis is on estimation in nonparametric models in the context of contingency tables, regression (e.g., linear, logistic), density estimation and more. Topics include maximum likelihood and loss-based estimation, asymptotic linearity/normality, the delta method, bootstrapping, machine learning, targeted maximum likelihood estimation. Comprehension of broad concepts is the main goal, but practical implementation in R is also emphasized. Basic knowledge of probability/statistics and calculus are assume

Rules & Requirements

Prerequisites: Statistics 200A (may be taken concurrently)

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Hubbard

Also listed as: STAT C245A

PB HLTH C240B Biostatistical Methods: Survival Analysis and Causality 4 Units

Terms offered: Fall 2025, Fall 2024, Fall 2023
Analysis of survival time data using parametric and non-parametric models, hypothesis testing, and methods for analyzing censored (partially observed) data with covariates. Topics include marginal estimation of a survival function, estimation of a generalized multivariate linear regression model (allowing missing covariates and/or outcomes), estimation of a multiplicative intensity model (such as Cox proportional hazards model) and estimation of causal parameters assuming marginal structural models. General theory for developing locally efficient estimators of the parameters of interest in censored data models. Computing techniques, numerical methods, simulation and general implementation of biostatistical analysis techniques with emphasis on data applications.

Rules & Requirements

Prerequisites: Statistics 200B (may be taken concurrently)

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: van der Laan

Also listed as: STAT C245B

PB HLTH C240C Machine Learning and Biostatistics in Healthcare 3 Units

Terms offered: Fall 2025, Spring 2025, Fall 2023
Machine learning (ML) algorithms are widely applied in our daily lives. The overarching goal of this course is to provide students with an overview and hands-on experiences of popular machine learning methods and biostatistical models adopted in the healthcare system and medical research. The topics of the class include supervised learning methods (GLM, SVM, metric learning, tree-based approaches, and shrinkage based approaches), semi-supervised learning (transduction learning, inductive learning), deep learning and neural networks, adaptive experiments, reinforcement learning and multi arm bandit algorithm, causal inference and resampling based statistical inference. The course will also cover the applications of these methods.

Rules & Requirements

Prerequisites: Probability, Linear Regression, Calculus

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Wang

Also listed as: STAT C245C

PB HLTH C240D Biostatistical Methods: Computational Statistics with Applications in Biology and Medicine II 4 Units

Terms offered: Fall 2017, Fall 2015, Fall 2013
This course and Pb Hlth C240C/Stat C245C provide an introduction to computational statistics with emphasis on statistical methods and software for addressing high-dimensional inference problems that arise in current biological and medical research. The courses also discusses statistical computing resources, with emphasis on the R language and environment (www.r-project.org). Programming topics to be discussed include: data structures, functions, statistical models, graphical procedures, designing an R package, object-oriented programming, inter-system interfaces. The statistical and computational methods are motivated by and illustrated on data structures that arise in current high-dimensional inference problems in biology and medicine.

Rules & Requirements

Prerequisites: Statistics 200A-200B or Statistics 201A-201B (may be taken concurrently) or consent of instructor

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Dudoit

Also listed as: STAT C245D

PB HLTH C240F Statistical Genomics 4 Units

Terms offered: Spring 2022, Spring 2021, Spring 2020, Spring 2018, Spring 2017
Genomics is one of the fundamental areas of research in the biological sciences and is rapidly becoming one of the most important application areas in statistics. The first course in this two-semester sequence is Public Health C240E/Statistics C245E. This is the second course, which focuses on sequence analysis, phylogenetics, and high-throughput microarray and sequencing gene expression experiments. The courses are primarily intended for graduate students and advanced undergraduate students from the mathematical sciences.

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructors: Dudoit, Huang, Nielsen, Song

Also listed as: STAT C245F

PB HLTH 241 Intermediate Biostatistics for Public Health 4 Units

Terms offered: Spring 2025, Fall 2024, Spring 2024
This course will help students think clearly and critically about asking and answering research questions in public health. The first part of the course covers foundational tools required to formulate and answer clear research question: probability, density, independence, expectation, estimators, sampling distributions, inference, and potential outcomes. The second part of the course uses this language to introduce linear, logistic, and nonparametric regression and shows how to use these methods to answer descriptive, predictive, and causal research questions.
Objectives & Outcomes

Course Objectives: 1. Translate between mathematical notation, diagrams, English prose and code
2. Demonstrate fundamental ideas in probability and statistics (e.g., conditioning, independence, expectation, consistency) using multivariate simulation

3. Distinguish between estimands and estimates

Rules & Requirements

Prerequisites: PB HLTH 142, PB HLTH W142 or equivalent introductory course in statistics with consent of instructor

Credit Restrictions: Students will receive no credit for PB HLTH 241 after completing PB HLTH W241R. A deficient grade in PB HLTH 241 may be removed by taking PB HLTH W241R.

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Schuler

PB HLTH 241W Intermediate Biostatistics for Public Health 4 Units

Terms offered: Not yet offered
This course will help students think clearly and critically about asking and answering research questions in public health. The first part of the course covers foundational tools required to formulate and answer a clear research question: probability, density, independence, expectation, estimators, sampling distributions, inference, and potential outcomes. The second part of the course uses this language to introduce linear, logistic, and nonparametric regression and shows how to use these methods to answer descriptive, predictive, and causal research questions.
Objectives & Outcomes

Course Objectives: 1. Translate between mathematical notation, diagrams, English prose, and code
2. Demonstrate fundamental ideas in probability and statistics (e.g. conditioning, independence, expectation, consistency) using multivariate simulation

3.
Distinguish between estimands and estimates

Rules & Requirements

Prerequisites: PBHLTH 142 or PBHLTH 142W or equivalent introductory course in statistics with consent of instructor

Credit Restrictions: Students will receive no credit for PB HLTH 241W after completing PB HLTH 241. A deficient grade in PB HLTH 241W may be removed by taking PB HLTH 241.

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Schuler

Formerly known as: Public Health W241

PB HLTH C242C Longitudinal Data Analysis 4 Units

Terms offered: Fall 2024, Fall 2023, Fall 2021
Course covers statistical issues surrounding estimation of effects using data on units followed through time. Course emphasizes a regression model approach for estimating associations of disease incidence modeling, continuous outcome data/linear models & longitudinal extensions to nonlinear models forms (e.g., logistic). Course emphasizes complexities that repeated measures has on the estimation process & opportunities it provides if data is modeled appropriately. Most time is spent on 2 approaches: mixed models based upon explicit (latent variable) maximum likelihood estimation of the sources of the dependence, versus empirical estimating equation approaches (generalized estimating equations). Primary focus is from the analysis side.

Objectives & Outcomes

Course Objectives: After successfully completing the course, you will be able to:

•
frame data science questions relevant to longitudinal studies as the estimation of statistical parameters generated from regression,

•
derive consistent statistical inference in the presence of correlated, repeated measures data using likelihood-based mixed models and estimating equation approaches (generalized estimating equations; GEE),
•
implement the relevant methods using R.
•
interpret the regression output, including both coefficients and variance components and

Rules & Requirements

Prerequisites: 142, 145, 241 or equivalent courses in basic statistics, linear and logistic regression

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Hubbard

Also listed as: STAT C247C

PB HLTH 243A Targeted Learning 4 Units

Terms offered: Fall 2025, Fall 2024, Fall 2023
PH 243A teaches students to construct efficient estimators & obtain robust inference for parameters that utilize data-adaptive estimation strategies (i.e., machine learning). Students perform hands-on implementation of novel estimators using high-dimensional data structures, providing students with a toolbox for analyzing complex longitudinal, observational & randomized control trial data. Students learn & apply the core principles of the Targeted Learning methodology, which generalizes machine learning to any estimand of interest; obtains an optimal estimator of the given estimand, grounded in theory; integrates state-of-the-art ensemble machine learning techniques; & provides formal statistical inference in confidence intervals & testing.

Objectives & Outcomes

Course Objectives: Design an ensemble of machine learning algorithms, Super Learner, such that the optimality theory (i.e., oracle inequalities for the general cross-validation selector) is likely to hold for the data at-hand.
Explain the importance of asymptotic linearity and efficiency/inference to non-statistician collaborators, and reason whether or not the current estimator meets these conditions.
Query subject-matter experts, study designers, and others involved in the data generation process in order to
use the data at-hand to formulate a statistical estimation problem that's realistic, reliable, and reproducible;
check assumptions that are required to use this data to answer causal questions (i.e., identifiability);
build a library of machine learning algorithms that is consistent with the processthat generated the data;
design improved (potentially hypothetical) studies that would permit answering the relevant scientific question of interest, and evaluate if this ideal experiment is possible/ethical in the real-world; and
translate the final scientific question of interest into a statistical question whose answer can be reliably estimated from the data.
Use R's tlverse software ecosystem to
define a machine learning task that mirrors your estimation problem;
specify the question of interest in terms of a tlverse Spec; and
design simulations that can be used to evaluate the behavior of estimators and their inference, ultimately informing your final choice for estimation.

Rules & Requirements

Prerequisites: STAT 201A-B or instructor's consent. PBHLTH C240A / STAT C245A, PBHLTH 252D or STAT C239A recommended

Repeat rules: Course may be repeated for credit with advisor consent.

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: van der Laan

PB HLTH 243B Targeted Learning in Practice 2 - 3 Units

Terms offered: Spring 2023, Spring 2022, Spring 2004
This course follows PBHLTH 243A as a two part series. It provides a self-contained introduction to the computational tools for Targeted Learning through it's accompanying software ecosystem, the tlverse. Each class incorporates a concise preliminary lecture, vignette-guided live coding exercises, and discussion. Students will have the opportunity to perform hands-on implementation of novel estimators for answering causal questions with real- world cross-sectional data using the tlverse software ecosystem of R packages.

Objectives & Outcomes

Course Objectives: Apply standard cross-validation schemes using the origami R package, including V-fold, stratified, ad cluster-specific cross-validation.
Approximate causal effects under stochastic treatment regimes with the tmle3shift R package by defining a single shift, grid of counterfactual shifts, or individual-level shifts of the treatment.
Differentiate stochastic, dynamic, optimal dynamic, and static treatment regimes from each other, and interpret effects under each kind of intervention.
Estimate direct and indirect effects based on decompositions of the total causal effects of static and stochastic interventions with the tmle3mediate R package.
Estimate the effect of a static intervention using the appropriate "Spec", as defined in the tmle3 R package, and apply tmle3's delta method in order to estimate transformations of existing parameters.
Follow the roadmap of statistical learning to define estimation problems in realistic statistical models, and obtain valid inferences.
Obtain and interpret variable importance metrics from the following tlverse R packages: sl3, tmle3, tmle3mopttx, tmle3shift, and tmle3mediate.
Train a super learner using the sl3 R package by selecting an appropriate loss function, metalearner, and assembling a library of candidate machine learning algorithms.
Use the tmle3mopttx R package to learn the optimal individualized treatment regime, and to estimate effects under such data-adaptive regimes.

Rules & Requirements

Prerequisites: PB HLTH 243A

Repeat rules: Course may be repeated for credit with advisor consent.

Hours & Format

Fall and/or spring: 15 weeks - 1-1 hours of lecture and 1-1 hours of laboratory per week

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: van der Laan

PB HLTH 243C Information Systems in Public Health 2 Units

Terms offered: Spring 2025, Spring 2024, Spring 2023
An introduction to new information systems, such as the Internet and interactive television, and how they may be used to improve human health. The course has three objectives: first, to familiarize students with new information technologies; second, to review how these technologies will be used by public health professionals, consumers, health care providers, and others; and third, to study related ethical and legal issues such as privacy, access, and liability. The course is designed for people with minimal understanding of interactive technologies.

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Van Brunt

PB HLTH 244 Big Data: A Public Health Perspective 3 Units

Terms offered: Spring 2024, Spring 2023, Spring 2022
Big Data deluge now engulfs almost every brand of science and business, requiring expertise in combination of statistics and computing. This course aims to help students develop a set of useful skills to cope with the Big Data challenges, with particular focus on Public Health applications. It covers a wide range of modern statistics and machine learning techniques, as well as state of the art computational tools, and emphasizes statistical modeling and inference (e.g., how to properly formulate a hypothesis and a model, develop intuitive insights and interpretations, and evaluate uncertainty of the outcomes) and covers important computational and algorithmic components (modern computational paradigm of Map-Reduce).

Rules & Requirements

Prerequisites: PB HLTH 142 (basic concepts of probability and distributions, point and interval estimation, hypothesis testing), PBHLTH 145 (regression analysis of continuous outcome), PBHLTH 241 (categorical data analysis, some modern statistical learning techniques), or equivalent or permission of the instructor

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Li

PB HLTH 245 Introduction to Multivariate Statistics 4 Units

Terms offered: Fall 2025, Fall 2024, Fall 2023
The following topics are discussed in the context of biomedical and biological application: multiple regression, loglinear models, discriminant analysis, principal components. Instruction in statistical computing is given in the laboratory session.
Rules & Requirements

Prerequisites: 145 or equivalent or consent of instructor

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Lahiff

PB HLTH 246 Biostatistics Consulting 1 Unit

Terms offered: Fall 2025
The goal of this course is to give biostatistics graduate students structured opportunities to work with domain researchers, hone consulting skills, and receive feedback. Consulting is a core ability necessary for success in both academia and industry that we explicitly emphasize in our training program. While student expertise may sometimes not be su#cient to fully resolve the problems raised by collaborators, it is precisely the process of encountering these new problems or of translating unfamiliar scenarios to formal statistical terms that cultivates growth and statistical maturity.
Simultaneously, this provides free quantitative consulting service accessible to MPH students working on their capstone projects.
Rules & Requirements

Prerequisites: Probability theory (STAT 201A or equivalent); Statistics (STAT 201B or equivalent); Linear models (STAT 230A or equivalent); Programming (STAT 243A or equivalent)

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Offered for satisfactory/unsatisfactory grade only.

Instructor: Schuler

PB HLTH 249 Grant Writing 3 Units

Terms offered: Fall 2025, Fall 2024, Fall 2023
The objective of this course is to introduce students to the fundamentals of proposal writing for epidemiologic research. The course will focus primarily on developing an NIH Research Grant (R Series), though we will also discuss other grant mechanisms. In addition, the course will cover the grant submission process and grand review. Students will write a formal proposal focusing on a specific research question of their choice. Emphasis will be placed on development of significant and innovative research aims, critical evaluation of the previous literature and proposing a valid and feasible approach to address their research question.
Objectives & Outcomes

Course Objectives: •
Demonstrate critical thinking and communication skills
•
Describe principles of grant writing
•
Design an epidemiologic study
•
Explain about the grant submission and review process

Rules & Requirements

Prerequisites: PBHLTH 250A, PBHLTH 250B & PBHLTH 293: Epidemiology Doctoral Seminar is recommended. Developing a research topic, writing a 1st draft of your Specific Aims takes time. Accomplishing these tasks, writing a full grant proposal is a tall order for a semester. Recommend that prior to taking this class you take PH 293: Epidemiology Doctoral Seminar, which focuses on developing a research topic & Specific Aims. PH 249 picks up where PH 293 leaves off & requires a strong first draft of your Aims page

Credit Restrictions: Students will receive no credit for PB HLTH 249 after completing PB HLTH 249, or PB HLTH 249. A deficient grade in PB HLTH 249 may be removed by taking PB HLTH 249, or PB HLTH 249.

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Metayer

PB HLTH 250A Epidemiologic Methods I 4 Units

Terms offered: Fall 2025, Fall 2024, Fall 2023
This course will introduce principles and methods of epidemiology, including types and sources of descriptive epidemiologic data, study designs (intervention trials, cohort, case-control, cross-sectional and ecological), confounding and other types of bias, causal inference, and screening. The course will provide a basic understanding of epidemiology for those pursuing a career in public health, will explain the role of quantitative methods in describing a population's health, and will emphasize the importance of evidence in advancing public health knowledge.

Rules & Requirements

Prerequisites: PBHLTH 142 (may be taken concurrently)

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Scott

PB HLTH 250B Epidemiologic Methods II 4 Units

Terms offered: Spring 2025, Fall 2024, Spring 2024
This course is intended as an intermediate level course in the field of epidemiology. Topics include causal inference; measurement of disease rates; inferential reasoning; and research study designs including ecologic, case-control, cohort, intervention trials, and meta-analytic designs (potential sources of bias, confounding, and effect modification in each research design are explored in depth); topics in clinical epidemiology including the use of likelihood ratios, receiver operator curves, and the sensitivity, specificity, predictive value of a test; and a brief introduction to logistic regression, survival analysis, and decision analysis. The readings from this course are drawn primarily from advanced epidemiology textbooks (Kleinbuam, Rothman, Miettinen). The course is intended to provide a firm foundation for students who will subsequently enroll in 250C.

Rules & Requirements

Prerequisites: 250A or an equivalent introductory course in epidemiology or advanced degree (M.D., Ph.D., D.V.M.) in a biomedical field

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Ahern or Colford (alternating years)

PB HLTH 250BW Epidemiologic Methods II 4 Units

Terms offered: Fall 2025
This course is an intermediate level course in epidemiology. It replaces previously approved and delivered courses PHW250F and PHW250G. Topics include causal inference; measurement of disease rates; inferential reasoning; research study designs, ecologic, case-control, cohort, intervention trials, meta-analytic designs; potential sources of bias, confounding, effect modification in research design are explored in depth; topics in clinical epidemiology, likelihood ratios, receiver operator curves, the sensitivity, specificity, predictive value of a test; brief introduction to logistic regression and survival analysis. Topics are covered at a advanced level than PH250A or PHW250. Readings from this course provide a firm foundation for PH250C.

Objectives & Outcomes

Student Learning Outcomes: •
Apply causal frameworks to the assessment of causality in associations
•
Assess the extent of bias in studies and calculate bias-corrected measures
•
Calculate and interpret measures of disease and association.
•
Define the major study designs, including their strengths and weaknesses, and demonstrate their
appropriate applications

•
Define, calculate and interpret effect measure modification on different scales
•
Define, calculate and interpret power, sample size, confidence intervals and p-values.
•
Explain sources of bias in studies
•
Explain the purposes, mechanics and limitations of matching in study designs
•
Identify and apply appropriate analytic techniques for study questions, and interpret coefficients
and other quantities estimated using these techniques.

•
Identify appropriate applications of measures of disease and association.

•
Identify design and analysis approaches to reduce bias in studies
•
State the purposes of screening, and calculate and interpret screening measures.
Explain the purposes and process of systematic review and meta-analysis.

Rules & Requirements

Prerequisites: PBHLTH 150A, PBHLTH 250A or PBHLTH W250

Credit Restrictions: Students will receive no credit for PB HLTH W250B after completing PB HLTH 250B. A deficient grade in PB HLTH W250B may be removed by taking PB HLTH 250B.

Hours & Format

PB HLTH 250C Advanced Epidemiologic Methods 3 Units

Terms offered: Spring 2025, Spring 2024, Spring 2023
This course will cover a series of advanced analytical methods for epidemiologic research, drawing heavily on concepts covered in PH 250B. The course consists of a series of modules, including modeling of epidemiological measures of effect, Bayesian methods, instrumental variable analysis, mediation analysis, missing data, sensitivity analysis and methods to address sources of systematic error in epidemiologic research. Hands-on application is emphasized. Class time will consist of lectures, class discussion, student presentations and a weekly practicum.

Rules & Requirements

Prerequisites: 241, 245, 250B, 252, or consent of instructor

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Bradshaw

PB HLTH 250FW Epidemiologic Methods II: Part 1 3 Units

Terms offered: Not yet offered
This course is intended as an intermediate level course in the field of epidemiology. Topics include causal inference; measurement of disease rates; inferential reasoning; and research study designs including ecologic, case-control, cohort, intervention trials, and meta-analytic designs. These topics are covered at a more advanced level than in PH250A or PHW250. The readings from this course are drawn primarily from advanced epidemiology textbooks (e.g., Kleinbaum, Rothman). The course is intended to provide a firm foundation for students who will later enroll in 250C.

Rules & Requirements

Prerequisites: PB HLTH 150A, PB HLTH 250A, or PB HLTH W250

Hours & Format

Fall and/or spring: 8 weeks - 6 hours of lecture per week

Summer: 8 weeks - 6 hours of lecture per week

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructors: COLFORD, BENJAMIN-CHUNG

Formerly known as: Public Health W250F

PB HLTH 250W Epidemiologic Methods I 3 Units

Terms offered: Fall 2025
This introductory graduate course presents principles & methods of epidemiology, including descriptive & analytic approaches to assessing the distributions of health, disease & injury in the population & factors influencing those distributions. Emphasis is on developing an understanding of concepts, rather than quantitative methods. Basic calculations are involved. Course consists of readings, critical review of epidemiology papers, brief video lectures to explain key concepts, quizzes & exams that allow students to practice applying epidemiological concepts. Students without prior coursework in epidemiology will acquire the core competencies in epidemiology expected of all MPH graduates. Course shares the same content & learning of PH 250A

Objectives & Outcomes

Course Objectives: Calculate basic epidemiology measures.
Communicate epidemiologic information to lay and professional audiences.
Critically evaluate the strengths and limitations of epidemiologic research publications.
Draw appropriate inferences from epidemiologic data.
Identify key sources of data for epidemiologic purposes.
Recognize the important contribution of epidemiology to scientific and ethical discussion of health issues.
Understand basic ethical principles pertaining to epidemiologic studies.
Understand public health problems in epidemiologic terms.
Use the basic terminology and definitions of epidemiology.

Rules & Requirements

Prerequisites: Concurrent or previous enrollment in an introductory biostatistics course (e.g., W142)

Credit Restrictions: Students will receive no credit for PB HLTH W250 after completing PB HLTH 250. A deficient grade in PB HLTH W250 may be removed by taking PB HLTH 250.

Hours & Format

Fall and/or spring:
7 weeks - 6 hours of lecture per week
15 weeks - 3 hours of lecture per week

Online: This is an online course.

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: McCoy

Formerly known as: Public Health W250

PB HLTH N250A Epidemiologic Methods 3 Units

Terms offered: Summer 2025 Second 6 Week Session, Summer 2024 Second 6 Week Session, Summer 2023 Second 6 Week Session
This introductory graduate-level course presents the principles and methods of epidemiology, including descriptive and analytic approaches to assessing the distributions of health, disease, and injury in populations and factors that influence those distributions. The emphasis is on developing an understanding of concepts, rather than quantitative methods, although calculations are involved. Through the combination of lectures, readings, critical review of papers, and problem sets, students without prior coursework in epidemiology will acquire the core competencies in epidemiology expected of all MPH graduates.

Objectives & Outcomes

Course Objectives: Calculate basic epidemiology measures.
Communicate epidemiologic information to lay and professional audiences.
Critically evaluate the strengths and limitations of epidemiologic research publications.
Draw appropriate inferences from epidemiologic data.
Identify key sources of data for epidemiologic purposes
Recognize the important contribution of epidemiology to scientific, ethical, economic and political discussion of health issues.
Understand basic ethical principles pertaining to epidemiologic studies.
Understand public health problems in epidemiologic terms .
Use the basic terminology and definitions of epidemiology.

Rules & Requirements

Prerequisites: There are no prerequisites, although it is advantageous to have taken or be concurrently taking an introductory course in biostatistics (e.g., PH 141 or PH 142)

Credit Restrictions: Students will receive no credit for PB HLTH N250A after completing PB HLTH 250A, PB HLTH W250, or PB HLTH N250A. A deficient grade in PB HLTH N250A may be removed by taking PB HLTH 250A, PB HLTH W250, or PB HLTH N250A.

Hours & Format

Summer: 6 weeks - 8 hours of lecture and 4 hours of discussion per week

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

PB HLTH 251BW Data Visualization for Public Health 2 Units

Terms offered: Fall 2025
In this course we will discuss the theory behind effective graphical design, how to apply this theory to communicating health data to different audiences, and how to produce a variety of graphical types using primarily the ggplot command in the statistical analysis program R. There are two lectures per week accompanied by readings. Generally, the course content and assignments alternate weekly between theory and R programming.

Objectives & Outcomes

Course Objectives: •
Apply color theory and accessibility principles to reach the widest audience.
•
Create a data dashboard using REDCap or Tableau.
•
Create graphics for print and digital media.
•
Effectively communicate your messages, both graphically and verbally.
•
Leverage existing graphical applications, including mapping/census data
•
Produce different styles of graphics using R.
•
Understand the theory behind good graphical design for presenting health data.

Rules & Requirements

Credit Restrictions: Students will receive no credit for PB HLTH W251B after completing PB HLTH 251B. A deficient grade in PB HLTH W251B may be removed by taking PB HLTH 251B.

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Mocello

Formerly known as: Public Health W251B

PB HLTH 251D Applied Epidemiology Using R 2 Units

Terms offered: Fall 2019, Fall 2018, Fall 2017

This is an intensive, one-semester introduction to the R programming language for applied epidemiology. R is a freely available, multi-platform (Mac OS, Linux, and Windows, etc.), versatile, and powerful program for statistical computing and graphics (http://www.r-project.org). This course will focus on core basics of organizing, managing, and manipulating epidemiologic data; basic epidemiologic applications; introduction to R programming; and basic R graphics.

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Aragon

PB HLTH 251W R for Public Health 2 Units

Terms offered: Fall 2025

The course examines principles & methods underlying the use of R, emphasizing multi-disciplinary, collaborative, & real world uses. We will emphasize practices for collaborative coding using Git/GitHub repositories for storing & sharing code to benefit not only your current collaborators but your most frequent collaborator. We will introduce best practices for organizing data & projects, how to create reproducible examples (a.k.a reprex) for when you get stuck and need to ask the R community for help (but can't share a full dataset because it's too large or contains confidential information). Application of principles will be taught through scenarios that public health practitioners encounter.

Objectives & Outcomes

Course Objectives:

Effectively engage with public health practitioners in the use of R to address current public health and/or policy issues;

Apply knowledge of R to support ongoing analytic work in epidemiology and biostatistics;

Create meaningful visualizations of data and have a basic understanding of tools available through R to present data (including R markdown, R Shiny)

Develop strategies for addressing issues that arise when combining data from multiple, complex data sources;

Identify best practices for project management, programming, and version control when contributing data to evaluate and/or support effective public health interventions;

Leverage existing open-source resources for continued learning and problem solving.

Select appropriate methods for importing, cleaning, and analyzing data within R;

Rules & Requirements

Credit Restrictions: Students will receive no credit for PB HLTH W251 after completing PB HLTH 251. A deficient grade in PB HLTH W251 may be removed by taking PB HLTH 251.

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Wheeler

Formerly known as: Public Health W251

PB HLTH 252 Epidemiological Analysis 4 Units

Terms offered: Fall 2025, Fall 2024, Fall 2023
This 4-unit course will cover modern quantitative methods relevant to epidemiologic research drawing heavily on concepts covered in PB HLTH 250B. Course topics include generalized linear models, Kaplan-Meier estimation, survival distributions, and models for parametric and semi-parametric survival analysis. We will also cover methods for confounder selection, dose-response modeling, and interaction and effect modification.

Objectives & Outcomes

Course Objectives: Apply the appropriate statistical model to estimate epidemiologic effects of interest
Articulate necessary assumptions for different methods, and accurately interpret results
Identify measures of association that can be estimated under various study designs
d.
Understand analyses presented in epidemiologic literature, and evaluate their soundness
e.
Follow future developments in epidemiologic research

Rules & Requirements

Prerequisites: PB HLTH 250B, PB HLTH 241, or consent of instructor

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Bradshaw

PB HLTH 252AW Introduction to Causal Inference and the Causal Roadmap 4 Units

Terms offered: Not yet offered
With the ongoing “data explosion”, methods to delineate causation from correlation are perhaps more pressing now than ever. This course will introduce a general framework for Causal Inference in Public Health: 1) clear statement of the research question, 2) definition of the causal model and effect of interest, 3) assessment of identifiability, 4) choice and implementation of estimators including parametric and non-parametric methods, and 5) appropriate interpretation of findings. The statistical methods include G-computation, inverse probability weighting (IPW), and targeted minimum loss-based estimation (TMLE) with machine learning.

Objectives & Outcomes

Course Objectives: 1.
Translate a research question and background knowledge into a causal model (directed acyclic graphs and non-parametric structural equation models).
2.
Define the target causal parameter with counterfactuals.
3.
Assess identifiability of the target causal parameter and express it as a parameter of the observed data distribution.
4.
Understand the challenge posed by parametric estimation approaches and apply machine learning methods.
5.
Understand the properties of and apply 3 estimators: G-computation, inverse probability weighting (IPW), and targeted minimum loss-based estimation (TMLE) with Super Learner.
6.
Understand how to appropriately address missing outcomes, which may be differentially measured.
7.
Apply course concepts to address cause-and-effect in a real data application.
8.
Be ready to explore more advanced settings for Causal Inference.

Rules & Requirements

Prerequisites: Familiarity with basic probability theory and experience conducting multivariable regression analyses (i.e., generalized linear models). This material is often, but not exclusively, covered in graduate-level courses on introductory statistics and regression (e.g., PH142 Intro to Probability/Statistics and PHW241 Intermediate Biostatistics for Public Health)

Credit Restrictions: Students will receive no credit for PB HLTH W252A after completing PB HLTH 252A. A deficient grade in PB HLTH W252A may be removed by taking PB HLTH 252A.

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Balzer

Formerly known as: Public Health W252A

PB HLTH 252B Infectious Disease Modeling 3 Units

Terms offered: Fall 2025, Fall 2024, Fall 2023
This course will lead students through the process of designing mathematical models of infectious diseases, fitting these models to data, and using them as public health tools to design effective control strategies. Examples are drawn from COVID-19, HIV, influenza, Ebola, and mosquito-borne diseases such as malaria and Zika virus. Each class consists of a lecture followed by a computer-based activity to apply the material. Students also work on a project in which they design their own model and use it to answer a specific research question.

Objectives & Outcomes

Course Objectives: 1.
Design compartmental models of infectious diseases,
2.
Understand the role of heterogeneity, especially in sexually-transmitted infectious,
3.
Understand the importance of stochasticity in outbreak modeling,
4.
Estimate parameters, such as the basic reproductive number, R0, from epidemiological data,
5.
Fit mathematical models to incidence and prevalence data,
6.
Incorporate interventions into infectious disease models.

Rules & Requirements

Prerequisites: Students should be able to write and interpret ordinary differential equations, and to manipulate beginner-level code in R

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Marshall

PB HLTH 252C Intervention Trial Design 2 Units

Terms offered: Spring 2025, Spring 2024, Spring 2023
Students learn through pre-recorded lectures. There are graded student presentations of final course project to interpret and design clinical and population-level field trials in addition to a written midterm. Topics: formulation of a testable trial hypothesis; identification of appropriate study populations; blinding (including indices for assessment); randomization (including traditional and adaptive); sample size estimation; recruitment strategies; data collection systems; quality control and human subjects responsibilities; adverse effects monitoring; improving participant adherence; use of surrogate outcomes; preparation of a meta-analysis summarizing a group of trials.

Objectives & Outcomes

Student Learning Outcomes: 3) identify whether appropriate steps have been taken to provide transparency in a published Trial;
4) be able to design a basic Intervention Trial in the student's area of interest;
5) prepare a summary meta-analysis for a group of published Trials published on one topic of interest to the student.
: 2) understand and apply basic principles to determine an appropriate sample size for a Trial;
At the completion of the course, students will be able to: 1) critique published Intervention Trials with respect to design and potential sources of bias:

Rules & Requirements

Prerequisites: PBHLTH 250A or equivalent introductory Epidemiology course

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Colford

PB HLTH 252D Introduction to Causal Inference 4 Units

Terms offered: Spring 2022, Spring 2021, Spring 2020
This course presents a general framework for causal inference using directed acyclic graphs, non-parametric structural equation models, and counterfactuals. Marginal structural models and causal effect estimation using inverse probability of treatment weighting, G-computation, and targeted maximum likelihood are introduced. In two-part presentations, students will define and implement research questions.

Rules & Requirements

Prerequisites: 241 or C240A (can be taken concurrently); 245 or similar course covering multivariable linear and logistic regression analysis; for epidemiology students, 250C, or consent of instructor

Hours & Format

Fall and/or spring: 15 weeks - 2-2 hours of lecture, 0-2 hours of discussion, and 2-0 hours of laboratory per week

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Petersen

PB HLTH 252E Advanced Topics in Causal Inference 4 Units

Terms offered: Spring 2025, Spring 2023, Fall 2021
The course will be conducted as a seminar with readings and discussions on a range of more advanced topics. We will cover case-control designs; longitudinal causal models, identifiability and estimation; direct and indirect effects; dynamic regimes (individualized treatment rules); approaches for diagnosing and responding to violations in the positivity assumption. Additional topics may include stochastic interventions, community-based interventions, and Collaborative-TMLE. There will also be some guest lectures and presentations from current students and faculty members.

Rules & Requirements

Prerequisites: Public Health 252D or consent of instructor

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Petersen

PB HLTH 252W Epidemiologic Analysis 4 Units

Terms offered: Fall 2025
This 4-unit course will cover modern quantitative methods relevant to epidemiologic research drawing heavily on concepts covered in PB HLTH 250B. Course topics include generalized linear models, Kaplan-Meier estimation, survival distributions, and models for parametric and semi-parametric survival analysis. We will also cover methods for confounder selection, dose-response modeling, and interaction and effect modification.

Objectives & Outcomes

Course Objectives: Apply the appropriate statistical model to estimate epidemiologic effects of interest.
Articulate necessary assumptions for different methods, and accurately interpret results.
a.
Identify measures of association that can be estimated under various study designs.
d.
Understand analyses presented in epidemiologic literature, and evaluate their soundness.
e.
Follow future developments in epidemiologic research.

Rules & Requirements

Prerequisites: PB HLTH 250B, PB HLTH 241, or consent of instructor

Credit Restrictions: Students will receive no credit for PB HLTH W252 after completing PB HLTH 252. A deficient grade in PB HLTH W252 may be removed by taking PB HLTH 252, or PB HLTH 252.

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Bradshaw

Formerly known as: Public Health W252

PB HLTH 253B Epidemiology and Control of Infectious Diseases 3 Units

Terms offered: Spring 2025, Spring 2024, Spring 2023
A discussion of major infectious diseases with emphasis on disease surveillance, investigative procedures, and prevention programs. Emphasis is on current problems in health agencies at a state, national, and international level.
Rules & Requirements

Prerequisites: Prior degree or courses in biomedical sciences and consent of instructor

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Reingold

PB HLTH 253W Outbreak Investigations 3 Units

Terms offered: Fall 2025
The purpose of this course is to provide students with an overview of outbreak investigations in public health. This course will teach students why and how clusters of illnesses/epidemics are investigated. Methods and approaches required for such investigations will be discussed in detail, using published and unpublished material from the scientific literature.
Rules & Requirements

Prerequisites: Students must be matriculated in the On-campus Online MPH Program in order to enroll in this course

Credit Restrictions: Students will receive no credit for PB HLTH W253 after completing PB HLTH 253. A deficient grade in PB HLTH W253 may be removed by taking PB HLTH 253.

Repeat rules: Course may be repeated for credit with instructor consent.

Hours & Format

Fall and/or spring: 7 weeks - 6 hours of lecture per week

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructors: Reingold, Enanoria

Formerly known as: Public Health W253

PB HLTH 254 Occupational and Environmental Epidemiology 3 Units

Terms offered: Spring 2025, Spring 2024, Spring 2023
Epidemiological methods for designing, conducting, and interpreting epidemiological studies of persons occupationally or environmentally exposed to chemical and physical agents.
Rules & Requirements

Prerequisites: 250A

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: A. Smith

Formerly known as: 254B

PB HLTH 255A Social Epidemiology 4 Units

Terms offered: Spring 2025, Spring 2024, Spring 2023
This is a breadth course intended to provide an overview of the field of social edpidemiology and its role in understanding the social determinants of population health and health disparities. Given the breadth of social epidemiology, 255A provides a systematic and selective overview of literature covering the history and development of the field, theoretical perspectives and conceptual approaches, major topical areas and current controversies related to theory, research methods and research findings. Principles emphasized throughout the course (ecological model, measurement and causality) will provide a framework for critical analysis and synthesis across content areas. This is not a methods course.
Rules & Requirements

Prerequisites: Consent of instructor. 142, 145, and 250A-250B recommended

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Nuru-Jeter

PB HLTH 255C Mental Health and Psychopathology 3 Units

Terms offered: Spring 2025, Spring 2021, Spring 2019
This doctoral seminar is designed to provide an understanding of the complex (and often interactive) individual and environmental conditions that increase the risk of psychopathology in individuals across the life span. We will start by learning about general concepts important to an understanding of psychopathology and prevention of psychopathology, including the "biopsychosocial model," "psychological resilence," and different levels of preventive interventions. For each different area of psychopathology, we will consider: a) the core feature of disorder; b) key theory and empirical evidence regarding etiology and course, with a particular emphasis on understanding the range of risk and protective factors on the individual, family, and community level; and c) the implications of etiological understanding for public health efforts to prevent the particular disorder.

Rules & Requirements

Prerequisites: Open to doctoral students or with consent of instructor

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Ozer

PB HLTH 255D Methods in Social Epidemiology 2 Units

Terms offered: Fall 2022, Spring 2022, Spring 2020
This course is designed to review, evaluate, and apply methods currently used in the field of social epidemiology. The course aims to teach approaches to forming clear research questions, and selecting the best method(s) to answer the questions posed. Initially we will discuss approaches to defining clear and specific research questions. We will then discuss recent controversies around the meaning of questions posed in social epidemiology, and the ability of currently used methods to answer questions in social epidemiology. Finally we will review, evaluate, and apply a range of different methods that are or could be used to answer questions in social epidemiology, again emphasizing the types of questions answered by these methods, and their ability to address the challenges to effectively answering questions in social epidemiology. There will be a mixture of discussion and lecture depending on the topic, with student participation and questions strongly encouraged.

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Offered for satisfactory/unsatisfactory grade only.

Instructors: Ahern, Hubbard

PB HLTH 256 Human Genome, Environment and Public Health 4 Units

Terms offered: Spring 2019, Spring 2018, Spring 2016
This course will cover basic principles of human/population genetics and molecular biology relevant to understanding approaches to molecular and genetic epidemiology: approaches to genome-wide association studies; application of biomarkers to define exposures; recent developments in genomics, epigenomics and other -omics, including next generation sequencing technology and genomics in personalized medicine and health. Hands-on computer and wet laboratory will provide experience with modern research tools.

Rules & Requirements

Prerequisites: College-level biology course or consent of instructor. Introductory biostatistics recommended

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructors: Barcellos, Holland

PB HLTH C256 Human Genome, Environment and Public Health 4 Units

Terms offered: Spring 2025, Fall 2024, Spring 2024, Spring 2023
This introductory course will cover basic principles of human/population genetics and molecular biology relevant to molecular and genetic epidemiology. The latest methods for genome-wide association studies and other approaches to identify genetic variants and environmental risk factors important to disease and health will be presented. The application of biomarkers to define exposures and outcomes will be explored. Recent developments in genomics, epigenomics and other ‘omics’ will be included. Computer and wet laboratory work will provide hands-on experience.

Rules & Requirements

Prerequisites: Introductory level biology/genetics course, or consent of instructor. Introductory biostatistics and epidemiology courses strongly recommended

Credit Restrictions: Students will receive no credit for PB HLTH C256 after completing CMPBIO 156. A deficient grade in PB HLTH C256 may be removed by taking CMPBIO 156.

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructors: Barcellos, Holland

Also listed as: CMPBIO C256

PB HLTH C256A Human Genome, Environment and Human Health 3 Units

Terms offered: Spring 2017
This introductory course will cover basic principles of human/population genetics and molecular biology
relevant to understanding how data from the human genome are being used to study disease and other
health outcomes. The latest designs and methods for genome-wide association studies and other
approaches to identify genetic variants, environmental risk factors and the combined effects of gene and
environment important to disease and health will be presented. The application of biomarkers to define
exposures and outcomes will be explored. The course will cover recent developments in genomics,
epigenomics and other 'omics', including applications of the latest sequencing technology and
characterization of the human microbiome.

Rules & Requirements

Prerequisites: Introductory level biology course. Completion of introductory biostatistics and epidemiology courses strongly recommended and may be taken concurrently

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructors: Barcellos, Holland

Also listed as: CMPBIO C256A

PB HLTH C256B Genetic Analysis Method 3 Units

Terms offered: Prior to 2007
This introductory course will provide hands-on experience with modern wet laboratory techniques and computer analysis tools for studies in molecular and genetic epidemiology and other areas of genomics in human health. Students will also participate in critical review of journal articles. Students are expected to understand basic principles of human/population genetics and molecular biology, latest designs and methods for genome-wide association studies and other approaches to identify genetic variants, environmental risk factors and the combined effects of gene and environment important to human health. Students will learn how to perform DNA extraction, polymerase chain reaction and methods for genotyping, sequencing, and cytogenetics.

Rules & Requirements

Prerequisites: Introductory level biology course. Completion of introductory biostatistics and epidemiology courses strongly recommended and may be taken concurrently with permission. PH256A is a requirement for PH256B; they can be taken concurrently

Hours & Format

Fall and/or spring: 15 weeks - 2-2 hours of lecture and 1-3 hours of laboratory per week

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructors: Barcellos, Holland

Also listed as: CMPBIO C256B

PB HLTH 257 Outbreak Investigation 2 Units

Terms offered: Spring 2025, Fall 2024, Fall 2023
This course will teach students why and how clusters of illnesses/epidemics are investigated. Methods and approaches required for such investigations will be discussed in detail, using published articles from the scientific literature to provide examples.

Rules & Requirements

Prerequisites: 250A, 250B, or an equivalent introductory course in epidemiologic methods

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Offered for satisfactory/unsatisfactory grade only.

Instructor: Reingold

PB HLTH 257W Public Health Preparedness and Emergency Response 3 Units

Terms offered: Fall 2025
This one semester course is an intensive introduction to public health emergency preparedness and response, and covers the following topic areas: the role of public health in disasters; natural disasters and severe weather; intentional mass threats (CBRNE); biosurveillance: detecting and monitoring public health threat; post-disaster sampling, surveys, and rapid needs assessments; public health emergency incident management systems; emergency operations planning and exercises.
Rules & Requirements

Prerequisites: Completion of one semester of graduate public health curriculum, or in public health practice

Credit Restrictions: Students will receive no credit for PB HLTH W257 after completing PB HLTH 257. A deficient grade in PB HLTH W257 may be removed by taking PB HLTH 257.

Hours & Format

Fall and/or spring: 7 weeks - 6 hours of lecture per week

Summer: 7 weeks - 6 hours of lecture per week

Online: This is an online course.

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Aragon

Formerly known as: Public Health W257

PB HLTH 258 Cancer Epidemiology 3 Units

Terms offered: Spring 2024, Spring 2023, Spring 2022
For students with a basic understanding of epidemiology, biostatistics, and tumor biology. An introduction to the epidemiology of some major site-specific cancers, considering epidemiological approaches to the study of their causation, and implementation will be discussed.
Rules & Requirements

Prerequisites: Public Health 150A or 250A

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Metayer

PB HLTH 258W Global Health Disaster Preparedness and Response 3 Units

Terms offered: Not yet offered
This course is designed to serve the emerging field of global disaster management. Topics include the analysis of past mega-disasters; global disaster trends; hazard identification, profiling, and analysis; concepts of risk and vulnerability and risk evaluation; structural and non-structural mitigation; multi-level disaster preparedness; pre-, peri-, and post-disaster response, including the provision of water, food, and shelter, and the management of volunteers; components of recovery, disaster effects on communities and societies; participation of governmental, non-governmental, and multilateral agencies and organizations in planning and response; role of the media, including social media.
Rules & Requirements

Credit Restrictions: Students will receive no credit for PB HLTH W258 after completing PB HLTH 258. A deficient grade in PB HLTH W258 may be removed by taking PB HLTH 258.

Repeat rules: Course may be repeated for credit under special circumstances: if receive D or F grades

Hours & Format

Summer: 6 weeks - 7 hours of lecture per week

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Gershon

Formerly known as: Public Health W258

PB HLTH 260A Principles of Infectious Diseases 4 Units

Terms offered: Fall 2025, Fall 2024, Fall 2023
This course presents general principles of microbial interactions with humans that result in infection and disease. Common themes are developed using examples of viral, bacterial, and parasitological pathogens that exemplify mechanisms of infectious disease. The epidemiology, pathogenesis, host immune response, diagnosis, treatment, and control will be presented for each infectious disease discussed.
Rules & Requirements

Prerequisites: Upper division course preparation in biology

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructors: Riley, Swartzberg

PB HLTH 260B Principles of Infectious Diseases 4 Units

Terms offered: Spring 2021, Fall 2020, Spring 2020
This course presents general principles of microbial interactions with humans that result in infection and disease. Common themes are developed using examples of viral, bacterial, and parasitological pathogens that exemplify mechanisms of infectious disease. The epidemiology, pathogenesis, host immune response, diagnosis, treatment, and control will be presented for each infectious disease discussed.

Rules & Requirements

Prerequisites: Upper division course preparation in biology

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Swartzberg

PB HLTH 260E Molecular Epidemiology of Infectious Diseases 2 - 3 Units

Terms offered: Fall 2022, Fall 2020, Fall 2018
The course will cover general principles and practical approaches in the use of molecular laboratory techniques to address infectious disease epidemiologic problems. It is designed for students with experience in the laboratory or in epidemiology, but not both. The principles to be discussed will include the use of molecular techniques in outbreak investigations, characterizations of dynamics of disease transmission, identifying vehicles, and quantifying attributable risks in sporadic infections, refining data stratification to assist case-control studies, distinguishing pathovars from non-pathogenic variants of organisms, doing surveillance, and identifying genetic determinants of disease transmissions. 3-units if a five-page paper completed.

Rules & Requirements

Prerequisites: 150A

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture and .5 hours of discussion per week

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Riley

PB HLTH 260F Infectious Disease Research in Developing Countries 2 Units

Terms offered: Spring 2025, Spring 2023, Fall 2021
The objective of this course is to provide M.P.H. and Ph.D. students with an appreciation and understanding of the complex issues involved in conducting scientific, laboratory-based investigation in developing countries. We will discuss the many obstacles to establishing and sustaining research projects, such as poor infrastructure, insufficient financial and material resources, and lack of scientific information and interaction. More importantly, we will identify innovative solutions to overcoming these obstacles. The first half of the course will consist of presentations by U.S. and developing countries investigators who have long-term research experience in Latin America, Asia, and Africa. We will also discuss related issues such as ethical considerations, equitable collaborations, research capacity strengthening. During the second half of the course, students will give presentations on topics of their choice.

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Harris

PB HLTH 260W Infectious Diseases 3 Units

Terms offered: Fall 2025

The purpose of this course is to provide students with knowledge and approach to understand key principles that apply to infectious diseases recognized to be of major public health importance in the USA and globally. The students will learn about the important infectious disease issues and obstacles that arise at the population level, and how to address them through science, public health practices, and policy.

Objectives & Outcomes

Student Learning Outcomes: 1.
understand definitions used in discussing, describing, and reporting about infectious diseases.
2.
understand US and WHO-recommended immunization practices and policies, as well as common obstacles to their universal implementation.
3.
propose new ideas about how to address obstacles related to immunization policies; challenges in developing new vaccines.
4.
know about the major drug-resistant infectious disease problems in the US and abroad; factors that select for drug resistance, and what needs to be done to prevent and control the spread of drug-resistant infections.
5.
describe hospital infection surveillance systems; hospital infection control stewardship principles.
6.
understand the rationale behind screening tests for HIAIDs and other STIs.
7.
describe approaches to hepatitis screening, blood donation and blood bank screening for hepatitis viruses; differences in TB contact tracing programs in the US and elsewhere; BCG vaccination vs preventive treatment for latent TB infection in the USA.

Rules & Requirements

Prerequisites: Students must be matriculated in the On-campus Online MPH Program to enroll in this course

Credit Restrictions: Students will receive no credit for PB HLTH W260 after completing PB HLTH 260. A deficient grade in PB HLTH W260 may be removed by taking PB HLTH 260.

Repeat rules: Course may be repeated for credit with instructor consent.

Hours & Format

Fall and/or spring: 7 weeks - 6 hours of lecture per week

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Swartzberg

Formerly known as: Public Health W260

PB HLTH 262 Molecular and Cellular Basis of Bacterial Pathogenesis 3 Units

Terms offered: Spring 2024, Spring 2023, Spring 2022

This course for graduate students will explore the molecular and cellular basis of bacterial pathogenesis. The emphasis will be on model bacterial pathogens of mammals. The course also will include some aspects of bacterial genetics and physiology, immune response to infection, and the cell biology of host-parasite interactions. Taught concurrently with. Students enrolled in 262 also will be required to attend a weekly discussion of the primary literature, both current and classic. Each student will be required to present one paper.

Rules & Requirements

Prerequisites: 260A, 260B, or consent of instructor

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Portnoy

PB HLTH 263 Public Health Immunology 3 Units

Terms offered: Fall 2025, Fall 2024, Fall 2023

This course will be the principal immunology course for students in the field of public health. It is designed to teach both the basic biology of the human immune system and its response in health and disease, especially the specific response of the human immune system to major human pathogens. Four areas will be explored: 1) components of the immune system (spectrum of cell types and cell products); 2) different arms of the immune system including humoral, cell-mediated, innate, and mucosal immunity; 3) specific immune response to infection caused by viral, bacterial, fungal, and parasitic pathogens; and 4) disorders of the immune system unrelated to infectious disease. Through this course, students should not only gain a basic understanding of the human immune system, but also learn the functions and responses of the human immune system to diseases of infectious and non-infectious nature, and the relevance of these interactions in the context of public health problems.

Rules & Requirements

Prerequisites: 260A (prior or concurrent). Graduate standing. Public Health majors by consent of instructor

Credit Restrictions: Students will receive no credit for 263 after taking Molecular and Cell Biology 150.

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Stanley

PB HLTH 264 Capstone Seminar in Infectious Diseases and Vaccinology 2 Units

Terms offered: Fall 2025, Fall 2024, Fall 2023
Examination of scientific, social, and policy dimensions of issues involving infectious diseases. Students select one topic for in-depth analysis and present findings in a public debate. Topics vary from year to year.

Rules & Requirements

Prerequisites: Second-year Infectious Diseases MPH students only

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Liu

Formerly known as: 264A-264B

PB HLTH 265 Molecular Parasitology 3 Units

Terms offered: Fall 2025, Fall 2023, Fall 2021
Advanced course in the molecular aspects of parasite immunology, molecular biology, genetics, biochemistry, and genomics. For each parasite, the following areas will be covered: biology; disease spectrum; epidemiology; pathogenesis, immunology; and vaccine development. The lectures will focus on "state-of-the-art" research in relation to molecular mechanisms of pathogenesis, parasite adaptations for survival within the host, and strategies for drug and vaccine development and disease control and prevention. Course content will rely heavily on current literature.

Rules & Requirements

Prerequisites: Upper division courses in molecular biology, parasitology, biochemistry, immunology, microbiology, or consent of instructor. Familiarity with reading primary research is recommended

Repeat rules: Course may be repeated for credit without restriction.

Hours & Format

Fall and/or spring: 10 weeks - 3 hours of lecture and 2 hours of discussion per week

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Harris

PB HLTH 266A Foodborne diseases 2 Units

Terms offered: Spring 2019, Fall 2016, Fall 2015
This course will cover public health, microbiological, social, and economical issues related to foodborne diseases. Three areas will be explored: 1) categories, clinical manifestations, and disease processes of foodborne illnesses; 2) etiological agents causing foodborne illnesses; 3) investigation and prevention of foodborne illness. The course will discuss different types of foodborne diseases, clinical manifestations, and the interactions between etiological agents (pathogens and non-pathogens) and human hosts. We will cover pathogens that are the most frequently associated with foodborne illness including bacterial and viral pathogens such as Salmonella, E coli, hepatitis viruses and Norwalk-like gastroenteritus viruses. We will also study non-pathogen agents such as heavy metal, pesticide, and toxic chemicals. Futhermore, the course will discuss how to identify the etiological agents in outbreaks and possible measures that can be taken to minimize the risk to the public including vaccines and education. Finally, we will explore the social and economic issues involved in the food production, distribution, and consumption that contribute to foodborne diseases.

Rules & Requirements

Prerequisites: Basic knowledge of microbiology

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Lu

PB HLTH 266B Zoonotic Diseases 2 Units

Terms offered: Fall 2021, Spring 2021, Fall 2020
This is a graduate (Ph.D. and MPH) level course designed to describe the major zoonoses and their life cycle, disease manifestations, epidemiology, and methods for prevention and control. Available treatments, diagnostics, and public health and agriculture surveillance and “forecasting” programs will also be discussed. The most recent research on the molecular and cellular basis of the mechanisms and consequences of the “species” jump from other animals to humans will be reviewed. The global nature
of zoonotic diseases and the integration of multiple disciplines (molecular biology, immunology, epidemiology, evolutionary biology, ecology, animal science, veterinary medicine, etc.) will be emphasized.
Objectives & Outcomes

Course Objectives: Recognize, understand and be able to describe the public health importance of presented zoonotic diseases
Understand the agent’s life cycle (agent, host, and environment interaction), including the source(s) or reservoir(s) and host range
Understand the factors involved in the susceptibility and resistance of the human host to the
cross-species transmission of disease

Rules & Requirements

Prerequisites: Public Health 260A or equivalent Infectious Diseases course (may be taken concurrently)

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Dailey

PB HLTH 266C Healthcare-Associated Infections 2 Units

Terms offered: Fall 2024, Fall 2023, Fall 2022
This course will examine the principles underlying the control of infections in healthcare facilities (the emphasis will be on hospitals), the causes of these infections, current important topics in this field, and future trends. Students will develop an understanding of the national and local programs involved in healthcare-associated infections (HAI’s), the major causes of HAI's antimicrobial stewardship, specific agents and procedures causing HAI’s and how to prevent HAI's.
Objectives & Outcomes

Course Objectives: 1) Understand the public health impact of HAIs.
2) Know the important causes of HAIs.
3) Formulate a plan to address each of the causes.
4) Address in-depth one important issue about HAIs.

Student Learning Outcomes: At the conclusion of the course, students will understand the public health import of HAIs, why they occur, and what to do to prevent them. They will also appreciate how we obtain and process the data that informs our interventions.

Rules & Requirements

Repeat rules: Course may be repeated for credit without restriction.

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Offered for satisfactory/unsatisfactory grade only.

Instructor: Swartzberg

PB HLTH 266D Homelessness and the Public's Health 2 Units

Terms offered: Spring 2023

Homelessness is an epidemic in the United States affecting more than 500,000 people each day. It impacts people of all races, age, and family situations, and it has enormous consequences for physical and mental health. There is no single cause, and no single solution. The focus of this course is the relationship between homelessness and health. We will discuss the range of causes for homelessness and how each of these is correlated to individual health, public health, public policy, and the law. We will explore various strategies and approaches through readings, guest lecturers, and student-led discussions.

Objectives & Outcomes

Course Objectives: •
Develop plans to address this important public health problem.
•
Understand the consequences of homelessness on an individual’s health

•
Understand the obstacles to addressing homelessness
•
Understand the root causes of homelessness and various strategies to address them

Student Learning Outcomes: 1)
Understand the root causes of homelessness and various strategies to address them.
2)
Understand the consequences of homelessness on an individual’s health.
3)
Understand the obstacles to addressing homelessness.
4)
Develop plans to address this important public health problem.

Rules & Requirements

Repeat rules: Course may be repeated for credit without restriction.

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Offered for satisfactory/unsatisfactory grade only.

Instructors: Swartzberg, Davis

PB HLTH 266E Diagnostics in Infectious Diseases: Development, Regulatory and Implementation Challenges 2 Units

Terms offered: Spring 2025

Diagnostics are indispensable for clinical management and accurate diagnostic tests are the cornerstone of global health programs, but they need to be reviewed and cleared by regulatory authorities before they can be used. Class reviews domestic and global regulatory oversight and explores how tests are marketed around the world. Students will learn about the challenges to innovation generalizability, steps in design and development, technical requirements and clinical validity/utility, and reimbursement. Topics include regulatory pathways, risk stratification, changing regulatory landscape, performance metrics, common mistakes to be avoided, appropriate statistics and strategies to bring a test from lab bench to clinical practice.

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Miller

PB HLTH 267B Characterization of Airborne Contaminants 4 Units

Terms offered: Spring 2025, Spring 2023, Spring 2021

Principles underlying the use of air monitoring methods in industry and the environment. Topics include behavior of gases, vapors, and aerosols; mechanisms of absorption and elimination of inhaled toxicants; methods for measuring of airborne chemicals and particles.

Rules & Requirements

Prerequisites: Graduate standing in environmental health sciences or consent of instructor

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Hammond

PB HLTH 267W Applied GIS for Public Health Practice 3 Units

Terms offered: Not yet offered

This course will familiarize students with the principles, methods, and techniques necessary to apply Geographic Information Systems (GIS) in diverse public health practice settings. Case studies will be presented to introduce the application of GIS technologies for rendering disease surveillance maps, developing effective spatial data visualization, creating compelling and credible spatial risk maps, and acquiring and processing positioning information for health applications.

Rules & Requirements

Credit Restrictions: Students will receive no credit for PB HLTH W267 after completing PB HLTH 272B, PB HLTH 277, or PB HLTH 267. A deficient grade in PB HLTH W267 may be removed by taking PB HLTH 272B, PB HLTH 277, PB HLTH 272B, PB HLTH 277, or PB HLTH 267.

Hours & Format

Fall and/or spring: 8 weeks - 6 hours of lecture per week

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Smith

Formerly known as: Public Health W267

PB HLTH 268W Water, Sanitation and Hygiene (WaSH) for Health and Development 3 Units

Terms offered: Not yet offered

This course is designed for students who may be interested in working in countries where contaminated water, inadequate sanitation and poor hygiene (WaSH) are the cause of serious health problems. In this course, important concepts in WaSH will be covered so that students can understand what is needed to develop, implement, monitor and evaluate a WaSH program. It emphasizes concepts that are needed to develop effective, appropriate, accessible and affordable WaSH interventions to reduce the global burden of disease.

Objectives & Outcomes

Course Objectives: 1.
Identify major water, sanitation and hygiene hazards and understand how hazards differ between different countries, watersheds, climates, cultures and regions.
2.
Describe key social determinants of health that drive WaSH inequities

3.
Understand the primary WaSH interventions that have been shown to be effective at reducing morbidity and mortality
4.
Conduct vulnerability assessments of community supplies of water and sanitation systems to assess ability to provide essential services.
5.
Describe the relationship between WaSH technologies, behavioral change communications and the enabling environment and how the three must work in tandem to result in sustained improvements.
6.
Critically analyze WaSH-related issues associated with rapid growth of urban populations in developing countries.

Rules & Requirements

Credit Restrictions: Students will receive no credit for PB HLTH W268 after completing PB HLTH 268. A deficient grade in PB HLTH W268 may be removed by taking PB HLTH 268.

Hours & Format

Summer: 7 weeks - 5.5 hours of lecture per week

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructors: Graham, Jain

Formerly known as: Public Health W268

PB HLTH 269AW Introduction to Physical Ergonomics 3 Units

Terms offered: Not yet offered
Students will identify the components of occupational tasks that contribute to musculoskeletal injury, quantify the risks using the most relevant ergonomic assessment tools, and integrate that information into conclusions regarding the acceptability of the risk. This course will challenge students to assess many practical examples from a wide variety of workplace sectors, including manufacturing, health care, agriculture and others, and interpret data from sources that will not always agree, so that the decisions can be made and defended.
Rules & Requirements

Credit Restrictions: Students will receive no credit for PB HLTH W269A after completing PB HLTH 269A. A deficient grade in PB HLTH W269A may be removed by taking PB HLTH 269A.

Hours & Format

Fall and/or spring: 7 weeks - 8-5 hours of lecture per week

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructors: Harris Adamson, Potvin, Janowitz

Formerly known as: Public Health W269A

PB HLTH 269C Occupational Biomechanics 4 Units

Terms offered: Spring 2025, Spring 2024, Spring 2023
Overview of ergonomics and occupational biomechanics. Course covers pathophysiology and risk factors of upper extremity and back musculoskeletal disorders, biomechanics of spine and upper extremity loading at work, measurement of force and posture, models for risk assessment, anthropometry applied to task and workstation design, tool design, and structure of successful ergonomics programs. Students will conduct a detailed job analysis and design a workplace intervention.
Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Rempel

PB HLTH 269D Ergonomics Seminar 2 Units

Terms offered: Fall 2025, Fall 2024, Fall 2023
Readings and lectures in occupational biomechanics. Topics to be covered are muscle, tendon, and joint biomechanics, material handling models, mechanisms of injury, hand tool design, and instrumentation issues. Students will prepare critical reviews of recent publications and design an engineering intervention to reduce work-related risk factors.
Rules & Requirements

Prerequisites: 269C or consent of instructor

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Rempel

PB HLTH 269E Current Topics in Environmental Medicine 2 - 3 Units

Terms offered: Fall 2025, Fall 2024, Fall 2022
Topics in environmental medicine will provide students with an overview of the health impacts, disease mechanisms, and public health controversies related to selected environmental exposures. The course will cover established environmental diseases as well as impacts of some emerging exposures of concern. The focus will primarily be on pathophysiology, issues related to exposure pathways, and the susceptibilities of specific human populations. No prior medical knowledge required.
Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructors: Harrison, Seward

PB HLTH 270 Introduction to Environmental Health Sciences 3 Units

Terms offered: Fall 2025, Fall 2024, Fall 2023
This survey course covers the breadth of hazards to chemical, biological, and physical agents of concern to environmental health professionals. Lectures are presented by experts on particular topics that emphasize the activities involved in professional practice. Students will also meet twice monthly with the instructor to discuss advanced readings and assignments related to the lecture topics. Students will conduct a project on a topic of current interest in some aspect of environmental health (under the guidance of the instructor). This course is designed for MPH students in Environmental Health Sciences and other graduate-level students interested in an overview course on environmental health.
Rules & Requirements

Prerequisites: One epidemiology course; one biostatistics course (may be taken concurOne Epidemiology course; one Biostatistics course, can be concurrent. rently)

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Balmes

PB HLTH 270A Exposure Assessment and Control 3 Units

Terms offered: Fall 2025, Fall 2024, Fall 2023
Direct and indirect methods and procedures for the estimation and control of human exposure to chemical, physical, and biological agents of concern to health in the community and in occupational settings. Includes review of measurement technologies, exposure assessment strategies, and multipathway analyses used by regulatory agencies. Also covers exposure control options and strategies, including administrative procedures, personal protective equipment, and various engineering control approaches.
Rules & Requirements

Prerequisites: Graduate standing in the School of Public Health or consent of instructor

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructors: Nicas, Spear

PB HLTH 270B Toxicology I 3 Units

Terms offered: Fall 2025, Fall 2024, Spring 2024
Introduction to toxicology covering basic principles, dose-response, toxicity testing, chemical metabolism, mechanisms of toxicity, carcinogenesis, interpretation of toxicological data for risk assessment, and target organ toxicity.
Rules & Requirements

Prerequisites: Graduate standing or consent of instructor

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: M. Smith

PB HLTH 270C Practical Toxicology 2 Units

Terms offered: Spring 2019, Spring 2017, Spring 2016
This course will focus on cutting-edge issues involving real-world toxicology in drug discovery, pesticide regulation, stem cell research, etc. Many well-known toxicologists, regulators, and consultants from pharmaceutical companies, petroleum industry, private consulting firms, non-profit institutes, federal and state regulatory agencies in the Bay Area will be invited to talk to our participating students. Some of the speakers are our school's alumni who understand exactly what our students need to know before entering the real world. Learning outside the classroom will be another major focus and different from other existing toxicology courses offered at Berkeley. This new class will provide students a chance to visit some of the real-world sites allowing students to see and feel what they really need to know and to learn. To better prepare our students for the real world, we will use combined teaching/learning styles including lecture with discussion sections, site-visits, hand-on experience in a toxicology laboratory, and student group assignments or projects.
Rules & Requirements

Prerequisites: 270B or Nutrition Science and Toxicology 110 or equivalent course in toxicology

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Zhang

PB HLTH 271C Drinking Water and Health 3 Units

Terms offered: Spring 2022, Spring 2021, Spring 2020
The course covers monitoring, control and regulatory policy of microbial, chemical and radiological drinking water contaminants. Additional subjects include history and iconography of safe water, communicating risks to water consumers and a bottled water versus tap water taste test as part of the discussion on aesthetic water quality parameters.
Objectives & Outcomes

Student Learning Outcomes: By the end of this course, students will be expected to:
Recognize the global occurrence of waterborne contaminants and related health impacts.
Understand water quality monitoring and control of key water quality constituents.
Appreciate the complexities of the regulatory process as it pertains to public drinking water systems in the US and abroad.
Read and synthesize published and unpublished sources of information regarding drinking water and health. Prepare a literature review in journal submission format.
Using an established rubric, review and comment on a literature review (prepared by a fellow student). Rank the paper as acceptable, acceptable with minor revision, acceptable with major revision, unacceptable.

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Smith

PB HLTH 271E Science and Policy for Environment and Health 3 Units

Terms offered: Spring 2025, Spring 2024, Spring 2023
Scientific knowledge and analyses are important to the development of public policies that address the impact of the environment on health. The limits of existing knowledge and uncertainties in research results create significant challenges in applying science to answer critical questions. This course critically examines how scientific information is used in policy decisions. Case studies of current issues address characterization of scientific knowledge, interpretation of science in policy contexts, scientific integrity, and factors in addition to science that influence decisions. Assignments prepare students to effectively translate technical knowledge for multi-disciplinary and lay audiences and to participate in public policy proceedings. Core materials address differences between regulatory and market-based approaches; emerging paradigms including the precautionary principle and environmental justice; and key elements of risk assessment and cost-benefit analysis.
Rules & Requirements

Prerequisites: Graduate standing or consent of instructor

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Kyle

PB HLTH 271G Health Implications of Climate Change 3 Units

Terms offered: Spring 2025, Spring 2024, Spring 2023
This course explores the Public Health effects of global climate change: physical basis of climate change, including causes & projections; burden of disease stemming from global climate change, emphasis on impacts in the developing world, global & local equity issues, interaction between climate change mitigation/adaptation activities & existing global health initiatives; direct exposures (extreme heat, drought, precipitation, sea-level rise), indirect exposures (vector-borne & zoonotic diseases, ecosystem disruption, water quantity & quality, land arability & food production, population displacement). After taking this course, students will be well positioned for further work on global environmental change and health.
Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Remais

PB HLTH 271H Greener Solutions: A Safer Design Partnership 4 Units

Terms offered: Fall 2025, Fall 2024, Fall 2023

At the same time as chemistry has dramatically improved our lives, it has also exposed people to synthetic chemicals and pollutants via air, water, food, consumer products and workplaces. While government agencies work to assess and control chemical hazards, communities, workers and advocacy groups are demanding safer materials, and businesses are actively seeking to eliminate hazardous chemicals from their products and supply chains. Green chemistry aims to develop products and materials that are inherently safer for human health and the environment. The Greener Solutions course pairs interdisciplinary teams of graduate students with a partner organization seeking to solve these challenges in a specific application.

Rules & Requirements

Prerequisites: Graduate standing or advanced undergraduate with permission. General chemistry and organic chemistry or equivalent knowledge

Hours & Format

Fall and/or spring: 15 weeks - 4 hours of seminar per week

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructors: Schwarzman, Hart-Cooper

PB HLTH 271J Social Justice and Worker Health 2 Units

Terms offered: Fall 2024, Fall 2022

Course is an overview on work as a key social determinant of health. The workplace is commonly viewed as a setting for health promotion of individual behavior change, while its potential to be a source of critical exposures that directly impact health, safety & well-being of working populations is often overlooked. Purpose of the class is to help public health practitioners build a framework for understanding the role that work & workplace conditions play in individual & community health, to introduce strategies that address work-related health inequities & facilitate the development of concrete skills in these areas. The course emphasizes worker & community organization & participation in effecting social justice & public health change.

Objectives & Outcomes

Student Learning Outcomes: Define the concept of a healthy job, and describe work as a social determinant of health with an emphasis on its impact on the lives of low-wage, immigrant, and other vulnerable workers and communities.

Describe the “landscape” of work and labor dynamics, including current issues and topics in worker health and safety and the populations most affected by workplace hazards and risks.

Discuss basic theoretical and experiential concepts underlying the following public health strategies:

#

Community organizing

#

Labor organizing

#

Training for action

#

Effective partnerships

#

Work-related policies

Practice skills in community organizing, popular education, training for action, and building effective partnerships that are all essential to professional community-based practice in public health.

Rules & Requirements

Repeat rules: Course may be repeated for credit with advisor consent.

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructors: Teran, Chang

PB HLTH 271K Introduction to Data Management and Programming in SAS for Public Health 2 Units

Terms offered: Spring 2025, Spring 2024, Spring 2023
This class is an introduction to the use of the SAS programming language for managing, cleaning and analyzing biomedical data.
Objectives & Outcomes

Course Objectives: By the end of this course, students should be able to write SAS programs for data management, cleaning, and analysis

Student Learning Outcomes: Create and run SAS programs
#
Create new variables from other data.
#
Export SAS datasets
#
Manipulate and transform data
#
Read raw input files in various formats and create SAS datasets.
#
Use SAS procedures for basic statistical inference: Chi-square tests, T-Tests, Correlations, Linear Regression, etc.
#
Use basic SAS procedures to describe data numerically and graphically.
#
Work with SAS datasets: sort, subset, merge, and re-format SAS datasets

Rules & Requirements

Prerequisites: It is expected that students will have taken introductory courses to both biostatistics and epidemiology (PBHLTH 142 or PBHLTH W142; PBHLTH W250A, PBHLTH 250B or PBHLTH W250, PBLTH W250F/G)

Hours & Format

Fall and/or spring: 15 weeks - 1 hour of lecture and 1 hour of laboratory per week

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Costello

PB HLTH C271G Health Implications of Climate Change 3 Units

Terms offered: Spring 2020, Spring 2019, Spring 2018, Spring 2017, Spring 2016, Spring 2015
The course will provide a basic foundation in the physical mechanisms of, responses to, and health implications of climate change. We will explore the variety of epidemiologic, risk assessment, and statistical methods used to understand the impacts of climate change on health across diverse demographic groups. The public health implications, positive and negative, of efforts to mitigate and adapt to climate change will be elaborated, including discussions of ethical, political, and economic aspects of these efforts. Students will be responsible for leading class discussions and presenting a poster on their choice of a topic related to climate change and health.
Rules & Requirements

Prerequisites: The material will be presented with minimal expectation of a background in physical science, although some additional reading may be needed for students with no university science courses. A background in epidemiology is also helpful, but not necessary

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructors: Jerrett, Morello-Frosch

Also listed as: ESPM C282

PB HLTH 272AW Introduction to Geographic Information Systems for Public Health 3 Units

Terms offered: Not yet offered
This course introduces geographic information systems (GIS) for the processing, visualization and description of spatial public health data. We will introduce principles, methods, and techniques for acquiring, processing, and manipulating spatial data. We will cover basic GIS concepts, such as coordinate systems and cartography, layering, buffering, joining spatial data, and conducing spatial queries. The role of locational information in aiding in the prevention of disease will be covered and discussed.
Rules & Requirements

Credit Restrictions: Students will receive no credit for PB HLTH W272A after completing PB HLTH 272A. A deficient grade in PB HLTH W272A may be removed by taking PB HLTH 272A.

Hours & Format

Fall and/or spring: 8 weeks - 6 hours of lecture per week

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructors: Casey, Midekisa

Formerly known as: Public Health W272A

PB HLTH 272CW Applied Spatial Data Science for Public Health 3 Units

Terms offered: Not yet offered

This course will cover the theory and methods behind the analysis of patterns of health and disease in space. Students will increase their proficiency in the application of Geographic Information Systems (GIS) to public health data, and will learn how to perform a wide variety of space and space-time analyses. The course will introduce statistical techniques for describing, analyzing and interpreting layers of mapped health data, including the acquisition and classification of remote sensing data.

Objectives & Outcomes

Course Objectives: Apply appropriate spatial statistics to diverse locational data;
Describe several statistical techniques useful for analyzing and interpreting mapped data in public health applications;
Describe the rationale for geographical analysis and spatial epidemiology;
Formulate a research question that is answerable using spatial techniques;
Identify strengths and weaknesses of mapped data and spatial analyses;

Provide examples of impactful spatial analyses from the literature;
Report results of spatial analyses in a manner that is clear and understandable to both technical and non-technical audiences.

Rules & Requirements

Prerequisites: Completion of PBHLTH W272A or permission of instructor is required to enroll in this course. Furthermore, this course requires extensive use of R. At least 50 hours of experience programming in R is strongly recommended. Similarly, this course will cover spatial regression analysis. As such, students are expected to be familiar with general linear regression

Credit Restrictions: Students will receive no credit for PB HLTH W272C after completing PB HLTH 272C. A deficient grade in PB HLTH W272C may be removed by taking PB HLTH 272C.

Hours & Format

Fall and/or spring: 8 weeks - 6 hours of lecture per week

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Readhead

Formerly known as: Public Health W272C

PB HLTH 273 Environmental Determinants of Infectious Disease 3 Units

Terms offered: Fall 2025, Fall 2024, Fall 2023

The course takes a global perspective, examining the environmental phenomena that influence the transmission of infectious diseases. The epidemiological significance of environmental processes are explored, including weather, climate extremes, hydrology, development projects, and land usage change. Analytical tools are discussed and critiqued with respect to their ability to resolve the role of environmental factors in shaping disease distributions and pathogen fate, transport, and persistence.

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Remais

PB HLTH 275 Current Topics in Vaccinology 2 Units

Terms offered: Fall 2025, Fall 2024, Spring 2018

This is an advanced level course designed to cover current issues related to the biological and analytical aspects of vaccine development and utilization. Latest developments in recombinant vaccine technology, vaccine delivery systems, "naked DNA" vaccines, "designer" vaccines, new adjuvants, anti-tumor vaccines, epidemiological approaches to assess vaccine efficacy, effectiveness, and safety will be discussed and covered.

Rules & Requirements

Prerequisites: 250A, 260A, and 264 or consent of instructor

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructors: Riley, Enanoria

PB HLTH 277A GIS and Spatial Analysis for Health Equity 3 Units

Terms offered: Spring 2025, Spring 2024, Spring 2023
The goal of this course is to acquire the knowledge and skills needed to approach public health problems from an equity or health justice perspective. Students will acquire mapping and spatial analysis (spatial epidemiology) skills and apply them in the context of structural inequity, health disparities, and racial justice. Geospatial skills are applied to public health problems that demonstrate differences in health exposures, risks, and adverse outcomes for BIPOC or economically disadvantaged individuals living in the US as well as those in low and medium income countries as compared to high income countries.

Objectives & Outcomes

Course Objectives: Communicate information related to an important health issues including their geographic and demographic contexts.
How: Use the ESRI StoryMap Builder to incorporate short narratives, maps, infographics, and images into a web-based interactive communication tool.
Demonstrate the ability to design, implement, and apply spatial data to determine and display relative prevalence of diseases.
How: Create maps and perform kernel density and cluster/hot spot analysis for a specific disease
How: Create a dashboard to illustrate the location and incidence of disease cases
Illustrate how maps were used to contribute to structural racism by relating historic redlining maps to current health inequities.
How: Create a social vulnerability index from demographic and health indicators, and map the index by county
How: Compare a current map that illustrates social vulnerabilities to historic redlining maps from the Federal Housing Administration.
Illustrate the limitations of political boundaries (census areas, cities, counties), in predicting disease prevalence, and equity issues associated with health risks.
How: Use appropriate classification schema to overcome the “Modifiable Areal Unit Problem”
Predict concentrations of an environmental contaminant where data are missing
How: Use Kriging to interpolate values in an area that has some missing data.
Report survey data cartographically.
How: Develop and execute a geo-enabled survey on a public health issue
How: Create an interactive map of survey results

Rules & Requirements

Credit Restrictions: Students will receive no credit for PB HLTH 277A after completing PB HLTH 177A. A deficient grade in PB HLTH 277A may be removed by taking PB HLTH 177A.

Hours & Format

Fall and/or spring: 15 weeks - 1.5 hours of lecture and 3 hours of laboratory per week

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Smith

PB HLTH 278 Health Policymaking and 4+1 Competency Development 2 Units

Terms offered: Fall 2025, Fall 2024, Fall 2023
This course will provide 4+1 MPH students with a “homeroom,” a space to grow as a cohort, meet outstanding competencies, and be introduced to the internship process. The lion share of competencies addressed will be in Advocacy and Policymaking.

Objectives & Outcomes

Course Objectives: 1.
Compare the organization, structure and function of health care, public health, and regulatory systems across national and international settings.
2.
Explain basic principles and tools of budget and resource management.
3.
Discuss multiple dimensions of the policy-making process, including the roles of ethics and evidence.
4.
Evaluate policies for their impact on public health and health equity.
5.
Propose strategies to identify stakeholders and build coalitions and partnerships for influencing public health outcomes.
6.
Advocate for political, social, or economic policies and programs that will improve health in diverse populations.
7.
Communicate audience-appropriate public health content, both in writing and through oral presentation.
8.
Apply systems thinking tools to a public health issue.

Rules & Requirements

Prerequisites: 4+1 Student in first semester of program

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Flagg

PB HLTH 281 Public Health and Spirituality 2 Units

Terms offered: Spring 2025, Spring 2024, Spring 2023
This course presents a brief introduction to the emerging field of spirituality and health. We examine scholarly and scientific views of links between spirituality, religion, and health. Topics include highlights and overviews of the rapidly emerging scientific evidence base, public health relevance, collaborations with faith-based organizations, and other practical applications.
Rules & Requirements

Prerequisites: Completion or concurrent enrollment in at least one other course in public health, or consent of instructor

Hours & Format

Fall and/or spring: 10 weeks - 2 hours of seminar per week

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Oman

PB HLTH 285A Public Health Injury Prevention and Control 2 Units

Terms offered: Fall 2025, Fall 2024, Fall 2023
Injuries are a major and often neglected health problem with substantial human and economic costs. Injuries are the leading cause of death from the first year of life to age 45, and the leading cause of lost potential years of life. This course provides an historical and conceptual framework within which to consider injuries (both intentional and unintentional) as social, and public health problems. Through review of epidemiology and intervention studies, course work will consider the causes and consequences of traumatic injury within developmental, social and economic contexts. Particular emphasis is placed on alternative strategies for injury prevention and on the relative benefits of intervention at different levels.
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: Public Health/Graduate

Grading: Letter grade.

Instructor: Ragland

PB HLTH C285 Traffic Safety and Injury Control 3 Units

Terms offered: Spring 2025, Spring 2024, Spring 2023
This course applies principles of engineering, behavioral science, and vision science to preventing traffic collisions and subsequent injury. A systematic approach to traffic safety will be presented in the course, and will include (1) human behavior, vehicle design, and roadway design as interacting approaches to preventing traffic crashes and (2) vehicle and roadway designs as approaches to preventing injury once a collision has occured. Implications of intelligent transportation system concepts for traffic safety will be discussed throughout the course.
Rules & Requirements

Prerequisites: Graduate standing or consent of instructor

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Ragland

Also listed as: CIV ENG C265

PB HLTH 288C Preventive Medicine Residency Seminar: Managed Care and Preventive Medicine 1 Unit

Terms offered: Spring 2025, Spring 2024, Spring 2023
This seminar is required for preventive medicine residents, but is also open to other physicians and medical students interested in preventive medicine and public health practice. It provides an overview of preventive medicine practice, especially those areas covered by the American Board of Preventive Medicine examination in public health and preventive medicine. The objectives of this seminar are to review basic principles and practices of health care organization and financing, quality assurance, clinical practice guidelines, clinical preventive services and health care delivery for the underserved and to describe the role of the preventive medicine physician in health care organizations.
Rules & Requirements

Prerequisites: MD or medical student

Credit Restrictions: Two hours of seminar per week for eight weeks.

Hours & Format

Fall and/or spring: 8 weeks - 2 hours of seminar per week

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructors: Rutherford, Seward

PB HLTH 288D Preventive Medicine Residency Seminar: Public Administration 1 Unit

Terms offered: Spring 2025, Spring 2024, Spring 2023
This seminar is required for preventive medicine residents, but is also open to other physicians and medical students interested in preventive medicine and public health practice. It provides an overview of preventive medicine practice, especially those areas covered by the American Board of Preventive Medicine examination in public health and preventive medicine. The objectives of this seminar are to review basic principles and practices of public administration as they relate to the management of a governmental public health agency and to describe the role of the preventive medicine physician as a leader and administrator in those agencies.

Rules & Requirements

Prerequisites: MD or medical student. MD or medical student

Credit Restrictions: Two hours of seminar per week for eight weeks.

Hours & Format

Fall and/or spring: 8 weeks - 2 hours of seminar per week

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructors: Rutherford, Seward

PB HLTH 289W Interdisciplinary Health Seminar 3 Units

Terms offered: Summer 2025 First 6 Week Session
This hybrid seminar course consists of both online and face-to-face instruction, with the objective of mastering, at least partially, the following competencies: basic leadership skills for public health leaders, ability to design and conduct a needs assessment and stakeholder analysis, the ability to critically analyze a public health journal article, the ability to conduct an ethical analysis in public health, basic negotation skills, and the ability to complete a Human Subjects Protocol (IRB) application.

Rules & Requirements

Credit Restrictions: Students will receive no credit for PB HLTH W289 after completing PB HLTH 289. A deficient grade in PB HLTH W289 may be removed by taking PB HLTH 289.

Hours & Format

Fall and/or spring: 7 weeks - 8 hours of lecture and 4.5 hours of discussion per week

Summer: 6 weeks - 8 hours of lecture and 4.5 hours of discussion per week

Online: This is an online course.

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Hosang

Formerly known as: Public Health W289

PB HLTH 290 Health Issues Seminars 1 - 4 Units

Terms offered: Fall 2025, Summer 2025 First 6 Week Session, Summer 2025 Second 6 Week Session
A discussion of current developments and issues in public health of interest to faculty and students of the department as a whole. Content varies from semester to semester depending upon current issues and interests.

Rules & Requirements

Repeat rules: Course may be repeated for credit without restriction.

Hours & Format

Fall and/or spring: 15 weeks - 1-4 hours of seminar per week

Summer:
6 weeks - 1-8 hours of seminar per week
8 weeks - 1-10 hours of seminar per week
10 weeks - 1-8 hours of seminar per week
12 weeks - 1-6 hours of seminar per week

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: The grading option will be decided by the instructor when the class is offered.

PB HLTH 290AW Public Health Short Seminar 1 - 4 Units

Terms offered: Not yet offered
A discussion of current developments and issues in public health of interest to graduate students of the department as a whole. Content varies from semester to semester depending upon current issues and interests.

Rules & Requirements

Credit Restrictions: Students will receive no credit for PB HLTH W290A after completing PB HLTH 290A. A deficient grade in PB HLTH W290A may be removed by taking PB HLTH 290A.

Repeat rules: Course may be repeated for credit when topic changes. Students may enroll in multiple sections of this course within the same semester.

Hours & Format

Fall and/or spring: 8 weeks - 1.5-4 hours of seminar per week

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Formerly known as: Public Health W290A

PB HLTH 290B Health Issues Seminar - Online 1 - 3 Units

Terms offered: Spring 2025, Spring 2023
A discussion of current developments and issues in public health of interest to faculty and students of the department as a whole. Content varies from semester to semester depending upon current issues and interests.

Rules & Requirements

Repeat rules: Course may be repeated for credit when topic changes. Students may enroll in multiple sections of this course within the same semester.

Hours & Format

Fall and/or spring: 15 weeks - 1-3 hours of seminar per week

Summer:
6 weeks - 1-8 hours of seminar per week
8 weeks - 1-8 hours of seminar per week
10 weeks - 1-6 hours of seminar per week
12 weeks - 1-8 hours of seminar per week

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

PB HLTH 290C Changemaker Microcourse 1 Unit

Terms offered: Fall 2025, Spring 2025, Fall 2024
This Changemaker Microcourse will focus on developing critical analysis and practical public health skill building related to making change as a public health professional.

Rules & Requirements

Repeat rules: Course may be repeated for credit when topic changes. Students may enroll in multiple sections of this course within the same semester.

Hours & Format

Fall and/or spring: 5 weeks - 4 hours of lecture per week

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

PB HLTH 291 Leadership for Public Health Changemakers 1 Unit

Terms offered: Fall 2025, Spring 2025, Fall 2024
This course helps you find your unique leadership voice and step into your own leadership potential in the field of Public Health by exploring three fundamental questions, no matter your background, experience level, or familiarity to date with leadership. Leadership is multidisciplinary, so our course will draw from fields ranging from engineering to economics to psychology to art, and we'll apply a changemaker lens throughout the semester to help you become a leader ready and able to lead positive change from wherever you are.

Objectives & Outcomes

Student Learning Outcomes: Reflect on your values, vision, and opportunities for leading positive change no matter your role, sector, title, or years of experience.

Analyze key leadership theories, tactics, and models relevant to the field of public health.

Apply leadership principles to address complex public health challenges. Become a Public Health Changemaker.

Develop clarity on the type of leader you hope to become, and the steps necessary to get there.
Develop skills for effective communication, negotiation, and collaboration within public health organizations.

Gain confidence to thrive in highly-dynamic environments where change and disruption are the norm

Rules & Requirements

Credit Restrictions: Students will receive no credit for PB HLTH 291 after completing PB HLTH 291. A deficient grade in PB HLTH 291 may be removed by taking PB HLTH 291.

Hours & Format

Fall and/or spring: 7 weeks - 2 hours of lecture per week

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

PB HLTH 291A Preparation for Public Health Practice 2 Units

Terms offered: Spring 2023, Fall 2022, Spring 2022
Series of skills-based workshops and sessions to introduce students to specialized leadership competencies needed in the public health workplace. These workshops complement the School of Public Health's (SPH) core curriculum and are selected based on the Council on Linkages between Academia and Public Health Practice, and regular feedback from public health practitioners, faculty and students. Workshop facilitators include UC Berkeley faculty, public health practitioners and consultants with expertise in the topic areas. Designed to teach the core public health skills relevant to pre-internship preparation and prepare students for professional success. Cases draw on past scenarios/ challenges experienced in the PH field.

Rules & Requirements

Repeat rules: Course may be repeated for credit without restriction.

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

PB HLTH 291C Public Health Leadership 3 Units

Terms offered: Spring 2025
The DrPH Leadership and Practice course is designed to be an interactive series of learning sessions for first and second year students in the DrPH Program at the School of Public Health. The course will give each student an opportunity to develop an understanding of leadership, apply leadership to public health practice, and develop individually as a leader.

Rules & Requirements

Repeat rules: Course may be repeated for credit with advisor consent.

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Letter grade.

Instructor: Lachance

PB HLTH 292 Seminars for M.P.H. Students 1 - 4 Units

Terms offered: Fall 2025, Summer 2025 Second 6 Week Session, Spring 2025
Current topics and special issues in the health field.
Rules & Requirements

Repeat rules: Course may be repeated for credit without restriction.

Hours & Format

Fall and/or spring: 15 weeks - 1-4 hours of seminar per week

Summer: 6 weeks - 2-10 hours of seminar per week

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: The grading option will be decided by the instructor when the class is offered.

PB HLTH 293 Doctoral Seminar 1 - 4 Units

Terms offered: Fall 2025, Spring 2025, Fall 2024
Discussion and analysis of dissertation research projects, as well as of conceptual and methodological problems in planning and conducting health research.
Rules & Requirements

Repeat rules: Course may be repeated for credit without restriction.

Hours & Format

Fall and/or spring: 15 weeks - 1-4 hours of seminar per week

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: The grading option will be decided by the instructor when the class is offered.

PB HLTH 297 Field Study in Public Health 1 - 12 Units

Terms offered: Summer 2025 10 Week Session, Fall 2017, Spring 2017
Supervised experience relevant to specific aspects of public health in off-campus organizations for graduate students. Regular individual meetings with faculty sponsor and written reports required.
Rules & Requirements

Repeat rules: Course may be repeated for credit without restriction.

Hours & Format

Fall and/or spring: 15 weeks - 1-12 hours of fieldwork per week

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: Offered for satisfactory/unsatisfactory grade only.

PB HLTH 298 Group Study 1 - 8 Units

Terms offered: Fall 2025, Spring 2025, Fall 2024
Rules & Requirements

Repeat rules: Course may be repeated for credit without restriction.

Hours & Format

Fall and/or spring: 15 weeks - 1-8 hours of independent study per week

Summer:
6 weeks - 1-8 hours of independent study per week
8 weeks - 1-8 hours of independent study per week

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: The grading option will be decided by the instructor when the class is offered.

PB HLTH 299 Independent Research 1 - 12 Units

Terms offered: Summer 2024 Second 6 Week Session, Spring 2023, Summer 2016 10 Week Session
Independent study and research.
Rules & Requirements

Repeat rules: Course may be repeated for credit without restriction.

Hours & Format

Fall and/or spring: 15 weeks - 1-12 hours of independent study per week

Summer:
6 weeks - 1-12 hours of independent study per week
8 weeks - 1-12 hours of independent study per week

Additional Details

Subject/Course Level: Public Health/Graduate

Grading: The grading option will be decided by the instructor when the class is offered.

PB HLTH 375A School of Public Health Schoolwide Pedagogy Course 2 Units

Terms offered: Fall 2025, Spring 2025, Fall 2024
Skill development and professional preparation for graduate student instructors in public health courses. Preparing for and leading discussion sections. Designing writing prompts. Preparing and creating problem sets. Working with students one-on-one. Grading students' writing and exams. Self assessment. Developing a course syllabus. Use of technology in public health classes. Required for first-time public health GSIs who are not participating in an SPH divisional pedagogy course.
Objectives & Outcomes

Course Objectives: Assess student learning and grading student work fairly, consistently, and efficiently;
Build confidence in your abilities to teach.
Create and evaluate the effectiveness of discussion section plans that employ active learning strategies;
Critically reflect upon teaching and learning experiences and explain your choices as
a teacher;
Describe and utilize a variety of teaching strategies and evaluation methods, ncluding:
Develop a “toolbox” of teaching articles, resources and activities for future use; and,
Develop learning objectives for classroom activities and assignments;
Develop skills and demonstrate strategies to facilitate a more inclusive learning
environment to meet the needs of diverse students
Develop skills in giving constructive feedback to peers on teaching;
Engage in collaborative learning to identify, discuss, evaluate and engage in
teaching strategies designed for online or in-person class sessions;
Identify your teaching strengths and areas for development;
Reflect on your own identity, positionality and power and the role it plays in the classroom by learning about racism, anti-racism, inclusion, implicit bias, stigma, etc.
Utilize feedback and assessment tools to improve teaching;

Rules & Requirements

Repeat rules: Course may be repeated for credit without restriction.

Hours & Format

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

Additional Details

Subject/Course Level: Public Health/Professional course for teachers or prospective teachers

Grading: Offered for satisfactory/unsatisfactory grade only.

Instructors: Lachance, Sheats

Formerly known as: Public Health 333